TYPE: _____

CATALOG #: _____

_____

NOTES: _____

THE ESCORT II SERIES

12EL50-2MRS Series

Completely Self-Contained or Heavy Duty Thermoplastic Battery Unit

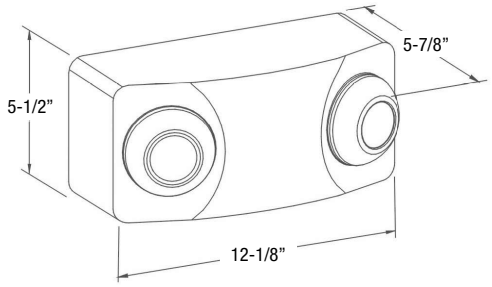


Features

- Each self-contained unit comes with two (2) 6V MR16 halogen or LED lamps housed in adjustable, gimbal-type assemblies to provide clean, adequate lighting
- High impact thermoplastic construction is UL recognized 94, 5VA
- Sealed, maintenance-free Lead-Calcium batteries
- Reliable integrated circuitry offers 120/277VAC 0.1/0.05A input standard, automatic charging, instantaneous transfer, test switch, long-life LED AC charge monitor, temperature compensated charger, short circuit protection, low battery voltage disconnect, brownout protection, and lock out (automatic battery detection during installation)
- Snap-together thermoplastic housing facilitates mounting in any orientation
- UL924 Listed
- Damp location listing is standard
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Accessories

DESCRIPTION	PART NUMBER
Wire Guard	WG13-E
Replacement MR16 lamp 12V-4W LED	580.0093-E
Replacement MR16 lamp 12V-12W Halogen	580.0080-E
Replacement MR16 lamp 12V-20W Halogen	580.0064-E

Power Consumption

Series	Battery Type	DC Voltage	Watts to 87-1/2% of rated battery voltage				Dual Voltage	Current Maximum	Maximum
			1-1/2 hrs	2 hrs	3 hrs	4 hrs			
12EL50-2MRS	Lead-Calcium	12V	50	32	25	16	120VAC 277VAC	.21A .1A	23W 23W

How to Order

VOLTAGE	SERIES	CAPACITY (W)	LAMP
12= 12 Volts	**EL**	**50**	**-2MRS-MK**= 12V-12W Halogen (Standard) **-2MRS-LG**= 12V-4W, MR16 LED **-2MRS-MG**= 12V-20W Halogen

Example: **12EL50-2MRS-MK**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

nexus

X10 LED Series

Steel LED Exit & Mini- System Combination Units



COMMERCIAL

Features

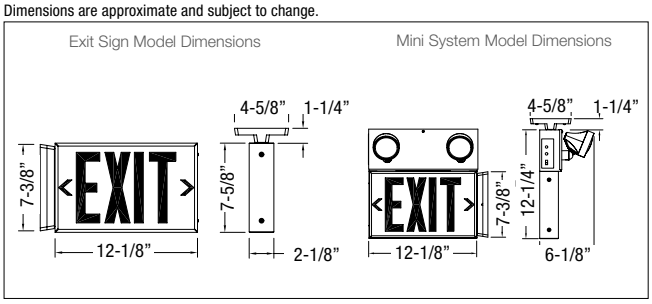
- Red or green LED light sources.
- Constructed of rugged 20 gauge steel. Off-white or black epoxy powder finish
- Available with sealed, maintenance-free Nickel-Cadmium or Lead-Calcium batteries
- PulsePlus charger circuitry offers 120/277VAC 60Hz, 0.3/0.15A (other inputs available), fused output circuit, pilot and charge indicator lights, temperature compensation, sealed relay, low voltage battery disconnect, brownout protection and lock out (automatic battery connect)
- Universal mounting, single or double face, stencil or open face are available
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
White Pendant	P-WT*
Black Pendant	P-BK*
Wire Guard Ceiling Mount (Exit Only)	WG5-E
Wire Guard End Mount (Exit Only)	WG5-E
Wire Guard For Wall Mount (AC Only, AC/ DC & Self-Powered Exit Signs)	WG12-E
Wire Guard For Wall Mount (Mini System or Combo)	WG6-E

Dimensions

Dimensions are approximate and subject to change.



Choice of Models

Mini-systems

Remote capacity L-SBX14 models
No EF9 mounted heads = 30W remote capacity
Two 5.4-watt EF9 mounted heads = 19W remote capacity

Remote capacity L-STX14 models
No EF9 mounted heads = 24W remote capacity
Two 5.4-watt EF9 mounted heads = 13W remote capacity

Exit Sign

AC input: universal 2-wire 120 to 277VAC 50/60Hz
AC/DC models: universal 2-wire 6 to 24VDC
Self-Powered models: long-life, sealed Nickel-Cadmium battery

LED Benefits

Low Energy Consumption

AC-Only, AC/DC and Self-Powered Signs consume less than 3 watts per sign, single or double face.

Visual Performance

High brightness red and green LED's provide smooth, even illumination across the entire exit legend, for both single and double face signs. Illumination is 100% in both AC and emergency DC operation. A color rich diffuser mounted in front of the LEDs provide a full 3/4" stroke with even illumination... without hot spots.

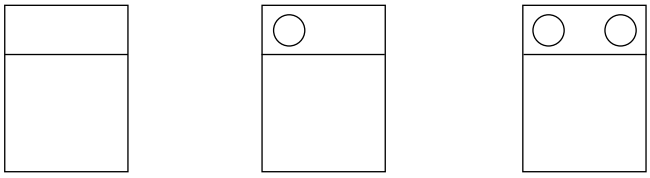
No Maintenance Cost

X10 LED Series signs require no maintenance. LED expected lamp life is in excess of 20 years.

Reliability

X10 LED Series signs are unaffected by the vibrations, ambient temperature swings and typical power surges detrimental to standard exit light sources.

Head Mounting Choices with the LED Exit Sign



0 Heads | 1 Heads | 2 Heads

Electrical

Output: 6 VDC, Batteries provide 90 minutes of emergency illumination.

Transfer: solid state relay automatically and instantly transfers lamp load upon failure of AC supply. **Brownout:** close tolerance electronic circuit activates emergency unit when utility power dips below nominal voltage. **Charger:** current limited and short circuit protected. Chargermregulation +1%. The equipment is capable of full recharge in compliance with UL924 specificati on. **Controls:** test switch, dual diagnostic LED indicator lights, hi-charge and AC pilot.

Unit Data

Housing: The housing is constructed of 20 gauge steel, with a tough epoxy powder finish in black or white. The stencil face has field programmable knock-out directional arrows.

Light Source: Long-Life LEDs insure a high-illumination, even distribution of the light on the legend.

Unit Warranty*

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

For complete warranty information,see Data Sheet ELW.

Battery Warranty*

Unit batteries are warranted as follows:

Sealed Nickel Cadmium: 12LSC – 10year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Long Life Lead: 12LSE – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Lead Calcium: 12LSM – 8-year life expectancy, 3-year Full Warranty, plus 3-year pro rata warranty.

Sealed Lead Calcium (Immobilized Electrolyte): 24LC – 12- year life expectancy. 5-year full warranty, plus 5-year pro rata warranty.

*Subject to proper installation and maintenance

Power Consumption (Mini-System Combination Units)

120/277VAC 60Hz, 03/0.15 Amp.

Unit Rating

(Total DC power available for local and remote emergency lights.)

UNIT EQUIPMENT - MINI-SYSTEM						
Battery Type	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*			
			1-1/2 hrs	2 hrs	3 hrs	4 hrs
Lead-Calcium	6	SBX14	30	20	15	10
Nickel-Cadmium	6	STX14	24	18	12	9

*National Electrical Code Specification

Power Consumption (LED Exit Signs)

Model	AC Specs		DC Specs	
AC-only: L-X14	120 to 277 VAC	Less than 1.5W	–	–
AC/DC: DCL-X14	120 to 277 VAC	Less than 1.5W	6 to 24 VDC	Less than 1.5W
Self-Powered: L-SNX14	120 to 277 VAC	Less than 3W	Nickel-Cadmium	Min. 90 minutes
Mini-System	120/277VAC	0.3/0.15 Amp		

*National Electrical Code Specification

How to Order

DC INPUT	SERIES	HOUSING COLOR	BATTERY TYPE	LEGEND COLORS	# OF HEADS	LAMP TYPE	OPTIONS
Blank= No DC input **DC**= 6V to 24VDC* * Only available on Exit Sign models	**L**= LED Exit sign	**W**= White **B**= Black **A**= Textured aluminum #- Other color	**Exit Sign Models** **X14**= AC only or AC/DC **SNX14**= Ni-Cd 120/277VAC input (only for DC) **Mini System Models** **SBX14**= 6V-30W Lead-Calcium **STX14**= 6V-24W Nickel-Cadmium* **SXX14**= 6V-20W Nickel-Cadmium* * Not available with sealed beams	**R**= Red **G**= Green **Open face** **RW**= Red/white **WR**= White/red **GW**= Green/white **WG**= White/green (Open face required with special wording legends)	**Blank**= No head **-1**= 1 head **-2**= 2 heads	**H_**= Halogen Bi-Pin **I_**= Incandescent DC-bayonet **U_**= Incandescent sealed-beam** **X_**= Halogen sealed-beam** **Z_**= Incandescent wedge **M_**= Halogen MR16* **L_**= MR16 LED* * Available with 10 & 150 lamp head only ** Available with EF18 only NOTE: For a complete list of available lamp types, please refer to the lamp data on p. 140-141	**Blank**= No options **-AD**= Advanced diagnostics* **-ADNA**= Diagnostics non-audible* **-NEX**= NEXUS® wired* **-NEXRF**= NEXUS® wireless* **D1**= Time Delay (5 minutes) **D2**= Time Delay (10 minutes) **D3**= Time Delay (15 minutes) **-VR**= Vandal-resistant screws **-VR-1**= Vandal-resistant screws & shield * Available only in SNX14, SBX14 & SXX14

Example: **DCLWX14R-VR**

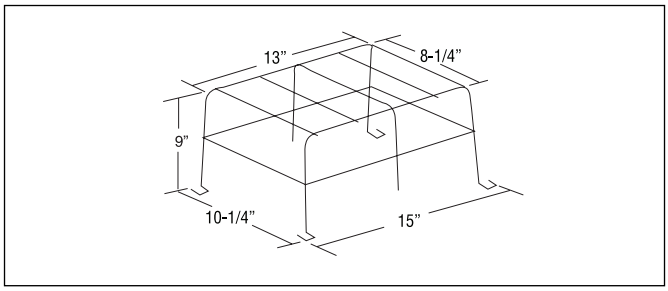
All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

EMERGI-LITE®

TYPE: _____

CATALOG #: _____

NOTES: _____



Wire Size Guide

Determining Wire Size

The following information is provided to assist in designing proper emergency lighting systems effectively and economically by using the smallest permissible wire size for load circuits. When remote lighting fixtures and/or exit signs are connected to emergency lighting units, circuit runs must be of sufficient size to maintain a proper operating voltage to all lamps. The National Electrical Code limits voltage to drop to a maximum of 5% of nominal. The table below gives the maximum length or wire run based on systems voltage, wire gauge and total wattage on the run. To determine the maximum length of a wire run not listed, divide the value of the load in watts into the constant listed at the bottom of each row. Example, the maximum wire run for #10 wire on a 12 volt system, with a 54 watt load, is 3397 ÷ 54 or, or 62 feet.

Conversely, to determine the maximum load on a run of known length, divide the length into the constant. Example, a 36 foot run of #12 wire on a 6 volt systems can be loaded to, 534 ÷ 36, or 14 watts; on #10 wire, 23 watts.

Longer Wire Runs

The wiring distances give the maximum length of a battery circuit, assuming that the entire load is concentrated at the end of the circuit. If loads are uniformly spaced along the circuit path (equal watts, equal distances), the lengths in the table may be increased, based on number of fixtures on a given circuit, by means of the chart and formula below.

Number of Fixtures	2	3	4	5	6	N
Multiply by Feet	1.33	1.5	1.6	1.67	1.71	2n(n+1)

For example, a 36 foot long, 6 volt circuit has (3) 9 watt headsspaced 12 feet apart. According to the wire run table, # 8 wire must be used (at 50 feet for a 5% voltage drop.) but, by multiplying the 31 feet for #10 wire by 1.5, a $46^{1/2}$ foot wire run is acceptable, so #10 wire may be used and still meet the 5% voltage drop limitation.

Note: According to the National Electrical Code, Article 720-Y, the smallest permissible wire size for systems under 50 volts is the #12 wire gauge.

Total watts on wire run	Wiring Distance in Feet (Maximum Voltage Drop 5%)												
	6 volt wire size				12 volt wire size					24 volt wire size			
	#12	#10	#8	#6	#12	#10	#8	#6	#4	#12	#10	#8	#6
6	89	141	225	357	356	566	900	1431	+	1425	+	+	+
8	66	106	168	268	267	424	675	1073	1707	1068	1698	+	+
9	59	94	150	238	237	377	600	954	1517	949	1509	+	+
10	53	84	135	214	213	339	540	859	1366	854	1358	+	+
12	44	70	112	178	178	283	450	715	1138	712	1132	1801	+
16	33	53	84	134	133	212	337	536	853	534	849	1350	+
18	29	47	75	119	118	188	300	477	758	474	754	1200	1909
24	22	35	56	89	89	141	225	357	569	356	566	900	1431
25	21	33	54	85	85	135	216	343	546	341	543	864	1374
27	19	31	50	79	79	125	200	318	505	316	503	800	1272
30	17	28	45	71	71	113	180	286	455	284	452	720	1145
36	14	23	37	59	59	94	150	238	379	237	377	600	954
42	12	20	32	51	50	80	128	204	325	203	323	514	818
45	11	18	30	47	47	75	120	190	303	189	301	480	763
48	11	17	28	44	44	70	112	178	284	178	283	450	715
50	10	16	27	42	42	67	108	171	273	170	371	432	687
75	7	11	18	28	28	45	72	114	182	113	181	288	458
100	5	8	13	21	21	33	54	85	136	85	135	216	343
150	-	5	9	14	14	22	36	57	91	56	90	144	229
200	-	-	6	10	10	16	27	42	68	42	67	108	171
250	-	-	5	8	8	13	21	34	54	34	54	86	137
300	-	-	-	7	7	11	18	28	45	28	45	72	114
400	-	-	-	5	5	8	13	21	34	21	33	54	85
500	-	-	-	-	-	6	10	17	27	17	27	43	68
Constant	534	849	1350	2148	2137	3397	5403	8590	13660	8548	13588	21613	34363

Thomas&Betts

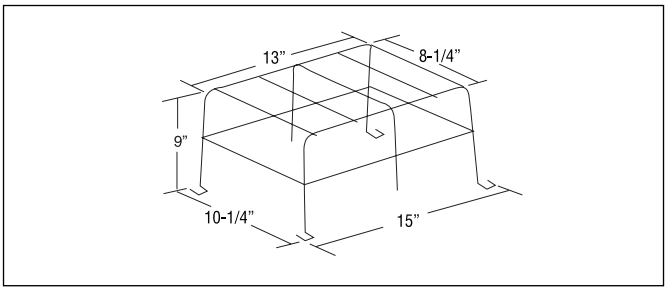
All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

EMERGI-LITE®

TYPE: _____

CATALOG #: _____

NOTES: _____

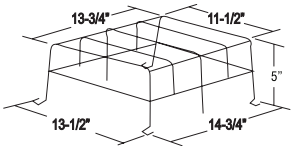


Wire Guards

Catalog Number WG1-E

Application

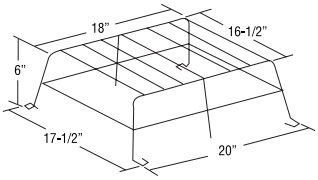
- JS Series (small cabinet)
- PS Series (surface or semi-recessed)
- EF24 or EF24R remote lighting fixture
- Premier™ Battery Unit
- Premier™ Exit Sign (wall mount)



Catalog Number WG2-E

Application

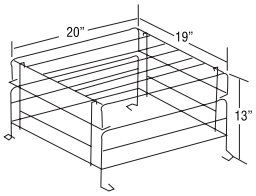
- JS Series (large cabinet)
- All A cabinets
- Premier™ Combo Series (wall mount)



Catalog Number WG3-E

Application

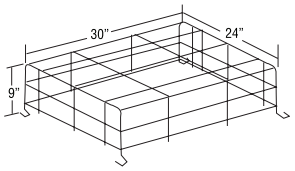
- IL Series
- All B and C cabinets



Catalog Number WG4-E

Application

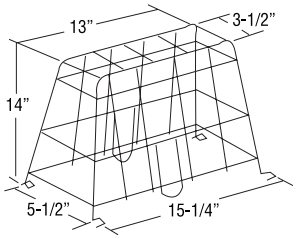
- All D cabinets
- KS Series (not for front mounted heads)



Catalog Number WG5-E

Application

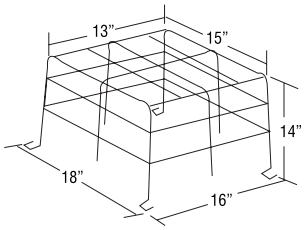
- X10 (end or ceiling mounted) AC and AC/DC or Self-Powered exit with no mounted heads
- ECL & ECLXN Series LED (end or ceiling mounted) AC and AC/DC or Self-Powered
- Preceptor™ Series LED (AC and AC/DC or Self-Powered) (end or ceiling mounted)
- Prestige™ DX Series LED and Thin Die Cast Series (end or ceiling mount)
- Premier™ Exit Sign (end or ceiling mount)



Catalog Number WG6-E

Application

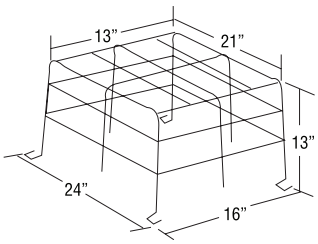
- Single EF22 head
- X10 mini systems (wall mounted) with front mounted EF9 head(s) (wall mounted)
- KS Series with front mounted heads



Catalog Number WG7-E

Application

- EF22D heads
- RS Series with cylinder EF32 heads



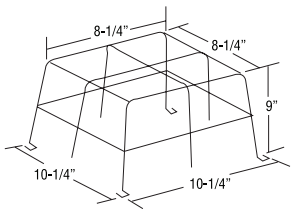
Thomas&Betts

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

Catalog Number WG8-E

Application

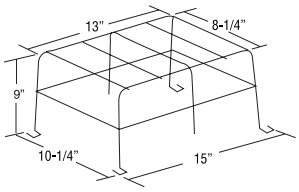
- Single remote EF9, EF11, EF16, EF18, EF28, or EF32 lighting head



Catalog Number WG9-E

Application

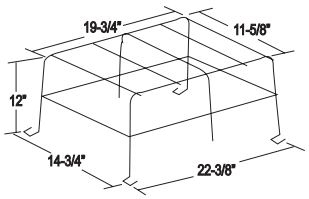
- Double or triple remote EF9, EF11, EF18, EF28 or EF32 lighting heads
- RS Series with EF9 or EF18 heads
- ECS-2 Series



Catalog Number WG10-E

Application

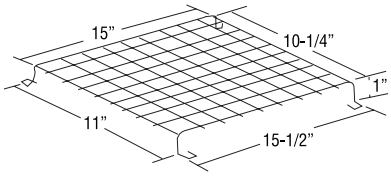
- JS Series with front mounted heads



Catalog Number WG11-E

Application

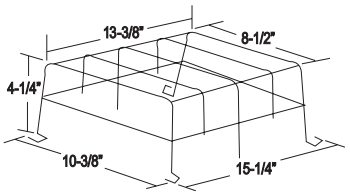
- Fully recessed PS Series
- GS Series
- EF15, EF20, EF21R, EF35 lighting fixtures
- Fully recessed Preceptor™ Series
- Prestige™ Thin Die Cast Exit Sign (wall mounted)



Catalog Number WG12-E

Application

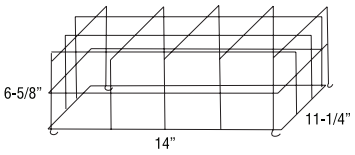
- X10 Series LED (AC and AC/DC or Self-Powered) (wall mount)
- ECL & ECLXN Series LED AC and AC/DC or Self-Powered (wall mount)
- Preceptor™ Series LED (AC and AC/DC or Self-Powered) (wall mount)
- Prestige™ DX Series LED AC and AC/DC or Self-Powered (wall mount)
- Remote EF13, EF14, or EF17 fixtures



Catalog Number WG13-E

Application

- PRO-2 Series
- Preceptor™ Series Self-Powered (wall mount)



Thomas&Betts

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Weatherproof EF11,EF11D & EF11T Series

Thermoplastic Weather-Resistant PAR 36 Lamp Head



Features

- Outdoor use
- Available as a single, double or triple PAR 36 size lighting head
- Thermoplastic construction with aluminum canopy plate
- Fully adjustable aiming swivel head
- Specular parabolic reflector and prismatic lens for a wide-beam, even light distribution
- Sealed for rain; dust-tight; corrosion resistant
- Off-white, black or gray
- Surface mount
- Mounts to a standard 4" octagonal electrical box
- Sealed beam lamps not compatible with Ni-Cd battery
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

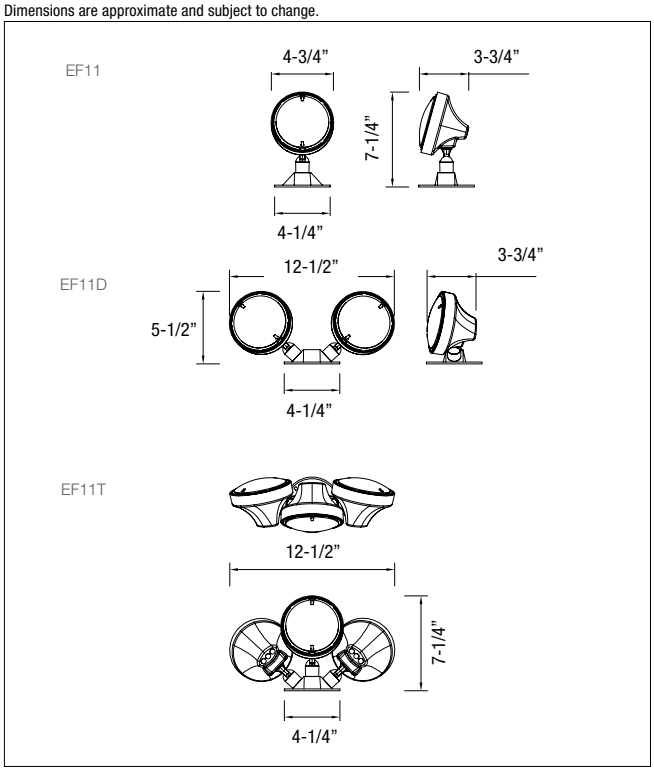
Lamp type(s), voltage and maximum wattage available for fixture are shown under lamp description. Determine lamp type, voltage and wattage required for your application, then select lamp from Lamp Chart in the Charts & Diagrams section. Do not exceed fixture wattage rating. Include lamp suffix and voltage as suffix to model number. Voltage must be stated.

Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Wire Guard	WG9-E

Dimensions

Dimensions are approximate and subject to change.



How to Order

SERIES	# OF HEADS	LAMP TYPE/WATTAGE	COLOR
EF11= PAR 36 remote head (Weatherproof)	**Blank**= Single head **D**= Double heads **T**= Triple heads	**(H_)**= Halogen Bi-Pin 20W max* **(I_)**= Tungsten wedge 25W max* **(Z_)**= Tungsten wedge 18W max* **(U_)**= Tungsten sealed beam 30W max* **(X_)**= Halogen sealed beam* 50W max** * For a complete list of available lamp types, please refer to the lamp data on pages 140-141 ** Use high temp enclosure	**Blank**= Black* **WT**= Off-white * XI lamps available in gray only heads

Example: **EF11D(HD)WT**

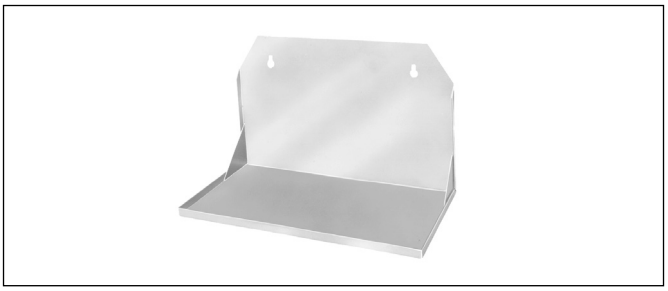
All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

EMERGI-LITE®

TYPE: _____

CATALOG #: _____

NOTES: _____



Unit Accessories

Vandal Resistant Covers

- Provides protection against tampering, vandalism and accidental damage.
- Constructed of UV stabilized, unbreakable, noncorrosive, clear polycarbonate material.
- VRS-4X Models complies with NEMA-4X standards and is supplied with a self-adhesive, closed-cell neoprene gasket which forms a bond around the perimeter of the cover to make the unit dust & water tight. Installs easily to wall or flat surface. Mounting holes are pre-drilled.



Vandal Resistant COVER

Application: ME Series with top mounted heads; PS Series all mountings; X10 or X30 Series LED, Incandescent (wall mounted) AC and AC/DC or Self-Powered exit with no monted heads; ECL & ECLXN Series LED (wall mounted) AC and AC/DC or Self-Powered; or Preceptor Series LED, Incandescent (wall mounted) AC and AC/DC

How to Order

VRS or VRS-4X (NEMA-4X)

Vandal Resistant COVER

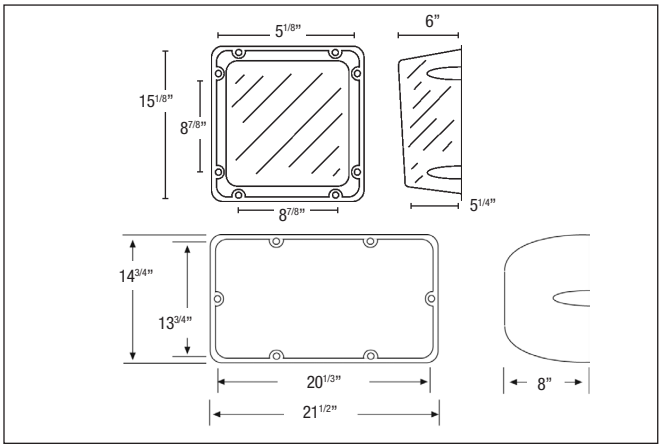
Application: JS Series (small cabinet) top or front mounted heads; ME Series with top or side mounted heads; or ECC & ECM Series (small cabinet)

How to Order

VRS-BB or VRSBB-4X (NEMA-4X)

Outline and Dimensions

Dimensions are approximate and subject to change.



Mounting Brackets

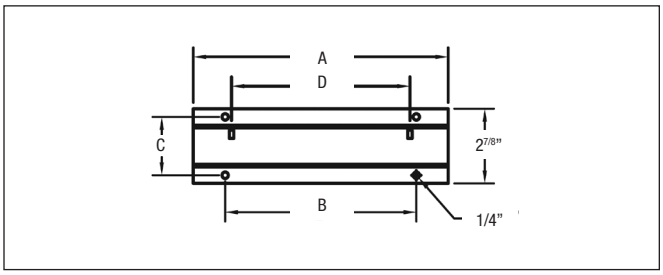
- 16 gauge steel
- Corrosion resistant undercoat
- Oven baked hammertone finish
- Supplied with rubber stand-offs for unit and machine screws to secure unit to bracket.

How to Order

Mouting bracket (whist) - **B1** or **B2**

Outline and Dimensions

Dimensions are approximate and subject to change.



Model	Dimensions (inches)			
	A	B	C	D
B1	10	$7^{3/4}$	$2^{1/8}$	7
B2	$14^{1/4}$	$12^{5/8}$	$2^{9/32}$	$11^{3/4}$

Thomas&Betts

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

Mounting Platforms

- 18 gauge steel
- Corrosion resistant undercoat
- Oven baked hammertone finish
- 1/2" retaining lip on three sides.
- Keyhole slots for easy mounting

How to Order

Mouting Plataform - **MP3**
Mouting Plataform, gray - **MP3-GY**

How to Order

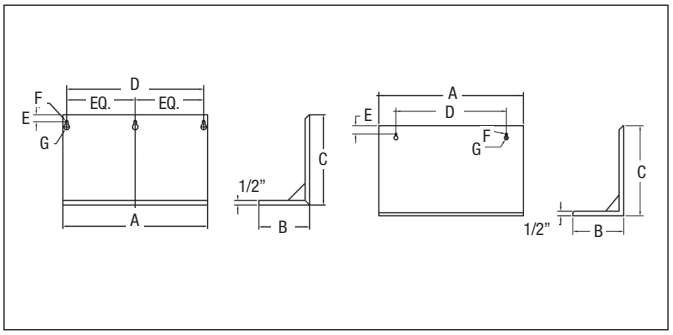
Mounting plataform (whist) -
MP6, **MP12** or **MP4**



Model	Dimensions (inches)						
	A	B	C	D	E	F	G
MP3	$16^{3/8}$	$5^{3/4}$	$10^{3/16}$	$12^{1/2}$	$1^{5/8}$	3/16	7/16
MP6	17	$7^{3/4}$	$12^{1/4}$	16	$1^{5/8}$	5/16	5/8
MP12	$27^{1/2}$	$7^{3/4}$	$12^{1/4}$	16	$1^{5/8}$	5/16	5/8
MP24	$27^{1/2}$	$11^{1/2}$	$12^{1/4}$	16	$1^{5/8}$	-	-

Outline and Dimensions

Dimensions are approximate and subject to change.



Remote Test Switch

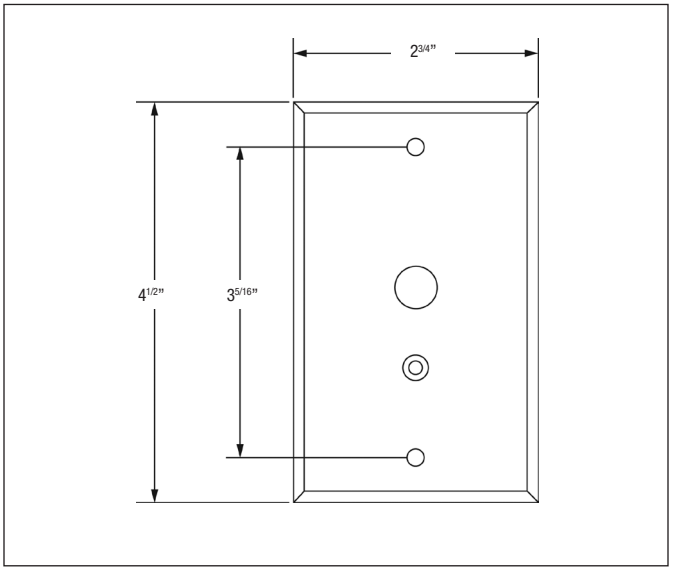
Make testing your ceiling mounted equipment easier with the remote test switch. Compatible with 120 or 277 VAC circuits, the remote test switch will interrupt the line voltage to your equipement by means of a momentary push button switch. AC on/Charge status indicator lamp assures that power is going to your emergency lighting.

How to Order

Metal faceplate, chrome - **RTS**
Plastic faceplate, off white - **RTS/1**

Outline and Dimensions

Dimensions are approximate and subject to change.



Thomas&Betts

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

TS Series

6, 12 and 24 Volt T-Bar Units

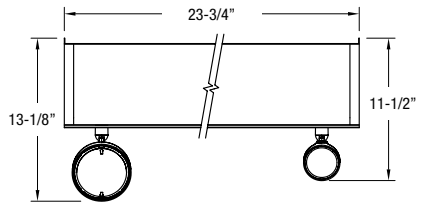


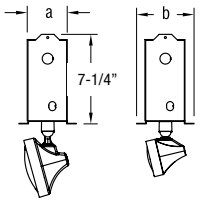
Features

- Each unit comes with two (2) off-white EF-18 lamp heads (standard) with one 9W wedge-based lamp per head. Provisions for mounting three heads are included
- Constructed of 20-gauge steel with an off-white baked enamel finish
- Available with sealed, maintenance-free Nickel-Cadmium or Lead-Calcium batteries
- PulsePlus Charger circuitry offers 120/277V input 60Hz., 0.3/0.15A (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensated charger, sealed relay, low voltage battery disconnect, brownout protection and lock out (automatic battery connect)
- Fully-recessed housing for unobtrusive use in T-Bar ceilings. A removable cover on the back box allows for ease of installation and full access to the battery and charger
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.





EF18 EF9 and EF10

Cabinet Size	Dimensions	
	a	b
S	3-1/4"	4-5/8"
L	5-5/8"	7-1/8"

Suggested Specification

Supply and install **Emergi-Lite®** Series TSC_____,TSE_____ or TSM_____ in 6, 12 or 24 volts, withelectrically compatible remote fixtures or exit signs as indicated on the plans. The emergency lighting unit shall be an architecturally designed, self-contained fixture including sealed, maintenance-free battery.

TYPE TSC to be supplied with a Nickel-Cadmium battery.

TYPE TSE to be supplied with a Long Life Pure Lead battery.

TYPE TSM to be supplied with Lead Calcium battery.

The unit shall supply the rated load for a minimum of 90 minutes to 871/2% of rated battery voltage. The unit shall be rated at 120/277VAC, 60 Hz. The unit charger shall utilize an integrated circuit which samples the battery voltage in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, shortcircuit protected

and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brown out circuit which will activate the unit when utility power dips below 80-85% of normal voltage. A low voltage battery protection circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 871/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL 924 specifications. The unit shall be furnished with a sealed dusttight relay, a test switch and dual diagnostic LED indicator lights, (hi-charge and AC pilot). The unit shall be designed to recess in conventional T-Bar suspended ceiling construction. Unit shall be constructed of 20 gauge steel with a off-white baked enamel finish. Unit shall be furnished with two off-white EF18 lighting heads constructed of impact resistant, flame retardant polymeric material complete with 9W lamps.

Fused output terminals shall be provided for ease of remote lamp connections. Every TS Series unit will be tested for charge and discharge performance. Every TS Series unit shall be fully warranted for three years, subject to proper installation and maintenance.

The unit shall be **Emergi-Lite®** model: _____.

Electrical

Power Requirements: 120/277 Vac, 60 Hz., 0.3/0.15 Amp (other inputs available).Transfer: dust-tight sealed relayautomatically and instantly energizes lamp load upon failure ofAC supply. LVD: low voltage battery disconnect circuit automatically shuts down lamp load and circuitry when batteryreaches 871/2% of its nominal voltage, protecting battery from deep discharge Lockout: labor saving electronic circuit automatically connects battery when AC circuit is activated. Brownout: close tolerance electronic circuit activates emergency unit when utility power dips below 80-85% of nominal voltage. Charger: the pulse-plus charging circuit utilizes an integrated circuit which samples the battery in relation to its temperature,state of charge and input voltage fluctuations. The charger is current limited, temperature compensated, shortcircuit protected and reverse polarity protected. The equipment is capable of full recharge in compliance with UL924 specifications. Transformer: 120/277VAC. Controls: test switch, LED indicator lights.

Unit Rating

Furnished standard with two 9 watt High Intensity Incandescent lamps.

UNIT EQUIPMENT – NO REMOTE CAPABILITY							
Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*				Cabinet Size
			1½ hrs	2 hrs	3 hrs	4 hrs	
Nickel-Cadmium	6	TSC18-2	18	12	9	6	S
Lead-Calcium	6	TSM18-2	18	12	10	7	S
UNIT EQUIPMENT – WITH REMOTE CAPABILITY							
Nickel-Cadmium	6	TSC25-2	25	18	12	9	S
	12	12TSC36-2	36	21	15	12	S
	12	12TSC50-2	50	36	25	18	S
	24	24TSC100-2**	100	73	50	37	L**
Lead-Calcium	6	TSM27-2	27	18	14	10	S
	6	TSM36-2	36	25	20	14	S
	6	TSM54-2	54	37	28	21	S
	6	TSM81-2	81	54	42	30	L
	6	TSM110-2	110	72	56	40	L
	12	12TSM36-2	36	25	20	14	S
	12	12TSM54-2	54	37	28	21	S
	12	12TSM110-2	110	72	56	40	L
	24	24TSM110-2	110	72	56	40	L

* National Electrical Code Specification

** AD & ADNA not available

= New York City Approved

Diagnostic/Self Test Feature (Optional)

Advanced Diagnostics (audible and non-audible versions)

Our Advanced Diagnostics circuity was designed to continuously monitor every critical function of the unit, attached remote lightingheads and exit signs. Operational status is indicated by colored LED lamps. A high-pitch audible alarm (if specified) and an LEDstatus indicator alert maintenance personnel of a unit malfunction. This option saves the time spent on testing and trouble shooting by maintenance personnel. This new generation of Emergi-Lite diagnostics is perfect for any application. Self-testing in accordance with NFPA 101, Life Safety Code. Unit tests itself every thirty days for one minute, thirty minutes on the sixth month and ninety minutes annually.

Unit Warranty*

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

Battery Warranty*

Unit batteries are warranted as follows:

Sealed Nickel-Cadmium: TSC– 12 year life expectancy, 5-year Full Warranty, plus 5-year prorata warranty

Sealed Long Life Lead: TSE– 10 year life expectancy, 5-year Full Warranty, plus 5-year prorata warranty

Sealed Lead Calcium: TSM– 8 year life expectancy, 3-year Full Warranty, plus 3-year prorata warranty

*Subject to proper installation and maintenance.

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Remote Test Switch (metal face plate)	**RTS**
Remote Test Switch (plastic face plate)	**RTS-1**

How to Order

SERIES	SERIES/BATTERY TYPE/ CAPACITY	# OF HEADS	HEAD STYLE	LAMP TYPE/WATTAGE	OPTIONS
Blank= Factory white **B**= Black enclosure	**TSC18**= 6V-18W Ni-Cd* **TSC25**= 6V-25W Ni-Cd* **TSM18**= 6V-18W Lead-Calcium **TSM27**= 6V-27W Lead-Calcium **TSM36**= 6V-36W Lead-Calcium **TSM54**= 6V-54W Lead-Calcium **TSM81**= 6V-81W Lead-Calcium **TSM110**= 6V-110W Lead-Calcium **12TSC36**= 12V-36W Ni-Cd* **12TSC50**= 12V-50W Ni-Cd* **24TSC100**= 24V-100W Ni-Cd* **24TSM110**= 24V-110W Lead-Calcium * Not available with sealed beams	**-0**= No head **-1**= One head **-2**= Two heads **-3**= Three heads	**Blank**= EF18 (PAR 36 plastic) **9**= EF9 mini plastic **10**= EF10 Mini plastic MR16 **150**= EF150 MR16 lamp heads	**Blank**= 6V-9W or 12V-9W Inc. wedge base **LA**= 6V-4W, MR16 LED* **LG**= 12V-4W, MR16 LED* **LL**= 24V-4W, MR16 LED* **LI**= 12V-5W, MR16 LED* **LJ**= 12V-6W, MR16 LED* **H_**= Halogen bi-pin** **U_**= Inc. sealed-beam** **X_**= Halogen sealed-beam** **Z_**= Inc. wedge **M_**= Halogen MR16* NOTE: For a complete list of available lamp types, please refer to the lamp 140-141 * Available with EF10 and EF150 lamp heads only ** Available with the EF18 lamp head only	**-AD**= Advanced Diagnostics (audible)* **-ADNA**= Advanced Diagnostics (non-audible)* **-V**= Voltmeter** **-A**= Ammeter ** **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-NEX**= Nexus® wired (consult your sales representative) **-NEXRF**= Nexus® wireless (consult your sales representative) * Minimum lamp load required: 20% of unit capacity Not available with 100W Ni-Cd 24V. -AD & -ADNA include a time delay feature that can be enabled/ disabled in the field or set by the factory by including -AD-D or -ADNA-D. **-A & -V not available with -AD, -ADNA, -NEX, -NEXRF option

Example: **BTSC18-210L_-AD**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____



Total Edge™ Series

Single and Double Face, Surface and Recessed Mount Edge-Lit Exit Sign

Standard Features

- Surface, recessed* or end-mount
- High performance low power consumption LEDs
- Peel-off chevrons
- Special wording panel not available
- Suitable from Damp Location

Construction

- Brushed aluminum housing with matching gray end-caps and canopy
- High grade acrylic panel, choice of legend colors: red on mirror or green on mirror

Electrical

- Dual-voltage input capability 120/277VAC
- Self-Powered models feature battery delivering more than 90 minutes capacity in emergency mode

Installation

- **Surface mount:** Pivoting panel design allows for surface installation in any applications, including ceilings and walls.
- **Semi recessed* mount:** Includes back box and necessary hardware for joist or T-Bar ceilings and is vertically adjustable to install in most ceiling thickness. Mounting bars lock in place with two screws.

Listings

- UL924 listed
- Damp Location listing is standard 68°F to 86°F (20°C to 30°C)

Warranty

- 3-year limited warranty

  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

* Not intended for closed ceilings such as sheet-rock or plaster.

Suggested Specification

Supply and install the **Emergi-Lite® TOTAL™ Edge** Series Edge-Lit Exit Sign. The housing assembly shall be fabricated of extruded aluminum with a satin aluminum finish. The canopy shall be of impact resistant thermoplastic and allow for ceiling, wall or end mount installations. The light source shall be long-life LEDs installed on a PCB strip. The legend shall be printed on an acrylic panel with mirror background. The panel shall be universal faces (single and double) and shall rotate and lock to position from 0° to 180° to allow for wall, ceiling or sloped ceiling installations. The unit shall be equipped with peel-off translucent directional chevrons, to be configured in the field as required by the Code. All models shall be provided with a hardware kit including two 27-inch adjustable bar hangers for recessed installation in a ceiling or wall. AC only models shall have a dual input voltage of 120/277VAC 60Hz. Self-Powered models shall have a dual input voltage of 120/277VAC 60Hz, be supplied with sealed Nickel-Metal Cadmium maintenance free battery, and perform minimum 90 minutes of emergency illumination upon AC failure.The equipment shall be UL-924 listed for Damp location 32°F to 104°F (0°C to 40°C).

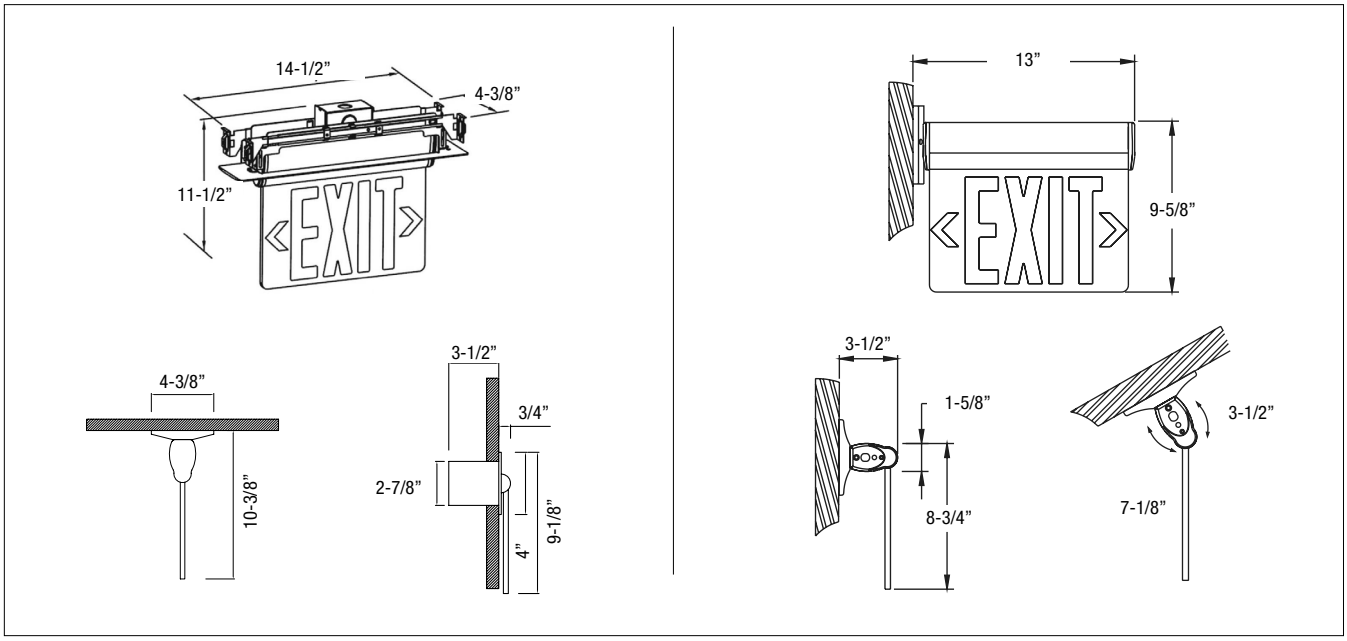
The equipment shall be **Emergi-Lite®** model: _____.

Power Consumption

Model		AC Specs		DC Specs	
Red	AC Only	120VAC, 60Hz	2.0-2.6W	-	-
		277VAC, 60Hz	2.6-3.1W	-	-
	Self-Powered	120VAC, 60Hz	2.0-2.6W	Ni-Cd battery	Min. 90 Minutes
		277VAC, 60Hz	2.6-3.1W	Ni-Cd battery	Min. 90 Minutes
Green	AC Only	120VAC, 60Hz	2.8-3.3W	-	-
		277VAC, 60Hz	3.5-4W	-	-
	Self-Powered	120VAC, 60Hz	2.8-3.3W	Ni-Cd battery	Min. 90 Minutes
		277VAC, 60Hz	3.5-4W	Ni-Cd battery	Min. 90 Minutes

Dimensions

Dimensions are approximate and subject to change.



How to Order

SERIES	COLOR	LEGEND
PA= AC Only **PN**= Self-Powered **PA2**= AC only Dual Circuit	**R**= Red on mirror **G**= Green on mirror	**6**= 6" EXIT Single & Double face with universal chevrons

Example: **PAR6**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

Survive-All™ SVX-HZ Series

Hazardous Location Exit Sign



Features

- Energy efficient: consumes less than 2.5 watts in any configuration. Exit sign illuminated by long-life, energy-efficient LEDs.
- Single face heavy-duty 1/8" thick aluminum back plate. Polyvinyl chloride frame, with built-in gasket to prevent water infiltration. Will not dent, peel, rust or corrode. The sealed, heavy-duty, vandal-resistant polycarbonate faceplate features an evenly illuminated legend. The fully gasketed faceplate is fastened with stainless steel tamper-resistant screws. Self contained; batteries and circuitry are located inside the exit housing.
- Available with sealed, maintenance-free Nickel-Cadmium batteries that provide 90 minutes of emergency operation. Batteries recharge per UL924 requirements.
- AC and Self-Powered models have universal, 2-wire input 120V to 277VAC 50/60Hz.
- Tamper-resistant, hermetically sealed magnetic test switch for Self-Powered models.
- Diagnostic / Self Test circuitry is standard on all Self-Powered models. This circuitry is programmed to ensure the exit sign's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "service required" indicator illuminates immediately. A detailed diagnostic display that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self test will test the unit for a minimum of 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually.
- Nexus® System wired or wireless compatible.
- Can be wall, end or ceiling mounted. Comes standard with an industrial-grade, Die-Cast aluminum electrical box. 1/2" electrical conduit entry on both sides and at the top. Each unit comes standard with one tamper-proof driver bit
- Legend and chevron comply with UL requirements. Evaluated to the UL 844 standard for Class I Division 2, Groups A, B, C and D, Temperature Code: T6 (maximum 185°F/85°C). Evaluated to UL 924 and UL1598 standards. Suitable for cold-weather: -4°F/-20°C (Self-Powered model, "CW" option) and -40°F/-40°C (AC only)
- CSA US Listed
- 5-year limited warranty

  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Tamper-Proof Bit (extra)	690.0454-E
Convert single to double face, red*	DFKR-GY
Convert single face to double face, green*	DFKG-GY

* In the field

Applications

- Manufacturing Plants
- Chemical plants
- Paint Shops
- Gas Stations
- Moisture, Dirt or Dust Concerns
- Oil Refineries
- Wet or Corrosive Conditions

Diagnostic/Self-Test Feature (Standard)

Diagnostic / Self Test circuitry is standard on all self-powered models. This circuitry is programmed to ensure the exits readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "Service Required" indicator illuminates immediately. A detailed diagnostic display is located on the inside of the exit sign, out of sight from the general public. The detailed diagnostic display inside the exit sign will further indicate the nature of the fault. The self test will test the unit for the minimum 30 seconds each month, 30 minutes in every 60 days and 90 minutes annually.

Suggested Specification

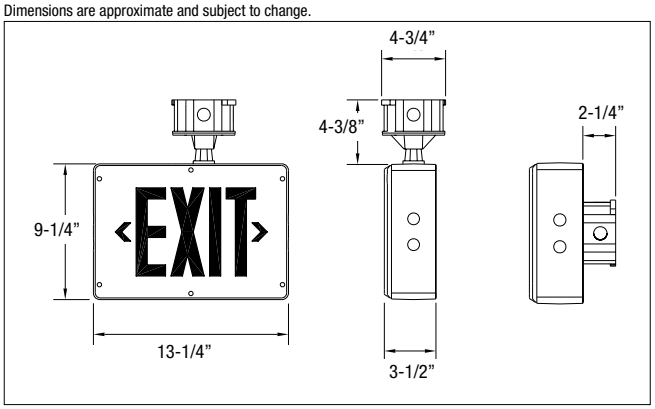
Supply and install **Emergi-Lite® SVX-HZ Series** LED exit signs. The equipment shall operate with universal two-wire AC input voltage from 120Vac to 277Vac at less than 2.5 Watts for single and double face signs. Designed specifically for hostile environments, the equipment frame shall be of industrial grade polyvinyl chloride with a gasket around lenses and canopy. The faceplate(s) shall be constructed of heavy-duty vandal-resistant polycarbonate and feature an even illuminated legend. The light source shall be light emitting diodes (LED). Red LED technology shall be ALINGAP. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination. The equipment shall be evaluated to the UL 844 standard for hazardous locations: Class I Division 2, Groups A, B, C and D with a temperature code T6 (Maximum 85°C). The equipment shall be designed specifically for high abuse areas, wet location, and cold weather (-20°C). The self-powered model shall stay illuminated during emergency operation for at least 90 min utes upon AC failure and shall include a magnetic test switch and selftesting / self-diagnostic functions. The self test will test the unit for 30 seconds each month for the first 5 months, 30 minutes in the 6th month, 30 seconds in months 7 through 11 and 90 minutes in the 12th month. A "Service required" lamp shall be located near the test switch and flash when a fault is detected. A two-LED diagnostic display shall be located inside the equipment and shall identify the eventual source of failure (battery, charger circuitry, or LED lamps).

The exit sign shall be evaluated to UL 924 and UL 1598 Standards.

The unit shall be **Emergi-Lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



Unit Warranty*

Unit carries a 5-year Full Warranty.

Battery Warranty*

Sealed Nickel-Cadmium Battery has a 10 year life expectancy and carries a 5-year Full Warranty, plus a 5-year pro rata warranty.

*Subject to proper installation and maintenance.

Power Consumption

Model	AC Specs		DC Specs	
AC-only red	120 to 277VAC	Less than 2W	–	–
AC-only green	120 to 277VAC	Less than 1.5W	–	–
Self-Powered red	120 to 277VAC	Less than 2W	Ni-Cd battery	Min. 90 minutes
Self-Powered green	120 to 277VAC	Less than 2.5W	Ni-Cd battery	Min. 90 minutes

* Note: Cold-weather option does not consume additional power

How to Order

COLOR OF BODY/FACE	SERIES	FACE	LEGEND	DIAGNOSTIC	OPTIONS
GG= Gray/gray	**SVXHZ**= AC only **SVXNHZ**= Self-Powered Ni-Cd	**1**= Single (ceiling/ wall mount) **2**= Double (ceiling mount only)	**R**= Red **G**= Green	**-D**= Diagnostic (Self-Powered only) **-NEX**= NEXUS® wired (consult your sales representative) **-NEXRF**= NEXUS® wireless (consult your sales representative)	**Blank**= AC only **CW**= Cold weather (-4°F/-20°C for Self-Powered and -40°F/ -40°C for AC only)

Example: **GGSVXNHZ2R-DCW**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

nexus ADVANCED AD DIAGNOSTICS SA US

Survive-All™ SVXH Series

Hazardous Location Combination and Emergency Battery Unit



Features

- Exit sign module is illuminated by long-life, energy-efficient LEDs. Fully field adjustable lamp head assembly comes standard with a selection of two (2) MR16 halogen lamps for optimum illumination over the path of egress. Lamps are shielded by a cast aluminum housing and a polycarbonate cover
- Rugged PVC body will not dent, peel or corrode. The sealed faceplate has a heavy-duty, vandal-resistant polycarbonate cover and is fastened with stainless steel tamper-resistant screws. The polyvinyl chloride frame has a built-in gasket to prevent water infiltration. The heavy-duty 1/8" thick aluminum back plate has keyholes for secure wall mount installation
- Available with sealed, maintenance-free Nickel-Cadmium, or Nickel-Metal Hydride batteries
- Fully automatic pulse charger offers 120/277VAC, 60Hz, current limiting temperature compensation, short circuit proof, low voltage battery disconnect, brownout protection and standard solid state transfer feature. The test switch is magnetically operated
- Advanced Diagnostic circuitry is standard on all Self-Powered models. This circuitry is programmed to ensure the combination unit's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "Service Required" indicator illuminates immediately. A detailed diagnostic display that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self test will test the unit for a minimum of 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually
- Designed for wall-mount installation only with a 1/2" electrical conduit entry on both sides and at the top
- CSA US Listed
- Evaluated to UL924 standard and to UL844 standard for hazardous locations: Class I Division 2, Groups A, B, C and D. A range of lamp ratings are available for different temperature codes
- 5-year limited warranty

  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Additional special bit for tamper-proof screws	690.0454-E

Applications

- Manufacturing Plants
- Chemical plants
- Paint Shops
- Gas Stations
- Moisture, Dirt or Dust Concerns
- Oil Refineries
- Wet or Corrosive Conditions

Diagnostic / Self Test Feature (Standard)

Diagnostic / Self Test circuitry is standard on all self-powered models. This circuitry is programmed to ensure the exit's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "Service Required" indicator illuminates immediately. A detailed diagnostic display is located on the inside of the exit sign, out of sight from the general public. The detailed diagnostic display inside the exit sign will further indicate the nature of the fault. The self test will test the unit for a minimum 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually.

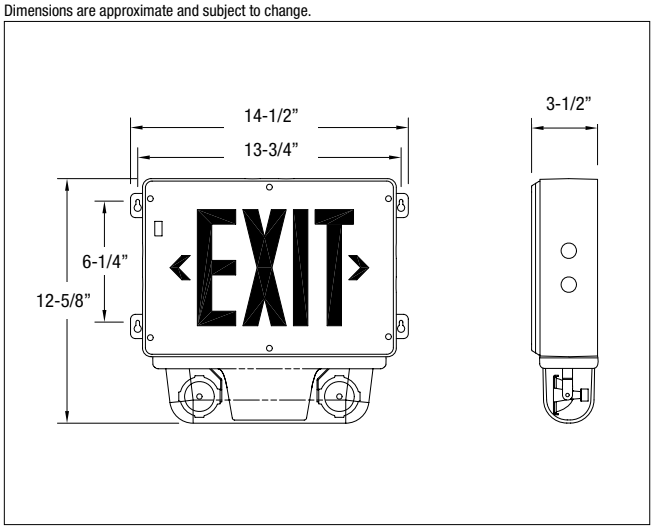
Suggested Specification

Supply and install **Emergi-lite® SVXH Series** combination of unit equipment and LED exit sign. Designed specifically for hostile environments, the equipment frame shall be of industrial grade polyvinyl chloride with gaskets around both sides of the frame contour. The back plate shall be made of 1/8-inch thick aluminum sheet and shall include knock-outs for installation on an electrical box and four keyholes for alternative installation on a wall surface. The faceplate shall be constructed of heavyduty vandal-resistant polycarbonate and feature a uniformly illuminated legend. The light source shall be light emitting diodes (LED). Red LED technology shall be ALINGAP. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination. When specified, the equipment shall have attached a lower compartment containing two emergency lights with adjustable swivels and long-life MR-16 halogen lamps of _____V and _____ W. The lamps shall be shielded by cast aluminum housing and protected by a shock-absorbent, transparent polycarbonate cover. The equipment shall be evaluated for the UL 844 Standard for Hazardous Locations: Class I Division 2, Groups A, B, C and D. The standard AC input voltage shall be: 120/277VAC. The equipment shall be equipped with a magnetic test switch located behind the face plate and two LED pilot lights: AC-on and "Service required". The unit shall include self-testing / selfdiagnostic functions monitored. The self test will test the unit for a minimum of 30 seconds every 30 days, 30 minutes in the 6th months, 90 minutes annually. The "Service required" LED shall light when a fault is detected. A four-LED diagnostic display located inside the equipment shall identify the source of the failure (battery, charger circuitry, or lamp load).

The unit shall be **Emergi-Lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



Unit Warranty*

Unit carries a 5-year Full Warranty.

Battery Warranty*

Sealed Nickel-Cadmium Battery has a 10 year life expectancy and carries a 5-year Full Warranty, plus a 5-year pro rata warranty.

*Subject to proper installation and maintenance

Temperature Codes

Lamp Rating	Temperatude Code	Max. Temperature	Replacement Part #
6V-10W	T3C	320°F/160°C	580.0079-E
12V-12W	T3A	356°F/180°C	580.0080-E
12V-20W	T2D	419°F/215°C	580.0068-E
6V-4W LED	T4A	248°F/120°C	580.0097-E
12V-4W LED	T4A	248°F/120°C	580.0093-E
12V-5W LED	T4A	248°F/120°C	580.0104-E

Note: Use qualified replacement lamps to avoid risk of over-heating

Power Consumption Chart

Model	AC Input	Maximum		Stand-by		Unit Rating*			
		Current	Power	Current	Power	1½ hrs	2 hrs	3 hrs	4 hrs
SVXH	120/277VAC	0.15/0.07A	16W	0.09/0.03A	8W	20	15	–	–
SVXH12N	120/277VAC	0.30/0.08A	29W	0.13/0.05A	10W	24	18	12	–
SVXH12H	120/277VAC	0.30/0.08A	29W	0.13/0.05A	10W	40	30	20	12

* Watts to 87-1/2% of rated battery voltage

How to Order

HOUSING/FACE COLOR	SERIES/CAPACITY	LEGEND COLOR	DIAGNOSTICS	# OF HEADS	LAMP TYPE/WATTAGE*
GG= Gray/gray	**SVXH**= 6V-20W, Ni-Cd **SVXH12N**= 12V-24W, Ni-Cd **SVXH12H**= 12V-40W, NiMH	**R**= Red **G**= Green	**DA**= Advanced Diagnostics (audible) **D**= Advanced Diagnostics (non-audible) **NEX**= NEXUS® wired* **NEXRF**= NEXUS® wireless* * Consult your sales representative	**Blank**= 0 head* **2**= Two heads * A remote load must be connected	**LA**= 6V-4W, MR16 LED **LG**= 12V-4W, MR16 LED **LI**= 12V-5W, MR16 LED **MK**= 12V-12W MR16 **MJ**= 6V-10W MR16 **MW**= 12V-20W MR16 IR high output * No other lamp option available

Example: **GGSVXHRD2MJ**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

NEMA-4X nexus

Survive-All™ SVX Exit Series

NEMA-4X Rated and UL Listed for Wet and Damp Locations



Features

Reliability

The Survive-All™ SVX Series has a 5-year limited warranty, including light source

Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Unit Data - NEMA-4X* Rated

Rugged polyvinyl chloride body will not dent, peel, rust or corrode. The sealed faceplate is constructed of heavy duty, vandal-resistant polycarbonate and features an evenly illuminated legend. The fully gasketed faceplate is fastened with stainless steel tamper-resistant screws. Magnetically operated test switch. Models can be wall, or ceiling mounted. Legend and chevron complies with UL and CSA requirements.

Survive-All™ SVX Series signs are unaffected by the vibrations, ambient temperature swings and typical power surges detrimental to standard exit light sources.

NEMA 4X* Rated. UL924 Listed. Listed for wet and Damp Locations 50°F to 104°F (+10°C/+40°C)

5-year limited warranty

Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

* Nema-4X Certified for wall or ceiling mounting only

Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Tamper-proof bit	690.0454-E
Convert single to double face, red	DFKR*
Convert single face to double face, green	DFKG*

* Colors available AL-BK-WT

Applications

- Hosedown areas / car washes
- Food processing / preparation facilities
- Marine locations
- Chemical plants
- Schools and other public facilities
- Parking garages
- Food processing / preparation facilities
- Transit platforms
- Sports arenas / swimming pools
- Security areas / prisons
- Warehouse and cold storage facilities
- Heavy industrial facilities

Note: Units installed outdoors must be in a shaded area (Lead-Calcium batteries)

Suggested Specification

Supply and install the **Emergi-Lite® SVX Series LED** exit signs. The signs shall be listed to UL924. The exit housing shall be molded polyvinyl chloride in either white or black. A universal mounting pattern shall be available on single face signs for back mounting to a wall or surface. All models shall come equipped with a canopy for ceiling or end mount applications. The faceplate and canopy shall have gasketing available for a secure, watertight seal. Vandal proof screws shall be provided for securing the faceplate(s). Light Source: Shall be high intensity, long-life light emitting diodes (LED's). LED's shall provide even illumination, at the same intensity during AC operation and in the the emergency mode. LED's shall be mounted within the exit housing but not along the face or wording. An LED sensitive ink diffuser shall be mounted on the face to provide full 3/4" letter stroke with even illumination. Red LED technology shall be ALINGAP. Self Powered Models: Shall have a Nickel-Cadmium battery for long, maintenance-free life. In the emergency mode the battery shall provide a minimum of 90 minutes run time. Self Testing/ Self-diagnostics shall be standard on all self powered signs. The circuit shall have a single "service required" LED visible to the user. A detailed diagnostic display will be found internally to the unit and isolate the fault to the batter y charger board or LED lamps.

The self testing software will simulate a power failure and transfer the light source to the batter y for 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually in accordance with NFPA 101. The unit shall be supplied with an AC pilot light and a magnetic proximity test switch for manual testing. The charger shall be fully automatic, solid state, temperature compensated and short circuit protected.

The unit shall be **Emergi-Lite®** model: _____.

Self-Diagnostic/Self-Test Feature (Standard)

Self-Diagnostic circuitry is standard on all self-powered models. This circuitry is programmed to ensure the exits readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single service required indicator illuminates immediately. A detailed diagnostic display is located on the inside of the exit sign... out of sight from the general public will further indicate the nature of the fault. The self testing software will test the unit for 30 seconds ever y 30 days, 30 minutes every 60 days and 90 minutes annually.

Battery Warranty*

Unit carries a 5-year Full Warranty.

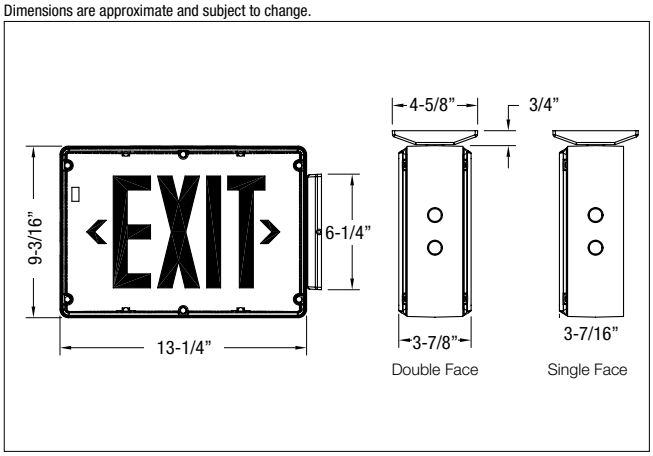
Battery Warranty*

Sealed Nickel-Cadmium batteries has a 10 year life expectancy and carries a 5-year Full Warranty, plus a 5-year pro rata warranty.

* Subject to proper installation and maintenance.

Dimensions

Dimensions are approximate and subject to change.



High Performance Circuitry

- Self Contained – Batteries and circuitry located inside the exit housing.
- Continuous self-diagnostic monitoring and monthly self testing.
- Fully automatic charger is solid state.
- AC, AC/DC and Self-Powered Models have universal, 2-wire input 120V to 277VAC 50/60 Hz.
- Sealed, maintenance-free Nickel-Cadmium battery provides 90 minutes of emergency operation.
- Battery recharges per UL924 requirements.
- Each unit comes standard with one tamper-proof driver bit.

Power Consumption (LED Exit Signs)

Model	AC Specs		DC Specs	
AC-only	120 to 277VAC	1.2W	–	–
AC/DC	120 to 277VAC	1.2W	6 to 24VDC	Less than 1.5W
Self-Powered	120 to 277VAC	3.7W	Nickel-Cadmium	Min. 90 minutes

How to Order

HOUSING COLOR	SERIES	FACE	LEGEND	DIAGNOSTIC	HOUSING	OPTIONS
BB= Black/black **BW**= Black/white **BA**= Black/aluminum **GB**= Gray/black **GW**= Gray/white **GA**= Gray/aluminum **WB**= White/black **WW**= White/white **WA**= White/aluminum	**SVX**= AC only **SVXN**= Self-Powered Ni-Cd	**1**= Single **2**= Double	**R**= Red **G**= Green	**Blank**= Standard **D**= Diagnostic (Self-Powered only) **NEX**= NEXUS® wired (consult your sales representative) **NEXRF**= NEXUS® wireless (consult your sales representative)	**4X**= Wet/Damp Locations* * NEMA 4X rated for wall or ceiling mount only	**Blank**= No options **2CKT**= Dual circuit (AC only)* **CW**= Cold weather (Self-Powered -4°F to 77°F / -20°C to 25°C – AC/DC -40°F to 77°F / -40°C to 25°C) **DC**= 6 to 24 VDC** **FA**= Fire alarm activated flasher* **FL**= Flasher only* **FZ**= Flasher/buzzer (Self-Powered only)* *Not available with Nexus® option **Not available with Self-Power

Example: **BBSVXN1RD4X-FA**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

nexus NEMA-4X ADVANCED AD DIAGNOSTICS

Survive-All™ SVX Series

NEMA-4X, Vandal Resistant and Harsh Environment Combination Unit



Features

- Each unit comes with two (2) MR16 high intensity lamps (standard). Fully field-adjustable lamp head assembly offers the option of selecting either a halogen lamp or a high efficiency white LED light source for optimum illumination over the path of egress. Exit light source LED
- Rugged PVC body will not dent, peel or corrode. The sealed faceplate is constructed with a heavy duty, vandal-resistant polycarbonate cover and fastened with stainless steel tamper-resistant screws
- Available with sealed, maintenance-free Nickel-Cadmium batteries
- This circuitry is programmed to ensure the exit combination unit's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "Service Required" indicator illuminates immediately. A detailed diagnostic display that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self test will check the unit for a minimum of 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually. PulsePlus Charger circuitry offers 120/277 volt input 60 Hz, 0.3/0.15 Amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensated charger, sealed relay, low voltage battery disconnect, brownout protection and lockout (automatic battery connect). Magnetically operated test switch
- Can be wall, end or ceiling mounted
- UL924 Listed
- NSF Certified for use in food processing plants
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Additional special bit for tamper-proof screws	690.0454-E
Additional test magnet	199.0133-E

Applications

- Hosedown areas / car washes
- Food processing / preparation facilities
- Marine locations
- Chemical plants
- Schools and other public facilities
- Parking garages
- Transit platforms
- Sports arenas / swimming pools
- Security areas / prisons
- Warehouse and cold storage facilities
- Heavy industrial facilities

Note: Units installed outdoors must be in a shaded area (Lead-Calcium batteries)

Suggested Specification

Supply and install **Emergi-Lite® Survive-All™ SVX Combo Series** unit with electrically compatible fixtures or exit signs as indicated on the plans. The combination unit shall be able to provide exit signage and the emergency lighting with its entire electronics and power source in a slim one-piece compact sealed NEMA 4X-rated housing. The emergency lighting MR16 heads shall be located at the bottom of the unit and covered by a sealed clear lens made of UV-stabilized polycarbonate. These emergency lighting heads shall be equipped with an innovative swivel system allowing for up to a 180° rotation in order to provide for an illumination i n any direction of the path of egress. The unit shall be NEMA 4X-rated and designed specifically for high abuse areas, wet and damp locations, as well as for cold weather applications (CW4 option).

The exit signage faceplate(s) shall be constructed of heavy-duty vandal-resistant polycarbonate and features an even illuminated legend. The legend light source shall be composed of high efficiency light emitting diodes (LED). The Emergi-Lite® Advanced Diagnostic Micro-controller board shall supply the rated load for a minimum of 90 minutes to 87-1/2% of the rated batter y voltage. The unit shall be rated 120/277 Vac, 60Hz and be UL listed. The unit shall have a remote output of ___ V ___ W. The charger shall at first continuously recharge the battery then, when the battery is at full capacity, the charger will periodically pulse charge the battery in stand-by mode. This pulse-type charger promotes long battery life and reduces the potential for grid corrosions. Its charge voltage is factory set to +/-1% tolerance and is temperature compensated. The charger incorporates Lockout and Brownout Circuits, and Low Voltage Disconnect. It protects the unit from over-current, shortcircuit, and reverse polarity. This unit shall self-test for 1 minute every 30 days, 30 minutes on the 6th month and 90 minutes every 12 months. The unit shall be capable of full recharge in compliance with UL specifications. The unit shall be supplied with a magnetic test switch. A "ServiceRequired" lamp shall be located near the test switch and flash when a fault is detected. A LED based diagnostic display shall be located inside the equipment and shall identify the source of failure (battery, charger, circuitry, or lamps).

The unit shall be **Emergi-Lite®** model: _____.

Battery Warranty*

Entire unit (excluding lamps) carries a 3-year full warranty.

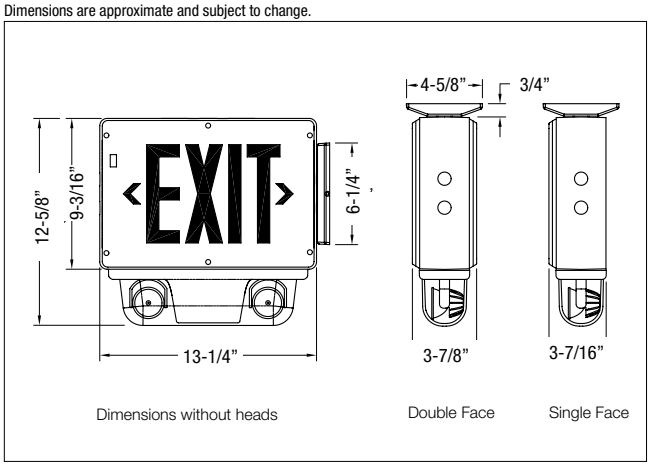
Battery Warranty*

Sealed Nickel-Cadmium batteries carry a 5-year full warranty and a 5- year pro-rata warranty.

* Subject to proper installation and maintenance.

Dimensions

Dimensions are approximate and subject to change.



Unit Rating

Sealed Maintenance-Free Battery Types	Watts to 87-1/2% of rated battery voltage*			
	1-1/2 hrs	2 hrs	3 hrs	4 hrs
Nickel-Cadmium	12	9	–	–
	24	18	12	9

* National Electrical Code Specification.

Power Consumption

Model	AC Specs		DC Specs (90 minutes)	
SVX12N	120/277VAC	0.12/0.06A 13W	6V	12W
SVX24N	120/277VAC	0.17/0.08A 19W	12V	24W

How to Order

HOUSING/FACE COLOR	SERIES/ CAPACITY	FACES	LEGEND COLOR	DIAGNOSTICS	HOUSING	# OF HEADS	LAMP TYPE/ WATTAGE	OPTIONS
WW= White/white **WB**= White/black **WA**= White/ aluminum **BB**= Black/black **BW**= Black/white **BA**= Black/ aluminum **GA**= Gray/ aluminum **GW**= Gray/white **GB**= Gray/black	**SVX12N**= 6V-12W **SVX24N**= 12V-24W	**1**= Single face **2**= Doubleface	**R**= Red legend **G**= Green legend	**DA**= Advanced Diagnostics (audible) **D**= Advanced Diagnostics (non-audible) **NEX**= NEXUS® wired * **NEXRF**= NEXUS® wireless* * Consult your sales representative	**4X**= Wet/ Damp Locations	**Blank**= 0 heads* **2**= Two heads * A remote load must be connected	**LA**= 6V-4W, MR16 LED **LG**= 12V-4W, MR16 LED **LI**= 12V-5W, MR16 LED **LJ**= 12V-6W, MR16 LED **MI**= 6V-6W, MR16 **MK**= 12V-12W, MR16	**Blank**= No options **CW4**= Cold weather (-40°F/-40°C)* **FA**= Flasher (fire alarm activated) **F/B**= Flasher/buzzer (AC power failure) **FL**= Flasher (AC power failure) **-208V**= 208VAC, 60Hz input **-240V**= 240VAC, 60Hz input **-208V50HZ**= 208VAC, 50Hz input **-CM**= Canopy pendant mount * Single face only

Example: **WWSVX12N1RD4X2LGCW4**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

nexus

US

Survive-All™ SVH Series

Hazardous Location Battery Unit



The **SVH Series** of battery units are designed specifically for installation in hazardous locations and other high-abuse, industrial environments. Extremely resistant to high impacts, vibrations and variations in temperature.

The **SVH Series** is ideally suited for areas with the risk of flammable gases, vapors or liquids that can create an explosive atmosphere. Equipped with state-of-the-art MR16 LED lamps and with generous remote power capabilities, the equipment offers impressive illumination performance along an extensive path of egress

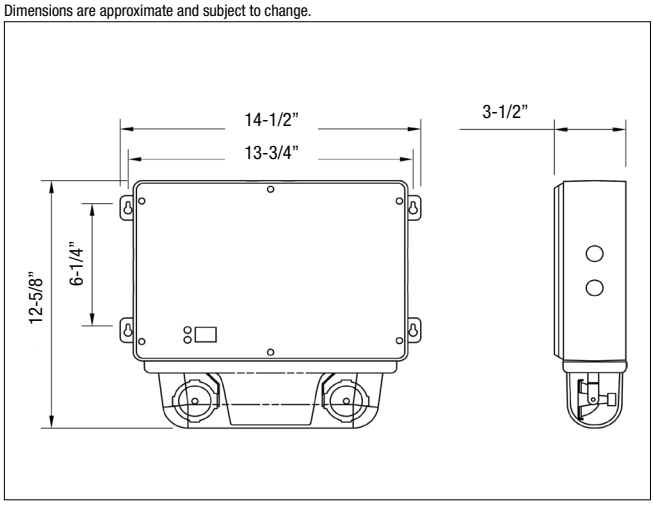
Features

- A range of lamp ratings are available for different temperature codes
- Ambient temperature: 10… 40°C (50… 104°F)
- Advanced Diagnostics option available
- Lead-Calcium batteries are sealed, maintenance-free, with up to 72W emergency power
- Choice of MR16 LED or halogen lamps, shielded by a clear polycarbonate cover
- Two MR16 LED lamps illuminate up to a 60 ft path of egress
- Remote load capacity: illuminate up to a 420 ft path of egress with LED remote heads
- Heavy-duty 1/8-inch thick aluminum back plate with keyholes for secure wall-mount installation
- Built-in microprocessor-based battery charger and self-test/ self-diagnostic circuitry
- 3/4-inch electrical conduit entry on both sides and at the top
- Certified for use in Damp locations
- Evaluated to the UL924 Standard
- Evaluated to the UL844 Standard for Class I Division 2, Groups A, B, C and D
- CSA US Listed
- 5-year limited warranty

  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Suggested Specification

Supply and install **Emergi-lite® SVH Series** of battery units. Designed specifically for hostile environments, the equipment frame shall be of industrial grade polyvinyl chloride with gaskets around both sides of the frame contour. The frame shall be covered by two plates made of 1/8-inch thick aluminum sheet. The back plate shall include four keyholes for wall-mount installation.The front plate shall include watertight lenses for pilot lights: AC-on and “service required”. When specified, the equipment shall have attached a lower compartment containing two emergency lights with adjustable swivels and long-life MR-16 lamps type ____ of ____ V and ____ W. The lamps shall be shielded by a shock-absorbent, transparent polycarbonate cover.

The equipment shall be certified for use in Hazardous Locations: Class I Division 2 GroupsA,B, C and D.The standard equipment shall have a dual AC input voltage: 120/277Vac and shall be equipped with a magnetic test switch located on the left side o f the frame.The unit shall include self-testing/self-diagnostic functions monitored by a microcontroller and shall automatically self test for one minute every 30 days, 30 minutes in the 6th month and 90 minutes annually. The “service required” LED shall light when a fault is detected. A LED diagnostic display shall identify the source of the failure (battery, charger circuitry, lamp load).

The unit shall be **Emergi-Lite®** model: _____.

Temperature Codes

Lamp Rating	Temperature Code	Max. Temperature	Replacement Part #
6V-4W	T4A	120°C	580.0097
6V-10W	T3C	160°C	580.0079
12V-4W	T4A	120°C	580.0080
12V-5W	T4A	120°C	580.0104
12V-12W	T3A	180°C	580.0080
12V-20W-H	T2D	215°C	580.0068

Note: Use qualified replacement lamps to avoid risk of over-heating

Power Consumption

Model	AC Specs		Wattage Capacity				
			1-1/2 hrs	2 hrs	3 hrs	4 hrs	8 hrs
SVH18	120/277VAC	0.17 / 0.09 Amp	18	12	9	–	–
12SVH36		0.30 / 0.15 Amp	36	27	18	14	–
12SVH60		0.30 / 0.15 Amp	60	45	30	24	12
12SVH72		0.30 / 0.15 Amp	72	54	36	28	14

How to Order

COLOR	VOLTAGE AND POWER	# OF HEADS	LAMPS	OPTIONS
G= Gray	**SVH18M**= 6V-18W, Lead-Calcium **12SVH36M**= 12V-36W, Lead-Calcium **12SVH60M**= 12V-60W, Lead-Calcium **12SVH72M**= 12V-72W, Lead-Calcium	**-2**= Two heads **-0**= No heads	**LA**= 6V-4W, 2 X MR16 LED **LG**= 12V-4W, 2 X MR16 LED **LI**= 12V-5W, 2 X MR16 LED **MK**= 12V-12W, MR16 **MW**= 12V-20W, MR16-IR high-output	**-DA**= Advanced Diagnostics (audible)* **-D**= Advanced Diagnostics (non-audible)* **-D3**= Time delay (15 minutes) **-NEX**= NEXUS® wired (consult your sales representative)* **-NEXRF**= NEXUS® wireless (consult your sales representative)* (12SVH only) * Minimum lamp load required: 20% of unit capacity

Example: **G12SVH72M-2MK-DA**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

nexus NEMA-4X ADVANCED AD DIAGNOSTICS

Survive-All™ SV Series

NEMA-4X, NSF, Vandal-Resistant Housing Battery Unit



INDUSTRIAL

Features

- Equipped with a tool-less MR16 swivel lamp assembly to provide precise beam control. Choice of MR16 LED or halogen lamps of 6V and 12V
- Fully gasketed cast aluminum back plate with clear, UV resistant polycarbonate cover. Tamper-proof screws and bit are included. Available in black, white or gray
- Standard temperature Lead-Calcium 50°F to 86°F (10°C to 30°C)
- Standard temperature Nickel-Cadmium & Nickel-Metal Hydride 50°F to 104°F (10°C to 40°C)
- Available with sealed, maintenance-free Nickel-Cadmium (UL Listed for damp and wet locations), or Lead-Calcium batteries
- Standard 120/277VAC 0.3/0.15A input. Non-audible advanced diagnostic charger board, 15 minute Time Delay and lamp disconnect. Audible warning and Time Delay functions can be enabled or disabled during installation. Non-obtrusive, magnetic test switch. Microprocessor diagnostic system tests, detects and indicates battery, charger circuitry or MR16 lamp failures.
- Wall, strut or beam mounting
- UL924 Listed
- NSF Certified for use in food processing plants
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Additional special bit for tamper-proof screws	690.0454-E
Universal bracket (for mounting on poles, I-beams or strut metal framing)	PMK-E

Applications

- Hosedown areas / car washes
- Food processing / preparation facilities
- Marine locations
- Chemical plants
- Schools and other public facilities
- Parking garages
- Food processing / preparation facilities
- Transit platforms
- Sports arenas / swimming pools
- Security areas / prisons
- Warehouse and cold storage facilities
- Heavy industrial facilities

Note: Units installed outdoors must be in a shaded area (Lead-Calcium batteries)







Suggested Specification

Supply and install **Emergi-Lite®**, **Survive-All™ SV** Emergency Battery Unit, with electrically compatible fixtures or exit signs as indicated on the plans. The unit shall include a die-cast aluminum back plate and an equipment frame of industrial grade thermoplastic with a gasket around lenses and canopy, specifically designed for hostile environments. The front of the unit shall be protected with a clear cover constructed of heavy-duty vandalresistant, UV stabilized polycarbonate, fixed with tamper-proof screws. Emergency lights shall be fully adjustable and equipped with high efficiency MR16 lamps. The unit shall be NEMA 4X rated, NSF certified and designed specifically for high abuse areas, wet and damp locations, as well as cold weather applications (CW4 option). The equipment shall supply the rated load for a minimum of 90 minutes to 87-1/2% of the rated batter y voltage. The unit shall be rated 120/277Vac, 60Hz, and be UL listed. The unit shall have an output of ___ V ____ W. The charger shall at first continuously recharge the battery, then when the battery is at full capacity, the charger will periodically pulse-charge the battery in stand-by mode. This pulse-plus charger promotes long battery life and reduces the potential for grid corrosions. Its charge voltage is factory set to +/-1% tolerance and temperature compensated.

The charger incorporates Lockout and Brownout Circuits, and Low Voltage Disconnection. It protects the unit from over-current, shortcircuit, and reverse polarity. The Emergi-Lite® Advanced Diagnostic Microcontroller board shall self-test for 1 minute every 30 days, 30 minutes on the 6th month and 90 minutes every 12 months. The unit shall be capable of full recharge in compliance with UL specifications. The unit shall be furnished with a magnetic test switch. A “Service Required” lamp shall be located near the test switch and flash when a fault is detected. A LED-based diagnostic display shall be located inside the equipment and shall identify the source of failure (battery, charger, circuitry, or lamps).

The unit shall be **Emergi-Lite®** model: _____.

Battery Warranty*

Entire unit (excluding lamps) carries a 3-year full warranty.

Battery Warranty*

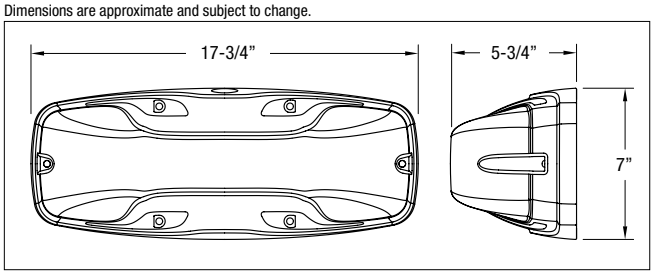
Lead-Calcium batteries carry a 3-year full warranty and 3-year prorata warranty.

Nickel-Cadmium batteries carry a 5-year full warranty and 5-year prorata warranty

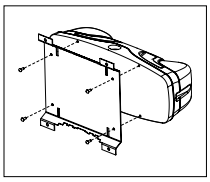
* Subject to proper installation and maintenance.

Dimensions

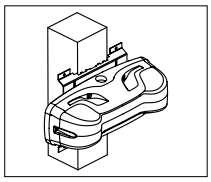
Dimensions are approximate and subject to change.



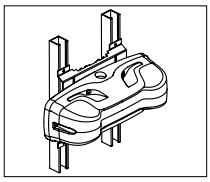
Universal Bracket



PMK KIT
(screws included)



BEAM MOUNTING



STRUT MOUNTING

Unit Rating

UNIT EQUIPMENT - WITH REMOTE CAPABILITY				
Sealed Maintenance-Free Battery Types	Watts to 87-1/2% of rated battery voltage*			
	1-1/2 hrs	2 hrs	3 hrs	4 hrs
Lead-Calcium	18	12	8	–
	24	16	12	8
	36	24	20	14
	54	36	27	20
Nickel-Cadmium	24	18	12	8
	40	27	20	14
Nickel-Metal Hydride	60	40	30	20

* National Electrical Code Specification.

How to Order

COLOR	SERIES	# OF LAMPS	LAMPS	DIAGNOSTICS	OPTIONS
B= Black **G**= Gray **W**= White	**SV18M**= 6V-18W Lead-Calcium **12SV24M**= 12V-24W Lead-Calcium **12SV36M**= 12V-36W Lead-Calcium **12SV54M**= 12V-54W Lead-Calcium **12SV24N**= 12V-24W Nickel-Cadmium* **12SV40N**= 12V-40W Nickel-Cadmium* **12SV60H**= 12V-60W NiMH* *= Suitable for Damp-Locations 50°F to 104°F (10°C to 40°C)	**-2**= 2 Lamps	**LA**= 6V-4W, MR16 LED **LG**= 12V-4W, MR16 LED **LI**= 12V-5W, MR16 LED **LJ**= 12V-6W, MR16 LED **MI**= 6V-6W, MR16 **MK**= 12V-12W, MR16 **MW**= 12V-20W, MR16-IR	**-DA**= Advanced Diagnostics (audible)* **-D**= Advanced Diagnostics (non-audible)* **-NEX**= NEXUS® wired **-NEXRF**= NEXUS® wireless * Minimum lamp load: 20% of unit capacity	**Blank**= No options **CW4**= Cold weather -40°F to 104°F (-40°C to +40°C)* **-SMC**= Surface ceiling mount kit * Only available with: 12SV24M, 12SV36M & 12SV24N NEX & NEXRF: 12SV24M & 12SV36M

Example: **B12SV36M-2LG-DCW4**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

US

Survive-All™ EF41 Series

Remote Fixture for Hazardous Locations

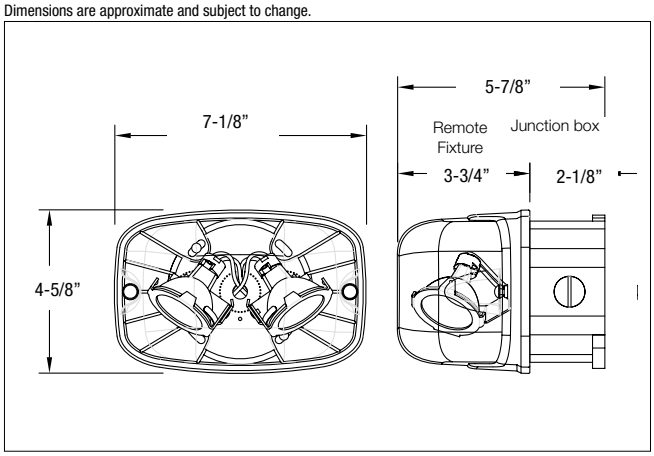


Features

- •• Available with single or double lamp heads with high-efficiency MR16 halogen lamps of 10W, 12W or 20W (see How to Order information) and MR16 high-output LEDs (4W, 5W and 6W)
- Die-Cast aluminum back plate with gasket. Clear polycarbonate cover, UV and impact resistant
- Input voltage: 6V, 12V, 24V or 120V
- Easy installation on a 4" octagonal box (included). Comes standard with tamper-proof screws and bit
- Extreme operational temperature range: -40ºF to +104ºF (-40ºC to +40ºC)
- Indoor use
- Fully adjustable tool-less aiming swivel
- Tool-less easy lamp replacement
- Surface mount
- Conduit entry 1/2" NPT
- CSA US Listed
- Evaluated to UL 844 Standard for Class I Division 2, Groups A, B, C and D. Temperature Codes: T3B (10W and 12W MR16 lamps) and T2C (20W MR16 lamps) and T4A and T5 MR16 LED.
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Lamp Selection Chart and Temperature Code

Lamp Suffix	Voltage	Wattage	Lumens	Replacement #	Temperature Code	Max Temperature
MJ	6	10	74	580.0079-E	T3B	165°C
MK	12	12	80	580.0080-E	T3B	165°C
MW	12	20-H	400	580.0068-E	T2C	230°C
MS	24	12	82	580.0070-E	T3B	165°C
MD	24	20	240	580.0077-E	T2C	230°C
MT	120	20	100	580.0065-E	T2C	230°C
LA	6	4	200	580.0097-E	T4A	120°C
LG	12	4	220	580.0093-E	T5	100°C
LI	12	5	340	580.0104-E	T4A	120°C
LJ	12	6	540	580.0106-E	T4	135°C
LL	24	4	220	580.0098-E	T5	100°C
LW	120	4	230	580.0113-E	T4A	120°C

How to Order

SERIES	LAMP TYPE/WATTAGE	COLOR
EF41= Single **EF41D**= Double	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LJ)**= 12V-6W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LW)**= 120V-4W, MR16 LED **(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MW)**= 12V-20W, MR16 IR high output **(MS)**= 24V-12W, MR16 **(MD)**= 24V-20W, MR16 **(MT)**= 120 VAC/VDC-20W MR16 (GU10)	**-GY**= Gray

Example: **EF41(MJ)-GY**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

US

Survive-All™ EF41 Series

Class I Division II Certified Remote Fixture

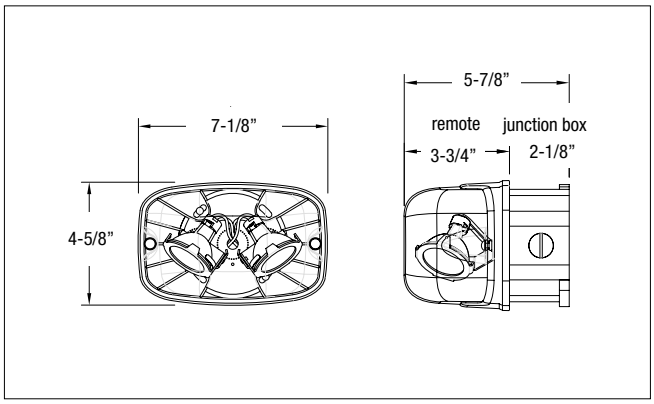


Features

- Available with single or double lamp heads with high-efficiency MR16 halogen lamps of 10W, 12W or 20W (see How to Order information) and MR16 high-output LEDs (4W, 5W and 6W)
- Die-Cast aluminum back plate with gasket. Clear polycarbonate cover, UV and impact resistant
- Input voltage: 6V, 12V, 24V or 120V
- Easy installation on a 4" octagonal box (included). Comes standard with tamper-proof screws and bit
- Evaluated to UL 844 Standard for Class I Division 2, Groups A, B, C and D. Temperature Codes: T3B (10W and 12W MR16 lamps) and T2C (20W MR16 lamps) and T4A and T5 MR16 LED.
- Extreme operational temperature range: -40ºF to +104ºF (-40ºC to +40ºC)
- Indoor use
- Fully adjustable tool-less aiming swivel
- Tool-less easy lamp replacement
- Surface mount
- Conduit entry 1/2" NPT
- CSA US Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Lamp Selection Chart and Temperature Code

Lamp Suffix	Voltage	Wattage	Lumens	Replacement #	Temperature Code	Max Temperature
MJ	6	10	74	580.0079-E	T3B	165°C
MK	12	12	80	580.0080-E	T3B	165°C
MW	12	20-H	400	580.0068-E	T2C	230°C
MS	24	12	82	580.0070-E	T3B	165°C
MD	24	20	240	580.0077-E	T2C	230°C
MT	120	20	100	580.0065-E	T2C	230°C
LA	6	4	200	580.0097-E	T4A	120°C
LG	12	4	220	580.0093-E	T5	100°C
LI	12	5	340	580.0104-E	T4A	120°C
LJ	12	6	540	580.0106-E	T4	135°C
LL	24	4	220	580.0098-E	T5	100°C
LW	120	4	230	580.0113-E	T4A	120°C

How to Order

SERIES	LAMP TYPE/WATTAGE	COLOR
EF41= Single lamp **EF41D**= Double lamp	**(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MW)**= 12V-20W, MR16-IR **(MS)**= 24V-12W, MR16 **(MD)**= 24V-20W, MR16 **(MT)**= 120VAC/VDC-20W MR16(GU10) **(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LJ)**= 12V-6W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LW)**= 120V-4W, MR16 LED (C/W wires) *** Wattage doubles for "D" 2-lamp version**	**-GY**= Gray

Example: **EF41(MJ)-GY**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

NEMA-4X

Survive-All™ EF39 & EF40 Series

EF39: NEMA-4X & NSF Certified
EF40: Vandal Resistant



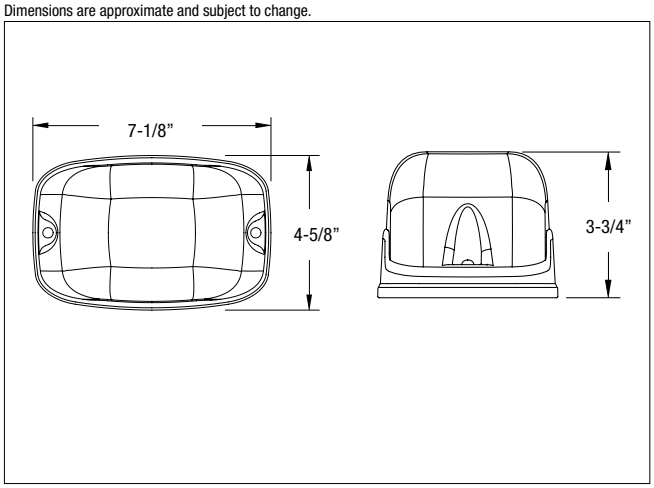
Features

- Fully gasketed with a selection of cast aluminum or polycarbonate back plate
- Clear polycarbonate UV and impact resistant-lens
- Choice of single or double lamp models
- Available in 6, 12 and 24V models MR16 or LED
- Easy lamp replacement
- EF39 comes standard with tamper-proof screws and bit
- NSF Certified for food processing plants
- NEMA-4X Certified
- EF39P and EF40P require mounting plate option when installed on surface mount junction box
- CSA Certified to C22.2 No. 141
- Suitable for indoor/outdoor installation
- UL924 Listed
- 3-year limited warranty

  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Additional special bit for tamper-proof screws	690.0454-E

How to Order EF39 Series

SERIES	LAMP TYPE/WATTAGE		COLOR	OPTION
EF39P= All polycarbonate single head NEMA-4X **EF39PD**= All polycarbonate double head NEMA-4X	**(MI)**= 6V-6W, MR16 **(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MS)**= 24V-12W, MR16	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LJ)**= 12V-6W, MR16 LED	**Blank**= White **-BK**= Black **-GY**= Gray	**SM**= Mounting plate

Example: **EF39P(LG)-BK**

SERIES	LAMP TYPE/WATTAGE		COLOR
EF39= Die-Cast back plate single head NEMA-4X **EF39D**= Die-Cast back plate double head NEMA-4X	**(MI)**= 6V-6W, MR16 **(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MS)**= 24V-12W , MR16 **(MD)**= 24V-20W, MR16 **(MW)**= 12V-20W, MR16-IR	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LJ)**= 12V-6W, MR16 LED	**Blank**= White **-BK**= Black **-GY**= Gray

Example: **EF39(LG)-BK**

How to Order EF40 Series

SERIES	LAMP TYPE/WATTAGE		COLOR	OPTIONS
EF40P= All polycarbonate single head for dry location **EF40PD**= All polycarbonate double head for dry location	**(MI)**= 6V-6W, MR16 **(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MS)**= 24V-12W, MR16	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LJ)**= 12V-6W, MR16 LED	**Blank**= White **-BK**= Black **-GY**= Gray	**Blank**= No options **T**= Tamper proof screws **SM**= Mounting plate

Example: **EF40P(MK)**

SERIES	LAMP TYPE/WATTAGE		COLOR	OPTIONS
EF40= Die-Cast back plate single head for dry location **EF40D**= Die-Cast back plate double head for dry location	**(MI)**= 6V-6W, MR16 **(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MS)**= 24V-12W , MR16 **(MD)**= 24V-20W, MR16 **(MW)**= 12V-20W, MR16-IR	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LJ)**= 12V-6W, MR16 LED	**Blank**= White **-BK**= Black **-GY**= Gray	**Blank**= No options **T**= Tamper proof screws

Example: **EF40D(MD)**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

NEMA-4X

Survive-All™ EF39 & EF40 Series

EF39 NEMA-4X & NSF Certified
EF40 Vandal Resistant

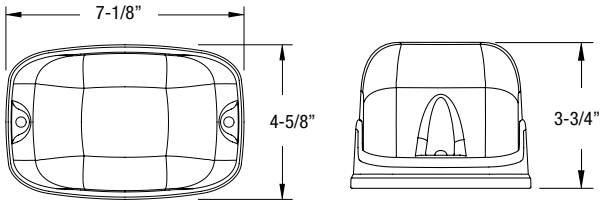


Features

- Fully gasketed with a selection of cast aluminum or polycarbonate back plate
- Clear polycarbonate UV and impact resistant lens
- Choice of single or double lamp models
- Available in 6, 12 and 24V models MR16 or LED
- Easy lamp replacement
- EF39 comes standard with tamper-proof screws and bit
- NSF Certified for food processing plants
- NEMA-4X Certified
- EF39P and EF40P require mounting plate option when installed on surface mount junction box
- Suitable for indoor/outdoor installation
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Additional special bit for tamper-proof screws	690.0454-E

How to Order EF39 Series

SERIES	LAMP TYPE/WATTAGE		COLOR	OPTION
EF39P= All polycarbonate single head NEMA-4X **EF39PD**= All polycarbonate double head NEMA-4X	**(MI)**= 6V-6W, MR16 **(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MS)**= 24V-12W, MR16	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LJ)**= 12V-6W, MR16 LED	**Blank**= White **-BK**= Black **-GY**= Gray	**SM**= Mounting plate

Example: **EF39P(LG)-BK**

SERIES	LAMP TYPE/WATTAGE		COLOR
EF39= Die-Cast back plate single head NEMA-4X **EF39D**= Die-Cast back plate double head NEMA-4X	**(MI)**= 6V-6W, MR16 **(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MS)**= 24V-12W , MR16 **(MD)**= 24V-20W, MR16 **(MW)**= 12V-20W, MR16-IR	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LJ)**= 12V-6W, MR16 LED	**Blank**= White **-BK**= Black **-GY**= Gray

Example: **EF39(LG)-BK**

How to Order EF40 Series

SERIES	LAMP TYPE/WATTAGE		COLOR	OPTIONS
EF40P= All polycarbonate single head for dry locations **EF40PD**= All polycarbonate double head for dry locations	**(MI)**= 6V-6W, MR16 **(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MS)**= 24V-12W, MR16	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LJ)**= 12V-6W, MR16 LED	**Blank**= White **-BK**= Black **-GY**= Gray	**Blank**= No options **T**= Tamper proof screws **SM**= Mounting plate

Example: **EF40P(MK)**

SERIES	LAMP TYPE/WATTAGE		COLOR	OPTIONS
EF40= Die-Cast back plate single head for dry locations **EF40D**= Die-Cast back plate double head for dry locations	**(MI)**= 6V-6W, MR16 **(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MS)**= 24V-12W , MR16 **(MD)**= 24V-20W, MR16 **(MW)**= 12V-20W, MR16-IR	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LJ)**= 12V-6W, MR16 LED	**Blank**= White **-BK**= Black **-GY**= Gray	**Blank**= No options **T**= Tamper-proof screws

Example: **EF40D(MD)**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Surface Mounted
EF9, EF9D & EF9T Series
Thermoplastic PAR 18 Size Lamp Head

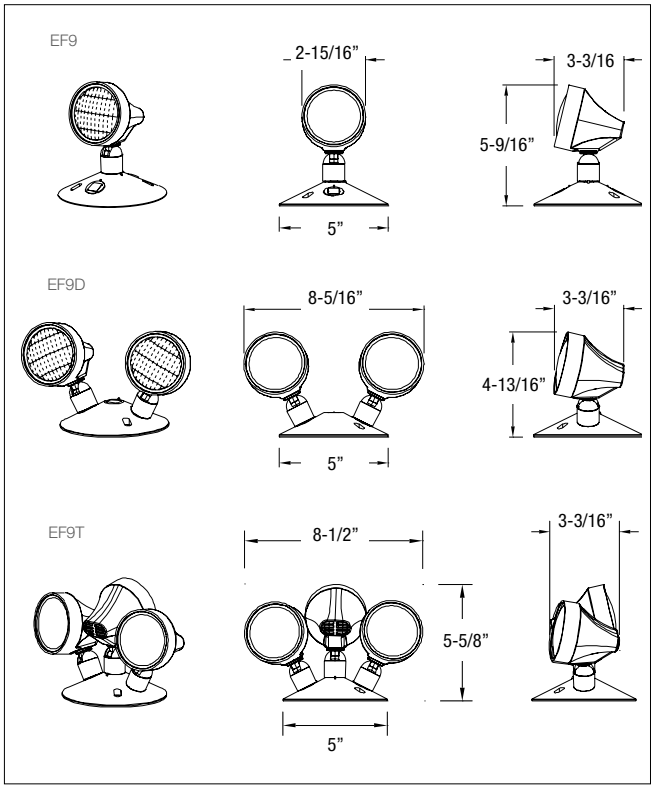


Features

- Off-white finish; black (BK) optional
- Surface (wall or ceiling) mounting direct to 4" octagonal or single-gang box
- Lamps (for alternate lamp selection, see lamp data sheet): lamp type H: Bi-Pin halogen or lamp type Z: High intensity incandescent wedge base
- Thermoplastic construction
- Indoor use
- Fully adjustable tool-less aiming swivel head
- Specular parabolic reflector and prismatic lens for wide-beam, even light distribution
- Snap-out lens for easy lamp replacement
- Surface mount
- Includes a 5" round universal canopy plate with 3 knock-outs (supplied with 2 plugs) for use with single, double or triple head mounting
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



How to Order

SERIES	# OF HEADS	LAMP TYPE/WATTAGE	COLOR
EF9= PAR 18 remote head	**Blank**= Single head **D**= Double head **T**= Triple head	**(H_)**= Halogen Bi-Pin 12W max* **(Z_)**= Tungsten wedge 18W max* * For a complete list of available lamp types, please refer to the lamp data on pages 140-141	**Blank**= Off white **BK**= Black

Example: **EF9D(HB)BK**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

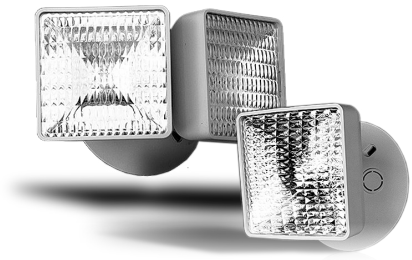
CATALOG #: _____

_____

NOTES: _____

Surface Mounted EF23 & EF23D Series

Thermoplastic square Lamp Head



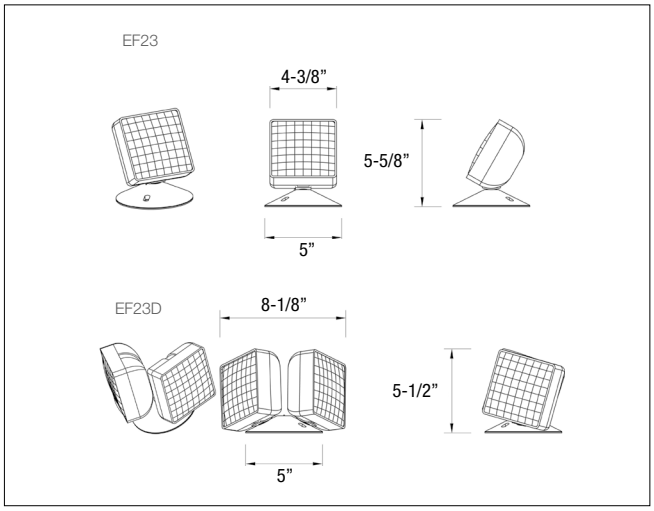
Features

- Thermoplastic construction with off-white or black (BK) finish.
- Available as a single, or double square lighting head
- Fully adjustable tool less aiming swivel
- Specular parabolic reflector and prismatic lens for wide-beam, even light distribution
- Snap-out lens for easy lamp replacement
- Surface Mount
- Mounts to either a standard 4" octagonal or a single gang electrical box. (4-gang plate for EF23D optional)
- Round mounting canopy standard.
- Lamps (for alternate lamp selection, see lamp data sheet):
  Series H: Bi-Pin halogen 6, 8 and 12 watt lamps only.
  or Series Z: High intensity incandescent wedge base 5.4, 9 and 12 watt lamps only
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Lamp type(s), voltage and maximum wattage available for fixture are shown under lamp description. Determine lamp type, voltage and wattage required for your application, then select lamp from Lamp Chart in the Charts & Diagrams section. Do not exceed fixture wattage rating. Include lamp suffix and voltage as suffix to model number. Voltage must be stated.

Dimensions

Dimensions are approximate and subject to change.



Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Wire Guard	WG8-E

How to Order

SERIES	# OF HEADS	LAMP TYPE/WATTAGE	COLOR
EF23= Remote SQ Fixture	**Blank**= Single head **D**= Double head	**(Z_)**= Wedge base, 12W Max, (6, 12, 24 Volts)* **(H_)**= Bi-Pin halogen, 12W max, (6, 12 Volts)* * For a complete list of available lamp types, please refer to the lamp data on pages 146-147	**Blank**= Off white **BK**= Black

Example: **EF23D(HB)BK**

Recessed Mounted EF35 Series

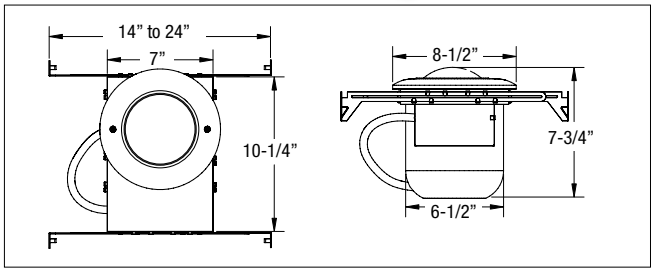


Features

- Gasketed, fully recessed, with fresnel lens; suitable for Damp locations
- Off-white finish
- Fully recessed ceiling mounting
- Trim: plastic, off-white
- Recessed (wall or ceiling). Plaster frame and standard 4" wire box provided
- Trim ring: 8-1/2" diameter
- EF35 Series: Wedge base incandescent 18W MAX, Double contact Bayonet base 25W MAX, Bi-Pin halogen 20W MAX
- 6, 12, 24VDC
- Maximum power: 25W low voltage
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



How to Order

SERIES	LAMP TYPE/WATTAGE
EF35= Remote Metal Fixture Only available with Bi-Pin halogen lamps	**(Z_)**= Wedge base, 20W max, (6, 12, 24V)* **(H_)**= Bi-Pin halogen, 20W max, (6, 12V)* **(I_)**= Double contact bayonet, 20W max, (6, 12, 24V)* * For a complete list of available lamp types, please refer to the lamp data on pages 140-141

Example: **EF35(IA)**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Surface Mounted
EF18, EF18D & EF18T Series

Thermoplastic PAR 36 Lamp Head



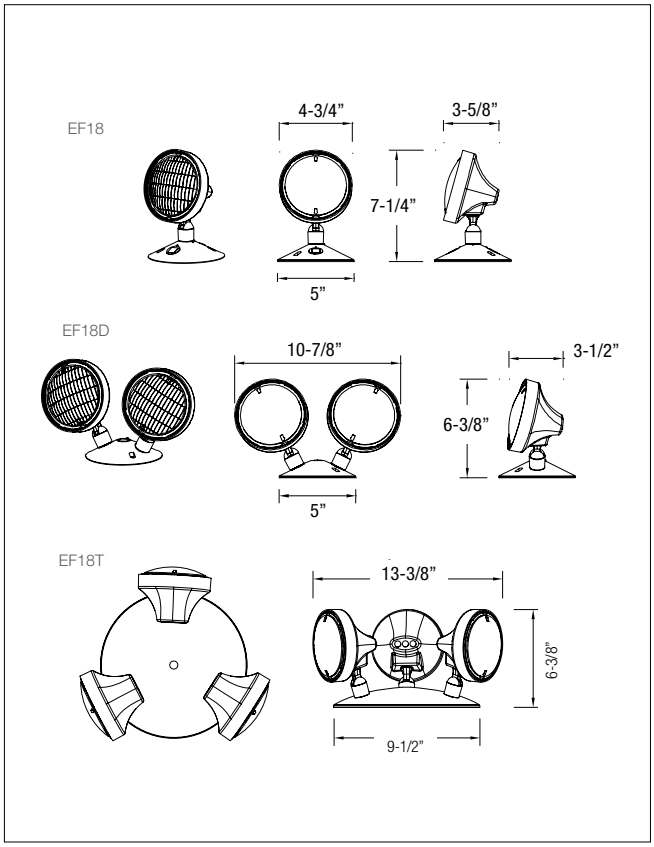
Features

- Thermoplastic construction with off-white finish; black (BK) optional
- Lamps (for alternate lamp selection, see lamp data sheet):
  Type H: Bi-Pin halogen
  Type I: High intensity tungsten (HIT) double contact bayonet base
  Type U: Sealed beam tungsten (not compatible with Ni-Cd battery)
  Type X: Sealed beam halogen (not compatible with Ni-Cd battery)
  or Type Z: High intensity incandescent wedge base
- Indoor use
- Available as a single, double or triple PAR 36 size lighting head
- Fully adjustable tool less aiming swivel head
- Specular parabolic reflector and prismatic lens for wide-beam, even light distribution
- Snap-out lens for easy lamp replacement.
- Surface Mount
- Includes a 5” round universal canopy plate with 3 knock-outs (supplied with 2 plugs) for use with single, double or triple head mounting
- Mounts to either a standard 4” octagonal or a single gang electrical box (4-gang plate for EF18T optional)
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Lamp type(s), voltage and maximum wattage available for fixture are shown under lamp description. Determine lamp type, voltage and wattage required for your application, then select lamp from Lamp Chart in the Charts & Diagrams section. Do not exceed fixture wattage rating. Include lamp suffix and voltage as suffix to model number. Voltage must be stated.

Dimensions

Dimensions are approximate and subject to change.



Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Wire Guard	WG9-E

How to Order

SERIES	# OF HEADS	LAMP TYPE/WATTAGE	COLOR
EF18= PAR 36 remote head	**Blank**= Single head **D**= Double head **T**= Triple head	**(H_)**= Halogen Bi-Pin 20W max* **(I_)**= Tungsten wedge 25W max* **(Z_)**= Incandescent wedge 18W max* **(U_)**= Tungsten sealed beam 30W max* **(X_)**= Halogen sealed beam* 50W max** * For a complete list of available lamp types, please refer to the lamp data on pages 140-141 ** Use high temp enclosure (white or gray metal head)	**Blank**= Off white **BK**= Black

Example: **EF18D(ZD)BK**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Surface Mounted
EF10, EF10D & EF10T Series
Thermoplastic MR16 Lamp Head



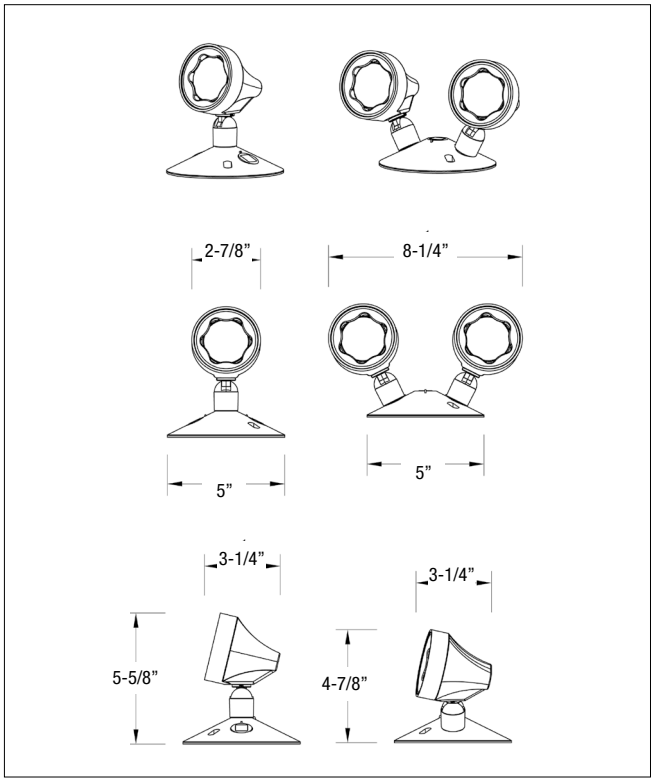
Features

- Thermoplastic construction with off-white finish; black (BK)
- Direct mounting to 4" octagonal electrical box
- Series M Lamps: MR16
- Indoor use
- Available as a single, double or triple PAR 18 size MR16 lighting head
- Fully adjustable tool less aiming swivel head
- Specular parabolic reflector and prismatic lens for wide-beam, even light distribution
- Snap-out lens for easy lamp replacement.
- Surface Mount
- Includes a 5" round universal canopy plate with 3 knock-outs (supplied with 2 plugs) for use with single, double or triple head mounting
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Lamp type(s), voltage and maximum wattage available for fixture are shown under lamp description. Determine lamp type, voltage and wattage required for your application, then select lamp from Lamp Chart in the Charts & Diagrams section. Do not exceed fixture wattage rating. Include lamp suffix and voltage as suffix to model number. Voltage must be stated.

Dimensions

Dimensions are approximate and subject to change.



How to Order

SERIES	# OF HEADS	LAMP TYPE/WATTAGE	COLOR
EF10= MR16 PAR18 remote head	**Blank**= Single head **D**= Double head **T**= Triple head	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LJ)**= 12V-6W, MR16 LED **(M_)**= Halogen MR16 20W max* *** 20W Halogen is only available in 12V (MA)**	**Blank**= Off-white **BK**= Black

Example: **EF10D(LA)BK**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Special Wording Series

Custom Illuminated Signage



Features

- The same sturdy construction and electrical design used in our exit signs is used to produce our custom-worded, illuminated signage
- Sign bodies are available in steel, extruded and Die-Cast aluminum, weatherproof, flame-retardant polycarbonate, high impact thermoplastic and recessed housing
- Also available with combination units
- Custom wording with available in any style of lettering, any language, and alphabet, any special characters
- Graphics can include logos, standard symbols and custom art
- Color choices for sign bodies, message and faceplate panel
- Ilumination from LED (light-emitting diodes); other light sources available
- Contact your local Emergi-Lite® sales representative to discuss your specific requirements

Illuminated Signage

Custom-worded, illuminated signage is available using the same sturdy construction and electrical design as Emergi-Lite® exit signage. A wide range of sign body options and color choices are available to suit any application.



Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

RS Series

6 and 12 Volt Decorator Recessed Emergency Lighting



Features

- Each unit comes with two (2) 6 or 12V-9W high-intensity incandescent EF-9 lamp heads (standard). EF-10, EF-18, and EF-150 lamp heads are optional
- Constructed of 20-gauge steel with an off-white baked enamel finish
- Available with sealed, maintenance-free Nickel-Cadmium, or Lead-Calcium batteries
- PulsePlus Charger circuitry offers 120/277V input 60 Hz., 0.3/0.15A (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensated charger, sealed relay, low voltage battery disconnect, brownout protection and lock out (automatic battery connect)
- Fully-recessed assembly for ceiling or wall mount. Includes adjustable bar hangers for grid ceilings. Can be framed into studs/joists
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Optional Features

DESCRIPTION	SUFFIX
New York City (EF-18 12 Watt Lamps)	-NYC
ACCESSORIES	
Wire Guard (Units with EF-9, EF-10 or EF-18, EF-150 Heads)	WG6-E
Remote Test Switch (metal face plate)	RTS
Remote Test Switch (plastic face plate)	RTS-1

Electrical

Power Requirements: 120/277 Vac, 60 Hz., 0.3/0.15 Amp (other inputs available). Output: 6 or 12 volt fused outputcircuit. Transfer: dust-tight relay automatically and instantly energizes lamp load upon failure of AC supply. LVD: low voltage battery disconnect circuit automatically disconnects the lamp load and circuitry when battery reaches 871/2% discharge to protect the battery from deep discharge and permanent damage. Lockout: labor saving electronic circuit automatically connects battery when the AC circuit is activated. Brownout: close tolerance electronic circuit activates emergency unit when utility power dips below 80-85% of nominal voltage. Charger: The pulse plus charging circuit utilizes an integrated circuit chip which samples the battery in relation to its temperature, state of charge and input voltage fluctuations.

The charger is current limited, temperature compensated, shortcircuit proof and reverse polarity protected. Charger regulation ±1%. The equipment is capable of full recharge in compliance with Underwriters 924 specification. Transformer: 120/277 volt. Controls: test switch and dual diagnostic LED indicator lights, Hi-charge and AC pilot.

Suggested Specification

Supply and install **Emergi-Lite® Series** RSM _____ RSE _____, or RSC _____ in 6 or 12V, with electrically compatible remote fixtures or exit signs as indicated on the plans. The emergency lighting unit shall be an architecturally designed, self-contained fixture including sealed, maintenance-free battery:

TYPE RSM to be supplied with Lead-Calcium battery.

TYPE RSE to be supplied with long life Pure Lead battery.

TYPE RSC to be supplied with long life Nickel-Cadmium battery.

The unit charger shall utilize an integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips below 80-85% of nominal voltage.

A low voltage battery protection circuit shall be provided and will disconnect the load and circuitry from the fused output circuit when battery reaches 871/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with a sealed, dusttight relay, a test switch and dual diagnostic LED indicator lights (Hi-charge and AC pilot). The unit shall be designed for fully recessed installation in walls or ceilings, including grid type suspended ceilings. Unit shall be constructed of 20 gauge steel with a off-white baked enamel mounting plate. Unit will be furnished with two (2) lampheads as follows:

TYPE EF-9 decorator heads; 6V, 12V: 9W lamp per head.

TYPE EF-18 decorator heads; 6V, 12V:W lamp per head.

Fused output terminals shall be provided for ease of remote lamp connections. All 6 and 12 volt RS Series shall be fully warranted for three years, subject to proper installation and maintenance.

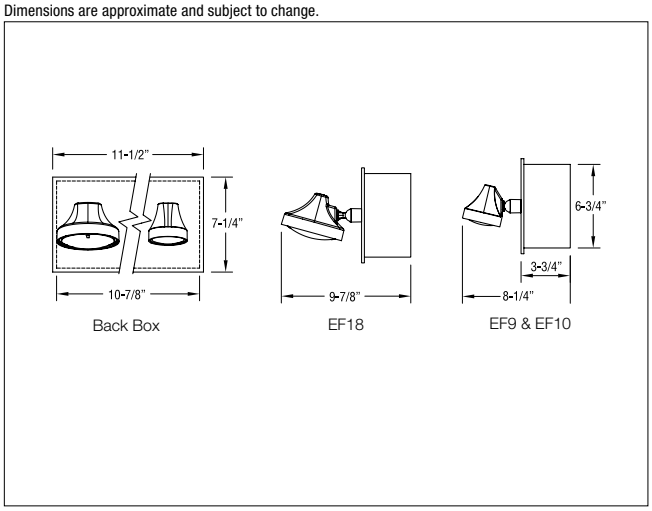
The unit shall be **Emergi-Lite®** model: _____.

Diagnostic/Self Test Feature (Optional)

Advanced Diagnostics (audible and non audible versions) Our Advanced Diagnostic circuitry is designed to continuously monitor every critical function of the unit, attached remote lighting heads and exit signs. Operational status is indicated by colored LED lamps. A high-pitch audible alarm and an LED status indicator alert maintenance personnel to a unit malfunction. This option saves the time spent on testing and trouble shooting by maintenance personnel. This new generation of Emergi-Lite diagnostics is perfect for any application. The self test will test the unit for a minimum 30 seconds every 30 days, 30 minutes every six months and 90 minutes annually. Self-testing in accordance with NFPA 101, Life Safety Code. Unit tests itself every thirty days for one minute, thirty minutes on the sixth month and ninety minutes annually.

Dimensions

Dimensions are approximate and subject to change.



Unit Warranty*

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

Battery Warranty*

Unit batteries are warranted as follows:

Sealed Nickel-Cadmium: RSC – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Long Life Lead: RSE – 10-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Lead Calcium: RSM – 8-year life expectancy, 3-year Full Warranty, plus 3-year pro rata warranty.

*Subject to proper installation and maintenance.

Unit Rating

EF-9 lamp heads: 6 or 12 volt 9 watt High Intensity Incandescent lamps.

Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number		Watts to 87-1/2% of rated battery voltage*			
		EF-150 Deco	EF-9 Lamp Heads	1½ hrs	2 hrs	3 hrs	4 hrs
UNIT EQUIPMENT – NO REMOTE CAPABILITY							
Nickel-Cadmium	6	RSC18-2150	RSC18-2	18	12	10	–
Lead-Calcium	6	RSM18-2150	RSM18-2	18	12	9	–
UNIT EQUIPMENT – WITH REMOTE CAPABILITY							
Nickel-Cadmium	6	RSC25-2150	RSC25-2	25	18	12	9
	12	12RSC36-2150	12RSC36-2	36	21	15	12
	12	12RSC50-2150	12RSC50-2	50	36	25	18
Lead-Calcium	6	RSM27-2150	RSM27-2	27	18	14	10
	6	RSM36-2150	RSM36-2	36	25	20	14
	12	12RSM36-2150	12RSM36-2	36	25	20	14

* National Electrical Code Specification

How to Order

COLOR	SERIES/BATTERY TYPE	WATTS	HEADS	LAMP TYPE	OPTIONS
Blank= Factory white **B**= Black enclosure	**RSC18**= 6V-18W Ni-Cd* **RSC25**= 6V-25W Ni-Cd* **RSM18**= 6V-18W Lead-Calcium **RSM27**= 6V-27W Lead-Calcium **RSM36**= 6V-36W Lead-Calcium **12RSC36**= 12V-36W Ni-Cd* **12RSC50**= 12V-50W Ni-Cd* **12RSM36**= 12V-36W Lead-Calcium * Not Available with sealed beams.	**-0**= No head **-1**= One head **-2**= Two heads	**Blank**= EF9 Mini PAR 18 style **10**= EF10 Mini plastic MR16 **18**= EF18 (PAR 36 plastic) **150**= EF150 Deco heads MR16	**Blank**= 6V-9W or 12V-9W Inc. wedge base **LA**= 6V-4W, MR16 LED* **LG**= 12V-4W, MR16 LED* **LI**= 12V-5W, MR16 LED* **LJ**= 12V-6W, MR16 LED* **H_**= Halogen bi-pin **I_**= Inc. DC-bayonet **U_**= Inc. sealed-beam** **X_**= Halogen sealed-beam** **Z_**= Inc. wedge **M_**= Halogen MR16* NOTE: For a complete list of available lamp types, please refer to the lamp data on pages 140-141 * Available with EF10 and EF150 lamp heads only ** Available with the EF18 lamp head only	**Blank**= No options **-AD**= Advanced Diagnostics (audible) **-ADNA**= Advanced Diagnostics (non-audible) **-V**= Voltmeter* **-A**= Ammeter* **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) * Voltmeter & Ammeter are not available with -AD & -ADNA

Example: **BRSC18-210LA-AD**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

US

NYC approved

Revelation™ DC-Remote Series

Virtually Invisible, Architecturally Pleasing



Features

- Indoor use
- Two lamp MR16 remote fixture with a choice of halogen or LED lamps
- One-piece all-metal module design (does not require large galvanized steel back box as does the battery back-up unit)
- Complete 360° door rotation, 180° to open, 180° to close
- Slip gear mechanism protects the unit from objects that would cause the door rotation to be forcibly stopped.
- Flat door and frame are covered with a high-quality, powder coated textured off-white finish
- Surface finish can be customized on site with paint, wallpaper or other coverings.
- Recessed ceiling or wall mount with cavity space; special bar hangers for installation in sheet rock or T-bar ceilings are included.
- The module includes the electrical junction box and is installed on the wall stud or ceiling beam with the help of a simple, U-shape bracket.
- Key-hole slot for ease of installation
- CSA US Listed
- 5-year limited warranty on electrical parts (motor, electronic circuitry). Each unit is fully computer-tested and aligned mechanically for optimum operation
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Suggested Specification

Supply and install **Emergi-Lite® Series Revelation™** ___RTR___. The unit shall be designed to be concealed in walls or ceilings with a cavity, including T-bar suspended ceilings. Bar hanger brackets shall be provided with the unit. The equipment shall consist of a metal back box containing the batteries, the lamp assembly and a charging circuitry. The back box shall be constructed of heavy-duty galvanized steel. The unit utilizes a modular design and comes with quick connect plugs for easy installation into the back box. The unit equipment shall be completely concealed in the wall or ceiling during normal power conditions. Upon a power failure the unit will expose the emergency heads by rotating its door by 180° and then will power the lamps. At the restoration of the AC power or the end of the battery discharge, the lamps will turn off and the unit will retract the heads in the wall (ceiling) by rotating the door by 180°. The unit shall not require the presence of AC power in order to rotate the door closed returning the lamps inside the housing. Under normal conditions, the only visible parts of the unit will be the flat door and trim plate, coated with a high-quality off-white finish that can be customized on site with paint or other suitable wall covering. The light source shall be 12V MR16 halogen lamps of specified wattage and light output. The unit shall supply the rated load for a minimum of 90 minutes or until the battery is discharged to 87-1/2% of its nominal voltage (whichever duration is longer). The charger circuitry shall utilize a micro-controller IC that samples the battery in relation to the ambient temperature, state of charge, and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof, and reverse-polarity protected. The circuit will charge in accordance with UL924 requirements. The unit shall be furnished with a recessed, illuminated push button serving as test switch and status indicator light.

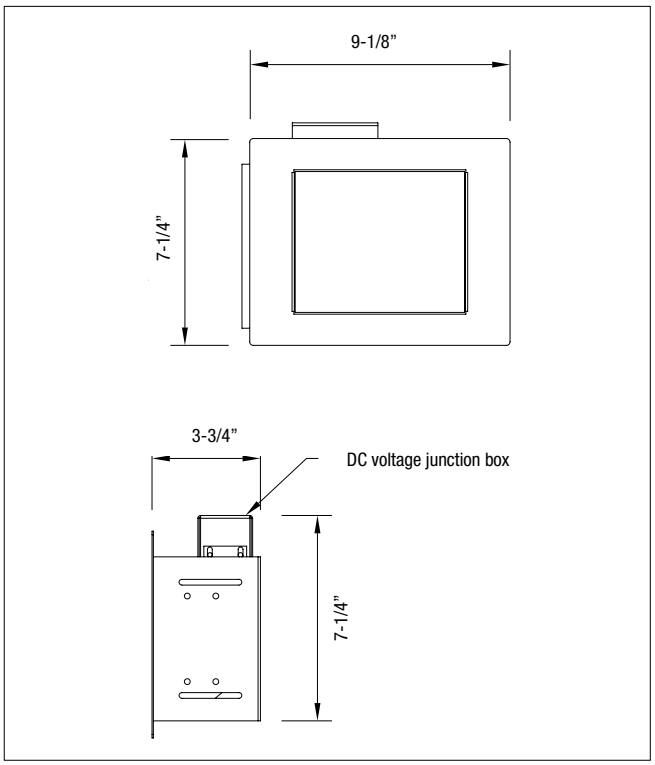
The unit shall be **Emergi-Lite®** model: _____.

Unit Data:

The normally exposed parts of the unit (flat door and frame) are covered with a high-quality, textured off-white finish, which integrates well with most wall and ceiling paints. The surface finish can also be customized on site with paint, wallpaper or other coverings. The self-powered unit is contained in a heavy-duty steel back-box, concealed in the wall or ceiling and includes a combined test switch and pilot light, accessible through the trim plate. Special bar hangers for installation in sheet rock or T-bar ceilings are included in the package. The DC-remote unit comes as a compact, one-piece module. The module includes the electrical junction box and is installed on the wall stud or ceiling beam with the help of a simple, U-shape bracket. Each unit comes standard with two (2) MR-16 halogen lamps of wide angle (flood), of specified power ranging from 12W to 50 Watts each. The DC-remote unit does not require connection to the AC power. Pulse-Type.

Dimensions

Dimensions are approximate and subject to change.



Unit Warranty*

Unit equipment (except battery and lamps): five-year limited warranty

*Subject to proper installation and maintenance

How to Order

INPUT VOLTAGE	SERIES	# OF LAMPS	LAMP TYPE/WATTAGE	OPTIONS
12= 12VDC **24**= 24VDC	**RTR**= Revelation remote	**2**= Two lamps standard	**-12**= 12W MR16 **-20**= 20W MR16 **-35**= 35W MR16 **-50**= 50W MR16 **-LG**= 12V-4W, MR16 LED **-LL**= 24V-4W, MR16 LED **-LI**= 12V-5W, MR16 LED **-LJ**= 12V-6W, MR16 LED	**Blank**= No options **-DL**= Damp Location

Example: **12RTL2-12-DL**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

US

Revelation™ Series

Visually invisible and architecturally designed Emergency Lighting



Features

- Fully concealed in open cavity walls or ceiling
- Only visible when needed: during a power failure
- Each unit comes with two (2) MR16 halogen lamps ranging from 12 to 50W each or 2 MR16 style LED lamps
- The Self-Powered unit is contained in a heavy-duty galvanized steel back box that can be concealed in the wall or ceiling and includes a combined test switch and pilot light that is accessible through the frame
- The normally exposed parts of the unit (flat door and frame) are covered with a high-quality powder-coated, textured off-white finish that integrates well with most wall and ceiling paints. The surface finish can also be customized on site with paint, wallpaper or other coverings
- Power requirements: 120/277VAC, 60Hz, 0.25/0.12A
- PulsePlus Charger circuitry offers 120/277VAC 60Hz, 0.25/0.12A, automatic charger, built around a micro-controller integrated circuit. Circuit standard features include current limiting, temperature-compensated cut-off voltage, brownout transfer, low-voltage battery disconnect and battery lock out (prevents activation in DC mode until initial AC activation)
- Special bar hangers for installation in sheet rock or T-bar ceilings are included. The included electrical junction box can be installed on a wall stud or ceiling beam with a simple U-shape bracket
- 5-year warranty on electrical parts (motor, electronic circuitry). Each unit is fully computer-tested and aligned mechanically for optimum operation

Diagnostic/Self Test Feature (optional)

Diagnostic/Self-Test circuitry is optional on all Self-Powered models. This circuitry is programmed to ensure equipment readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, the pilot light located on the front of the unit will change color from solid green to flashing red, indicating a fault. A detailed diagnostic legend is available on the door back and provides fault identification (battery, charger circuitry, lamps) for maintenance personnel. The self-test feature will simulate a power loss for a minimum of 30 seconds every 30 days, 30 minutes every 6 months and 90 minutes annually.

Electrical

Power requirements: 120/277 Vac, 60 Hz, 0.25/0.12 Amps

Transfer: dust-tight, sealed relay; automatically deploys the door assembly and powers the emergency lights.

LVD: (low-voltage battery disconnect): automatically removes the electrical load (lamps, motor) when the battery reaches 87% of its nominal voltage.

Lockout: labor-saving electronic circuit automatically connects the battery when the AC circuit is activated.

Brown-out: close-tolerance electronic circuit activates the emergency lights when the utility power dips below 80 – 85% of nominal voltage.

Charger: the Pulse-Plus charging circuit utilizes a micro-controller integrated circuit, that samples the battery in relation to the ambient temperature, state of charge, and input voltage fluctuations. The charger is current limited, temperature compensated, short-circuit proof, and reverse-polarity protected. The circuit will charge in accordance with UL924 requirements.

Suggested Specification

Supply and install **Emergi-Lite® Series Revelation™**: RT____- 2 ____. The unit shall be designed to be concealed in walls or ceilings with a cavity, including T-bar suspended ceilings. Bar hanger brackets shall be provided with the unit. The equipment shall consist of a metal back box containing the batteries, the lamp assembly and a charging circuitry. The back box shall be constructed of heavy-duty galvanized steel. The unit utilizes a modular design and comes with quick connect plugs for easy installation into the back box. The unit equipment shall be completely concealed in the wall or ceiling during normal power conditions. Upon a power failure the unit will expose the emergency heads by rotating its door by 180° and then will power the lamps. At the restoration of the AC power or the end of the batter y discharge, the lamps will turn off and the unit will retract the heads in the wall (ceiling) by rotating the door by 180°.

The unit shall not require the presence of AC power in order to rotate the door closed returning the lamps inside the housing. Under normal conditions, the only visible parts of the unit will be the flat door and trim plate, coated with a high-quality off-white finish that can be customized on site with paint or other suitable wall covering. The light source shall be 12V MR16 halogen lamps of specified wattage and light output. The unit shall supply the rated load for a minimum of 90 minutes or until the battery is discharged to 87.5% of its nominal voltage (whichever duration is longer). The charger circuitry shall utilize a microcontroller IC that samples the battery in relation to the ambient temperature, state of charge, and input voltage fluctuations. The charger shall be current limited, temperature compensated, shortcircuit proof, and reverse-polarity protected. The circuit will charge in accordance with UL924 requirements. The unit shall be furnished with a recessed, illuminated push button serving as test switch and status indicator light.

The unit shall be **Emergi-Lite®** model: _____.

Battery Warranty*

Sealed Lead-Calcium: 3-year Full Warranty, plus 3-year pro rata warranty, 8-year life expectancy

Sealed Nickel-Cadmium: 5-year Full Warranty, 5-year pro rata warranty, 10 year life expectancy

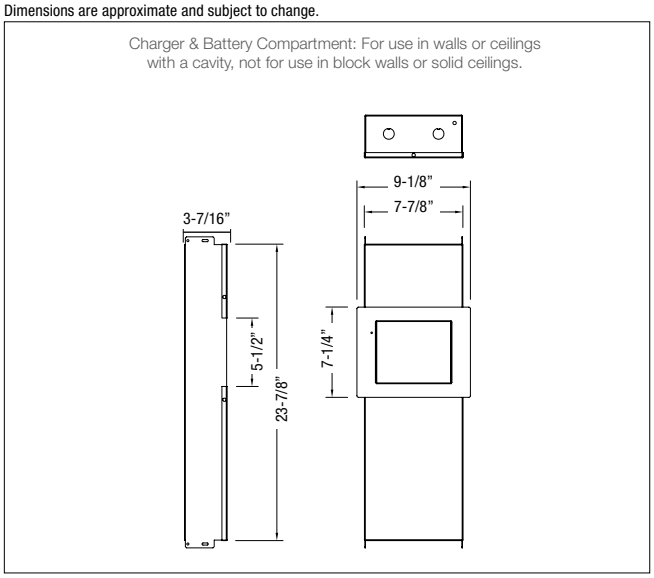
Unit Warranty*

Unit equipment (except battery and lamps): five-year limited warranty

*Subject to proper installation and maintenance

Dimensions

Dimensions are approximate and subject to change.



Power Consumption

Model	Maximum		Stand-By*	
	Input Current	Input Power	Input Current	Input Power
120V	0.25A	30W	0.1A	11W
277V	0.12A	30W	0.05A	11W

* Stand-by power consumption is 50% lower for Lead-Calcium batteries.

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Remote Test Switch (metal face plate)	RTS
Remote Text Switch (plastic face plate)	RTS-1

Unit Rating

Model	Watts to 87-1/2% of rated battery voltage*			
	1-1/2 hrs	2 hrs	4 hrs	8 hrs
RTM40, RTN40	40	30	24	-
RTM70, RTN70	70	50	40	24
RTM100, RTN100	100	70	50	40

* National Electrical Code Specification

How to Order

Battery Unit

SERIES	BATTERY TYPE	UNIT CAPACITY	LAMP TYPE/WATTAGE	OPTIONS
RT	**M**= Lead-Cadmium **N**= Ni-Cd	**40**= 12V-40W **70**= 12V-70W **100**= 12V-100W	**-2(12)**= 12W, MR16 each head **-2(20)**= 20W, MR16 each head **-2(35)**= 35W, MR16 each head **-2(50)**= 50W, MR16 each head **-2 (20H)**= 20W, MR16 high lumen output **-2 (35H)**= 35W, MR16 high lumen output **-2 (50H)**= 50W, MR16 high lumen output **-2 (LG)**= 12V-4W, MR16 LED **-2 (LI)**= 12V-5W, MR16 LED **-2 (LJ)**= 12V-6W, MR16 LED	**AD**= Advanced Diagnostics (audible)* **ADNA**= Advanced Diagnostics (non-audible)* **DL**= Damp Location** **D1**= Time Delay (5 minutes) **D2**= Time Delay (10 minutes) **D3**= Time Delay (15 minutes) **X**= Back box shipped separately * AD & ADNA include a time delay feature that can be enable/disable in the field or set by the factory ** Available on all models except Ni-Cd 100W

Example: **RTM100-2(50)-D3**

AC Remote Fixture

SERIES	INPUT VOLTAGE	# OF LAMPS	LAMP TYPE/WATTAGE	OPTIONS
RTG= Remote AC Generator	**1**= 120VAC, 60Hz **2**= 277VAC, 60Hz	**-2**= Two lamps standard	**(LG)**= 12V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LJ)**= 12V-6W, MR16 LED **(12)**= 12W each head **(20)**= 20W each head **(35)**= 35W each head **(50)**= 50W each head **(20H)**= 20W, high lumen output **(35H)**= 35W, high lumen output **(50H)**= 50W, high lumen output	**-DL**= Damp Location **X**= Back box shipped separately

Example: **RTG2-2(LG)-DL**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

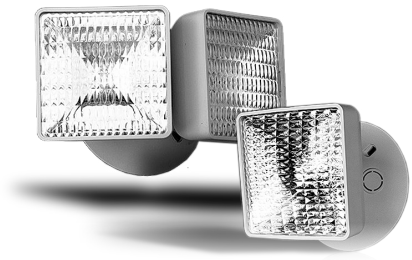
CATALOG #: _____

_____

NOTES: _____

Surface Mounted EF23 & EF23D Series

Thermoplastic square Lamp Head



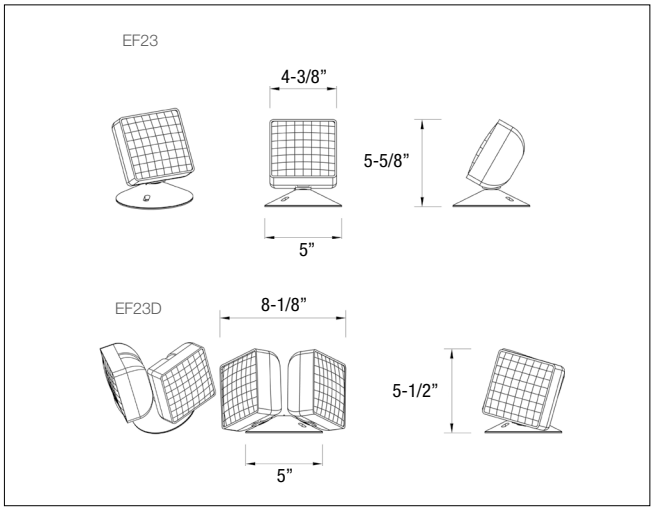
Features

- Thermoplastic construction with off-white or black (BK) finish.
- Available as a single, or double square lighting head
- Fully adjustable tool less aiming swivel
- Specular parabolic reflector and prismatic lens for wide-beam, even light distribution
- Snap-out lens for easy lamp replacement
- Surface Mount
- Mounts to either a standard 4" octagonal or a single gang electrical box. (4-gang plate for EF23D optional)
- Round mounting canopy standard.
- Lamps (for alternate lamp selection, see lamp data sheet):
  Series H: Bi-Pin halogen 6, 8 and 12 watt lamps only.
  or Series Z: High intensity incandescent wedge base 5.4, 9 and 12 watt lamps only
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Lamp type(s), voltage and maximum wattage available for fixture are shown under lamp description. Determine lamp type, voltage and wattage required for your application, then select lamp from Lamp Chart in the Charts & Diagrams section. Do not exceed fixture wattage rating. Include lamp suffix and voltage as suffix to model number. Voltage must be stated.

Dimensions

Dimensions are approximate and subject to change.



Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Wire Guard	WG8-E

How to Order

SERIES	# OF HEADS	LAMP TYPE/WATTAGE	COLOR
EF23= Remote SQ Fixture	**Blank**= Single head **D**= Double head	**(Z_)**= Wedge base, 12W Max, (6, 12, 24 Volts)* **(H_)**= Bi-Pin halogen, 12W max, (6, 12 Volts)* * For a complete list of available lamp types, please refer to the lamp data on pages 146-147	**Blank**= Off white **BK**= Black

Example: **EF23D(HB)BK**

Recessed Mounted EF35 Series

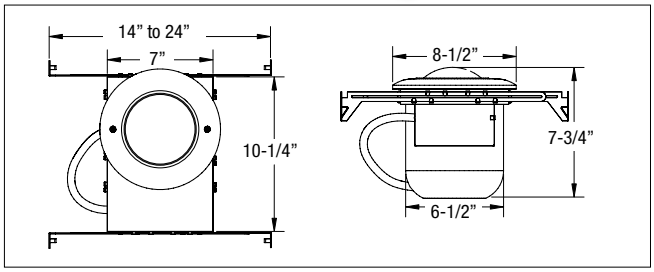


Features

- Gasketed, fully recessed, with fresnel lens; suitable for Damp locations
- Off-white finish
- Fully recessed ceiling mounting
- Trim: plastic, off-white
- Recessed (wall or ceiling). Plaster frame and standard 4" wire box provided
- Trim ring: 8-1/2" diameter
- EF35 Series: Wedge base incandescent 18W MAX, Double contact Bayonet base 25W MAX, Bi-Pin halogen 20W MAX
- 6, 12, 24VDC
- Maximum power: 25W low voltage
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



How to Order

SERIES	LAMP TYPE/WATTAGE
EF35= Remote Metal Fixture Only available with Bi-Pin halogen lamps	**(Z_)**= Wedge base, 20W max, (6, 12, 24V)* **(H_)**= Bi-Pin halogen, 20W max, (6, 12V)* **(I_)**= Double contact bayonet, 20W max, (6, 12, 24V)* * For a complete list of available lamp types, please refer to the lamp data on pages 140-141

Example: **EF35(IA)**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

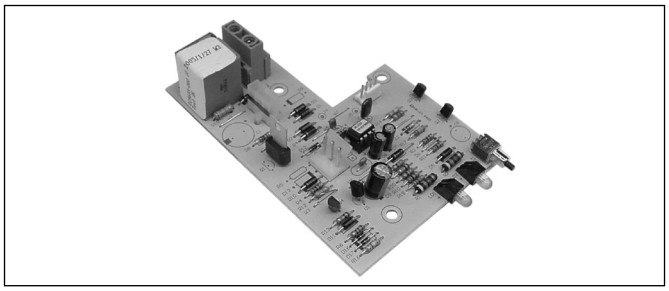
All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

EMERGI-LITE®

TYPE: _____

CATALOG #: _____

NOTES: _____



Pulse Type Circuitry

Standard Features

120/277 Volt Input
Capability to operate with 120 volt or 277 volt input.
Fused Output Circuit for Units with Remote Capacity
Emergency units up to 54 watts have a single fused output circuit. Units over 54 watts have two fused output circuits supplied standard.

Dual Diagnostic Indicator Lights
Dual indicators, red and amber continuously monitor the condition of the battery, charge circuit and presence of AC.

Temperature Compensation
At high ambient temperatures, batteries need less charge voltage to recharge. Cold temperatures, batteries require a higher charge to maintain full capacity. The PulsePlus charger automatically adjusts the charge voltage to precisely what the batteries require at a given temperature.

Sealed Relay
Sealed relay protects against environmental contaminants.

Low Voltage Battery Disconnect
The lighting load is disconnected from the battery at 87.5% of nominal battery voltage. This prevents deep discharge damage to the battery.

Brownout Protection
Emergency lamps energized when AC voltage falls to approx. 80% of nominal voltage, the level at which most fluorescent and HID fixtures extinguish.

Battery Lockout
This labor saving feature prevents the battery from discharging when the unit is installed to a non-energized circuit. The battery is electronically locked out until the unit is energized with AC power. Contractors do not have to return to a job site to connect batteries when the building's main power is turned on. They can install the unit and connect the battery in one convenient operation.

Reverse Polarity Protection
A polarized plug is used to connect the battery to the circuit board, thus preventing damage from occurring to the system.

Current Limited Output
Prolongs battery life by preventing overheating and battery gassing during recharge.

Advanced with LED Display

By incorporating our most popular standard diagnostics features with a powerful 8-bit microcontroller, our new Advanced Diagnostics system assures unsurpassed reliability in one, totally contained system. In the event of an equipment malfunction, the advanced diagnostics system produces an audible warning in the form of an intermittent beep and the LED indicator associated with the fault will illuminate continuously. When the problem is acknowledged by depressing the alarm/silence/test button, the alarm is silenced and the LED indicator changes to a flashing mode until the problem is corrected.

- Continually monitors system parameters
- ADNA non-audible version for visual service alarms only
- Incorporates state-of-the-art microcontroller technology
- Self-testing in accordance with NFPA101, Life Safety Code
- AD includes audio and visual service alarms
- Listed to UL 924 standards

Features

Battery Failure: (Red) Illuminates if the battery is shorted or battery voltage drops below preset value. Will also detect incorrect battery (ie. 6Vdc vs. 12Vdc)

Battery Disconnect: (Red) Illuminates if the battery circuit is open.

Charger Failure: (Red) Illuminates when charger is not functioning properly by monitoring the charger current.

Lamp Failure: (Red) Illuminates when one or more emergency lamps fail. Also monitors remote lamps.

Service Alarm: (Red) Illuminates when a fault is detected that requires a qualified service technician.

AC ON: (Green) Lit when line voltage is present.

Charger ON: (Amber) Illuminates when charger is recharging the battery.

Alarm ON: Button is used to acknowledge and silence alarms. Also functions as a manual test switch to simulate a power failure.

Self Testing: Unit tests itself every thirty days for one minute, thirty minutes on the sixth month and ninety minutes annually.

To Order for Compatible Unit:
Add suffix -AD to model number
Add suffix -ADNA (for non-audible circuit) to model number.

Factory Programmed Features: Transfer Time Delay. When activated, this feature will keep the emergency lights on for a period of 5, 10, or 15 minutes after the AC power is restored.

Thomas&Betts

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Provider™ PRO-2N/PRO-3N

6 Volt Thermoplastic Housing



Features

- Completely self-contained, thermoplastic construction with a polycarbonate lens that protects the fully-adjustable self-locking heads
- Available with sealed, maintenance-free Lead-Calcium batteries
- Integrated circuitry offers 120/277VAC 60Hz standard operation, LED pilot light rocker type, test switch, temperature compensated, low voltage battery disconnect, brownout protection and lock out (automatic battery connect)
- Optional MR16 LED lamps
- Optional advanced diagnostic circuitry monitors every critical function of the unit and provides an audible and visual indicator when a fault is detected (non-audible versions available)
- Optional tamper-proof screws
- Optional NEXUS® wired and NEXUS® wireless systems
- Universal wall mounting pattern keyhole slots and a conduit knockout provide alternate mounting methods
- Optional ceiling mount includes safety wire and pre-machined housing to receive a securement screw.
- UL924 Listed
- UL924 Listed for use in Damp Locations
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Advanced Diagnostics (optional)

Enjoy the peace of mind provided by Emergi-Lite's advanced diagnostic circuitry. The AD circuit monitors the every critical function of the unit and provides an audible and visual indicat or when a fault is detected. Non-audible versions available as well.

Unit Warranty

Entire unit (excluding lamps, fuses and pilot) carries a 3-year Full Warranty.

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Replacement lamps	570.0012-E
Additional special bit for tamper-proof screws	690.0454-E
REPLACEMENTS LAMPS	
570.0012-E	HIT 6V-5.4W
580.0097-E	MR16 LED 6V-4W

Power Consumption and Unit Rating

Each unit are furnished with one HIT lamp per head.

PROVIDER™ BATTERY UNIT						
Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage			
			1-1/2 hrs	2 hrs	3 hrs	4 hrs
Lead-Calcium	6	PRO-2N	10.8	8.5	–	–
	6	PRO-3N	18	12	10	7

*National Electrical Code Specification

Suggested Specification

Supply and install **Emergi-Lite®** Model **PRO-2N/PRO-3N**, 6 volt, 10.8-18 watts emergency lighting unit. Unit shall be fully automatic, selfcontained, maintenance-free and listed to UL Standard 924.

Circuitry- shall include a 120/277 volt dual input transformer, automatic charging, instantaneous transfer, test switch, long life LED AC charge monitor light. The charger shall utilize a computer tested integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, shortcircuit protected and reverse polarity protected. The charger shall recharge the battery to rated capacity as per UL924 specifications. Electrical features shall include a Low Battery Voltage Disconnect circuit to protect the battery from deep discharge damage. Brownout protection for automatic unit operation when utility power drops low enough to dim incandescent lamps and extinguish fluorescent and HID lamps. Battery lockout feature to prevent battery discharge during installation to a non-energized circuit.

Battery- shall be 6 volt, maintenance-free and have the electrolyte in a sealed case. To prevent loss of electrolyte through gassing, the battery shall operate by the principle of electrolyte recombination.

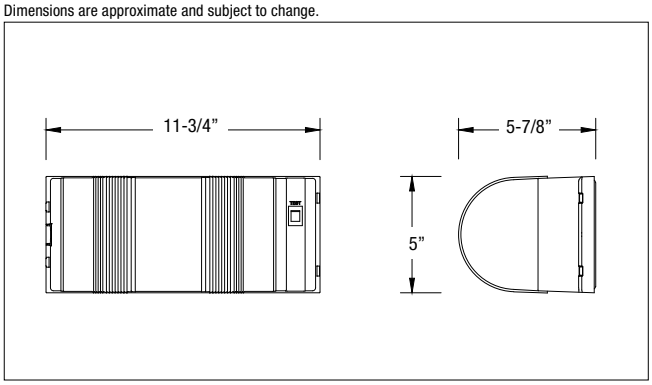
Housing- Heads and Shield- The housing and heads shall be constructed of high impact, UL 94-5VA flammability off white thermoplastic. The unit shall resist denting, peeling, scratching and corrosion. Heads shall have High Intensity Tungsten (HIT) lamps mounted in polished reflectors. The transparent lamp shield shall be constructed of acrylic.

Mounting- The unit shall be mountable in any orientation, on walls or ceilings. A universal mounting pattern, rear key-hole slots, and conduit entry on one end shall be provided. The lamp shield, housing and backplate shall be designed for snap-together assembly to eliminate screws and facilitate easy installation.

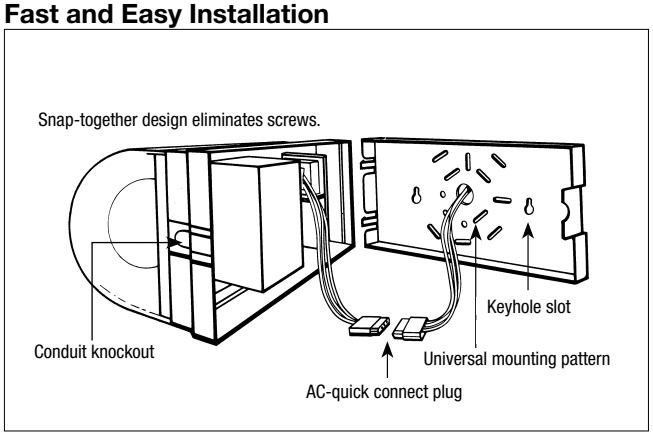
The unit shall be **Emergi-Lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



Fast and Easy Installation



Provider’s AC quick-connect plug, battery lock out feature and snap-together design make installation fast and easy.
With the AC quick-connect plug, contractors simply make the AC connection to the plug, mount the back plate and plug in the unit.

The battery lock out feature is an AC activated load switch that prevents the batteries from discharging until the unit is energized with AC power. This allows the contractor to install the Provider™ and connect the batteries in one convenient operation.

Universal mounting pattern keyhole slots and a conduit knock out provide alternate mounting methods.

How to Order

COLOR	SERIES	LAMP TYPE	UNIT TYPE	OPTIONS
Blank= Off white **B**= Black	**PRO-2N**= 6V-10.8W **PRO-3N**= 6V-18W	**-LA**= 6V-4W, MR16 LED **-ZP**= mini tungesten, 6V-5.4W	**Blank**= Standard Unit **-AD**= Advanced Diagnostics (audible) **-ADNA**= Advanced Diagnostics (non-audible) **NEX**= NEXUS® wired* **NEXRF**= NEXUS® wireless* *Available with PRO-2N only.	**V**= Voltmeter * **DL**= Damp Location **VR**= Vandal-resistant screws **C**= Line Cord 120V **CM**= Ceiling mount - Supplied with metal harness *Available with Standard unit type only.

Example: **BPRO-2N-LADL**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Prestige™ X40 Series

Edge-Lit Recessed Ceiling-Mount Only Exit Sign



Design upgrade: introducing new features

1. Easier installation: component-free back-box can be installed in advance, like a regular junction box
2. 20 – 30% less power consumption: max. 1.4W (AC-only) and max. 2.3W (Self-Powered)
3. Bi-color LED pilot light allows visual diagnostic without the need to open the unit (self-test and diagnostic option)
4. Listed by the Underwriting Laboratories UL Listed
5. Also available with white LEDs for custom-design legends: pictograms, special wording, etc. (Ask your sales representative)

Features

- Designed to achieve superior visual clarity and performance with an LED light source. High brightness red or green LEDs transmit light directly into both ends of a unique U-shaped panel. LED sensitive inks are formulated to provide a rich color in red or green
- Clear acrylic panel provides optimum light transmission. Illumination is 100% in both AC and emergency mode
- Clear acrylic panel is silkscreened and computer engraved. Computer engraving is used to crisply define each letter and chevron. LED sensitive inks are formulated to provide a rich color in red or green. Choice of legend background: clear (for single face), white or mirror (for single or double face signs)
- Rugged cast brushed aluminum trim plate (optional colors available).
- Low energy consumption LED lamps consume less than 2.3W per sign, single or double face, AC-only or Self-Powered
- Available with sealed maintenance-free Nickel-Cadmium batteries.
- Fully automatic charger circuitry offers two-wire universal 120 to 277VAC input, temperature compensated charger, solid state transfer, low voltage battery disconnect, and brownout protection
- Self-test and silent diagnostics are optional on all Self-Powered models. Diagnostics are programmed to ensure product readiness and reliability by continuously monitoring every critical function of the unit. The unit is self-tested for one minute every 30 days, 30 minutes every 60 days and 90 minutes annually. When a fault is detected the pilot light will change color from green to red and flash following a particular code, identifying the cause: battery, charger circuitry, or LED lamps
- Designed to fit integrally with a 20 gauge steel back box. Each unit includes a bar hanger kit
- Prestige LED Series signs are unaffected by the vibrations, ambient temperature swings and typical power surges detrimental to standard exit light sources
- UL924 Listed
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Power Consumption Chart

Model	AC Specs		DC Specs	
AC-only	120 to 277VAC, 60Hz	Less than 1.4W	–	–
AC/DC-remote	120 to 277VAC, 60Hz	Less than 1.4W	6 to 24VDC	Less than 1.4W
Self-Powered	120 to 277VAC, 60Hz	Less than 2.3W	Ni-Cd battery	Min. 90 minutes
Self-Powered diagnostic	120 to 277VAC, 60Hz	Less than 2.3W	Ni-Cd battery	Min. 90 minutes

Suggested Specification

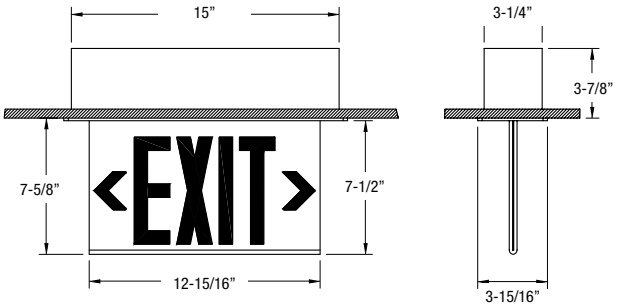
Supply and install the **Emergi-Lite® Prestige™ X40 series** of recessed edge-lit exit signs. The unit shall come standard with a flat trim plate of die-cast aluminum with _____ finish, a back box of 20-gauge galvanized steel, and a hardware kit including two 27-inch adjustable bar hangers for back box installation between ceiling joists. The back box shall be provided with conduit knockouts at the top, back and end.The unit shall have the trim plate snap and lock in the housing with torsion spring retainers, thereby eliminating any visible screws or hardware. The legend shall be printed on a clear acrylic panel.The panel shall have a U-shape and the legend letters shall have the contour engraved by laser.

The light source shall be long-life light-emitting diodes (LED) and shall provide even illumination in normal and emergency operation. Red LED technology shall be ALINGAP. The unit shall operate with a two-wire universal AC input voltage of 120 to 277Vac at less than 2.3 Watts. The edge-lit sign in a self-powered configuration shall use a sealed Nickel-Cadmium battery and shall stay illuminated during emergency operation for at least 90 minutes upon AC failure. When specified, the self-powered unit shall include self-test and silent diagnostic functions, managed by a micro-controller: it shall execute automatic tests for one minute every 30 days, 30 minutes every 60 days and 90 minutes annually. A diagnostic circuit shall continuously monitor the performance of the battery, charger module and LED lamps. When a fault is detected the pilot light shall change color from green to red and flash with a specific code. The red light is steady-on in case of battery disconnect; it will flash with one blink for battery failure, two blinks for charger failure and four blinks for LED lamp failure. A label with the diagnostic legend shall be visible next to the pilot light. The edge-lit sign shall be tested by the Underwriting Laboratories and listed to the UL924 standard.

The unit shall be **Emergi-Lite®** catalog number _____.

Dimensions

Dimensions are approximate and subject to change.



Accessories (order as a separate item)

DESCRIPTION	
Special wording	Contact your sales representative
DESCRIPTION	
Two 27-inch adjustable bar hangers*	TBH

* Bar hangers supplied with unit, order as replacement only

Arrow (Chevron) Designation



Arrow Right (R) | Arrow Left (L) | Double Arrow (D) | Arrow Right & Left (RL) Represents each side of a double face panel.

*Wording and chevrons not to scale. For illustration purposes only.

Backbox (order as a separate item)

DESCRIPTION	SUFFIX
Backbox kit flat trim	BBKTR-E

How to Order

HOUSING	SERIES	FACES	DESIGNATION	LEGEND COLOR	BACKGROUND COLOR	ARROWS	OPTIONS	LEGEND SIZE
Blank= Brushed aluminum **W**= White **B**= Black **PB**= Polished brass **CH**= Polished chrome **BR**= Bronze	**LX**= AC **LSNX**= Self-Powered	**40**= Less panel **42**= Single face **43**= Double face	**N**= New design	**R**= Red **G**= Green	**C**= Clear (single face only) **W**= White **M**= Mirror	**Blank**= No arrow **L**= Arrow left **R**= Arrow right **RL** = Right & left (double face) **D**= Double arrow **UA**= Universal field installed arrows	**Blank**= No option **-AD**= Advanced Diagnostics (non-audible) **-FA**= Fire Alarm **-DC**= AC/DC remote 6-24 VDC **-2CKT**= Two circuit, AC only **-FZ**= Flasher & buzzer (Self-Powered only) **-NEX**= Nexus® Wired **-NEXRF**= Nexus® Wireless	**Blank**= 6" EXIT legend **-8**= 8" EXIT legend (red only) **-LP**= Panel shipped separately **-X**= Back box shipped separately

Example: **WLSNX42NRWR-AD**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____



Prestige™ Thin Series

Die-Cast Aluminum Slim Profile Exit Sign With Long-Lasting LED Performance

Standard Features

- Easy to install
- Two popular finishes (see below)
- Self-Powered models with Nickel-Cadmium battery
- Low power consumption
- Field-selectable, knockouts chevrons
- Universal installation: top, end and back-mounting
- UL 924 Damp Location listed
- Meets UL 924, NFPA 101, NFPA 70-NEC and OSHA illumination standards
- Five-year full warranty

Construction

- Die-Cast aluminum housing, thin profile
- Clear lacquer, brushed aluminum inhibits fingerprints and other surface contaminants. Also available with white finish
- Universal directional chevron knockout are completely concealed and easily removed from face-plate
- Letters are 6" high with 3/4" stroke and 100 ft viewing distance rating

Electrical

- Dual-voltage input capability 120/277VAC
- Self-Powered models are provided with test switch, LED pilot light and rechargeable Nickel-Cadmium battery
- Battery: Sealed, maintenance-free, Nickel-Cadmium battery delivers 90 minutes of emergency power on all Self-Powered models

Installation

- Universal mounting – top, back or end. Mounting knockout and hole plugs are easily removed. Die-Cast aluminum canopy is provided (white canopy with white frame and black canopy with black frame)

Listings

- UL Listed
- Damp Location listing is standard 68°F to 86°F (20°C to 30°C)

Warranty

- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Suggested Specification

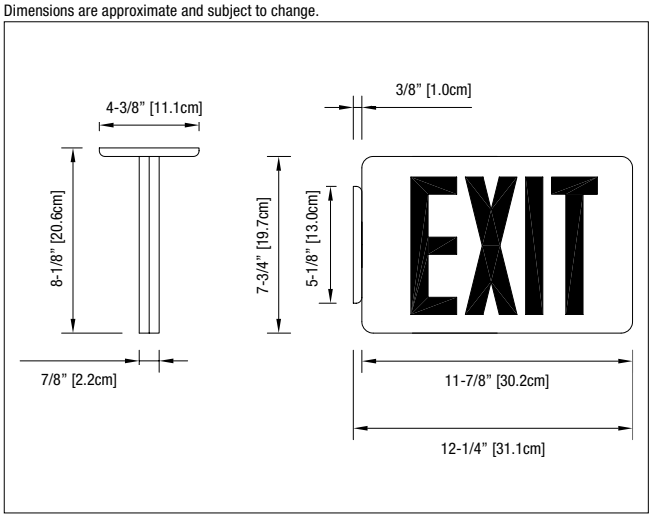
Supply and Install **Emergi-Lite® Prestige™ Thin** series Die-Cast Aluminum LED Exit Sign. The thin-profile faceplate(s), backplate and canopy shall be constructed of Die-Cast Aluminum. Frame and canopy shall be matching in finish, White frame with White canopy and Black frame with Black canopy. A choice of Legend (R) red or (G) green with faceplate(s) finished in (W) white or (A) brus hed aluminum. No screws are necessary to hold the faceplate(s) or backplate to the housing. The faceplate(s) shall come standard with concealed field-selectable removable knockout chevron indicators.

The exit sign shall be suitable for surface mount installations on wall, ceiling or end. The illumination source shall be Light Emitting Diodes (LED) in (R) Red or (G) Green color. Red LED technology shall be ALINGAP. The LEDs shall provide illumination in normal and emergency operation. The LEDs shall be mounted inside the exit sign housing. A LED sensitive diffuser shall be mounted in front of the LEDs to provide the 6" high by 3/4" stroke exit letters with even illumination and no visible LEDs or hot spots. The exit sign shall consume 1 watt, 0.1 Amp in any configuration. The exit sign shall be Listed to UL 924 Standards, UL listed for Damp location (32°F to 122°F (0°C to 50°C) and NFPA 101 (Life Safety Code), NFPA 70-NEC and OSHA illumination standards. Five-Year full warranty* AC-Only models shall be 120/277Vac 60HZ operation. Self-Powered models shall be 120/277Vac 60HZ and supplied with a sealed maintenance-free Nickel-Cadmium battery, providing at least 90 minutes illumination upon AC failure on all self-powered models.

The exit sign shall be **Emergi-Lite®** Model - _____.

Dimensions

Dimensions are approximate and subject to change.



Power Consumption Chart

Model	AC Specs			DC Specs	
AC-only	120/277 VAC 60Hz	Typical 1W	Less than 1.5W	–	–
Self-Powered	120/277 VAC 60Hz	Typical 1W	Less than 1.5W	Ni-Cd battery	Min. 90 minutes

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Wire Guard (wall mount)	WG1-E
Wire Guard (ceiling mount and end mount)	WG5-E

How to Order

FRAME COLOR/FACE PLATE	SERIES	# OF LAMPS	LEGEND COLOR
BA= Black body/brushed aluminum face **WW**= White/white	**TX**= AC only **TXN**= Self-Powered unit (90 min.)	**1**= Single face **2**= Double face	**R**= Red **G**= Green

Example: **BATXN1R**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

US

Prestige™ Floor Proximity Series

Master with Remote Floor Proximity LED Exit



Standard Features

- Low energy consumption LED light source (see Power Consumption chart). Red and green LEDs provide excellent visual performance, high reliability and low maintenance costs
- Self-Powered Master Units have self-contained batteries and circuitry inside the housing
- Available with sealed maintenance-free Nickel-Cadmium batteries for superior performance and long life. Provides 90 minutes of emergency operation and remote power for Proximity EXIT sign
- Remote Floor Proximity EXIT signs have power and diagnostics supplied from the DX/DXN Series Master Units only
- Stand alone AC-Only and Self-Powered Units: 120/277VAC dual voltage
- Master EXIT sign comes standard with the Self-Test/Diagnostic Feature. Its circuitry also monitors and supplies diagnostics to the Remote Floor Proximity EXIT sign. The self-test/diagnostic feature continuously monitors the charger assembly, battery and LED assembly current. If a fault is indicated, the "external service" required indicator will illuminate. The internal fault indicators will then indicate the nature of the fault. The self-test diagnostic will self test for minimum 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually. Meets NFPA 101 Life Safety Code requirements for periodic testing
- Available for surface or recessed mounting at floor level
- Evaluated to UL 924 Standard
- CSA US Listed
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Self-Test/Diagnostic Feature

The self-test/diagnostic feature continuously monitors the charger assembly, battery and LED assembly current. If a fault is indicated, the external service required indicator will illuminate. The internal fault indicators will then indicate the nature of the fault. The selftest/diagnostic will self test for 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually. Meets NFPA 101 Life Safety Code requirements for periodic testing.

Unit Warranty*

The Prestige LED Floor Proximity Series has a 5-year full warranty. Each unit is fully computer tested.

Battery Warranty*

Sealed Nickel-Cadmium: 10 year life expectancy 5-year Full Warranty, plus 5-year pro rata warranty.

*Subject to proper installation and maintenance.

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Wire Guard (for floor proximity recessed)	WG11-E

Features (optional)

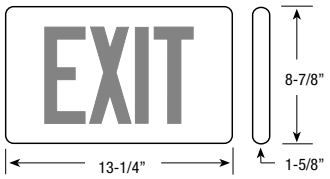
DESCRIPTION	SUFFIX
Vandal-Resistant shield and screws	VR1

Dimensions

Dimensions are approximate and subject to change.

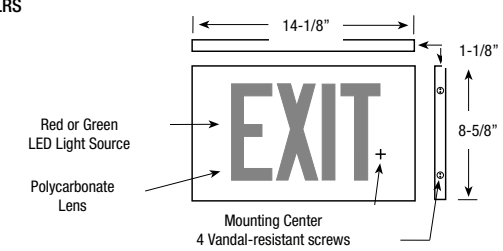
Self-Powered/AC-Only Master

DXN1G-M-N
DX1G-M-N



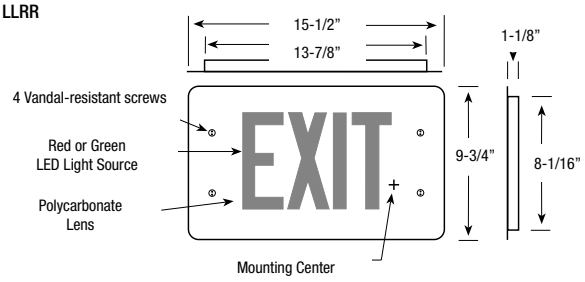
Floor Proximity Slave Surface Mount

LLGS
LLRS

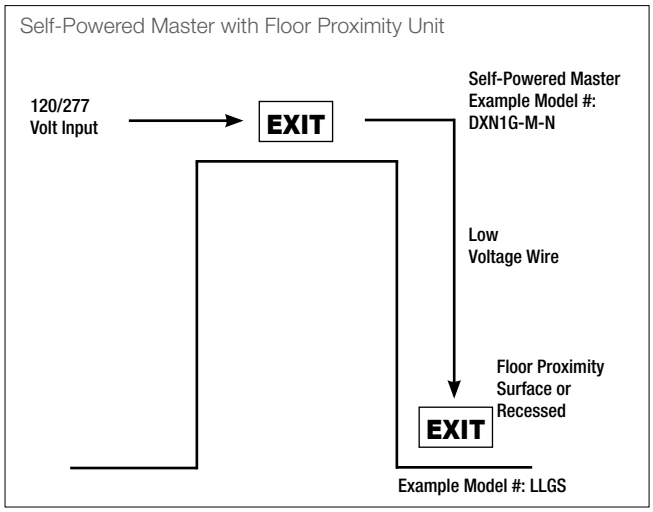


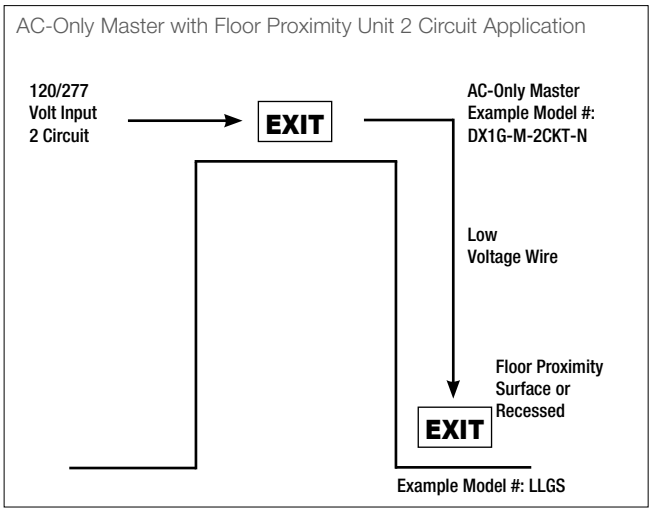
Floor Proximity Slave Recessed Mount

LLGR
LLRR



How to Order for a Typical Application





NOTE: Must install each "Floor Proximity Unit" along with one "Master Unit"

How to Order
Self-Powered Master (Unit for above door)

COLOR OPTION PREFIX	SERIES	FACES	STENCIL FACE LAMP COLOR	MASTER UNIT	STANDARD SERIES DESIGNATOR
Blank= Brushed alum. face, black body **WW**= All white **BB**= All black	**DXN**	**1**= Single face **2**= Double face	**R**= Red **G**= Green **RW**= Red/white **GW**= Green/white	**-M**	**-N**

Example: **DXN1G-M-N**

Floor Proximity Unit (Unit on side of door)

COLOR OPTION PREFIX	SERIES	STENCIL FACE LAMP COLOR	MOUNTING	OPTION
Blank= Brushed alum. face, black body **W**= All white **B**= All black	**LL**	**R**= Red **G**= Green **RW**= Red/white **GW**= Green/white	**R**= Recessed **S**= Surface	**-VR1**= Vandal-resistant screws/ polycarbonate shield

Example: **LLGS-VR1**
* Open face required for special wording (please contact your sales representative)

How to Order
AC-Only Master (Unit for above door)

COLOR OPTION PREFIX	SERIES	FACES	STENCIL FACE	MASTER UNIT	CIRCUIT	STANDARD SERIES DESIGNATOR
Blank= Brushed alum. face, black body **WW**= All white **BB**= All black	**DX**	**1**= Single face **2**= Double face	**R**= Red **G**= Green **RW**= Red/white **GW**= Green/white	**-M**	**-2CKT**	**-N**

Example: **DX1G-M-2CKT-N**

Floor Proximity Unit (Unit on side of door)

COLOR OPTION PREFIX	SERIES	STENCIL FACE LAMP COLOR	MOUNTING	OPTION
Blank= Brushed alum. face, black body **W**= All white **B**= All black	**LL**	**R**= Red **G**= Green	**R**= Recessed **S**= Surface	**-VR1**= Vandal-resistant screws/ polycarbonate shield

Example: **LL-GS-VR1**
* Open face required for special wording (please contact your sales representative)

Power Consumption Chart

Color	Model	AC Specs		DC Specs	
Red	AC-only	120/277VAC	1.3W	–	–
	AC-2 circuit	120/277 and 277/277VAC	2.6W	–	–
	Self-Powered	120/277VAC	3.8W	Ni-Cd battery	Min. 90 minutes
Green	AC-only	120/277VAC	1W	–	–
	AC-2 circuit	120/277 and 277/277 VAC	3.3W	–	–
	Self-Powered	120/277VAC	5W	Ni-Cd battery	Min. 90 minutes

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Prestige™ Series Edge-Lit

Die-Cast Aluminum Edge-Lit Exit Sign



Design upgrade: introducing new features

1. Easier installation: component-free back-box housing and canopy can be installed in advance, like a regular junction box.
2. 20 – 30% less power consumption: max. 1.4W (AC-only models) and max. 2.3W (Self-Powered)
3. Bi-color LED pilot light allows visual diagnostic without the need to open the unit (self-test and diagnostic option)
4. Listed by the Underwriting Laboratories UL Listed
5. Also available with white LEDs for custom-design legends: pictograms, special wording, etc. (Ask your sales representatives)

Features

- Designed to achieve superior visual clarity and performance with a red and green LED light source
- Clear acrylic panel provides optimum light transmission. Illumination is 100% in both AC and emergency mode
- Computer engraving is used to crisply define each letter and chevron. LED sensitive inks are formulated to provide a rich color in red or green. Choice of legend background includes clear (for single face), white or mirror (for single or double face signs)
- Clean trim plate design eliminates visible fasteners. Choice of trim plates: circular or angular. Standard finish is brushed aluminum for the housing, trim plate, trim ring and canopy
- Self-Powered models contain a sealed maintenance-free Nickel-Cadmium battery that provides 90 minutes of emergency illumination.
- Two-wire universal 120 through 277VAC, 50/60Hz for AC-only and Self-Powered models. AC-only signs consume maximum 1.4W. Self-Powered signs use 2.3W max while recharging batteries. Solid state transfer automatically and instantly supplies the LED lamps from the back-up battery upon failure of AC supply. Close tolerance electronic circuit activates emergency unit when utility power dips below nominal voltage for brownout protection. Current-limited and short-circuit-proof charger. Full battery recharge is made in compliance with UL924 specifications. Test switch incorporates a green LED AC pilot light
- Self-test and silent diagnostic is optional on all Self-Powered models. It is programmed to ensure product readiness and reliability by continuously monitoring every critical function of the unit. The unit is self-tested for one minute every 30 days, 30 minutes every 60 days and 90 minutes annually. When a fault is detected the pilot light will change color from green to red and blink following a particular code, identifying the cause: battery, charger circuitry, or LED lamps
- Modular design allows for several mounting configurations. A trim ring and two 27-inch bar hangers are used for recessed mounting on walls or ceilings. A canopy allows for surface mounting on ceilings or walls as back- or end-mount. Face panels snap securely into trim plate on all mounting configurations
- UL924 Listed
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Power Consumption

Model	AC Specs		DC Specs	
AC-only	120 to 277VAC, 50/60Hz	Less than 1.4W		
AC/DC-remote	120 to 277VAC, 50/60Hz	Less than 1.4W	6 to 24VDC	Less than 1.4W
Self-Powered	120 to 277VAC, 50/60Hz	Less than 2.3W	Ni-Cd battery	Min. 90 minutes
Self-Powered diagnostic	120/277VAC, 50/60Hz	Less than 2.3W	Ni-Cd battery	Min. 90 minutes

Suggested Specification

Supply and install the **Emergi-Lite® Prestige™ Series** of Die-Cast edge-lit exit signs. The unit shall come standard with a trim plate, trim ring, back box and canopy made of die-cast aluminum with _____ finish. The trim plate shall have a _____ profile and allow for wall- or ceiling-mount installation. The trim ring shall allow for recessed installation in walls or ceilings with cavity. The canopy shall allow for wall, end, or ceiling mount. The back box shall be provided with conduit knockouts at the top, back and end. All models shall be provided with a hardware kit including two 27-inch adjustable bar hangers for back box recessed installation. The unit shall have the trim plate snap and lock in the housing with torsion spring retainers, thereby eliminating any visible screws or hardware. The legend shall be printed on a clear acrylic panel. The panel shall have a U-shape and the legend letters shall have the contour engraved by laser. The light source shall be long-life light emitting diodes (LED) and shall provide even illumination in normal and emergency operation. Red LED technology shall be ALINGAP. The unit shall operate with two-wire universal AC input voltage of 120 to 277VAC at less than 2.3W. The edge-lit sign in a selfpowered configuration shall use a sealed Nickel-Cadmium battery and shall stay illuminated during emergency operation for at least 90 minutes upon AC failure. When specified, the self-powered unit shall include self-test and silent diagnostic functions, managed by a microcontroller: it shall execute automatic tests for one minute every 30 days, 30 minutes every 60 days and 90 minutes annually. A diagnostic circuit shall continuously monitor the performance of the battery, charger module and LED lamps. When a fault is detected the pilot light shall change color from green to red and flash with a specific code. The red light is steady-on in case of battery disconnect; it will flash with one blink for battery failure, two blinks for charger failure and four blinks for LED lamp failure. A label with the diagnostic legend shall be visible next to the pilot light. The edge-lit sign shall be tested by the Underwriting Laboratories and listed to the UL924 standard.

Unit shall be **Emergi-Lite®** catalog number _____.

Electrical

Power requirements: 120 to 277VAC, 50/60Hz. AC-only signs use 1.4 watts max, Self-Powered signs use 2.3 watts max while recharging batteries

Unit Warranty*

Unit carries a 5-year full warranty. (excluding lamps and fuses)

*Subject to proper installation and maintenance.

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
White Pendant	P*-WT
Black Pendant	P*-BK
Gray Pendant	P*-GY

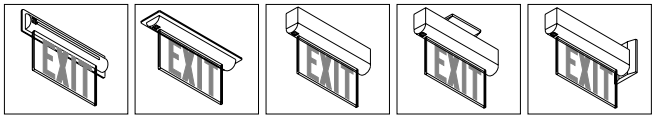
* Custom pendant lengths and colors available, specify (12", 24", 36", etc)

Backbox (order as a separate item)

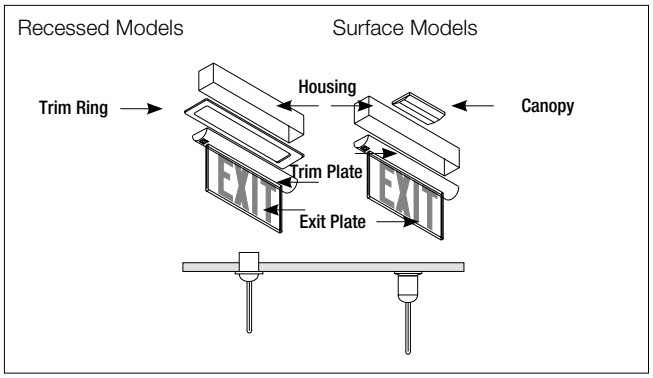
DESCRIPTION	SUFFIX
Backbox Kit white	BBKTS-WT-E
Backbox Kit black	BBKTS-BK-E
Backbox kit brushed aluminum	BBKTS-BA-E
Backbox kit chrome	BBKTS-CH-E
Backbox kit dark bronze	BBKTS-BR-E
Backbox kit polished brass	BBKTS-PB-E

Available Models

Circular trim plate models shown.
optional Angular trim plate available.



Recessed Wall Mount | Recessed Ceiling Mount | Surface Wall Mount | Surface Ceiling Mount | Surface End Mount





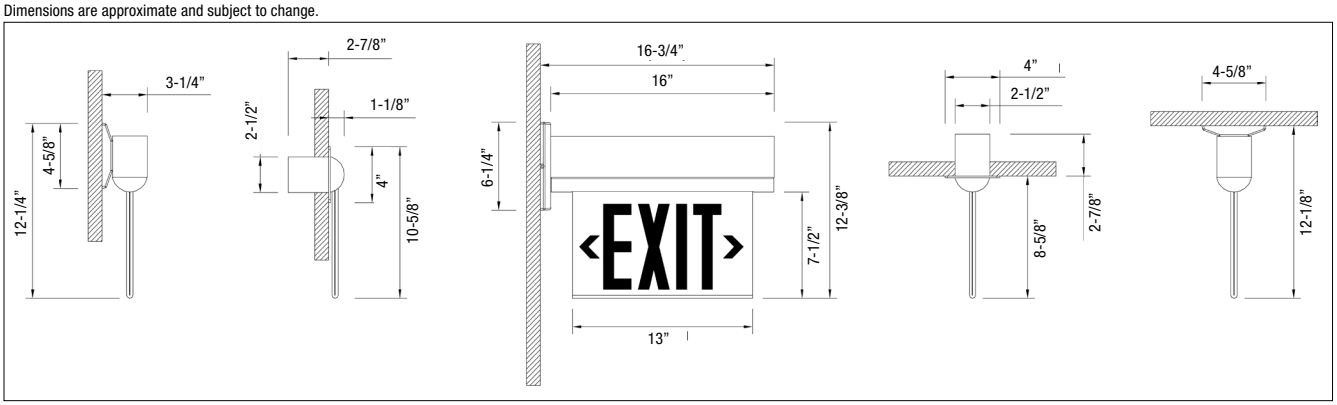
Standard
Circular Trim Plate



Optional
Angular Trim Plate

Dimensions

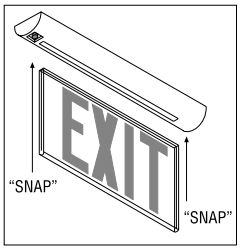
Dimensions are approximate and subject to change.



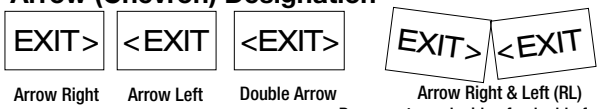
Mounting Configurations

All mounting configurations use the same basic components. Inserting a trim ring allows for recessed mounting on walls or ceilings.

Applying a canopy allows for surface mounting on ceilings or walls as back or end mount.



Arrow (Chevron) Designation



Arrow Right (R) | Arrow Left (L) | Double Arrow (D) | Arrow Right & Left (RL)

Represents each side of a double face panel.

*Wording and chevrons not to scale. For illustration purposes only.

How to Order

HOUSING COLOR	SERIES	FACES	DESIGNATION	LEGEND COLOR	BACKGROUND COLOR	ARROWS	TRIM	MOUNTING	OPTIONS	LEGEND SIZE
Blank= Brushed aluminum **W**= White **B**= Black **PB**= Polished brass **CH**= Polished chrome **BR**= Bronze	**LX**= AC-only **LXN**= Self-Powered	**1**= Single face **2**= Double face	**N**= New design	**R**= Red **G**= Green	**C**= Clear (single face only) **W**= White **M**= Mirror	**Blank**= No arrow **L**= Arrow left **R**= Arrow right **RL**= Right and left (double face) **D**= Double arrow **UA**= Universal field installed arrows	**-A**= Angular **-C**= Circular	**Blank**= Universal mount **S**= Surface mount (canopy)* * **Available only with chrome & polished brass**	**Blank**= No option **-NEX**= Nexus® Wired (consult your sales representative) **-NEXRF**= Nexus® Wireless (consult your sales representative) **-FA**= Fire alarm **-D**= Self-Test and diagnostic **-DC**= AC/DC remote 6-24 VDC **-2CKT**= Two circuit, AC only **-FZ**= Flasher & buzzer (Self-Powered only) **-X**= Back box shipped separately	**Blank**= 6" EXIT legend **-8**= 8" EXIT legend (red only) **-LP**= Panel shipped separately

Example: **WLXN2NRLWR-A-D**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Prestige™ Economizer Series

Slim Profile Surface Mount LED Edge-Lit Exit Sign



Features

- Acrylic panel with curved contour provides superior clarity and illumination. Long-life LED light for low maintenance costs and superior illumination
- Legend with a choice of red or green six-inch letters, and easy-to-add field-installed stick-on translucent directional arrows. Choice of legend background: clear, white or mirror
- Slim-profile extruded aluminum housing with slim-profile Die-Cast aluminum canopy. Choice of finishes: textured aluminum or off-white
- Energy efficient power consumption: less than 3W for Self-Powered version and less than 2 watts for AC only single or double face
- Available with sealed Nickel-Cadmium batteries that provide 90 minutes of emergency lighting
- Simple, two-wire universal AC input (120V to 277VAC 60Hz) prevents installation errors. Simple, two-wire universal DC input: 6V to 24VDC
- Universal surface mounting: wall, ceiling or end mount. Click-to-open housing door allows easy access to the panel and electrical wiring. For recessed mount please consult your sales representative
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Warranty

3 years full warranty *subject to proper installation and maintenance.

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
White Pendant	PE-P-WH*
Black Pendant	PE-P-BK*

Power Consumption

Model	AC Specs		DC Specs	
AC-only	120 to 277VAC	Less than 2W	–	–
AC/DC	120 to 277VAC	Less than 2W	6 to 24VDC	Less than 1.5W
Self-Powered	120 to 277VAC	Less than 3W	Ni-Cd battery	Min. 90 minutes

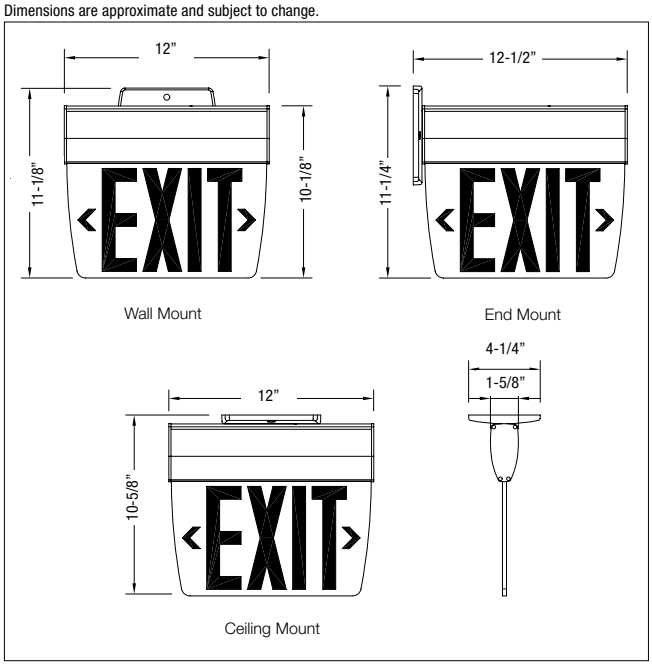
Suggested Specification

Supply and install the **Emergi-Lite® Prestige™ Economizer™** Series slim-profile edge-lit exit sign. The unit shall operate with universal two-wire AC input voltage from 120Vac to 277Vac at less than 3 Watts for single and double face legends. The housing assembly shall be fabricated of extruded aluminum with a textured finish and _____ color. The canopy shall be of die-cast aluminum and allow for ceiling,wall, or end mount installation. The light source shall be long-life LEDs installed on a PCB strip. The acrylic panel shall have a curved contour. The legend shall have six-inch high with ¾-inch stroke red letters on a clear background, unless otherwise specified. The unit shall be equipped with field installed stick-on translucent directional indicators, to be installed in the field as required by the code. The exit sign in a self-powered configuration shall be equipped with sealed Nickel-Cadmium batteries and perform minimum 90 minutes of emergency illumination upon AC failure. The equipment shall be UL-924 listed.

The equipment shall be UL-924 listedThe unit shall be **Emergi-Lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



How to Order (Surface Mount Series)

HOUSING COLOR	SERIES	FACE	LEGEND COLOR
TA= Textured aluminum **OW**= Off white	**PE**= AC **PES**= AC/DC **PEN**= Self-Powered	**1**= Single face **2**= Double face	**RC**= Red on clear* **RW**= Red on white **RM**= Red on mirror **GC**= Green on clear* **GM**= Green on mirror * Single face only

Example: **TAPE1RC**

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Prestige™ Economizer Series

Recessed Mount Edge-Lit Exit Sign

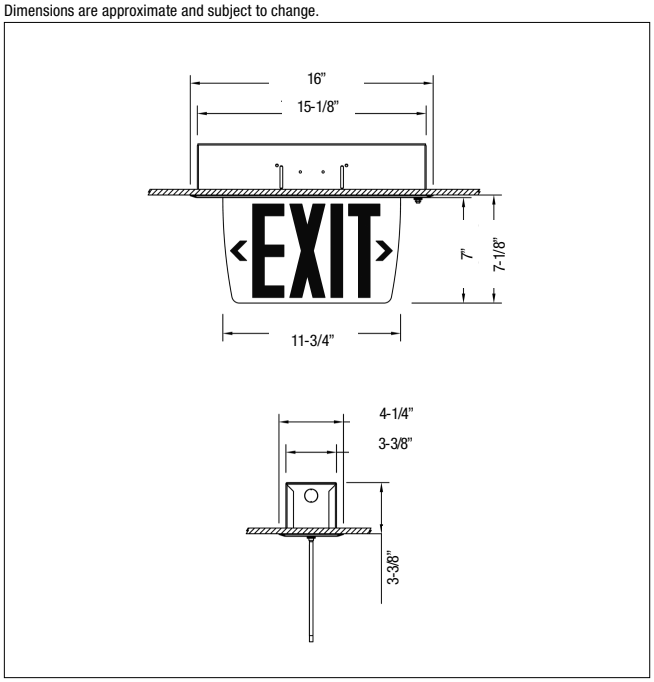


Features

- Rugged, 20-gauge steel back box
- Equipped with bar hanger kit for easy installation
- Formed steel flat trim plate
- Choice of finishes: textured aluminum or off-white
- Acrylic panel with curved contour provides superior clarity and illumination
- Legend with a choice of red or green letters
- Choice of legend background: clear, white (red legend only) or mirror
- Stick-on translucent directional chevrons for field installation
- Simple, two-wire universal AC input (120V to 277VAC 50/60Hz) prevents installation errors
- Sealed Nickel-Cadmium batteries provide 90 minutes of emergency lighting
- Simple, two-wire universal DC input: 6V to 24 VDC
- Long-life LED light for low maintenance costs and superior illumination
- Energy efficient power consumption: less than 2.5W for single or double face legends
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Suggested Specification

Supply and install the **Emergi-Lite® Economizer™ Series** recessed edge-lit exit sign. The unit shall operate with universal two-wire AC input voltage from 120VACto 277Vac at less than 2.5 Watts for single and double face legends. The housing assembly shall be of rugged 20-gauge steel and shall include a bar hanger kit for easy installation. The trim plate shall be low-profile and manufactured of formed steel with a textured finish and _____ color. The light source shall be eight (8) long-life LEDs installed on a PCB strip. Red LED technology shall be ALINGAP. The whole electrical circuit shall be contained in a plastic housing fixed on the trim plate. The acrylic panel shall have a curved contour. The legend shall have six-inch high with ¾-inch stroke red letters on a clear background, unless otherwise specified. The unit shall be equipped with stick-on translucent directional chevrons, to be installed in the field as required by the Code.

The exit sign in a self-powered configuration shall be equipped with sealed Nickel-Cadmium batteries and perform minimum 90 minutes of emergency illumination upon AC failure.

The equipment shall be UL-924 listedThe unit shall be **Emergi-Lite®** model: _____.

Power Consumption

Model	AC Specs		DC Specs	
AC-only	120 to 277VAC	Less than 2W	–	–
AC/DC	120 to 277VAC	Less than 2W	6 to 24VDC	Less than 1.5W
Self-Powered	120 to 277VAC	Less than 3W	Ni-Cd battery	Min. 90 minutes

How to Order (Surface Mount Series)

HOUSING COLOR	SERIES	TRIM	FACE	LEGEND COLOR
TA= Textured aluminum **OW**= Off white	**PE**= AC **PES**= AC/DC **PEN**= Self-Powered	**F**= Recessed flat trim	**1**= Single face **2**= Double face	**RC**= Red on clear* **RW**= Red on white **RM**= Red on mirror **GC**= Green on clear* **GM**= Green on mirror *Single face only

Example: **TAPEF1RC**

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

US

Prestige™ DX Series

Die-Cast Exit Sign



Features

- Red and green LED light source
- Constructed of Die-Cast aluminum. Finished with a deep brushed face and black body. Optional finishes available. Self Contained. Batteries and circuitry are located inside the exit housing
- Available with sealed maintenance-free Nickel-Cadmium batteries that provide 90 minutes of emergency operation. Batteries recharge per UL924 requirements
- Fully automatic charger is solid state. All models are Universal 2-wire, 120 through 277VAC, 50/60Hz
- Continuous self-diagnostic monitoring. Self-testing per Life Safety Code requirements. Diagnostic / Self Test circuitry is standard on all Self-Powered models. This circuitry is programmed to ensure the exit's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "service required" indicator illuminates immediately. A detailed diagnostic display that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self test will test the unit for a minimum of 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually
- Can be wall, end or ceiling mounted
- Evaluated to UL 924 Standard. AC-Only Signs are Listed for use in damp locations
- Unaffected by the vibrations, ambient temperature swings and typical power surges detrimental to standard exit light sources
- Universal directional chevron knockouts are completely concealed and easily removed from the face plate
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Diagnostic / Self Test Feature (Standard)

Diagnostic / Self Test circuitry is standard on all self-powered models. This circuitry is programmed to insure the exits readiness and reliability by continuously monitoring of the charger assembly, battery and LED assembly current function of the unit. If a problem occurs, a single FAULT indicator illuminates immediately. A detailed diagnostic display is located on the inside of the exit sign, out of sight from the general public. The display inside will further indicate the nature of the fault. The self test will test the unit for 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually.

Suggested Specification

Supply and install **Emergi-Lite® Prestige™ Series LED exit signs**. Signs shall be CSA Listed to U.L. Standard 924. Exit sign and mounting canopy shall be of rugged Die Cast construction with knockouts on the top and side for canopy mounting, and a universal knockout pattern on the back. Light Source: shall be long life, high intensity light emitting diodes (LED). Red LED technology shall be ALINGAP. LED lamps shall be mounted inside the exit housing, not on the face. An LED sensitive ink diffuser shall be mounted in front of the LEDs to provide a full 3/4" letter stroke with even illumination. Self-powered models: shall have a NickelCadmium battery for long life. Upon failure of AC power, the battery shall provide 90 minutes of emergency illumination. Diagnostics / Self Test shall be standard on all self-powered models. The circuitry shall have a Service Required indicator. A detailed diagnostic display on the inside of the exit sign that will illuminate to indicate the nature of the fault as either the battery or charging circuit. An AC pilot light and test switch are standard. Charger shall be fully automatic, solid state, temperature compensated and short-circuit protected. The self testing software will test the unit for 30 seconds every thirty days, 30 minutes every 60 days and 90 minutes annually.

Choice of Finish

Standard: Black Body with Deep Brushed Aluminum Face

Optional: White Body with a Brushed Aluminum Face, All White, All Black, All Bronze (painted), All Brushed Aluminum, All Chrome finish.

Choice of Models available with a Red or Green LED Light Source include

- AC-Only, universal 120 to 277 Vac, 50/60 Hz.
- AC/DC, 120 to 277 Vac input, 6 to 24VDC.
- 2 AC circuit, 120 to 277VAC.
- Self-Powered, 120 to 277VAC input.

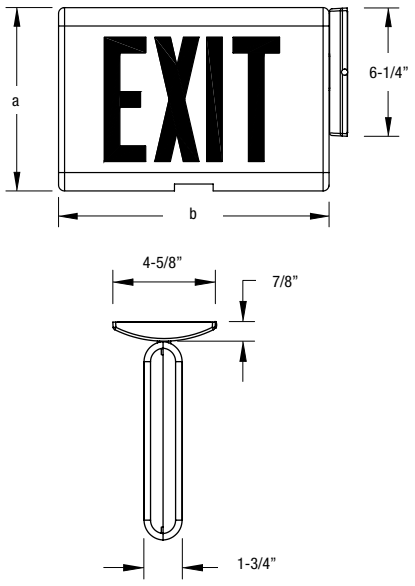
*AC-Only signs are now standard as AC/DC

Power Consumption

Model 6"	AC Specs	DC Specs	
AC-only	120 to 277VAC, 50/60Hz	–	–
AC/DC-remote	120 to 277VAC, 50/60Hz	6 to 48VDC	Less than 1.5W
Self-Powered	120 to 277VAC, 50/60Hz	Ni-Cd battery	Min. 90 minutes
Model 8"	**AC Specs**	**DC Specs**	
AC-only	120 to 277VAC, 50/60Hz	–	–
AC/DC	120 to 277VAC, 50/60Hz	6 to 24VDC	1.6W
Self-Powered	120 to 277VAC, 50/60Hz	Ni-Cd battery	Min. 90 minutes

Dimensions

Dimensions are approximate and subject to change.



Letters	Dimensions	
	a	b
6"	8-7/8"	13-1/16"
8"	10-1/2"	15-1/4"

Battery Warranty*

Sealed Lead-Calcium: 3-year Full Warranty, plus 3-year pro rata warranty, 8-year life expectancy

Sealed Nickel-Cadmium: 5-year Full Warranty, 5-year pro rata warranty, 10 year life expectancy

Unit Warranty*

Unit equipment (except battery and lamps): five-year limited warranty

*Subject to proper installation and maintenance

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
White Pendant	**PD**W**
Black Pendant	**PD**B**
Pendant Mount Gray	**PD**GY**
Wire Guard (Wall Mount) (6 in.)	**WG12-E**
Wire Guard (Ceiling Mount) (6 in.)	**WG5-E**
Wire Guard (End Mount) (6 in.)	**WG5-E**

* Specify Pendant Length (12", 24", 36", etc)

How to Order

COLOR FRAME/ FACEPLATE	SERIES	# OF FACE	LEGEND COLOR	LETTERS	DIAGNOSTIC OPTIONS	OPTIONS	VERSION
Blank= Black/brushed aluminum **WW**= White/white **WA**= White/brushed aluminum **BZ**= Bronze/bronze **BB**= Black/black **AA**= All brushed aluminum	**DXN**= Self-Powered unit **DX**= AC/DC* *Not available with Nexus® Wireless option	**1**= Single face **2**= Double face	**R**= Red **G**= Green **Open face** **RW**= Red on white **GW**= Green on white *Open face required for special wording	**Blank**= 6" letters **8**= 8" letters	**Blank**= Standard **NEX**= Nexus® wired	**Blank**= Standard **DL**= Damp Location **FA**= Fire alarm activated flasher **FZ**= Flasher buzzer (Self-Powered only)* **VR**= Vandal Resistant screws **VR1**= Polycarbonate shield with tamper proof screws **2CKT**= 2 Circuit (120/120 or 277/277, AC only)* *Not available with Nexus® option	**-N**= New design* *Not required for 8" letters

Example: **DXN1R-N**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

nexus ADVANCED AD DIAGNOSTICS

Premier™ Series

LED Thermoplastic, universal-mount & snap-fit Exit Sign



COMMERCIAL

Features

- Indirect reflective technology provides bright, even illumination
- Long-life LED light source for low maintenance costs and superior illumination
- Durable, injection-molded, thermoplastic housing. Optional vandal-resistant shield with tamper-proof screws
- Energy efficient power consumption: less than 3.5 watts for Self-Powered version and less than 3W for AC only single or double face
- Available with a sealed, maintenance-free Nickel-Cadmium battery
- Dual voltage input: 120/277VAC. Optional Advanced Diagnostic circuitry, flasher/buzzer, and fire alarm-activated flasher
- Standard Universal, supplied with two faceplates, back plate for wall mount and easy install canopy for end and ceiling mounting. Universal, field-selectable snap in/out chevrons
- UL924 Listed
- UL Listed for damp locations
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Wire Guards

WALL	CEILING	END
WG1-E	WG5-E	WG5-E

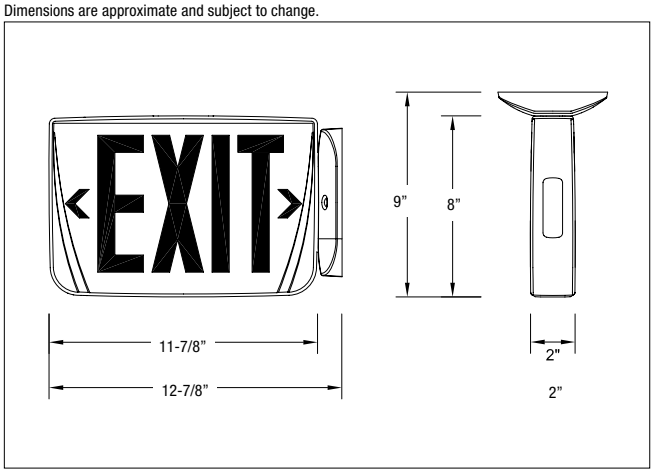
Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Pendant White	PRE-P-WH*
Pendant Black	PRE-P-BK*
Wire Guard (wall mount)	WG1-E
Wire Guard (ceiling mount and end mount)	WG5-E

* Specify pendant length

Dimensions

Dimensions are approximate and subject to change.



Suggested Specification

Supply and install the **Emergi-Lite® Premier™** exit sign. The standard equipment shall operate with a dual-voltage input of 120/277VAC with less than 3.5 Watts of consumption. The exit shall be suitable for wall, end, or ceiling mount. The faceplate shall be constructed of a durable high impact thermoplastic and come standard with snap in/out chevrons. No screws are necessary to hold the faceplate or the back plate to the housing. The one piece thermoplastic frame is molded in white (optional black). The light source shall be light emitting diodes (LEDs). The LEDs shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing. The light source shall be long-life LEDs installed in a PSB strip. A LED-sensitive diffuser shall be mounted in front of the LEDs to provide the 6" high by 3/4" stroke letters with even illumination. The exit sign in a self-powered configuration shall be equipped with a sealed, maintenance-free Nickel-Cadmium battery. The equipment shall stay illuminated at least 90 minutes upon AC failure. The exit sign shall be listed to UL924 standard and be approved for use in damp locations. The self-powered model equipped with optional advanced diagnostic shall self-test by simulating a power failure for one minute ev ery 30 days, 30 minutes every 60 days and 90 minutes every 360 days.

A diagnostic circuit shall continuously monitor the performance of the battery, charger module and LED lamps. Upon failure detection the system shall display the error on the AC pilot lamp, which will change color from green to red and will flash with a specifi c code. The pilot lamp shall be steady-on red in case of "Battery

Disconnect"; it shall flash red with one blink for "Battery failure", two blinks for "Charger failure" and four blinks for "LED lamp failure. A label with the diagnostic legend shall be visible next to the pilot lamp.

The unit shall be **Emergi-Lite®** model: _____.

Unit Warranty*

Unit carries a 5-year full warranty. (excluding lamps and fuses)

*Subject to proper installation and maintenance

Optional Self-Test/Self-Diagnostic

Continuous self-diagnostic monitoring. Self-testing per Life Safety Code requirements. This circuitry is programmed to ensure the exit sign's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "service required" indicator illuminates immediately.

A detailed diagnostic display that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self-test will test the unit a minimum of 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually.

Power Consumption

Each unit is furnished with one HIT lamp per head.

MODEL	AC SPECS		DC SPECS	
AC-Only	120/277VAC, 60Hz	Less than 2.5W	–	–
AC / DC-remote	120/277VAC, 60Hz	Less than 2W	6 to 48VDC	Less than 1.5W
Self-Powered	120/277VAC, 60Hz	Less than 3.3W	Ni-Cd battery	Min. 90 minutes
Self-Powered with Diagnostic	120/277VAC, 60Hz	Less than 2.8W	Ni-Cd battery	Min. 90 minutes

How to Order

HOUSING COLOR	SERIES	UNIT TYPE	COLOR	OPTIONS
W= White **B**= Black	**PREM**= LED plastic EXIT	**Standard models** **AC**= AC only (120/277V) **U**= 120/277VAC & 6 to 48VDC **SNX**= Self-Powered Ni-Cd **Optional models** **2C1**= Dual AC circuit (2x120V) **2C2**= Dual AC circuit (2x277V) **DN**= Self-Powered advanced diagnostic circuitry **NEX**= NEXUS® wired **NEXRF**= NEXUS® wireless	**R**= Red universal **R1**= Red single face* **R2**= Red double face* **G**= Green universal **G1**= Green single face* **G2**= Green double face* **Open face** **RW**= Red on white **GW**= Green on white (Open face required with special wording legends) *Available with VR & VR1 options only	**Blank**= No option **BA**= Brushed aluminum exit stencil **FZ**= Flasher buzzer (DN model only) **FL**= Flasher (DN model only) **FA**= Fire alarm activated flasher (AC, U, 2C1, 2C2 and DN models only) **FBF**= Flasher buzzer + fire alarm activated flasher (DN model only) **VR**= Vandal-resistant screws* **VR1**= Polycarbonate shield with tamper proof screws* *Please specify single or double face, red or green

Example: **WPREMACR**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Premier™ Series

Thermoplastic Housing 6V up to 60W & 12V up to 72W Capacities Emergency Light



Features

- Simple, compact and contemporary design
- Wall-mount or ceiling-mount installation (optional)
- Two-piece housing of injection-molded thermoplastic
- MR16 halogen or LED lamps, shielded by clear polycarbonate covers
- Sealed, maintenance-free, Lead-Calcium or Nickel-Cadmium batteries
- Power requirements: 120/277VAC, 60Hz, 0.25A/0.12A
- Total load capacity up to 72W
- Advanced Diagnostic-Audible (optional)
- Certified for Damp Locations (optional) 50°F to 104°F (10°C to 40°C)
- NEXUS® interface (optional)
- UL924 Listed
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Wire Guards

WG1-E	Wall mount
WG5-E	Ceiling mount

Power Consumption and Unit Rating

Model	AC Specs		Watts to 87-1/2% of rated battery voltage*			
			1-1/2 hrs	2 hrs	3 hrs	4 hrs
18M	6V	120/277VAC	18	14	9	-
30M	6V		30	20	15	10
40M	12V		40	30	20	15
60M	6/12V		60	40	30	20
72M	12V		72	54	36	27
20NC	6V	120/277VAC	20	15	10	8
40NC	12V		40	30	20	15
50NC	12V		50	36	24	18

* National Electrical Code Specification

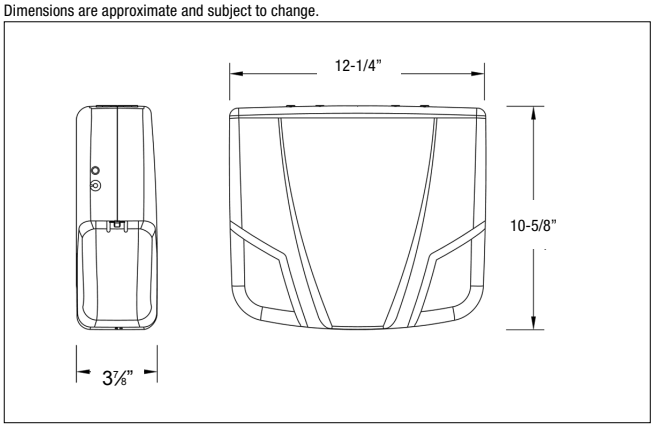
Suggested Specification

Supply and install **Emergi-Lite® Premier™ Series** combination of unit equipment and exit sign. The standard equipment shall operate with a dual voltage input of 120/277VAC. The unit shall be suitable for wall or ceiling mount. The unit frame and face plates shall be made of injection-molded durable high-impact thermoplastic and come standard with snap in/out chevrons. No screws are necessary to hold the faceplate or back plate to the housing. The one piece thermoplastic frame is molded in white (optional black). The faceplates shall feature a uniformly illuminated legend. The light source shall be light emitting diodes (LED) and shall provide illumination in normal and emergency operation. Red LED technology shall be ALINGAP. An LED-sensitive diffuser shall be mounted behind the legend to provide the 6" high by 3/4" stroke letters with even illumination. The unit shall be equipped with two emergency heads with tool-less adjustable swivels and long-life MR-16 halogen lamps of ___ V and ___ W. Each lamp shall be protected by a snap-on, shock-absorbent, transparent polycarbonate cover. The unit shall be equipped with a test switch and a green pilot light, located on the face plate above the EXIT legend. The battery charger shall be driven by a micro-controller. All electronic circuitry (charger, LED driver, LED's) shall be installed on a single printed circuit board PCB. The unit equipped with the advanced diagnostic (optional) features shall automatically self test for one minute every 30 days, 30 minutes in the 6th month and 90 minutes annually. When a fault is detected, the bi-color pilot-light shall turn from green to red and shall flash, identifying the source of the failure: battery, charger circuitry, lamp load, LED strip. The equipment shall be UL924 listed.

The unit shall be **Emergi-Lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



Wall Mount



How to Order

HOUSING COLOR	SERIES/CAPACITY	# OF LAMPS	LAMP TYPE/WATTAGE	UNIT TYPE	OPTIONS
Blank= White **B**= Black	**PR18M**= 6V-18W Lead-Calcium **PR30M**= 6V-30W Lead-Calcium **PR60M**= 6V-60W Lead-Calcium **12PR40M**= 12V-40W Lead-Calcium **12PR60M**= 12V-60W Lead-Calcium **12PR72M**= 12V-72W Lead-Calcium **PR20NC**= 6V-20W Ni-Cd **PR25NC**= 6V-25W Ni-Cd **12PR40NC**= 12V-40W Ni-Cd **12PR50NC**= 12V-50W Ni-Cd	**Blank**= No head **2**= 2 heads	**LA**= 6V-4W, MR16 LED **LG**= 12V-4W, MR16 LED **LI**= 12V-5W, MR16 LED **LJ**= 12V-6W, MR16 LED **MI**= 6V-6W MR16 **MJ**= 6V-10W MR16 **MO**= 12V-10W MR16 **MK**= 12V-12W MR16 **MG**=12V-20W MR16* *Not available with Damp Location	**Blank**= Standard **-D**= Advanced Diagnostics (non-audible)* **-DA**= Advanced Diagnostics (audible) **-NEX**= Nexus® Wired **-NEXRF**= NEXUS® wireless *Minimum lamp load required: 20% of unit capacity	**Blank**= No option **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-CM**= Ceiling mount **-DL**= Damp Location* 50°F to 104°F (10°C to 40°C) maximum 12W per head **-PM**= Pendant mount **-P**= Light activated test switch *Not available with PR60M, PR25N & 12PR50NC

Example: **PR18M2MI**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

nexus ADVANCED AD DIAGNOSTICS

Preceptor™ Series

Die-Cast Aluminum LED Exit Sign



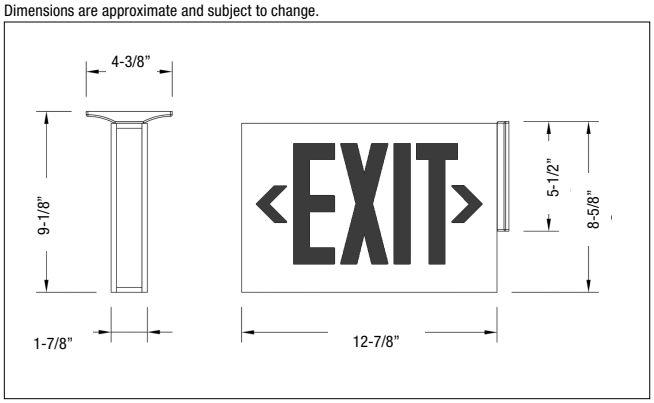
COMMERCIAL

Features

- Housing of Die-Cast aluminum in a variety of finishes
- Slim-line canopy for top and end mounting
- Universal mounting for wall, end, or ceiling
- Universal, field-selectable knock-out chevrons
- Long-life red or green LED light source.
- Dual voltage input: 120/277VAC 60Hz
- Low power consumption: less than 3W in any configuration
- Self-Powered models with sealed maintenance-free Nickel-Cadmium batteries
- UL924 Listed
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Power Consumption

Model	AC Specs		DC Specs	
AC-only	120/277VAC	Less than 2.5W	–	–
AC/DC-remote	120/277VAC	Less than 2W	6 to 24VDC	Less than 1.5W
Self-Powered	120/277VAC	Less than 3W	Ni-Cd battery	Min. 90 minutes
Self-Powered with Diagnostic	120/277VAC	Less than 2.8W	Ni-Cd battery	Min. 90 minutes

Suggested Specification

Supply and install the **Emergi-Lite®** Die-Cast exit sign. The frame, face plate(s), back plate and canopy shall be constructed of diecast aluminum of _____ finish and _____ color. No screws are necessary to hold the faceplate(s) or the back plate to the housing. The unit shall be suitable for installation on wall, end, or ceiling mount. The faceplates shall come standard with knockout chevrons. The light source shall be light emitting diodes (LEDs).

Red LED technology shall be ALINGAP. The LEDs shall provide illumination in normal and emergency operation and shall be mounted inside the exit housing, not on the face. An LED-sensitive diffuser shall be mounted in front of the LEDs to provide the 6" high by 3/4" stroke letters with even illumination. The exit sign in a self-powered configuration shall be equipped with a sealed, maintenance-free Nickel-Cadmium battery. The equipment shall operate with a dual-voltage input of 120/277VAC 60Hz with less than 3 Watts of consumption. The equipment shall stay illuminated at least 90 minutes upon AC failure. The exit sign shall be listed to UL924 standard. When specified, the self-powered model equipped with Advanced Diagnostic shall self-test by simulating a power failure for one minute every 30 days, 30 minutes every 60 days and 90 minutes every 360 days. A diagnostic circuit shall continuously monitor the performance of the battery, charger module and LED lamps. Upon failure detection the system shall display the error on the AC pilot lamp, which will change color from green to red and will flash with a specific code. The red light shall be steady-on in case of "Battery Disconnect"; it shall flash with one blink for "Battery failure", two blinks for "Charger failure" and four blinks for "LED lamp failure. A label with the diagnostic legend shall be visible next to the pilot light.

The equipment shall be UL-924 listedThe unit shall be **Emergi-Lite®** model: _____.

Unit Warranty*

Unit carries a 5-year full warranty. (excluding lamps and fuses)

How to Order

HOUSING COLOR	SERIES/MODELS	# OF FACES	LEGEND COLOR	OPTIONS
BA= Black body/aluminum face **WW**= White body/white face **WA**= White body/aluminum face **BB**= Black body/black face **AA**= Brushed aluminum body and face Other colors available	**Standard Models** **P**= AC only (120/277 volts) **PU**= 120/277VAC & 6 to 24VDC **PXN**= Self-Powered diagnostic Ni-Cd **PDN**= Self-Powered Ni-Cd, No AD **Optional Models** **P2C1**= Dual AC circuit (2 x 120V) **P2C2**= Dual AC circuit (2 x 277V) **PNEX**= NEXUS® wired **PNEXRF**= NEXUS® wireless	**1**= Single face **2**= Double face	**R**= Red **G**= Green **Open Face** **RW**= Red on white **GW**= Green on white Note: Open face required with special wording legends	**Blank**= No options **DL**= Damp Location **FZ**= Flasher buzzer* **FL**= Flasher* **FA**= Fire alarm activated flasher (Not available with PDN) **FBF**= Flasher buzzer + fire alarm activated flasher* **VR**= Tamper-proof screws** **VR1**= Polycarbonate shield with tamper-proof screws** * PXN, PNEX and PNEXFR models only ** Please specify single or double face red or green

Example: **BAPU2R**

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Preceptor™ Remote Capacity Series

Die-Cast Aluminum Remote Capacity Exit Sign



COMMERCIAL

Features

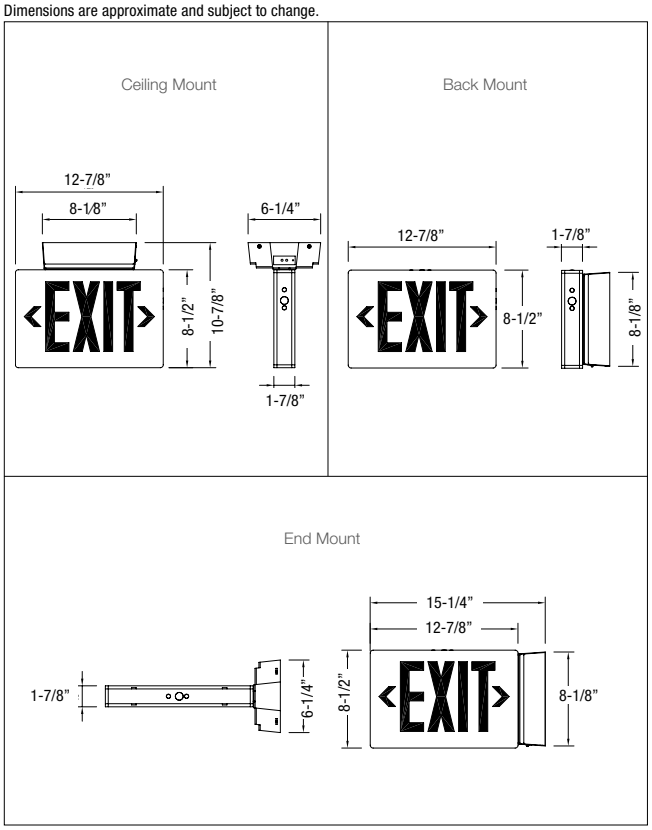
- Long-life, high-performance, low power consumption, red or green LEDs provide even illumination in normal and emergency modes
- Constructed of Die-Cast aluminum with a power canopy that houses the battery, input transformer and printed circuit board. The standard unit color is a black frame with a brushed aluminum face. Specify single or double face as required.
- Available with sealed maintenance-free Lead-Calcium or Nickel-Metal Hydride (cadmium-free, environmentally friendly) batteries.
- Can be ceiling, end or back mounted to the power canopy. The power canopy surface mounts directly to the junction box (supplied by others)
- UL924 Listed
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Wire Guard, Back Mount	WG13-E
Wire Guard, Ceiling Mount	WG14-E

Dimensions

Dimensions are approximate and subject to change.



Suggested Specification

Supply and install **Emergi-Lite® Preceptor™ Series** _____exit signs with extra capacity. Signs shall be Listed to UL 924 Standards. Exit frame, back plate, faceplate and mounting canopy shall be of die cast Aluminum construction. The exit sign shall have concealed knockouts for programmable directional chevrons. The canopy shall include the AC transformer, the charger circuitry and the sealed battery used to power the exit sign and the remote load. Shall be long life light emitting diodes (LED), Red LEDs shall be of ALINGAP technology. LED lamps shall provide 100% illumination in normal and emergency operation. A color rich diffuser shall be mounted in front of the LEDs to provide the legend. The unit shall provide 90 minutes of battery powered emergency illumination. Shall be fully automatic pulse-plus technology, micro controller based. The batteries shall be completely sealed, maintenance-free, Cadmium-free superior performance and long life.

Shall include a LED pilot light and test switch. A filtered and regulated power supply shall protect the LEDs from typical power surges. All models shall be 120/277 Vac dual voltage.

The equipment shall be UL-924 listedThe unit shall be **Emergi-Lite®** model: _____.

Electrical

RCL - 120/277 VAC, 60Hz, 0.02A max

RCN - 120/277 VAC, 60Hz, 0.03A max

RCX - 120/277 VAC, 60Hz, 0.03A max

Self-Test/Diagnostic Feature (Optional)

The self-test/diagnostic feature continuously monitors the charger assembly, battery and LED assembly current. If a fault is indicated, the external service required indicator will illuminate. The internal fault indicators will then indicate the nature of the fault. The selftest diagnostic will self test for 30 seconds ever y 30 days, 30 minutes every 60 days and 90 minutes annually. Meets NFPA 101 Life Safety Code requirements for periodic testing.

Unit Warranty*

Entire unit carries a three-year full warranty

Battery Warranty*

Sealed Lead-Calcium: RCL -8 year life expectancy, 3-year Full Warranty, plus 3-year pro rata warranty

Sealed Nickel Metal Hydride: RCN-RCX - 10 year life expectancy, 5-year Full Warranty, plus 5-year pro-rata warranty.

Nickel-Metal Hydride (NiMH) is a state-of-the-art battery technology, Lead-free and Cadmium-free.

*Subject to proper installation and maintenance.

Application Flexibility

Lead-Calcium Models (RCL) - Sealed, maintenance-free Lead-Calcium batteries power the exit sign for an estimated period of 20+ hours minimum with no remote load or 90-minutes run time with 9 watts remote load.

Nickel-Metal Hydride Models (RCN) - Sealed, maintenance-free Nickel-Metal Hydride batteries power the exit sign for an estimated period of 20+ hours minimum with no remote load or 90-minutes run time with 12 watts remote load.

Nickel-Metal Hydride Models (RCX) - Sealed, maintenance-free Nickel-Metal Hydride batteries power the exit sign for an estimated period of 40+ hours minimum with no remote load or 90-minutes run time with 24 watts remote load.

Power Consumption & Unit Rating Chart

Series	AC Specs		DC SPECS - WATTS TO 87-1/2% OF RATED BATTERY VOLTAGE*					
	AC Input	Maximum	Voltage	Battery	1-1/2 hrs.	2 hrs.	3 hrs.	4 hrs.
RCL	120/277VAC, 60Hz	0.13/0.06A 15W	6V	Lead-Calcium	9	–	–	–
RCN			6V	NiMH	12	9	–	–
RCX			6V	NiMH	24	18	12	9

* National Electrical Code Specification

How to Order

HOUSING COLOR	SERIES	BATTERY TYPE	# OF FACES	LEGEND COLOR	OPTIONS
BA= Black body/aluminum face **BB**= Black body/black face **WW**= White body/white face **WA**= White body/aluminum face **AA**= Brushed aluminum body and face	**P**= Preceptor	**RCL**= Sealed Lead-Calcium, 9W remote capacity **RCN**= Sealed Nickel-Metal Hydride, 12W remote capacity **RCX**= Sealed Nickel-Metal Hydride, 24W remote capacity	**1**= Single face **2**= Double face	**R**= Red **G**= Green **RW**= Red on white (Open face required for special wording) **GW**= Green on white (Open face required for special wording)	**AD**= Advanced Diagnostics (audible) **ADNA**= Advanced Diagnostics (non-audible) **D1**= Time Delay (5 minutes) **D2**= Time Delay (10 minutes) **D3**= Time Delay (15 minutes) **FZ**= Flasher buzzer **FA**= Fire alarm activated flasher **DL**= Damp Location **VR**= Vandal-resist screws **VR1**= Vandal-resistant polycarbonate lens and screws

Example: **BAPRCL2R**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

US

Preceptor™ Recessed Series

Die-Cast LED Exit Sign

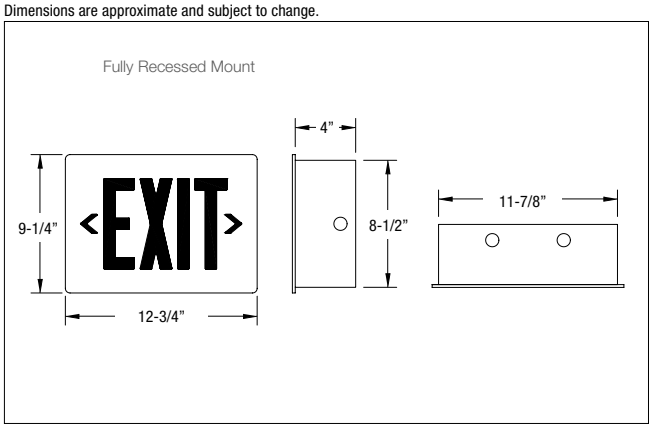


Features

- LED light sources. Long life LEDs eliminate the twice-a-year re-lamping typical of incandescent lamps
- Self-Powered models are self contained; batteries and circuitry are located inside the exit housing
- Available with sealed maintenance-free Nickel-Cadmium batteries to provide 90 minutes of emergency illumination
- Two-wire universal input 120 through 277VAC, 60Hz
- Diagnostic / Self Test circuitry is standard on all Self-Powered models. This circuitry is programmed to ensure the exit sign's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "service required" indicator illuminates immediately. A detailed diagnostic display sign that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self test will test the unit for 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually
- Unaffected by the vibrations, ambient temperature swings and typical power surges detrimental to standard exit light sources
- UL924 Listed
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Power Consumption

Model	AC Specs		DC Specs	
AC-only	120 to 277VAC	1.4W	–	–
Self-Powered	120 to 277VAC	1.7W	Ni-Cd battery	Min. 90 minutes

Choice of Models

AC-Only Models:
120 through 277VAC, 60Hz universal input.

"**Self-Powered Models** are self contained, batteries and circuitry are located inside the exit housing": 120 through 277VAC, 50/60Hz universal input.

Sealed maintenance free Nickel-Cadmium battery provides 90 minutes of emergency illumination.

How to Order

RECESSED	FACE COLOR	SERIES	# OF FACES	LEGEND COLOR	OPTIONS	VERSION
FR= Fully recessed	**Blank**= Aluminum face **B**= Black face **W**= White face **PB**= Polished brass face **CH**= Polished chrome face **BZ**= Dark bronze face Custom color vailable, consult your sales representative	**LEDP**= AC only **LEDPXN**= Self-Powered Ni-Cd	**1**= Single face	**R**= Red **G**= Green **RW**= Red on white (Open face) **GW**= Green on white (Open face)	**FZ**= Flasher buzzer (Self-Powered) **FA**= Fire alarm activated flasher (Self-Powered) **DL**= Damp Location **VR**= Vandal-resistant screws **VR1**= Polycarbonate shield with tamper-proof screws **-2CKT**= Dual circuit operation (AC models only)	**-N**= New design

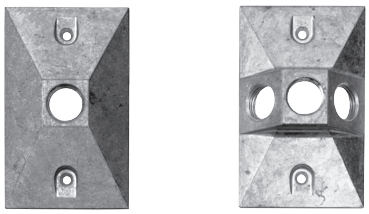
Example: **FRBLEDP1R-VR1-N**

EMERGI-LITE®

TYPE: _____

CATALOG #: _____

NOTES: _____



Mounting Plates

230.1238-E & 230.1239-E

- Single, Double or Triple Round
- Thermoplastic Construction
- Off-white or black finish only
- Mount direct to 4” octagonal box

Dimensions: 5” diameter - slotted mounting holes
3 to 3 9/16” mounting center

Standard: EF18, EF18D; and EF9, EF9D



Off-White - 230.1238-E



Black - 230.1239-E

330.7583-E & 330.7584-E

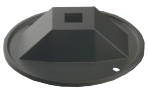
- Single or double round
- Die cast aluminum construction
- Gasketed weatherproof
- Off-white or black powder paint finish only
- Mount direct to 4” octagonal box

Dimensions: 4 1/8” diameter 3 9/16” mounting center

Standard: EF11 and EF11D



Off-White Single
330.7583-E



Black Single
330.7577-E



Off-White Double
330.7584-E



Black Double
330.7578-E

430.0765-E & 430.0766-E

- Single or double round
- Aluminum construction
- Matte white baked enamel finish
- Black finish optional
- Mount direct to 4” octagonal box

Dimensions: 5 1/4” diameter 3 7/16” mounting center

Standard: EF32 and EF32D



Off-White Single
430.0765-E



Off-White Double
430.0766-E

12804-E & 12805-E

- Single or double rectangular
- Die cast aluminum construction
- Gasketed weatherproof
- Silver gray enamel finish only
- Mount direct to standard outlet box

Dimensions: 4 5/8” X 2 7/8” 3 1/4” mounting center

Standard: Non standard mounting plate



12804-E



12805-E

450.0129-E, 450.0397-E & 450.0398-E

- Single, double or triple rectangular
- Single, triple or 4-gang steel construction
- Chrome plated finish only
- Mount direct to standard outlet box

Dimensions: single - 2 3/4” X 4 1/2” (for 1 fixture)
3-gang - 6 7/16” X 4 1/2” (for 2 fixture)
4-gang - 8 3/8” X 4 1/2” (for 2 or 3 fixture)

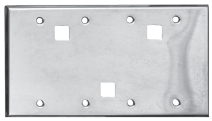
Standard: EF28, EF28D; EF18T and EF28T



450.0129-E - No Square Hole
450.1151-E - 7/16” Square Hole*
450.0194-E - 1/2” Square Hole



450.0397-E - No Square Hole
450.1152-E - 7/16” Square Hole*
450.1153-E - 1/2” Square Hole



450.0398-E - No Square Hole
450.1154-E - 7/16” Square Hole*
450.1155-E - 1/2” Square Hole

Thomas&Betts

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

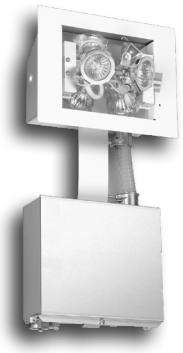
NYC approved

US

Mini-Revelation™ AC Generator Remote Series

THE UNSEEN SOLUTION

Virtually Invisible Emergency Lighting



Features

- 20 gauge galvanized steel back-box
- Head assembly designed for easy access to internal components
- Head assembly door and trim plate powder coated in a white finish
- Finish can be customized on site with paint or wallpaper
- Provision for 2 lighting heads
- Choice of MR16 Halogen or MR16 LED lamp types and wattages
- Complete 360° head assembly door rotation: 180° to open, 180° to close
- Recessed mount into ceiling or wall with cavities
- Special bar hangers included for installation in dry wall or T-bar ceilings
- Includes the electrical junction box
- Installed on the wall stud or ceiling beam with simple, U-shape bracket
- Head assembly includes keyhole slot and quick-connect plugs for easy installation
- CSA US Listed
- 5-year limited warranty on electrical parts (motor, electronic circuitry). Each unit is fully computer-tested and aligned mechanically for optimum operation
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Suggested Specification

Supply and install **Emergi-Lite® Series Mini-Revelation™** AC-GEN. The unit shall be designed to be completely concealed in walls with a cavity. The equipment shall consist of a metal housing containing two modules joined by a flexible bracket and electric conduit. One module contains the power transformer and electrical connection box; the other module contains the emergency lights installed on the back of a door able to rotate several turns of 360°. The unit equipment shall be completely concealed in the wall, after the installation through a rectangular opening not larger than 8.25” by 5.75”.

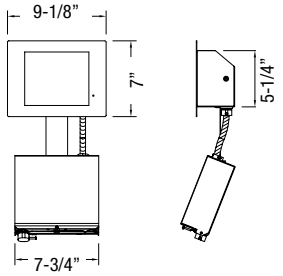
In stand-by mode, the only visible parts of the unit shall be the off-white flat door and trim plate that can be customized on site with paint or other suitable wall covering. Upon AC power supply the unit will expose the emergency heads by rotating its door 180° and then will power the lamps. At the end of the AC power, the lamps will turn off and the unit will retract the heads by rotating the door 180° in the same direction.

The unit shall not require the presence of AC power in order to close the door and conceal the lights. The door of the unit shall be easy to force-turn (open or close) by hand. The light source shall be 12V MR16 halogen lamps or MR16 LEDS of specified wattage and light output.

The unit shall be **Emergi-Lite®** model: _____.

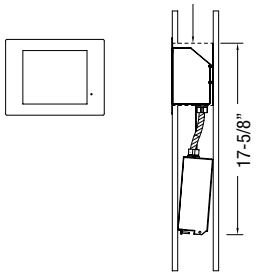
Dimensions

Dimensions are approximate and subject to change.



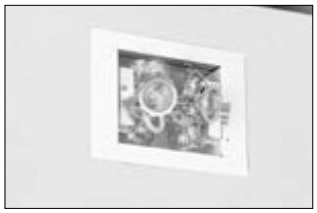
Complete unit

Mounting Bracket



Installed unit





Unit Warranty*

Unit carries a 5-year full warranty.

How to Order

SERIES		AC INPUT	LAMP TYPE/WATTAGE	OPTIONS
MRT	**G**= Remote AC generator	**1**= 120 VAC **2**= 277 VAC	**-2(12)**= 12W each head **-2(20)**= 20W each head **-2(35)**= 35W each head **-2(50)**= 50W each head **-2(20H)**= 20W, high lumen output **-2(35H)**= 35W, high lumen output **-2(50H)**= 50W, high lumen output **-2(-LG)**= 12V-4W, MR16 LED **-2(-LI)**= 12V-5W, MR16 LED **-2(-LJ)**= 12V-6W, MR16 LED	**Blank**= No options **DL**= Damp Location

Example: **MRTG1-2(20)DL**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

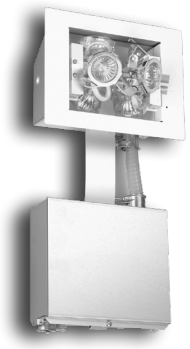
_____

NOTES: _____

Mini-Revelation™ Series

The Unseen Solution

Virtually Invisible Emergency Lighting



Features

- Each unit comes with two (2) MR16 halogen lamps or 2 MR16 style LED lamps
- The Self-Powered battery unit is contained in a heavy-duty galvanized steel back box that can be concealed in the wall or ceiling and includes a combined test switch and pilot light that is accessible through the frame
- The normally exposed parts of the unit (flat door and frame) are covered with a high-quality powder-coated, textured off-white finish that integrates well with most wall and ceiling paints. The surface finish can also be customized on site with paint, wallpaper or other coverings
- Power requirements: 120/277VAC, 60Hz, 0.25/0.12A
- PulsePlus Charger - this automatic charger is built around a micro-controller integrated circuit. Circuit standard features include current limiting, temperature-compensated cut-off voltage, brownout transfer, low-voltage battery disconnect and battery lock out (prevents activation in DC mode until initial AC activation)
- The equipment includes an electrical junction box and can be installed on a wall stud or ceiling beam with a simple U-shape bracket.
- Evaluated to UL 924 Standard
- 5-year warranty on electrical parts (motor, electronic circuitry). Each unit is fully computer-tested and aligned mechanically for optimum operation
- AD or ADNA options include includes a Time Delay function. If needed, it can be enabled/disabled in the field or it can be preset at the factory by including the suffix AD-D_ or ADNA-D_

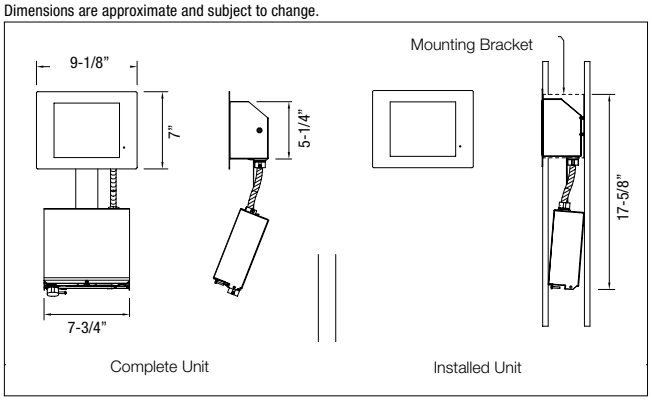
Diagnostic/Self Test Feature (optional)

DThe unit will come complete with the **Emergi-lite®** series of advanced diagnostic micro-controller circuitry that will ensure the equipment readiness and reliability by continuously monitoring every critical function of the unit. If a component failure occurs, the pilot light located on the front of the unit will change co lor from green to red and will flash indicating a fault. A detailed diagnostic legend shall be available on the back side of the door and shall provide fault identification (battery, charger circuitry, lamps) for the maintenance personnel. The self-test shall simulate a power loss for minimum 30 seconds every 30 days, 30 minutes every 6 months, and 90 minutes annually.

The equipment shall be **EMERGI-LITE®** catalog number: _____.

Dimensions

Dimensions are approximate and subject to change.



Suggested Specification

Supply and install **Emergi-Lite®® Series Mini-Revelation**: MRT___. The unit shall be designed to be completely concealed in walls with a cavity. The equipment shall consist of a metal housing containing two modules joined by a flexible bracket and electric conduit. One module contains the battery, charger circuitry and electrical connection box; the other module contains the emergency lights installed on the back of a door able to rotate several t urns of 360°. The unit equipment shall be completely concealed in the wall, after the installation through a rectangular opening not larger than 8.25-in by 5.75-in. In stand-by mode, the only visible parts of the unit shall be the flat door and trim plate, coated with a highquality off-white finish that can be customized on site with paint or ot her suitable wall covering. Upon a power failure the unit will expose the emergency heads by rotating its door 180° and then will power the lamps. At the restoration of the AC power or at the end of the battery discharge, the lamps will turn off and the unit will retract the heads by rotating the door 180° in the same direction. The unit shall not require the presence of AC power in order to close the door and conceal the lights. The door of the unit shall be easy to force-turn (open or close) by hand, in any rotation direction. The light source shall be 12V MR16 halogen lamps of specified wattage and light output. The unit shall supply the rated load for a minimum of 90 minutes or until the battery is discharged to 87½ % of its nominal voltage (whichever duration is longer). The charger circuitry shall utilize a micro-controller IC that samples the batter y in relation to the ambient temperature, state of charge, and input voltage fluctuations. The charger shall be current limited, temperature compensated, shortcircuit proof, and reversepolarity protected. The circuit all be furnished with a recessed, illuminated push button serving as test switch and status indicator light.

The unit shall be **Emergi-Lite®** model: _____.

Battery Warranty*

Unit carries a 5-year full warranty.

Battery Warranty*

Sealed Nickel Cadmium Battery has a 10 year life expectancy and carries a 5-year Full Warranty, plus a 5-year pro rata warranty.

* Subject to proper installation and maintenance.

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Remote Test Switch (metal face plate)	RTS
Remote Text Switch (plastic face plate)	RTS-1

Unit Rating

Model	Watts to 87-1/2% of rated battery voltage*			
	1-1/2 hrs	2 hrs	3 hrs	4 hrs
MRT-40	40	30	24	-

* National Electrical Code Specification

Power Consumption

Model	AC Input	Maximum		Stand-By (Ni-Cd, NiMH)*	
		Input Current	Input Power	Input Current	Input Power
MRT40	120VAC	0.25A	30W	0.1A	11W
	277VAC	0.12A	30W	0.05A	11W
MRTG	120VAC	0.95A	110W**	–	–
	277VAC	0.45A	110W**	–	–

* Stand-by power consumption is 50% lower for Lead-Calcium batteries

** Maximum power when equipped with 2 x 50W lamps (generator unit)

How to Order

SERIES	BATTERY TYPE	UNIT CAPACITY	AC INPUT	LAMP TYPE/WATTAGE	OPTIONS
Battery Unit= MRT	**M**= Lead-Calcium **N**= Nickel-Cadmium **H**= Nickel-Metal Hydride	**40**= 12V-40W	**Blank**= 120/277VAC	**-2 (12)**= 12W each head **-2 (20)**= 20W each head **-2 (20H)**= 20W, high lumen output **-2 (LG)**= MR16 LED, 12V-4W **-2 (LI)**= MR16 LED, 12V-5W **-2 (LJ)**= MR16 LED, 12V-6W	**-AD**= Advanced Diagnostics (audible)* **-ADNA**= Advanced Diagnostics (non-audible)* **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-DL**= Damp Location (only MRTN40, MRTH40)** *** AD & ADNA include a time delay feature that can be enable/disable in the field or set by the factory** **** Available on all models except Ni-Cd 100W**
Generator Unit= MRT	**G**= Remote AC generator	**Blank**= Max. 100W	**1**= 120VAC **2**= 277VAC	**-2 (12)**= 12W each head **-2 (20)**= 20W each head **-2 (35)**= 35W each head **-2 (50)**= 50W each head **-2 (20H)**= 20W, high lumen output **-2 (35H)**= 35W, high lumen output **-2 (50H)**= 50W, high lumen output **-2 (LG)**= 12V-4W, MR16 LED **-2 (LI)**= 12V-5W, MR16 LED **-2 (LJ)**= 12V-6W, MR16 LED	**-DL**= Damp Location

Example: **MRTM40-2(20)-ADNA**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

EMERGI-LITE®

TYPE: _____

CATALOG #: _____

NOTES: _____



Mini Inverter Series

Interruptible Unit Equipment

nexus®

The **Mini Inverter** is a UL Listed stand-alone pure sine wave (250W and up) output inverter designed to provide power to designated emergency lighting fixtures. In a power loss situation, it will supply power from the onboard battery supply.

The **Mini Inverter** works in conjunction with incandescent, LED, and fluorescent fixture types and will automatically run switched, normally-on, or normally-off designated emergency fixtures.

The **Mini Inverter** is ideal for applications requiring an emergency source for lighting arrangements that utilize multiple lamp and fixture types and is available in surface mount and comes with a three year warranty and seven-year pro-rata battery warranty.

Standard Features

- Lamps operated: Incandescent, LED, fluorescent lamps and ballast combinations, including dimming ballasts (consult factory if 0-10V or DALI dimming)
- Components: High-efficiency pure sine wave inverter (250W and up), temperature-compensated charger, 12V oversized Valve Regulated Lead-Acid (VRLA) battery
- Construction: 14-Gauge (400W & 720W) or 18-Gauge (125W & 250W) housing
- Emergency lighting supplied from one convenient source
- Input/Output voltage 120V 60 Hz or 277V 60 Hz
- Replacable output fuse protection
- Line voltage allows for remote mounting of emergency fixtures at distances up to 1000 feet
- Low Voltage Battery Disconnect
- Unit comes standard with electronic lockout and brownout circuits
- Meets or exceeds all National Electrical Code and Life Safety Code Emergency Lighting Requirements UL924 Listed
- Cabinet in factory white semi-gloss powder-coat paint finish
- May accept load to its full capacity when load feature power factor 0.8 leading to 0.8 lagging for 125 & 720W model
- Standard auto-diagnostic, non-audible, Nexus® system interface optional with an improved minimum lost load detection of 10%
- Standard lighting control override for 0-10V dimming systems

Replacement Battery

EMIU-125	860.0024-E
EMIU-250	2X 860.0024-E
EMIU-400	2X 860.0043-E
EMIU-720	2X 860.0096-E

Suggested Specification

Emergency lighting shall be provided by inverter unit equipment designed to operate designated incandescent, fluorescent and LED fixtures on emergency power at their full nominal lumen rating during the full 90 minutes emergency discharge cycle. System output will be rated at _____ watts for 90 minutes and provide fused output connections to the load. The system's voltage rating shall be _____ VAC input/output. The inverter unit shall allow for connected emergency fixture(s) to be normally-on, normally-off, switched or triac dimmable ballasts without affecting lamp operation during a power failure. Upon utility power loss, the inverter unit shall deliver 100% of its rated output to the emergency fixtures regardless of the local switch or dimmer position, and will provide power to emergency fixtures at distances of up to 1000 feet. The housing shall be manufactured using 14-Gauge (400W & 720W) or 18-Gauge (125W & 250W) steel with a white baked-on powder coat paint finish. The unit's electronics shall include a self-contained inverter section with a fully automatic, thermal-compensating variable-rate battery charger, AC lockout feature, low voltage battery disconnect, DC overload, short circuit and brownout protection as standard. The unit shall utilize a sealed Lead-Acid battery with a 10-year design life. The inverter system shall be UL 924 Listed and labeled. The unit shall be covered under a 3-year warranty on the electronics and battery and a 7-year pro-rata warranty on the battery.

Specifications

TRANSFER TIME: less than 1 second	
VOLTAGE REGULATION ON EMERGENCY: +/- 3%	
FREQUENCY REGULATION ON EMERGENCY: 60 Hz +/- 1%	
LOAD POWER FACTOR RANGE:	• 250W model: 0.9 leading to 0.9 lagging • 125, 400 & 720W models: 0.8 leading to 0.8 lagging
OPERATING TEMPERATURE: 68° TO 86°F (20° TO 30°C)	

Warranty

All **Emergi-Lite®** inverter products receive 100% quality inspection before shipment to insure proper and satisfactory operation. When operated under normal conditions, **Emergi-Lite®** inverter products will provide years of dependable service. The unit is covered by a complete 3-year warranty against defects in material or workmanship, and a 7-year pro-rata battery warranty.

The inverter unit shall be Emergi-Lite® model: _____

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.

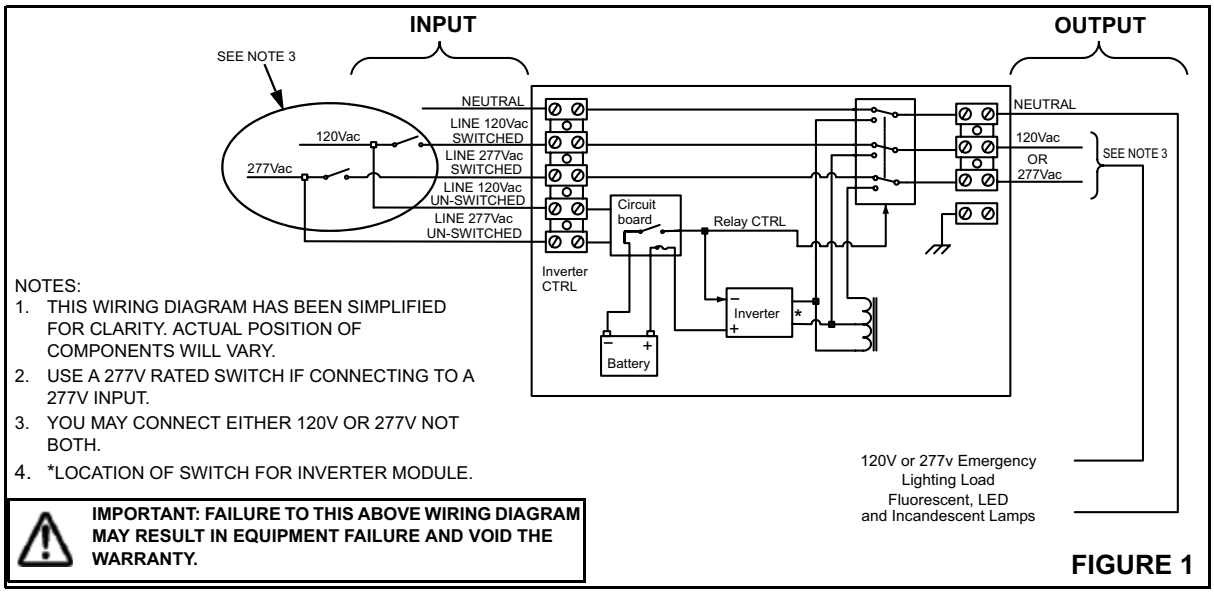
2014© Thomas & Betts Limited. All rights reserved.

Thomas&Betts
A Member of the ABB Group

Wiring Diagram

125W

NOTE: THE EMERGENCY LIGHT AND INDICATORS WILL NOT TURN ON AT THIS TIME.



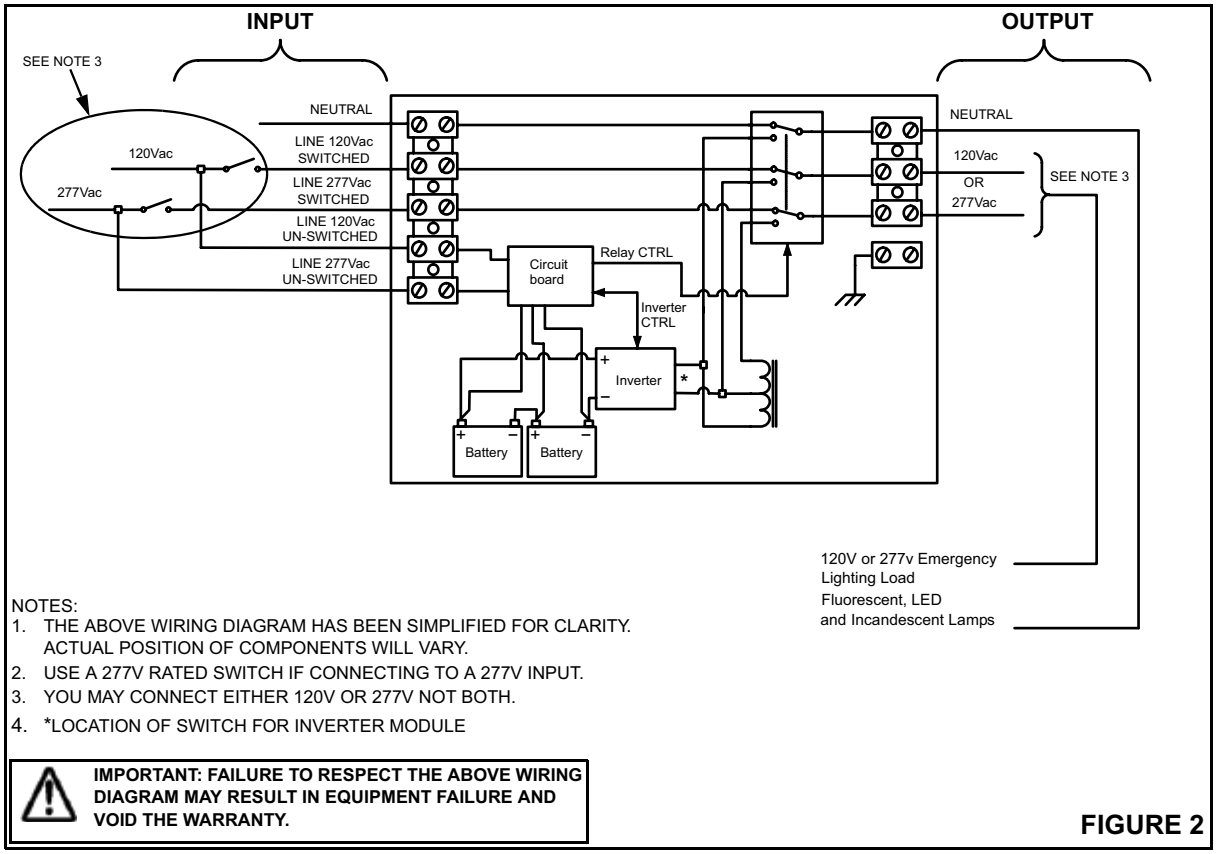
NOTES:
1. THIS WIRING DIAGRAM HAS BEEN SIMPLIFIED FOR CLARITY. ACTUAL POSITION OF COMPONENTS WILL VARY.
2. USE A 277V RATED SWITCH IF CONNECTING TO A 277V INPUT.
3. YOU MAY CONNECT EITHER 120V OR 277V NOT BOTH.
4. *LOCATION OF SWITCH FOR INVERTER MODULE.

IMPORTANT: FAILURE TO THIS ABOVE WIRING DIAGRAM MAY RESULT IN EQUIPMENT FAILURE AND VOID THE WARRANTY.

FIGURE 1

720W

NOTE: THE EMERGENCY LIGHT AND INDICATORS WILL NOT TURN ON AT THIS TIME.



NOTES:
1. THE ABOVE WIRING DIAGRAM HAS BEEN SIMPLIFIED FOR CLARITY. ACTUAL POSITION OF COMPONENTS WILL VARY.
2. USE A 277V RATED SWITCH IF CONNECTING TO A 277V INPUT.
3. YOU MAY CONNECT EITHER 120V OR 277V NOT BOTH.
4. *LOCATION OF SWITCH FOR INVERTER MODULE

IMPORTANT: FAILURE TO RESPECT THE ABOVE WIRING DIAGRAM MAY RESULT IN EQUIPMENT FAILURE AND VOID THE WARRANTY.

FIGURE 2

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2014© Thomas & Betts Limited. All rights reserved.

NEW!

Electrical Characteristics & Dimensions

POWER RATING	SINE WAVE	INSTALLATION	CABINET DIMENSIONS			NO. OF BATTERY	TOTAL WEIGHT	WEIGHT W/O BATTERY
			W"	H"	D"		120V & 277V	120V & 277V
125W	Modified	T-Bar	24"	6.5"	8"	1	50 lbs	22 lbs
125W	Modified	Wall	16.5"	12.2"	7.3"	1	50 lbs	22 lbs
250W	Pure	Wall	27"	12.2"	7.3"	2	100 lbs	45 lbs
400W	Pure	Wall	24"	10.5"	20"	2	150 lbs	65 lbs
720W	Pure	Wall	24"	14.5"	20"	2	220 lbs	95 lbs

Power Consumption And Unit Rating

MODEL NUMBER	AC SPECS		EMERGENCY POWER AVAILABLE FOR LOAD			
			90 MIN	2H	3H	4H
EMIU-125	120/277VAC	1.15 / 0.70 Amps	125W	83W	62W	47W
EMIU-250		2.75 / 1.20 Amps	250W	167W	125W	94W
EMIU-400		4.60 / 2.00 Amps	400W	300W	200W	150W
EMIU-720		9.60 / 4.00 Amps	720W	614W	473W	340W

How to Order

SERIES	CAPACITY	VOLTAGE	DIAGNOSTIC FEATURE	OPTIONS
EMIU	**-125**= 125W **-250**= 250W **-400**= 400W **-720**= 720W	**BLANK**= 120/120VAC or 277/277VAC	**-Blank**= Advanced-Diagnostic, non-audible **-AD**= Advanced-Diagnostic, audible **-NEX**= Nexus® wired **-NEXRF**= Nexus® wireless	**-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-SAC**= Service Alarm Contact* **-T**= Recessed T-Bar mounting (125W unit only) * Service alarm contact (SAC) shall provide a 24V signal, the charger board will indicate a fault by choosing a contact. Not available with 720 capacity

Example: **EMIU-720**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2014© Thomas & Betts Limited. All rights reserved.

Thomas&Betts
A Member of the ABB Group

TYPE: _____

CATALOG #: _____

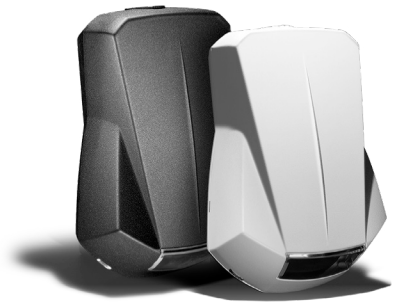
_____

NOTES: _____

NEMA-3R **Patent-Pending**

Luxray™ LED Series

Low-Profile, Sleek Look Light Fixture



Features

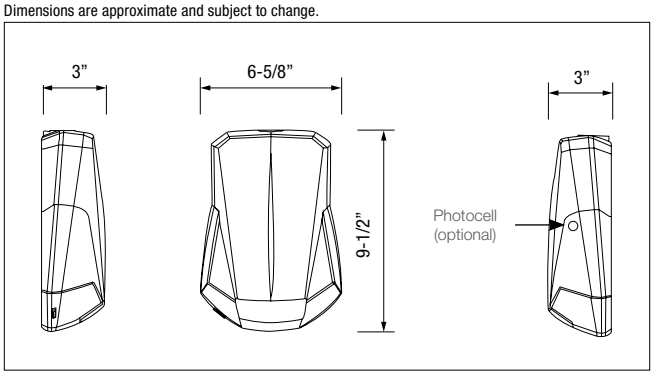
- Die-Cast aluminum housing, available in four finishes: dark bronze, off-white, black, and platinum gray
- Nema-3R rated for indoor / outdoors, cold, wet and Damp Locations: -40°F...122°F (-40°C...50°C)
- Wall-mount installation on various junction boxes or via rigid conduit
- Patent-pending design for easy installation: wall-mount back-plate includes electrical wire box with snap-on connector
- Patent pending light engine: four power LEDs with redundant connections and very wide beam
- Clear polycarbonate lens of reduced size (3" X 1.5"), shockabsorbent and UV-resistant
- 400-600 Lumens
- Color temperature: 5000K
- Power consumption in stand-by: less than 5W
- UL924 Listed
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Options

- Cold-weather: -40°F/-40°C
- Forward-throw light distribution, for applications of outdoor exit discharge (OSHA 1910.36)
- High-lumen output: 25 to 50% additional level of illumination
- Dual-mode operation: normal lighting and/or emergency lighting with separate AC inputs
- Photo-switch: dusk-to-dawn control of normal lighting
- Remote test: infrared remote control (keyboard ordered separately)
- Time delay: 5, 10, 15 minutes

Dimensions

Dimensions are approximate and subject to change.



Suggested Specification

Supply and install the **Lux-Ray™ LED Series** of emergency lighting unit from **Emergi-Lite®**.

The unit body shall include a back-plate and housing made of Die-Cast Aluminum with paint Finish color: and a UV- and impact-resistant polycarbonate lens of reduced size: 3" X 1.5". The back-plate shall have knockouts for wires and wall-mount installation box as well as a threaded hole for rigid conduit entry at the top of the unit. The back-plate shall have a built-in electrical box with wire terminals and snap-on connector. After complete electrical installation of the back-plate the equipment housing shall be installed by a simple push & snap over the back-plate.

The emergency lights shall be 4 Power-Light-Emitting Diodes (LED) with operational life of minimum 36,000 hours, until 70% of the initial light level (reported L70). The LED lamps shall have redundant interconnections: eventual failure of one lamp shall allow other LED lamps to function. The unit shall have a dual-voltage input rated: 120/277VAC, 60Hz. The battery charger shall include low voltage disconnect to prevent deep discharge, battery lockout to prevent battery drain prior to energizing the utility power, and brownout protection which will automatically switch unit into emergency mode if the utility power falls below 80% of nominal level.

The unit with Nickel-Metal Hydride battery shall be equipped with a micro-controller-based non-audible Advanced Diagnostic circuit. The unit shall self-test for one minute every month, 30 minutes every six months and 90 minutes annually. The pilot light shall be integrated with the test button; it shall be a bi-color LED and shall change color from normal green to flashing red when a failure is detected from the battery, charger circuit or lamps. A label located inside the unit near the test button shall describe the diagnostic for each flashing code.

When specified, models with dual-mode illumination shall include two separate AC input circuits: for emergency lighting and for normal lighting. When specified, models equipped with photo-switch shall automatically activate the lights only from dusk till dawn, for additional energy savings. The typical ambient illumination for the photo-switch shall be: one foot-candle (to turn-on) and three foot-candles (to turn-off). The unit shall be UL listed to the UL924 Standard for wet and damp locations.

The unit shall be **Emergi-Lite®** model: _____.

Photometry Performance

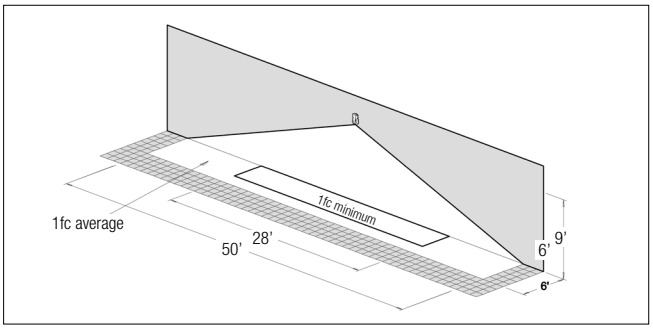
Whether installed indoors or outdoors, with spacing measurements for a single unit or between two units center-to-center, the **Lux-Ray™ LED Series** delivers a stable and consistent illumination making it easy to specify in a wide range of applications. The outstanding spacing of illumination ranges from 50 to 70 feet for standard units (wide beam) and from 40 to 50 feet with the forward-throw beam option.

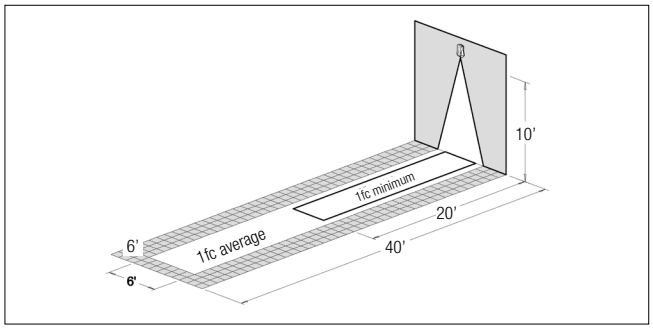
Minimum of 1 foot-candle

TABLE B: SPACING FOR MINIMUM ILLUMINATION = 1FC					
Model Type	Mouting Height	Lumen	Color Temperature	Width X Lenght (ft)	
				Single Unit	Center-To-Center
Standard	9’	400	5000K	4’ x 28’	4’ x 32’
With option -H	11’	550		4’ x 32’	4’ x 40’
With option -FT	12’	460		4’ x 22’	–
With option -FTH	15’	640		4’ x 27’	–

Average of 1 foot-candle

TABLE A: SPACING FOR NFPA101 (AVERAGE = 1FC, SEE NOTE)					
Model Type	Mouting Height	Lumen	Color Temperature	Width X Lenght (ft)	
				Single Unit	Center-To-Center
Standard	9’	400	5000K	6’ X 50’	6’ X 50’
With option -H	11’	550		6’ X 60’	6’ X 60’
					3’ X 70’
With option-FT	12’	460		6’ X 40’	—
With option-FTH	15’	640		6’ X 50’	—





Power Consumption Chart

Model Type	Normal Lighting (120/277VAC)		Emergency Lighting (120/277VAC)		6-12VDC Remote
	Current (max)	Power (max)	Current (max)	Power (max)	Power (max)
AC, 2AC, ACDC, DC	0.12/0.08A	12W	0.12/0.08A	12W	8W
AC, 2AC, ACDC, DC, -H	0.18/0.11A	18W	0.18/0.11A	18W	14W

* Note: Only unswitched AC input; normal lighting with photocell or remote control

How to Order

COLOR	SERIES	MODEL [-40°F ... +122°F (-40°C ... +50°C)]	OPTIONS
B= Black **BZ**= Dark bronze **OW**= Off-white **PG**= Platinum gray	**LUX**= Lux-Ray LED	**AC**= AC-only **ACDC**= AC/6-12VDC remote **DC**= 6-12VDC remote fixture **2AC**= AC-only two circuits: 120/120 or 277/277V	**-FT**= Forward throw lighting **-H**= High lumen output (-40... 86°F/-40…30°C) **-P**= Photocell (AC, ACDC only) **-RC**= Remote control test switch- infrared* (AC, ACDC only) *** Remote control keypad (TB-RC1-E) ordered separately**

Example: **BZLUXDC-FTH**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

NEMA-3R **Patent-Pending**



Lux-Ray™ LED Series

Die-Cast Aluminum LED Emergency Lighting

ARCHITECTURAL

Features

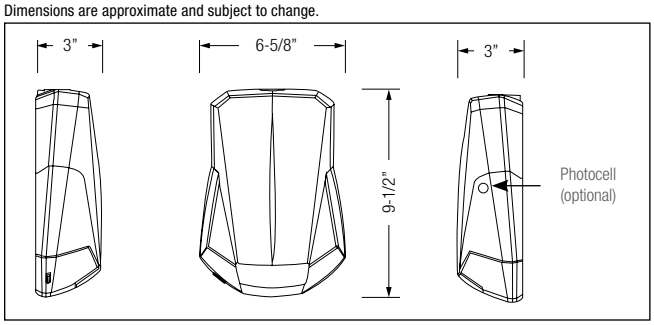
- Die-Cast aluminum housing, available in four finishes: dark bronze, off-white, black, and platinum gray
- Nema-3R rated for indoor/outdoor wet, damp & cold locations:
  -20 to 50°C (-4 to 122°F), SD Model
  -20 to 40°C (-4 to 104°F), ACSD Model
- Wall-mount installation on various junction boxes or via rigid conduit
- Patent-Pending design for easy installation: wall-mount back plate includes electrical wire box with snap-on connector
- Patent-Pending light engine: four power LEDs with redundant connections and wide beam
- Clear polycarbonate lens of reduced size (3" X 1.5"), shock absorbent and UV-resistant
- 400-640 Lumens
- Color temperature: 5000K
- Battery: environmentally friendly high-temperature rated, Nickel-Metal Hydride technology
- Run time 90 minutes
- Optional self-test and diagnostic functions
- UL924 Listed
- 5-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Optional Features

- Cold weather: -40°F / -40°C
- Forward-throw light distribution, for applications of outdoor exit discharge (OSHA 1910.36)
- High-lumen output: 25 to 50% additional level of illumination compared to the regular unit
- Dual-mode operation: normal lighting and/or emergency lighting with separate AC inputs
- Photocell: dusk-to-dawn control of normal lighting
- Remote test: infrared remote control (keypad ordered separately)
- Time Delay: 5, 10, 15 minutes

Dimensions

Dimensions are approximate and subject to change.



Suggested Specification

Supply and install the **Lux Ray™ LED Series** of emergency lighting unit from **Emergi-Lite®**.

The unit body shall include a back-plate and housing made of Die-Cast Aluminum with paint Finish color: and a UV- and impact-resistant polycarbonate lens of reduced size: 3" X 1.5". The back-plate shall have knockouts for wires and wall-mount installation box as well as a threaded hole for rigid conduit entry at the top of the unit. The back-plate shall have a built-in electrical box with wire terminals and snap-on connector. After complete electrical installation of the back-plate the equipment housing shall be installed by a simple push & snap over the back-plate.

The emergency lights shall be 4 Power-Light-Emitting Diodes (LED) with operational life of minimum 36,000 hours, until 70% of the initial light level (reported L70). The LED lamps shall have redundant interconnections: eventual failure of one lamp shall allow other LED lamps to function. The unit shall have a dual-voltage input rated: 120/277VAC, 60Hz. The battery charger shall include low voltage disconnect to prevent deep discharge, battery lockout to prevent battery drain prior to energizing the utility power, and brownout protection which will automatically switch unit into emergency mode if the utility power falls below 80% of nominal level.

The unit with Nickel-Metal Hydride battery shall be equipped with a micro-controller-based non-audible Advanced Diagnostic circuit. The unit shall self-test for one minute every month, 30 minutes every six months and 90 minutes annually. The pilot light shall be integrated with the test button; it shall be a bi-color LED and shall change color from normal green to flashing red when a failure is detected from the battery, charger circuit or lamps. A label located inside the unit near the test button shall describe the diagnostic for each flashing code.

When specified, models with dual-mode illumination shall include two separate AC input circuits: for emergency lighting and for normal lighting. When specified, models equipped with photo-switch shall automatically activate the lights only from dusk till dawn, for additional energy savings. The typical ambient illumination for the photo-switch shall be: one foot-candle (to turn-on) and three foot-candles (to turn-off). The unit shall be UL listed to the UL924 Standard for wet and damp locations.

The unit shall be **Emergi-Lite®** model: _____.

Power Consumption

Model Type	AC SPECS: 120/277VAC				6-12VDC remote
	Normal lighting		Emergency lighting		
	Current (max)	Power (max)	Current (max)	Power (max)	Power (max)
AC, 2AC, ACDC, DC (Remote)	0.12/0.08A	12W	0.12/0.08A	12W	8W
AC, 2AC, ACDC, DC, -H (Remote)	0.18/0.11A	18W	0.18/0.11A	18W	14W
ACSD, SD, SD-H	0.12/0.06A	12W	0.05/0.02A	5W	–
SD-CW	–	–	0.15/0.07A	16W	
ACSD-CWP, -CWRC*	–	–	0.22/0.10A	24W	

* Note: ACSD cold weather models must be powered only from the unswitched emergency AC line

Photometry performance

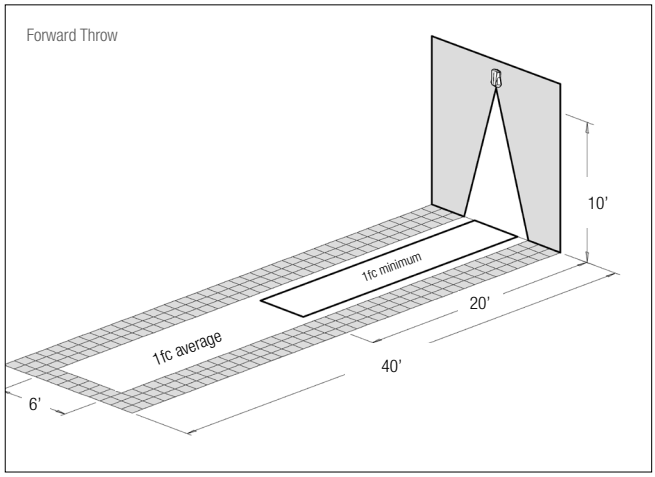
Whether installed indoors or outdoors, with spacing measurements for a single unit or between two units center-to-center, the Lux Ray® Series LED delivers a stable and consistent illumination making it easy to specify in a wide range of applications. The outstanding spacing of illumination ranges from 50 to 70 feet for standard units (wide beam) and from 40 to 50 feet with the forward-throw beam option.

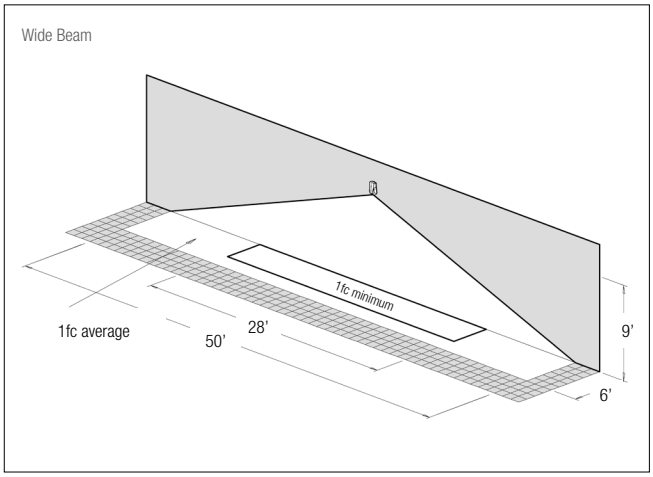
Minimum of 1 foot-candle

TABLE B: SPACING FOR MINIMUM ILLUMINATION = 1FC					
Model Type	Mouting Height	Lumen	Color Temperature	Width X Lenght (ft)	
				Single Unit	Center-To-Center
Standard	9’	400	5000K	4’ x 28’	4’ x 32’
With option -H	11’	550		4’ x 32’	4’ x 40’
With option -FT	12’	460		4’ x 22’	–
With option -FTH	15’	640		4’ x 27’	–

Average of 1 foot-candle

TABLE A: SPACING FOR NFPA101 (AVERAGE = 1FC, SEE NOTE)					
Model Type	Mouting Height	Lumen	Color Temperature	Width X Lenght (ft)	
				Single Unit	Center-To-Center
Standard	9’	400	5000K	6’ X 50’	6’ X 50’
With option -H	11’	550		6’ X 60’	6’ X 60’
					3’ X 70’
With option-FT	12’	460		6’ X 40’	—
With option-FTH	15’	640		6’ X 50’	—





How to Order

COLOR	SERIES	MODEL	OPTIONS
B= Black **BZ**= Dark bronze **OW**= Off-white **PG**= Platinum gray	**LUX**= Lux-Ray LED	**SD**= Self-Powered & diagnostic [-4... 122°F (-20… 50°C)] **ACSD**= Dual-mode AC / Self-Powered [-4... 104°F (-20… 40°C)]	**-CW**= Cold weather [-40… 86°F (-40…30°C) not available with option -H] **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-FT**= Forward throw lighting **-H**= High lumen output (max. 86°F/30°C; model SD only) **-P**= Photocell (ACSD only) **-RC**= Remote control test switch - infrared* *** Remote control keypad (TB-RC1-E) ordered separately**

Example: **BZLUXACSD-RC**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

nexus ADVANCED AD DIAGNOSTICS

LS Series

6 and 12 Volt Steel Enclosure



COMMERCIAL

Features

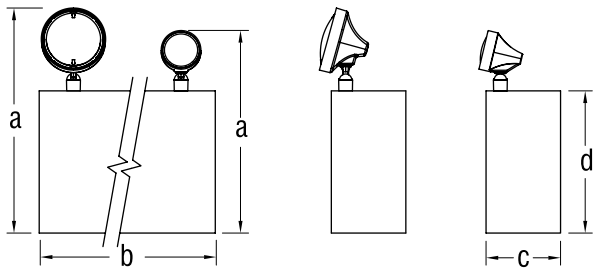
- Each unit comes with two (2) EF-18 heads with 9 watt high intensity incandescent lamps (standard). One or three heads available as options
- Constructed of 20-gauge steel with an off-white baked enamel finish
- Available with sealed, maintenance-free Nickel-Cadmium, or Lead-Calcium batteries
- Power Requirements: 120/277 VAC 60Hz, 0.3/0.15A
- PulsePlus Charger circuitry offers 120/277 VAC 60 Hz., 0.3/0.15A (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low voltage battery disconnect, brownout protection and lock out (automatic battery connect)
- Removable front panel
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Mounting bracket (cabinet A)	B1
Mounting bracket (cabinet B)	B2
Mounting shelves (cabinet B)	MP3-EG
Mounting shelves (cabinet C)	MP6-EG
Wire Guard (cabinet A)	WG2-E
Wire Guard (cabinet B & cabinet C)	WG3-E

Dimensions

Dimensions are approximate and subject to change.



EF18 EF9 & EF10

Cabinet Size	Dimensions			
	a	b	c	d
A	14-5/8" // 13"	12-3/4"	3-1/8"	8-1/2"
B	16-3/8" // 14-3/4"	16-1/8"	5-7/16"	10-1/4"
C	18-3/8" // 16-3/4"	16-1/2"	7-1/4"	12-1/4"

Suggested Specification

Supply and install the **Emergi-Lite®** LC Series LSC_____, LSE_____, LSM_____ or LC _____in 6 or 12 volt, single or double heads, with electrically compatible remote fixtures or exit signs as indicated on the plans. The emergency lighting unit shall be an architecturally designed, self-contained fixture including sealed, maintenance-free battery.

TYPE LSC to be supplied with Long Life Nickel-Cadmium battery.

TYPE LSE to be supplied with Long Life Pure Lead battery.

TYPE LSM to be supplied with Lead Calcium battery.

TYPE LC to be supplied with Lead Calcium (Immobilized Electrolyte) battery. The unit shall supply the rated load for a minimum of 90 minutes or to 871/2% of rated battery voltage. The unit shall be rated 120/277Vac, 60 Hz and be UL924 listed. The unit charger shall utilize an integrated circuit which samples the batter y in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips below 80-85% of nominal voltage. A low voltage battery disconnect circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 871/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with sealed dusttight relay, a test switch and dual diagnostic LED indicator lights (hi-charge and AC pilot). The cabinet shall be constructed of steel (see dimension chart for gauge) in off-white baked enamel color. A removable front panel shall be furnished to provide full access for ease of installation and servicing. A and B cabinet units shall have a universal mounting cluster. All cabinets shall be furnished with1/2" conduit knock-out, rear keyhole mounting slots (bracket or shelf available as an option) and provisions for mounting up to 3 heads on cabinet. Unit will be furnished with two EF18 lighting heads constructed of impact resistant, flame retardant thermoplastic material complete with 9 watt high intensity incandescent lamps. Fused output terminals shall be provided for ease of remote lamp connection. Every LS and LC Series unit shall be fully warranted for three years, subject to proper installation and maintenance.

The unit shall be **Emergi-Lite®** model: _____.

Unit Warranty*

Unit equipment (except battery and lamps): 3-year limited warranty

Battery Warranty*

Unit batteries are warranted as follows:

Sealed Nickel Cadmium: 12LSC – 10year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Long Life Lead: 12LSE – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Lead Calcium (Free Electrolyte): 12LC – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Lead Calcium: 12LSM – 8-year life expectancy, 3-year Full Warranty, plus 3-year pro rata warranty.

*Subject to proper installation and maintenance

Unit Rating

Furnished standard with two 9 watt High Intensity Incandescent lamps.

UNIT EQUIPMENT - NO REMOTE CAPABILITY								
Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*				# of Load Fuses	Cabinet size
			1-1/2 hrs	2 hrs	4 hrs	4 hrs		
Nickel-Cadmium	6	LSC18-2	18	12	9	6	1	A
Lead-Calcium	6	LSM18-2	12	12	10	7	1	A
UNIT EQUIPMENT - WITH REMOTE CAPABILITY								
			1-1/2 hrs	2 hrs	3 hrs	8 hrs		
Nickel-Cadmium	6	LSC25-2	25	18	9	–	1	A
	12	12LSC36-2	36	21	12	6	1	A
	12	12LSC50-2	50	36	18	10	1	A
	24	24LSC100-2	100	73	37	20	2	B
Lead-Calcium	6	LSM27-2	27	18	10	6	1	A
	6	LSM36-2	36	25	14	7	1	A
	6	LSM54-2	54	37	21	12	1	A
	6	LSM81-2	81	54	36	18	2	B
	6	LSM110-2	110	72	40	24	2	B
	6	LSM162-2	162	108	60	48	2	C
	6	LSM200-2	200	144	80	48	2	C
	12	12LSM36-2	36	25	14	7	1	A
	12	12LSM54-2	54	37	21	12	1	A
	12	12LSM110-2	110	72	40	24	2	B
	12	12LSM162-2	162	108	60	36	2	C
	12	12LSM220-2	220	144	80	48	2	C

* National Electrical Code Specification

= New York City Approved

How to Order

COLOR	SERIES/CAPACITY	# OF LAMPS	HEAD STYLE	LAMP TYPE/WATTAGE	OPTIONS
Blank= Off white **B**= Black enclosure	**LSC Series** **LSC18**= 6V-18W Ni-Cd* **LSC25**= 6V-25W Ni-Cd* **12LSC36**= 12V-36W Ni-Cd* **12LSC50**= 12V-50W Ni-Cd* **12LSC72**= 12V-72W Ni-Cd* **LSM Series** **LSM18**= 6V-18W Lead-Calcium **LSM27**= 6V-27W Lead-Calcium **LSM36**= 6V-36W Lead-Calcium **LSM54**= 6V-54W Lead-Calcium **LSM81**= 6V-81W Lead-Calcium **LSM110**= 6V-110W Lead-Calcium **LSM162**= 6V-162W Lead-Calcium **LSM200**= 6V-200W Lead-Calcium **12LSM36**= 12V-36W Lead-Calcium **12LSM54**= 12V-54W Lead-Calcium **12LSM110**= 12V-110W Lead-Calcium **12LSM162**= 12V-162W Lead-Calcium **12LSM220**= 12V-220W Lead-Calcium * Not available with sealed beams	**-0**= No head **-1**= 1 head **-2**= 2 heads **-3**= 3 heads	**Blank**= EF18 (PAR 36 plastic) **9**= EF9 (mini plastic) **10**= EF10 (small plastic MR16) **150**= EF150 (MR16 lamp heads)	**Blank**_= 6V-9W and 12V-9W incandescent wedge base **H**_= Halogen Bi-Pin **I**_= Incandescent DC-bayonet **U**_= Incandescent sealed-beam** **X**_= Halogen sealed-beam** **Z**_= Incandescent wedge **M**_= Halogen MR16* **LA**= 6V-4W, MR16 LED* **LG**= 12V-4W, MR16 LED* **LI**= 12V-5W, MR16 LED* **LJ**= 12V-6W, MR16 LED* * Available with EF10 & EF150 only ** Available with EF18 only NOTE: For a complete list of available lamp types, please refer to the lamp data on p. 140-141	**Blank**= No options **-AD**= Advanced Diagnostics (audible)* **-ADNA**= Advanced Diagnostics (non-audible)* **-NEX**= NEXUS® wired* **-NEXRF**= NEXUS® wireless* **-V**= Voltmeter **-A**= Ammeter **-CP**= Cord and plug 120V only** **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-XP**= Flexible cord with 120VAC or 277VAC plug** * Not available with LSM200 ** Standard cord is 3 ft.

Example: **BLSC18-110LA-AD**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

NEMA-3R

Literay™ Series

Wall Mount Remote Head for Damp and Wet Locations



Features

- Indoor or Outdoor use
- Die-Cast aluminum construction
- Fully gasketed cover available with (optional) Tamper Proof Screws
- Adjustable tool-less aiming swivel head rotates side to side and tilts in and out
- Surface Wall Mount
- Universal knock-outs for mounting to a standard 4" octagonal electrical box
- Precise beam control is provided with two fully adjustable MR16 halogen or LED lamps secured in an attractive molded swivel assembly for maximum light output
- Provides an average of one-foot candle along the path of egress
- Specially manufactured polycarbonate diffuser maximizes light output, and completes the wall sconce's decorative lines
- Available in four textured powder coat paint finishes: white, black, dark bronze and dark gray
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Electrical

Power Requirements

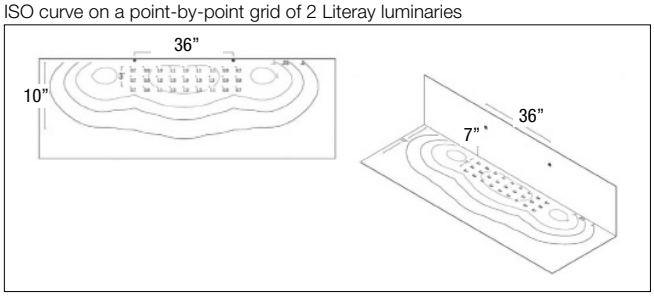
Make the proper connections. The fixture is made for 6, 12 or 12Vdc (see lamp voltage on marking). Connect the lamp wires to the DC supply wires. This unit comes standard with two MR16 lamps, see legend for wattage selection.

Unit Warranty*

Entire unit (excluding lamps) carries a 3 years full warranty.
*Subject to proper installation and maintenance.

Photometrics

ISO curve on a point-by-point grid of 2 Literay luminaries



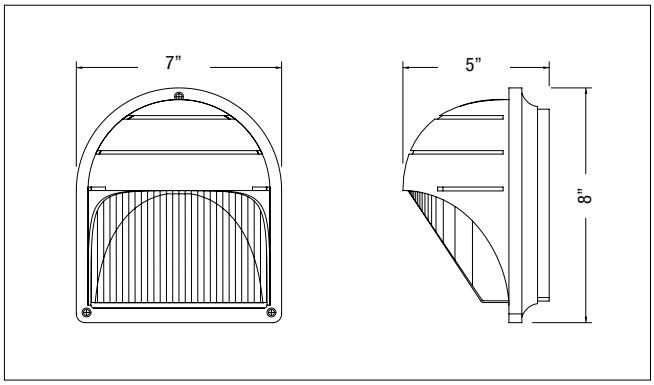
Suggested Specification

Supply and install **Emergi-Lite® LiteRay™ Series**, remote emergency wall mount lighting fixtures, Model -_____. The remote fixtures shall be fully gasketed and NEMA-3R rated They are specifically designed for wet and cold weather locations. It responds perfectly to the code requirements for indicating, on the building exterior, where the path of egress is located inside the building. The equipment back plate shall be of die-cast Aluminum, with a powder coat finish and is designed to mount directly on a typical, 4-inch octagonal electrical junction box. The lens cover shall be constructed of heavy-duty vandal-resistant polycarbonate, equipped, with stainless steel screws. Tamper proof screws can be ordered as an option separately. (See Options) The remote fixture shall be UL Listed for wet and damp locations the emergency lights shall be fully adjustable and equipped with an innovative swivel system, allowing for easy rotation in order to provide for an illumination in any direction of the path of egress. The heads shall be equipped with high efficiency MR16 halogen lamp(s) of ___V____W. These remote fixtures shall provide illumination in emergency operation and receive their DC power according to the load provided by the Lightalarms battery unit model- _____. The duration of the DC backup shall be _____ hours, according to the Building Code having jurisdiction in the geographical location in which the remote fixture will be installed.

The unit shall be **Emergi-Lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



How to Order

SERIES	# OF LAMPS	LAMP TYPE/WATTAGE	COLOR	OPTIONS
LITE= Exterior remote	**-2**= 2 lamps (standard) **-1**= 1 lamp (AC only)	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LV)**= 120V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LJ)**= 12V-6W, MR16 LED **(MI)**= 6V-6W, MR16 **(MJ)**= 6V-10W, MR16 **(MK)**= 12V-12W, MR16 **(MD)**= 24V-20W, MR16 **(MS)**= 24V-12W, MR16 **(MA)**= 12V-20W, MR16 **(AC)**= 1 med. base socket only (max. 60W), no lamp included, for non-emergency	**-WT**= White **-BK**= Black **-DG**= Dark gray **-BZ**= Dark bronze	**Blank**= No options **-VR**= Vandal-resistant screws **-N**= Clear lens

Example: **LITE-2(MI)-WT-VR**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

LC Series

6 and 12 Volt Steel Enclosure



Features

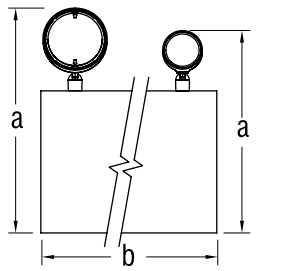
- Each unit comes with two (2) EF-18 heads with 9 watt high intensity incandescent lamps (standard). One or three heads available as options
- All-steel construction with an off-white baked enamel finish
- Contains sealed maintenance-free Lead-Calcium (Immobilized Electrolyte) batteries
- PulsePlus Charger circuitry offers 120/277VAC, input 60 Hz., 0.3/0.15 Amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low voltage battery disconnect, brownout protection and lock out (automatic battery connect)
- Removable front panel
- UL924 Listed. Complies with NEC, Life Safety Code and OSHA. Approved for use in the Commonwealth of Pennsylvania and New York City
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

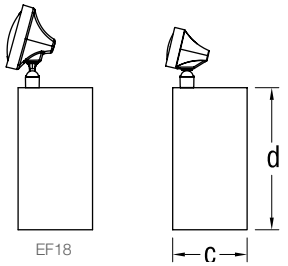
Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Mounting bracket (cabinet B)	B2
Mounting shelves (cabinet B)	MP3-EG
Mounting shelves (cabinet C)	MP6-EG
Mounting shelves (cabinet D)	MP12
Wire Guard (cabinet B & cabinet C)	WG3-E
Wire Guard (cabinet D)	WG4-E

Dimensions

Dimensions are approximate and subject to change.





EF18

EF9 & EF10

Cabinet Size	Dimensions			
	a	b	c	d
B	16-3/8" // 14-3/4"	16-1/8"	5-7/16"	10-1/4"
C	18-3/8" // 16-3/4"	16-1/2"	7-1/4"	12-1/4"
D	18-3/8" // 16-3/4"	27"	7-1/4"	12-1/4"

Suggested Specification

Supply and install the **Emergi-Lite®** LC Series LSC_____, LSE_____, LSM_____ or LC _____in 6 or 12 volt, single or double heads, with electrically compatible remote fixtures or exit signs as indicated on the plans. The emergency lighting unit shall be an architecturally designed, self-contained fixture including sealed, maintenance-free battery.

TYPE LSC to be supplied with Long Life Nickel-Cadmium battery.

TYPE LSE to be supplied with Long Life Pure Lead battery.

TYPE LSM to be supplied with Lead Calcium battery.

TYPE LC to be supplied with Lead Calcium (Immobilized Electrolyte) battery. The unit shall supply the rated load for a minimum of 90 minutes or to 871/2% of rated battery voltage. The unit shall be rated 120/277Vac, 60 Hz and be UL924 listed. The unit charger shall utilize an integrated circuit which samples the batter y in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips below 80-85% of nominal voltage. A low voltage battery disconnect circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 871/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with sealed dusttight relay, a test switch and dual diagnostic LED indicator lights (hi-charge and AC pilot). The cabinet shall be constructed of steel (see dimension chart for gauge) in off-white baked enamel color. A removable front panel shall be furnished to provide full access for ease of installation and servicing. A and B cabinet units shall have a universal mounting cluster. All cabinets shall be furnished with1/2" conduit knock-out, rear keyhole mounting slots (bracket or shelf available as an option) and provisions for mounting up to 3 heads on cabinet. Unit will be furnished with two EF18 lighting heads constructed of impact resistant, flame retardant thermoplastic material complete with 9 watt high intensity incandescent lamps. Fused output terminals shall be provided for ease of remote lamp connection. Every LS and LC Series unit shall be fully warranted for three years, subject to proper installation and maintenance.

The unit shall be **Emergi-Lite®** model: _____.

Self-Diagnostic Models

Advanced Diagnostics (audible and non-audible versions) Our Advanced Diagnostic circuitry was designed to ontinuously monitor every critical function of the unit and attached remote lighting heads. Operational status is indicated by colored LED lamps. A high-pitch audible alarm and an LED status indicator alert maintenance personnel of a unit malfunction. This option saves the time spent on testing and trouble shooting by maintenance personnel. This new generation of Emergi-Lite® diagnostics is perfect for any application.Self-testing in accordance with NFPA 101, Life Safety Code. Unit tests itself every thirty days for one minute, thirty minutes on the sixth month and ninety minutes annually.

Unit Rating

Furnished standard with two 9 watt High Intensity Incandescent lamps.

	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*				# of Load Fuses	Cabinet size
			1-1/2 hrs	2 hrs	4 hrs	8 hrs		
Lead-Calcium (immobilized electrolyte)	6	LC87-2	87	70	41	24	2	B
	6	LC100-2	100	77	47	24	2	C
	6	LC175-2	175	140	82	48	2	C
	6	LC200-2	200	168	96	48	2	C
	12	12LC150-2	150	120	66	36	2	C
	12	12LC175-2	175	140	85	48	2	C
	12	12LC200-2	200	168	96	48	2	C
	12	12LC300-2	300	240	132	72	2	D
	12	12LC350-2	350	280	170	96	2	D
	12	12LC400-2	400	336	192	95	2	D

* National Electrical Code Specification

= New York City Approved

How to Order

COLOR	SERIES/CAPACITY	# OF LAMPS	HEAD STYLE	LAMP TYPE	OPTIONS
Blank= Off white **B**= Black	**LC87**= 6V-87W Lead-Calcium **LC100**= 6V-100W Lead-Calcium **LC175**= 6V-175W Lead-Calcium **LC200**= 6V-200W Lead-Calcium **12LC150**= 12V-150W Lead-Calcium **12LC175**= 12V-175W Lead-Calcium **12LC200**= 12V-200W Lead-Calcium **12LC300**= 12V-300W Lead-Calcium **12LC350**= 12V-350W Lead-Calcium **12LC400**= 12V-400W Lead-Calcium	**-0**= No head **-1**= 1 head **-2**= 2 heads **-3**= 3 heads	**Blank**= EF18 (PAR 36 plastic) **9**= EF9 (mini plastic) **10**= EF10 (small plastic MR16) **150**= EF150 (MR16 lamp heads)	**Blank**_= 6V-9W and 12V-9W incandescent wedge base **H**_= Halogen Bi-Pin **I**_= Incandescent DC-bayonet **U**_= Incandescent sealed-beam** **X**_= Halogen sealed-beam** **Z**_= Incandescent wedge **M**_= Halogen MR16* **LA**= 6V-4W, LED MR16* **LG**= 12V-4W, LED MR16* **LI**= 12V-5W, LED MR16* **LJ**= 12V-6W, LED MR16* *Available with EF10 & 150 **Available with EF18 NOTE: For a complete list of available lamp types, please refer to the lamp data on p. 140-141	**Blank**= No options **-AD**= Advanced Diagnostics (audible)* **-ADNA**= Advanced Diagnostics (non-audible)* **-NEX**= NEXUS® wired **-NEXRF**= NEXUS® wireless **-A**= Ammeter **-V**= Voltmeter **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-XP1**= Cord & plug (120V)** **-XP1**= Cord & plug (277V)** *Minimum lamp head required: 20% of unit capacity -AD & -ADNA not available on LC100, LC175 & LC200 series **Standard cord is 3 ft.

Example: **BLC87-128HB-A**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

Lamp Data

General Information

All Emergi-Lite® Lighting Fixtures are furnished complete with lamps; however, **all fixtures and unit model numbers must include a lamp designation.** Unless otherwise noted, the standard lamp furnished with each lighting fixture is a 9W High Intensity Incandescent lamp of the designated voltage.

Example

FIXTURES	PART NUMBER
EF18 (ZD)	LSM 110-2Z (6V-9W)
EF18 (ZF)	12LSM 110-2Z (12V-9W)
EF18 (ZN)	24LSM 110-2Z (24V-9W)

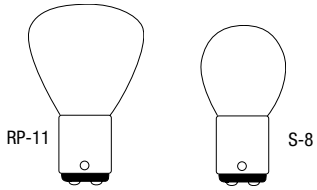
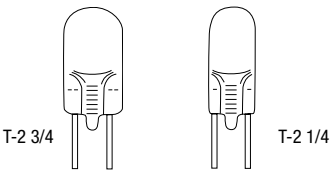
When an alternate lamp is required, refer to the lamp selection charts below, select the lamp type, the voltage and wattage required and add the symbol designation to the catalog number. Not all lighting fixtures and lamp types are compatible, always check individual lighting fixture "How to Order" information.

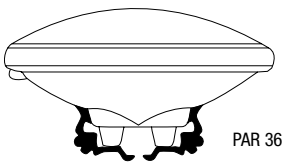
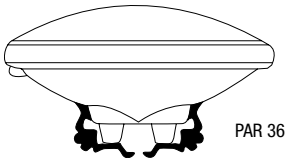
Example:

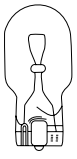
A Normally Furnished Lamp: EF18 (ZD)
(6V-9W Wedge Base Incandescent)

Lighting Head Requiring different Lamp: (6V-25W Sealed Beam Lamp)

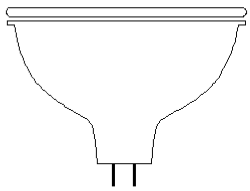
Change Catalog Number to: EF18 (UC)

LAMP TYPE	PART NUMBER	LAMP CODE	VOLTAGE (V)	POWER (W)	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BULB TYPE
High Intensity Tungsten (HIT) Lamps  Double Contact Bayonet Base	570.0010	IA	6	9	126	10	135	S-8
	570.0020	IM	6	13	188	15	88	S-8
	570.0037	IB	6	18	300	24	1130	S-8
	570.0038	IC	6	25	400	32	1134	RP-11
	570.0011	IE	12	9	126	10	138	S-8
	570.0022	IN	12	13	188	15	94	S-8
	570.0030	IF	12	18	276	22	139	S-8
	570.0031	IG	12	25	400	32	1076	S-8
	570.0058	II	24	9	75	6	304	C-2F
	570.0040	IJ	24	18	250	20	142	S-8
	570.0061	IK	24	25	400	32	1638	S-8
Bi-Pin Halogen Lamps 	580.0012	HA	6	6	113	9	784	T-2 1/4
	580.0013	HB	6	8	163	13	785	T-2 1/4
	580.0017	HC	6	10	200	16	787	T-2 1/4
	580.0011	HD	6	12	240	19	786	T-2 1/4
	580.0022	HE	6	20	400	32	788	T-2 1/4
	580.0014	HF	12	8	163	13	774	T-2 1/4
	580.0015	HG	12	12	276	22	783	T-2 1/4
	580.0016	HH	12	14	300	24	789	T-2 3/4
	580.0027	HI	12	20	314	25	782	T-2 3/4

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	CENTER-BEAM CANDLE POWER (CBCP)	LAMP #	BULB TYPE
Sealed Beam Halogen Lamps 	550.0022	XA	6	6	107	400	H7556	PAR 36
	550.0036	XB	6	8	155	550	H7551	PAR 36
	550.0037	XC	6	10	190	650	H7552	PAR 36
	550.0019	XD	6	12	225	850	H7553	PAR 36
	550.0021	XE	6	20	380	1,400	H7554	PAR 36
	550.0024	XF	12	8	130	550	H7555	PAR 36
	550.0025	XG	12	12	240	850	H7557	PAR 36
	550.0047	XH	12	37	700	70,000	H7616	PAR 36
	550.0012	XI	12	50	950	2,000	H7614	PAR 36
Sealed Beam Incandescent Lamps 	550.0018	UA	6	8	130	400	7613	PAR 36
	550.0030	UI	6	12	180	1,100	4042	PAR 36
	550.0016	UB	6	18	270	1,500	4014	PAR 36
	550.0017	UC	6	25	400	800	4510	PAR 36
	550.0035	UD	6	30	460	5,500	4515	PAR 36
	550.0026	UE	12	12	190	1,110	4044	PAR 36
	550.0027	UF	12	18	210	1,500	4414	PAR 36
	550.0023	UG	12	25	395	400	4446	PAR 36
	550.0034	UH	12	30	430	35,000	4416	PAR 36

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BULB TYPE
High Intensity Incandescent, Wedge Base  T-5	570.0012	ZP	6	5.4	68	5.4	939	T-5
	570.0026	ZL	6	7.2	100	8	927	T-5
	570.0016	ZD	6	9	150	12	908	T-5
	570.0025	ZF	12	9	138	11	915	T-5
	570.0028	ZG	12	12	150	12	912	T-5
	570.0029	ZH	12	18	264	21	921	T-5
	570.0045	ZN	24	9	113	9	EMS2209W	T-5
	570.0046	ZO	24	18	240	19	EMS2218W	T-5

Lamp Data
General Information

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	CENTER-BEAM CANDLE POWER (CBCP)	BEAM ANGLE (DEGREES)	BULB TYPE
MR16 Halogen Lamps 	580.0072	MH	6	5.4	34	73	36	MR16
	580.0074	MI	6	6	40	130	24	MR16
	580.0079	MJ	6	10	77	790	16	MR16
	580.0099	MO	12	10	86	200	36	MR16
	580.0080	MK	12	12	135	320	36	MR16
	580.0064	MG	12	20	270	525	36	MR16
	580.0075	MA	12	20-A	245	600	36	MR16
	580.0068	MW	12	20-H	417	950	36	MR16
	580.0083	MB	12	35	490	3300	24	MR16
	580.0076	MC	12	50	785	2800	24	MR16
	580.0089	MM	12	50-H	1550	5700	24	MR16
	580.0070	MS	24	12	95	280	36	MR16
	580.0077	MD	24	20	240	740	24	MR16
	580.0094	MN	24	20-A	195	890	24	MR16
	580.0084	ME	24	35	460	990	36	MR16
	580.0078	MF	24	50	875	3200	24	MR16
	580.0065	MT	120	20	100	240	36	MR16
	580.0066	MU	120	35	230	520	36	MR16
	580.0067	MV	120	50	460	1100	36	MR16
MR16 LED Lamps 	580.0097	LA	6	4	130	600	24	MR16
	580.0093	LG	12	4	170	440	30	MR16
	580.0104	LI	12	5	340	900	24	MR16
	580.0106	LJ	12	6	540	1800	25	MR16
	580.0098	LL	24	4	200	900	24	MR16
	580.0095	LV	120	4	200	900	24	MR16

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BULB TYPE
EXIT Signs, Hazardous Locations Incandescent Lamps	580.0086	XX6	6	15	210	17	JC6V-15W2KG4	Bi-Pin G4
	570.0071	XX12	12	25	220	18	13769	A19
	570.0118	XX24	24	25	220	18	24227-1	A19
	570.0136	AC	120	25	215	17	97478	A19

LAMP TYPE	PART NUMBER	VOLTAGE	WATTS	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BASE TYPE
EXIT Signs, 120VAC Incandescent	570.0013	145	15	150	12	15T6145	Candelabra Screw Base
	570.0024	120	20	90	7	20T61/2	Intermediate Screw Base
	570.0035	145	15	150	12	15T6	Intermediate Screw E17
	595.0010	120	7	330	26	PL7-T4	G23

Important: Lumen rating and candle power values are only for general reference.
The data was obtained from the manufacturer's catalogs, calculations or third-party laboratory measurements. Actual performance in the field may and will vary.

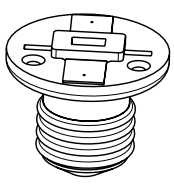
Explosion-Proof Incandescent Lamps

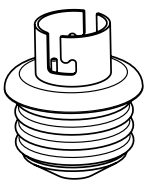
ITEM P/N	CATALOG SUFFIX	VOLTAGE	WATTS	LUMEN RATING	LAMP #
580.0086	XX6	6	15	225	JC-6V15W
570.0071	XX12	12	25	378	–
570.0118	XX24	24	25	345	–
570.0136	AC	120	25	215	–
540.0180	XX120	120	5	–	Red LED

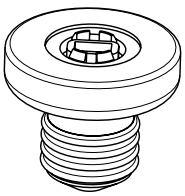
MSA Incandescent Lamp Adapter

For HIT, DCBB or Bi-Pin Halogen Lamps

DC lamp plus adapter for medium Edison screw base socket. This device converts any incandescent fixture into an emergency fixture.


MSA Bi-Pin


MSA Double Contact


MSA Wedge Base

120 Volt AC Exit Lamps

LAMP TYPE	CATALOG	WATTS	LAMP #	BASE
Incandescent	570.0013	15	15T6145	Candelabra Screw Base
Incandescent	570.0024	20	20T61/2	Intermediate Screw Base
Incandescent	570.0035	15	15T6	Intermediate Screw Base
Fluorescent	595.0010	7	PL7-T4	G23

How to Order (example)

PRODUCT CODE	LAMP SYMBOL
MSA	HB

Note:
Lumen figures based on information supplied by lamp manufacturers.
Lamp drawings shown are for shape comparison only, not actual size.

TYPE: _____

CATALOG #: _____

NOTES: _____

NEMA-3R nexus ADVANCED AD DIAGNOSTICS

KS Series

6, 12 & 24 Volt

High Impact Enclosure Power Unit



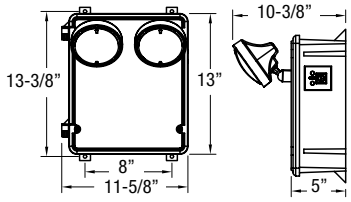
Features

- Each unit comes with two (2) 9W high intensity incandescent lamps (standard).
- Both the “S” and “L” enclosure are corrosion resistant. Both include separate battery compartments, fully gasketed door and stainless steel hardware. The “S” enclosure is constructed of high impact thermoplastic and the “L” enclosure is constructed of fiberglass and is NEMA 3R
- Available with sealed, maintenance-free Nickel-Cadmium or Lead-Calcium batteries.
- PulsePlus Charger circuitry offers 120/277 volt input 60 Hz, 0.3/0.15A (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low voltage battery disconnect, brownout protection and lockout (automatic battery connect).
- UL Listed. Complies with NEC, Life Safety Code and OSHA.
- 3-year full warranty, excluding lamps and fuses.

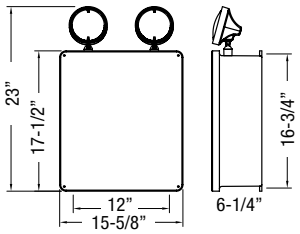
Dimensions

Dimensions are approximate and subject to change.

Small “S” Enclosure
High Impact Thermoplastic Construction



Large “L” Enclosure
Fiberglass Construction
NEMA-3R



Unit Warranty*

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

Battery Warranty*

Sealed Nickel-Cadmium: 10 year life expectancy, 5-year Full Warranty, 5-year pro rata warranty.

Sealed Long Life Lead: 12 year life expectancy, 5-year Full Warranty, 5-year pro rata warranty.

Sealed Lead Calcium (Free Electrolyte): 12 year life expectancy, 5-year Full Warranty, 5-year pro rata warranty.

Sealed Lead Calcium: 8 year life expectancy, 3-year Full Warranty, 3-year pro rata warranty.

*Subject to proper installation and maintenance.

Self-Diagnostic Models (optional)

Advanced Diagnostics (audible and non-audible versions) Our Advanced Diagnostic circuitry was designed to continuously monitor every critical function of the unit and attached remote lighting heads. Operational status is indicated by colored LED lamps. A high-pitch audible alarm (if selected) and an LED status indicator alert maintenance personnel of a unit malfunction.The self-testing program will periodically test the unit in accordance with NFPA 101, Life Safety Code.This option saves the time spent on testing and trouble shooting by maintenance personnel. This new generation of Emergi-Lite® diagnostics is perfect for any application. The self test will test the unit for a minimum 30 seconds ever y 30 days, 30 minutes every six months and 90 minutes annually.

Suggested Specification

A 6, 12 or 24 volt emergency lighting unit shall be installed in accordance with Article 700 of the National Electrical Code and shall be U.L.924 Listed. Housing: Shall be weather and corrosionresistant and designed specifically for hostile environment applications. Access door shall be fully gasketed and shall have stainless steel hardware. Large “L” enclosure, used for 160 and 175 watt units, shall be a NEMA rated, U.L. Listed, fiberglass enclosure and shall accommodate up to three top-mounted thermoplastic heads. For ease of installation, the door shall have a stainless steel retaining chain. Small “S” enclosure, used for 18 to 110 watt units shall be constructed of high-impact, flame retardant (5VA) thermoplastic and shall accommodate up to two frontmounted EF11 weather resistant heads. For ease of installation the door shall incorporate a removable hinged design.Mounting: wall mounting feet provided.

Electrical

Power Requirements: 120/277 Vac, 60 Hz., 0.3/0.15 A (other inputs available). Output: 6, 12 or 24 volt fused output circuit. Transfer: Dusttight relay automatically and instantly energizes lamp load upon failure of AC supply. LVD: Low voltage battery disconnect circuit automatically shuts down lamp load and circuitry when battery reaches 87-1/2% of its nominal voltage, preventing deep discharge and permanent damage to the battery. Lockout: Labor saving electronic circuit automatically connects battery when the AC circuit is activated. Brownout: Close tolerance electronic circuit activates emergency unit when utility power dips below 80-85% of nominal voltage. Emergency Heads: The unit is furnished with two EF11 weather resistant lighting heads. Heads are constructed of impact resistant, flame retardant, thermoplastic and have 9 watt high intensity incandescent lamps. Charger: The charger utilizes an integrated circuit which samples the batter y in relation to its temperature, state of charge and input voltage fluctuations. The charger is two-rate, temperature compensated, short-circuit protected and reverse polarity protected. The equipment is capable of full recharge in compliance with UL924 specifications. Transformer: 120/277 Vac input. Controls: Sealed push-to-test switch and diagnostic indicator lights for AC-on and pulse charge.

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Wire Guard (Small enclosure)	WG3-E
Wire Guard (Large enclosure)	WG4-E

Unit Rating

UNIT EQUIPMENT - NO REMOTE CAPABILITY							
Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*				Enclosure Size
			1-1/2 hrs	2 hrs	3 hrs	4 hrs	
Nickel-Cadmium	6	KSC18-2-F	18	12	10	7	S
Long Life Lead	6	KSE18-2-F	18	11	8	6	S
UNIT EQUIPMENT - WITH REMOTE CAPABILITY							
Nickel-Cadmium	6	KSC25-2-F	25	18	9	5	S
	12	12KSC36-2-F	36	21	21	6	S
	12	12KSC50-2-F	50	36	18	10	S
	12	12KSC100-2-F	100	73	37	20	S
	24	24KSC100-2-F	100	73	37	20	S
Long Life Lead	6	KSE27-2-F	27	19	10	5	S
	6	KSE36-2-F	36	24	13	7	S
	6	KSE54-2-F	54	36	20	11	S
	6	KSE80-2-F	80	65	35	19	S
	6	KSE110-2-F	110	74	43	21	S
	6	KSE160-2-F	160	130	70	38	L
	12	12KSE36-2-F	36	24	13	7	S
	12	12KSE54-2-F	54	37	21	10	S
	12	12KSE110-2-F	110	74	43	21	S
	12	12KSE160-2-F	160	130	70	38	L
	24	24KSE110-2-F	110	74	43	21	S
Lead-Calcium (Free Electrolyte)	6	KC87-2-F	87	70	41	24	S
	6	KC100-2-F	100	77	47	24	L
	6	KC175-2-F	175	140	82	48	L
	12	12KC175-2-F	175	140	85	48	L
Lead-Calcium	6	KSM27-2-F	27	18	10	6	S
	6	KSM54-2-F	54	37	21	12	S
	6	KSM81-2-F	81	54	30	18	S
	6	KSM110-2-F	110	72	40	24	S
	12	12KSM54-2-F	54	37	21	12	S
	12	12KSM110-2-F	110	72	40	24	S
	24	24KSM110-2-F	110	72	40	24	S

*National Electrical Code Specification

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

How to Order

SERIES/ VOLTAGE	UNIT CAPACITY	# OF HEADS	LAMP	ENCLOSURE TYPE	OPTIONS
KS= 6V	**C18**= 6V-18W Ni-Cd* **C25**= 6V-25W Ni-Cd* **M27**= 6V-27W Lead-Calcium **M54**= 6V-54W Lead-Calcium **M81**= 6V-81W Lead-Calcium **M110**= 6V-110W Lead-Calcium	**-0**= No head **-1**= 1 head **-2**= 2 heads **-125** = 1 Weather proof head* **-225** = 2 Weather proof heads* **-139** = 1 X single EF39 lamp (bottom mount)** **-239** = 1 X double EF39 lamp (bottom mount)** **-S39** = 2 X single EF39 lamp (side mount)** **-1S39** = 3 X single EF39 lamp (2 sides and bottom)** **-2S39** = 1 X double EF39 lamp & 2 X single EF39 lamp**	**EF11 Lamp Head** **Blank**= 6V-9W, 12V-9W, 24V-9W incandescent wedge base **H_**= Halogen bi-pin **I_**= Incandescent DC-bayonet **U_**= Incandescent sealed-beam **X_**= Halogen sealed-beam **Z_**= Incandescent wedge **EF25 Lamp Head (-125, -225)** **LI**= 12V-5W, MR16 LED **LJ**= 12V-6W, MR16 LED **MA**= 12V-20W, Aluminum MR16 halogen **MB** = 12V-35W, MR16 halogen **MC** = 12V-50W, MR16 halogen **MD** = 24V-20W, MR16 halogen **ME** = 24V-35W, MR16 halogen **MF** = 24V-50W, MR16 halogen **MG** = 12V-20W, DICH MR16 **MI** = 6V-6W, MR16 halogen **MJ** = 6V-10W, MR16 halogen **MK** = 12V-12W, MR16 halogen **MM** = 12V-50W, MR16 halogen high-output **MN** = 24V-20W, MR16 Aluminized **MS** = 24V-12W, MR16 halogen **MW** = 12V-20W, MR16 halogen high-output **EF39 Lamp Head (-139, -239, -S39, -1S39, 2S39)** **MD** = 24V-20W MR16 halogen **MI** = 6V-6W MR16 halogen **MJ** = 6V-10W MR16 halogen **MK** = 12V-12W MR16 halogen **MS** = 24V-12W MR16 halogen **MW** = 12V-20W MR16 halogen high-output **LA** = 6V-4W, MR16 LED **LG** = 12V-4W, MR16 LED **LI** = 12V-5W, MR16 LED **LJ** = 12V-6W, MR16 LED **LL** = 24V-4W, MR16 LED	**F**= Fiber glass or high impact thermoplastic	**-AD**= Advanced Diagnostics (audible)* **-ADNA**= Advanced Diagnostics (non-audible)* **NEX**= Nexus® wired (consult your sales representative)* **NEXRF**= Nexus® wireless (consult your sales representative)* **-V**= Voltmeter **-A**= Ammeter **-TD**= Time Delay **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes)** **-K**= Disconnect Switch **-CP**= Cord and plug 120V for fiberglass enclosure** **-E**= Cord and plug 277V** **-S**= Photometric test switch **-VR**= Tamper-proof screws **-FL**= Large cabinet **-TM**= Top mounted heads **-208V**= Input 208VAC, 50/60Hz
12KS= 12V	**C36**= 12V-36W Ni-Cd* **C50**= 12V-50W Ni-Cd* **C100**= 12V-100W Ni-Cd* **M54**= 12V-54W Lead-Calcium **M110**= 12V-110W Lead-Calcium				
24KS= 24V	**C100**= 24V-100W Ni-Cd **M110**= 24V-110W Lead-Calcium				
K= 6V	**C87-2-F**= 6V-87W Lead-Calcium (free electrolytes) **C100-2-F**= 6V-100W Lead-Calcium (free electrolytes) **C175-2-F**= 6V-175W Lead-Calcium (free electrolytes)				
12K= 12V	**C175-2**= 12V-175W Lead-Calcium (free electrolytes)				

* Not available with sealed beams

* Available on all units
** -139,-239,-S39,-1S39 & -2S39 only Available with "L" enclosure type

NOTE: For a complete list of available lamp types, please refer to the lamp data on pages 146-147

* Minimum lamp load required: 20% of unit capacity, not available on the 24KSC100 model
Not available on 24V-100W Ni-Cd units
** Standard cord is 3 ft.

Example: **KS18-2HB-AD**

TYPE: _____

CATALOG #: _____

_____

NOTES: _____



JS Series

Steel Housing 6V & 12V up to 54W Capacities

Features

- Each unit comes with two (2) EF18 heads with 9W high intensity incandescent lamps (standard)
- Constructed of 20-gauge steel with an off-white baked enamel finish
- Available with sealed, maintenance-free Nickel-Cadmium or Lead-Calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC 60 Hz., 0.3/0.15A (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low voltage battery disconnect, brown out protection and lock out (automatic battery connect)
- Hinged cabinet door for easy access
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Mounting Bracket (S cabinet only)	BJ-E
Wire Guard (S cabinet only)	WG1-E
Wire Guard (L cabinet only)	WG2-E
Wire Guard (front mounted heads)	WG10-E

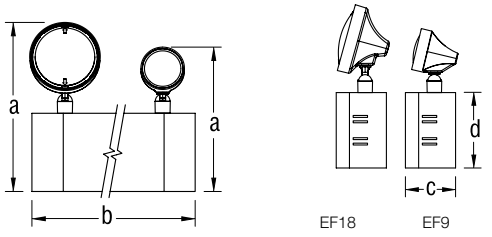
**S cabinet only, order on separate line.

Electrical

Power Requirements: 120/277VAC, 60 Hz., 0.3/0.15 Amp (other inputs available) Output: 6 or 12 volt, fused output circuit. **Transfer:** dust-tight, sealed relay automatically and instantly energizes lamp load upon failure of AC supply. LVD: low voltage battery disconnect circuit automatically shuts down lamp load and circuitry when battery reaches 87½% of its nominal voltage, preventing deep discharge and permanent damage to the battery. **Lockout:** labor saving electronic circuit automatically connects battery when AC circuit is activated. **Brownout:** close tolerance electronic circuit activates emergency unit when utility power dips to where fluorescent lamps extinguish. **Charger:** the PulsePlus charging circuit utilizes an integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger is current limited, temperature compensated, short-circuit proof and reverse polarity protected. The equipment is capable of full recharge in compliance with Underwriters Laboratories 924 specifications. **Transformer:** 120/277 volt. **Controls:** test switch, long-life LED pilot indicator light.

Dimensions

Dimensions are approximate and subject to change.



Cabinet Size	Dimensions			
	a	b	c	d
S	11-3/8" // 9-3/4"	11"	3-1/2"	5-1/4"
L	12-3/8" // 10-3/4"	12-3/4"	4"	6-1/4"

Suggested Specification

Supply and install **EMERGI-LITE®** Series JSC_____, JSE_____ or JSM _____ in 6 or 12 volt, single or double heads, with electrically compatible remote fixtures or exit signs as indicated on the plans. The emergency lighting unit shall be an architecturally designed, selfcontained fixture including sealed, maintenancefree battery.

TYPE JSC to be supplied with Nickel-Cadmium battery.

TYPE JSE to be supplied with long life pure lead battery.

TYPE JSM to be supplied with lead calcium battery.

The unit shall supply the rated load for a minimum of 1½ hours or to 87-½% of rated battery voltage. The unit shall be rated 120/277 Vac, 60 Hz and be UL924 listed. The unit charger shall utilize an integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected.

The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips to where fluorescent lamps extinguish. A low voltage battery disconnect circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 87-½% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with a sealed dusttight relay, a test switch and dual diagnostic LED indicator lights (hi-charge and AC pilot). The cabinet shall be compact size, all 20 gauge steel construction. Sprayed epoxy enamel finish colors shall be off-white, body and door. The door shall be hinged to provide full access to battery and charger for ease of installation and servicing. Unit shall have rear keyhole mounting slots and will be designed to mount directly to any standard 4" octagonal electrical box.

Unit shall have provisions for mounting up to three lighting heads on the cabinet (top or front mount). Unit shall be furnished with two EF18 lighting heads constructed of impact resistant, flame retardant polymeric material complete with 9 watt high intensity incandescent lamps. Fused output terminals shall be provide for ease of remote lamp connections. Every JS Series unit shall be fully warranted for three years, subject to proper installation and maintenance.

The unit shall be **Emergi-Lite®** model: _____.

Self-Diagnostic Models

Advanced Diagnostics (audible and non-audible versions) Our Advanced Diagnostic circuitry was designed to ontinuously monitor every critical function of the unit and attached remote lighting heads. Operational status is indicated by colored LED lamps. A high-pitch audible alarm and an LED status indicator alert maintenance personnel of a unit malfunction. This option saves the time spent on testing and trouble shooting by maintenance personnel. This new generation of Emergi-Lite® diagnostics is perfect for any application.Self-testing in accordance with NFPA 101, Life Safety Code. Unit tests itself every thirty days for one minute, thirty minutes on the sixth month and ninety minutes annually.

Unit Warranty*

Unit equipment (except battery and lamps): 3-year limited warranty

Battery Warranty*

Sealed Nickel-Cadmium: JSC – 10-year life expectancy,

5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Long Life Lead: JSE – 12-year life expectancy,

5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Lead Calcium: JSM – 8-year life expectancy, 3-year Full Warranty, plus 3-year pro rata warranty.

*Subject to proper installation and maintenance



Optional (FM suffix) Front Mounted Heads for low ceiling applications.

Unit Rating

Furnished standard with two 9 watt High Intensity Incandescent lamps.

Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*				Cabinet size
			1-1/2 hrs	2 hrs	3 hrs	4 hrs	
Nickel-Cadmium	6	JSC18-2	18	12	–	–	S
Lead-Calcium	6	JSM9-1	9	6	–	–	S
	6	JSM18-2*	18	12	10		S
UNIT EQUIPMENT - WITH REMOTE CAPABILITY							
Nickel-Cadmium	6	JSC25-2	25	18	12	9	S
	12	12JSC36-2	36	21	15	12	S
	12	12JSC50-2	50	36	25	18	S
Lead-Calcium	6	JSM27-2	27	18	14	10	S
	6	JSM36-2	36	25	20	14	S
	6	JSM54-2	54	37	28	21	L
	12	12JSM36-2	36	25	20	14	S
	12	12JSM54-2	54	37	28	21	L

* National Electrical Code Specification

= New York City Approved

How to Order

COLOR	SERIES/CAPACITY	# OF LAMPS	HEAD STYLE	LAMP TYPE/WATTAGE	OPTIONS
Blank= Off white **B**= Black	**JSC18**= 6V-18W, Ni-Cd* **JSC25**= 6V-25W, Ni-Cd*	**-0**= No head **-1**= One head **-2**= Two heads	**Blank**= (EF18 PAR 36 style) **9**= mini plastic **10**= mini plastic MR16 **23**= EF23 octagon deco **150**= EF150 lamp heads	**Blank**_= 6V-9W and 12V-9W incandescent wedge base **I**_= Incandescent DC-bayonet **U**_= Incandescent sealed-beam **X**_= Halogen sealed-beam **Z**_= Incandescent wedge **M**_= Halogen MR16* **LA**= 6V-4W, MR16 LED* **LG**= 12V-4W, MR16 LED* **LI**= 12V-5W, MR16 LED* **LJ**= 12V-6W, MR16 LED*	**-AD**= Advanced Diagnostics (audible) **-ADNA**= Advanced Diagnostics (non-audible) **-NEX**= NEXUS® wired **-NEXRF**= NEXUS® wireless **-V**= Voltmeter (or ammeter)* **-A**= Ammeter (or voltmeter)* **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-FM**= Front mounted heads **-C**= Cord & plug (120V)** **-E**= Special Cord & plug (specify length & plug type) **-XP1**= Twist lock with cord (120V) (specify length) **-XP2**= Twist lock with cord (277V) (specify length)
	JSM9= 6V-9W, Lead-Calcium **JSM18**= 6V-18W, Lead-Calcium* **JSM27**= 6V-27W, Lead-Calcium **JSM36**= 6V-36W, Lead-Calcium **JSM54**= 6V-54W, Lead-Calcium				
	12JSC36= 12V-36W, Ni-Cd* **12JSC50**= 12V-50W, Ni-Cd*				
	12JSM20= 12V-20W, Lead-Calcium **12JSM36**= 12V-36W, Lead-Calcium **12JSM54**= 12V-54W, Lead-Calcium				
	*Not available with sealed beams			*Available with EF10 and EF150 Lamp heads only. NOTE: For a complete list of available lamp types, please refer to the lamp data on p. 140-141	*Not available with -AD or -ADNA options. **Standard cord is 3ft.

Example: **JSC18-110LA**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

nexus ADVANCED AD DIAGNOSTICS

IL Series

6, 12 & 24 Volt Heavy Duty Industrial Emergency Power Unit

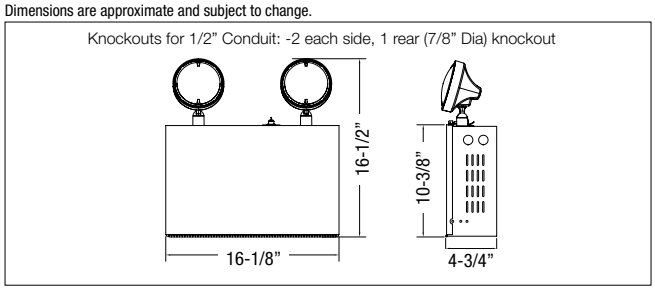


Features

- Each unit comes with two (2) impact resistant, flame retardant thermoplastic EF-18 lamp heads with 9 watt high intensity incandescent lamps (standard)
- All 20 gauge in steel construction ASA61 gray baked enamel finish
- Available with sealed, maintenance-free Nickel-Cadmium, Lead-Calcium
  (Free Electrolyte) or Lead-Calcium batteries
- PulsePlus Charger circuitry offers 120/277 volt input 60 Hz, 0.3/0.15A (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Provision for mounting to any standard 4" octagonal electrical box. The hinged and lockable front door allows easy access for maintenance and provides security against unauthorized access and vandalism
- UL924 Listed. Complies with NEC, Life Safety Code and OSHA. Approved for use in the Commonwealth of Pennsylvania
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Mounting bracket	B2
Mounting shelves (gray)	MP3-GY
Wire Guard	WG3-E

Unit Warranty*

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

Battery Warranty*

Unit batteries are warranted as follows:

Sealed Nickel-Cadmium: ILSC – 10-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Long Life Lead: ILSE – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Lead Calcium (immobilized electrolyte): ILC – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Lead Calcium: ILSM – 8-year life expectancy, 3-year Full Warranty, plus 3-year pro rata warranty.

*Subject to proper installation and maintenanceé.

Suggested Specification

Supply and install **Emergi-Lite® Series ILSC**_____, ILSE_____, ILSM_____ , ILC_____ in 6 volt, single or double heads, with electrically compatible remote fixtures or exit signs as indicated on the plans. The emergency lighting unit shall be a self-contained fixture including sealed, maintenance-free battery. TYPE ILSC to be supplied with long life Nickel-Cadmium battery. TYPE ILSE to be supplied with long life pure lead battery. TYPE ILSM to be supplied with lead calcium battery. TYPE ILC to be supplied with lead calcium (free electrolyte) battery. The unit shall supply the rated load for a minimum of 90 minutes or to 871/2% of rated batter y voltage. The unit shall be rated 120/277 Vac, 60 Hz and be UL924 Listed.

The unit charger shall utilize an integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips below 80-85% of nominal voltage. A low voltage battery disconnect circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 871/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with sealed dust-tight relay, a test switch and dual diagnostic LED indicator lights (hi-charge and AC pilot). The entire cabinet shall be constructed of 20 gauge steel in ASA61 grey baked enamel finish. The door shall be hinged to provide full access to the battery and charger for ease of installation and servicing. The door shall be lockable to prohibit unauthorized entry or vandalism. Unit shall have rear keyhole mounting slots and will be designed to mount directly to any standard 4" octagonal electrical box. Unit shall have provisions for mounting up to three lighting heads on the cabinet. Unit shall be furnished with two EF18 lighting heads constructed of impact resistant, flame retardant thermoplastic material complete with 9W High Intensity Incandescent lamps. Fused output terminals shall be provided for ease of remote lamp connections. Every IL Series unit shall be fully warranted for three years, subject to proper installation and maintenance.

The unit shall be **Emergi-Lite®** model: _____.

Unit Rating Chart

Furnished standard with two 9 watt High Intensity Incandescent lamps.

Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*				# of Load Fuses
			1-1/2 hrs	2 hrs	4 hrs	8 hrs	
UNIT EQUIPMENT - NO REMOTE CAPABILITY							
Nickel-Cadmium	6	ILSC18-2	18	12	6	–	–
Long Life Lead	6	ILSE18-2	18	11	6	–	–
Lead-Calcium	6	ILSM18-2	18	12	7	–	–
UNIT EQUIPMENT - WITH REMOTE CAPABILITY							
Nickel-Cadmium	6	ILSC25-2	25	18	9	–	–
	12	12ILSC36-2	36	21	12	6	1
	12	12ILSC50-2	50	36	18	10	1
	24	24ILSC72-2	72	42	24	12	2
Long Life Lead	6	ILSE27-2	27	16	10	6	–
	6	ILSE36-2	36	24	13	7	–
	6	ILSE54-2	54	36	20	11	–
	6	ILSE80-2	80	65	35	19	–
	6	ILSE110-2	110	72	40	24	–
	12	12ILSE36-2	36	24	13	7	1
	12	12ILSE54-2	54	37	21	10	1
	12	12ILSE72-2	72	48	26	14	2
	12	12ILSE110-2	110	74	43	21	2
	24	24ILSE72-2	72	48	26	14	2
	24	24ILSE110-2	110	74	43	21	2
Lead-Calcium (Immobilized Electrolyte)	6	ILC87-2	87	70	41	24	–
	6	ILC100-2	100	77	47	24	–
Lead-Calcium	6	ILSM27-2	27	18	10	6	–
	6	ILSM36-2	36	25	14	7	–
	6	ILSM54-2	54	37	21	12	–
	6	ILSM81-2	81	54	36	18	–
	6	ILSM110-2	110	72	40	24	–
	12	12ILSM36-2	36	25	14	7	1
	12	12ILSM54-2	54	37	21	12	1
	12	12ILSM110-2	110	72	40	24	2
	24	24ILSM110-2	110	72	40	24	2

* National Electrical Code Specification

How to Order

SERIES/VOLTAGE	UNIT CAPACITY	# OF HEADS	LAMP	OPTIONS
ILC= 6V	**87**= 87W Lead-Calcium **100**= 100W Lead-Calcium	**-0**= No head **-1**= One head **-2**= Two heads **-3**= Three heads	**Blank**= 6V-9W, 12V-9W, 24V-9W incandescent wedge base **H_**= Halogen bi-pin **Z_**= Tungsten incandescent **U_**= Tungsten sealed beam **X_**= Halogen sealed beam	**-AD**= Advanced Diagnostics (audible)* **-ADNA**= Advanced Diagnostics (non-audible)* **NEX**= NEXUS® wired (consult your sales representative)* **NEXRF**= NEXUS® wireless (consult your sales representative)* **-A**= Ammeter **-V**= Voltmeter **-CP**= Cord and plug 120V only **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-E**= Cord and plug 277V** **-OW**= Off-white cabinet and heads
ILS= 6V	**C18**= 18W Ni-Cd* **C25**= 25W Ni-Cd* **E18**= 18W Long Life Lead **E27**= 27W Long Life Lead **E36**= 36W Long Life Lead **E50**= 50W Long Life Lead **E80**= 80W Long Life Lead **E110**= 110W Long Life Lead **M18**= 18W Lead-Calcium **M27**= 27W Lead-Calcium **M36**= 36W Lead-Calcium **M54**= 54W Lead-Calcium **M81**= 81W Lead-Calcium **M110**= 110W Lead-Calcium			
12ILS= 12V	**C36**= 36W Ni-Cd* **C50**= 50W Ni-Cd* **E36**= 36W Long Life Lead **E54**= 54W Long Life Lead **E80**= 80W Long Life Lead **E110**= 110W Long Life Lead **M36**= 36W Lead-Calcium **M54**= 54W Lead-Calcium **M110**= 110W Lead-Calcium			
24ILS= 24V	**C100**= 100W Ni-Cd* **E72**= 72W Long Life Lead **E110**= 110W Long Life Lead **M110**= 110W Lead-Calcium **C72**= 72W Ni-Cd* * Not available with sealed beams		NOTE: For a complete list of available lamp types, please refer to the lamp data on pages 146-147	* Minimum lamp load required: 20% of unit capacity Option not available with 24V-100W Ni-Cd units ** Standard cord is 3 ft

Example: **ILC87-2HB-A**

Thomas&Betts
A Member of the ABB Group

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

HZM Series

6 and 12 Volt, Class I Division 2, Group A, B, C & D



Features

- Each unit comes with two (2) weather-resistant, impact-resistant, flame-retardant thermoplastic EF-11 lamp heads with 12 watt high intensity sealed beam tungsten halogen lamps (standard)
- Temperature code: T4A (max. 248ºF/120ºC)
- Water and corrosion-resistant cabinet is made of fiberglass-reinforced polyester. Industrial gray cabinet is fully gasketed around the cover. Battery compartment is vented with a breather vent designed to permit exhaust of battery gases without admitting external moisture or corrosives
- Available with sealed, maintenance-free Lead-Calcium batteries
- Fully automatic pulse charger offers 120/277VAC, 60Hz, 0.43/0.2 A, limited current temperature compensation, short circuit proof, reverse polarity protected, low voltage battery disconnect, brownout protection and standard solid state transfer feature
- PAR36 sealed-beam halogen lamps (see lamp selection chart below)
- Standard Self-Diagnostic circuitry continuously monitors every critical function of the unit. If a problem occurs, a single fault indicator on the outside of the fixture flashes immediately. A detailed diagnostic display is located internally. The detailed display will further indicate the nature of the fault as either a battery fault, load fault or a charger fault
- UL924 Listed
- 3-year limited warranty

  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Technical Information

Enclosure: structural foam, glass reinforced construction.

Finish: Industrial gray

Servicing: Fully gasketed front provides access to battery and charger.

Lighting Heads: The unit as standard, is furnished with two, EF11 weather resistant thermoplastic heads utilizing 12 watt sealed beam lamps. (Other lamps available - see Lamp Data Sheet).

Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Wire Guard	WG3-E

Electrical

Power Requirements: 120/277VAC, 60 Hz., 0.43/0.2 Amp. Output: 6 or 12 volt protected output circuit. **Transfer:** Automatically and instantly energizes lamp load upon failure of AC supply. **LVD:** Low voltage battery disconnect circuit automatically shuts down lamp load and circuitry when battery reaches 87-1/2% discharge, preventing deep discharge and permanent damage to the battery. **Brownout:** Close tolerance electronic circuit activates emergency unit when utility power dips below 80-85% of nominal voltage. **Charger:** The pulse plus charger circuit utilizes a microcontroller which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger is current limited, temperature compensated short-circuit proof and reverse polarity protected. Charge regulation +/-1%. The equipment is capable of full recharge in compliance with UL 924 specifications. **Transformer:** 120/277VAC. **Controls:** Sealed pushto - test switch, indicator light for ACOn and fault indicator (flashes).

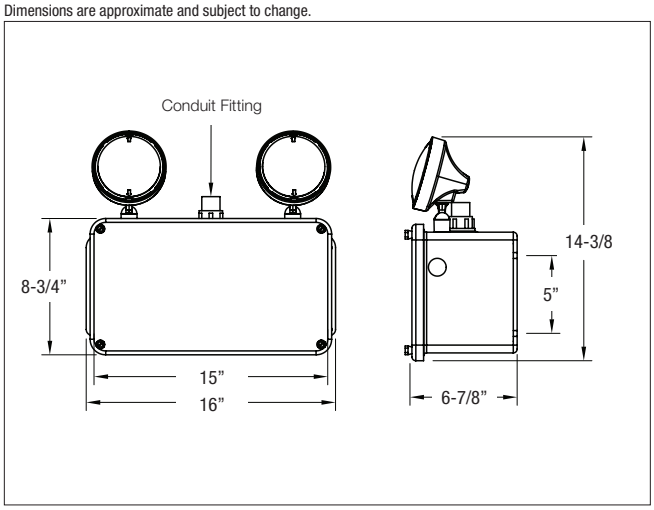
Suggested Specification

6 or 12 volt emergency lighting unit shall be installed in accordance with Article 501 of the National Electrical Code and shall be UL Listed. Transformer 120/277 volt input. Units furnished with sealed 6 or 12 volt battery as specified. The unit charger utilizes a micro-controller circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips be low 80- 85% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the load and circuitry from the output circuit when battery reaches 87-1/2% discharge. The unit shall be furnished with one or two protected charger output circuits and a solid state switch. The unit shall be capable of full recharge in compliance with Underwriters Laboratories specifications. The unit shall be furnished complete with a test switch and AC pilot light UL Listed for Class I Division 2 requirements. Cabinet shall be constructed of Injected molded structural foam, glass reinforced.

The unit shall have a fully gasketed cover. The battery compartment shall be provided with a breather vent designed for Class I Division 2 operation. The unit shall be furnished with two EF11 weather resistant lighting heads. Heads to be constructed of impact resistant, flame retardant thermoplastic complete with 12 watt sealed beam high intensity lamps. The unit shall be **Emergi-Lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



Unit Warranty*

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

Battery Warranty*

Unit batteries are warranted as follows: Sealed Lead Calcium: 8-year life expectancy, 3-year Full Warranty, plus 3-year pro rata warranty.

*Subject to proper installation and maintenance.

Unit Rating

Furnished standard with two 12W High Intensity Sealed Beam Halogen lamps.

Sealed Maintenance-Free Battery Types	D.C Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*			
			1-1/2 hrs	2 hrs	3 hrs	4 hrs
Lead-Calcium	6	6HZM24-2	24	18	10	6
	12	12HZM56-2	56	37	21	12

* National Electrical Code Specification.

How to Order

Note: Includes standard lamps. For standard units without options only order Series Number.

SERIES	# OF HEADS	LAMP TYPE	OPTIONS
6HZM24= 6V-24W, Lead-Calcium **12HZM56**= 12V-56W, Lead-Calcium	**-0**= No head **-1**= One head **-2**= Two heads	**Blank**= 6V-12W and 12V-12W halogen sealed beam **XB**= 6V-8W halogen sealed beam **XF**= 12V-8W halogen sealed beam Temperature code: T4A (max. 248ºF/120ºC) No other lamp type available	**-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-H1**= 120V Thermal Jacket Heater (recommended for ambient temperature) **-H2**= 277V Thermal Jacket Heater (recommended for ambient temperature) **-TC**= Shatter resistant teflon coated lens

Example: **6HZM24-2XB-H1**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

HP Series

NEMA-4X, High-Performance Industrial Remote Unit



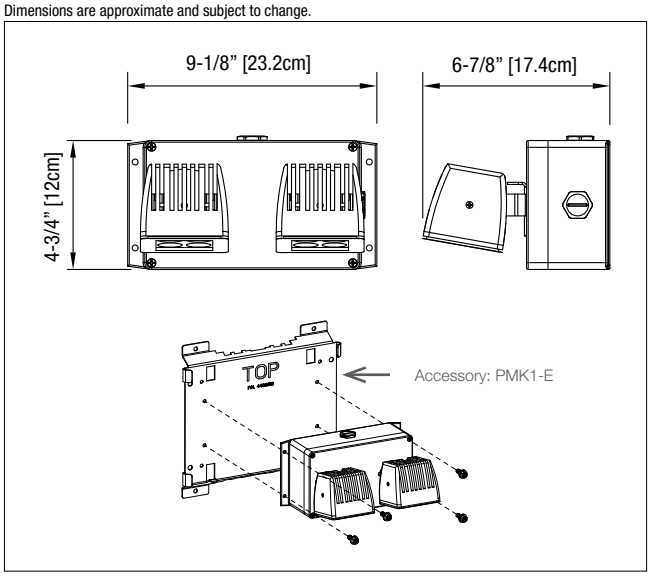
Features

- Die-Cast gray housing and heads designed for heavy-duty industrial applications: indoors, outdoors, hose-down areas, cold-storage facilities etc
- Can be installed in all temperature conditions: -40°F to 131°F (-40°C to 55°C)
- NEMA-4X protection grade against liquids and windblown dust
- High-efficacy LED emergency heads outperform traditional 50W incandescent lamps
- Innovative head design: four-LED and dual-driver provide illumination even in case of unexpected component failure
- Simple and easy to install on walls, poles, columns, struts, on vertical position for poles or columns use mounting bracket (order separately catalog number: PMK1-E)
- UL924 Listed
- 5 Year limited warranty

Detailed warranty terms located at: http://www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



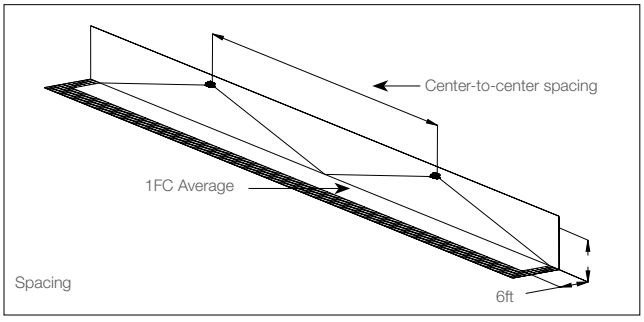
Photometry Performance

Whether installed indoors or outdoors, the HP Series of LED emergency lights deliver a stable and consistent illumination on the path of egress for a wide range of mounting heights. Depending on the application, one may select and specify among three levels of lumen output. See cross reference to traditional incandescent emergency lights below.

LED HEAD	POWER	TOTAL LUMENS	OUT-PERFORM SPACING OF THE INCANDESCENT
L6	6W	565	35W PAR36, MR16 Halogen
L10	10W	1000	50W PAR36, MR16 Halogen
L15	15W	1300	50W MR16-IR Halogen

Industrial environment: wall mounted equipment, reflectances: 10/10/10; 6-ft wide illumination path.
Illumination as per NFPA101; Average: 1fc; Min: 0.1fc; Max/min< 40:1

MOUNTING HEIGHT	SPACING CENTER-TO-CENTER (FEET)		
	LAMP L6 / 6W, 565LM	LAMP L10 / 10W, 1000LM	LAMP L15 / 15W, 1300LM
10 ft	80	110	140
15 ft	70	105	135
20 ft	60	100	130
25 ft	50	95	120



How to Order

SERIES	NUMBER OF HEADS	LED HEAD
HPR= High-Performance Remote	**D**= Double head	**L6** = 12-24V – 6W (565 Lumens) **L10** = 12-24V – 10W (1000 Lumens) **L15** = 12-24V – 15W (1300 Lumens)

Example: **HPRDL6**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

nexus NEMA-4X ADVANCED AD DIAGNOSTICS UL

HP Series

NEMA-4X, High-Performance Industrial Battery Unit



INDUSTRIAL

Features

- Fiberglass gray housing with captive screws. It is designed for heavy-duty industrial applications: indoors, outdoors, hose-down areas, cold-storage facilities etc
- NEMA-4X protection grade against liquids and windblown dust
- Wide ambient temperature range: standard 32°F to 122°F (0°C to 50°C) in high temperature Lead-Calcium and 50°F to 104°F (10°C to 40°C) in Nickel-Cadmium; optional cold-weather -40°F to 122°F (-40°C to 50°C)
- High-efficacy LED emergency heads outperform traditional 50W incandescent lamps
- Innovative head design: four-LED and dual-driver provide illumination even in case of unexpected component failure
- Compact size: 0.46 cubic feet
- Product feature stainless steel on all outside hardware
- Simple and easy to install on walls, poles, columns, struts, on vertical position for poles or columns use mounting bracket (order separately catalog number: PMK1-E)
- May be wired from top or side (see drawing beside for position)
- Standard infrared remote test control included in all models: allow to test the equipment without need to climb a ladder. Functional up to 30 ft distance. Universal, one Remote Test Control may test all units on the job.
- Non-Audible Advanced Diagnostic and Self-Test standard in all models
- Optional NEXUS® central monitoring system
- UL924 Listed
- 5 Year limited warranty
  Detailed warranty terms located at: http://www.emergi-lite.com/usa/files/EL_Warranty.pdf

Power Consumption: maximum current draw

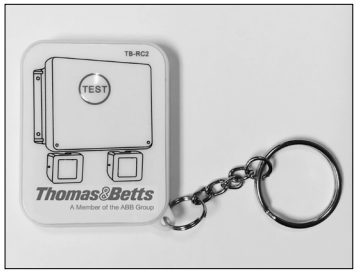
TEMPERATURE	SPECS
Standard temperature range	120/277VAC, 60Hz, 0.30/0.15A
Cold-Weather option	120/277VAC, 60Hz, 0.70/0.35A

Unit Rating

MODEL	WATTS TO 87-1/2% OF RATED BATTERY VOLTAGE*			
	1-1/2 hrs	2 hrs	3 hrs	4 hrs
12HPM30	30	20	15	10
12HPM60	60	40	30	20
12HPN40	40	36	24	18
24HPN90	90	72	48	36

Note: the cold-weather option is only rated for 90 minutes.

Remote Test Control



Suggested Specification

Supply and install **Emergi-Lite®** HP Series of battery unit equipment.

The unit enclosure shall have a compression-molded fiberglass construction and shall be equipped with a hinged, overlapping cover. The cover shall include a 3/16" wide rubber gasket and shall fasten with two stainless-steel captive screws. The enclosure shall have lateral flanges with holes for easy installation on the wall and also include two water-tight plugs of size 1/2" NPT for vertical and horizontal conduit and wire access. The emergency lighting heads shall be installed at the bottom of the cabinet and have the electrical cable passing through the swivel via water-tight bushings. The heads shall be made of Die-Cast aluminum and have a flat square lens made of UV-stabilized clear polycarbonate. The lens shall be sealed with a rubber gasket and be fixed with an aluminum frame and 6 (six) tamper-proof screws. Each head shall include four (4) LED lamps and two independent LED drivers with electrical connections allowing for lighting even in case of unexpected component failure. Each head shall have an input voltage range of 12 – 24VDC and a constant power regulation, providing stable illumination during variations of the battery discharge voltage.

The equipment shall have a dual AC input rated 120/277VAC 60Hz and a charger module equipped with micro-controller and solid-state transfer relay. The charger shall perform functions like: AC brownout detection, battery lockout, low-voltage battery disconnect, and provide protection against over-current, short-circuit, and DC reverse polarity.

When specified, the equipment with Improved Diagnostic option shall execute automatic tests for one minute every 30 days, 30 minutes every sixth month and 90 minutes every 12 months. In case of functional failure detection the equipment pilot light shall change color from green to red and signal a service alarm with specific flashing codes: battery or lamp disconnect, battery failure, charger failure, lamp failure. A label installed on the cover shall contain the legend with diagnostic codes.

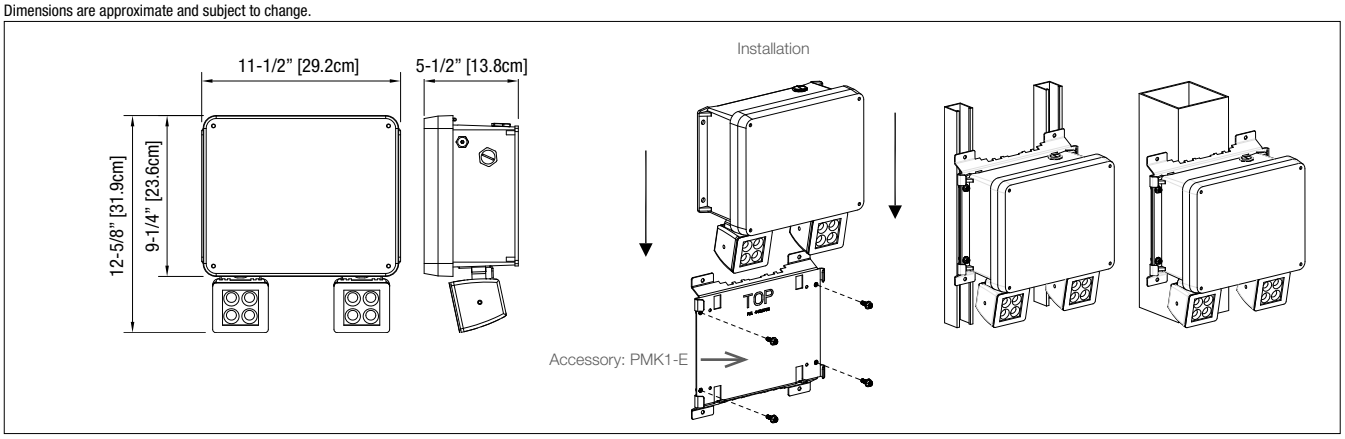
The equipment shall come standard with an infrared remote test control.

The equipment shall be rated NEMA-4X for hose-down applications. The equipment shall be listed to UL924 standards for Damp and Wet Locations.

The unit shall be **Emergi-Lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



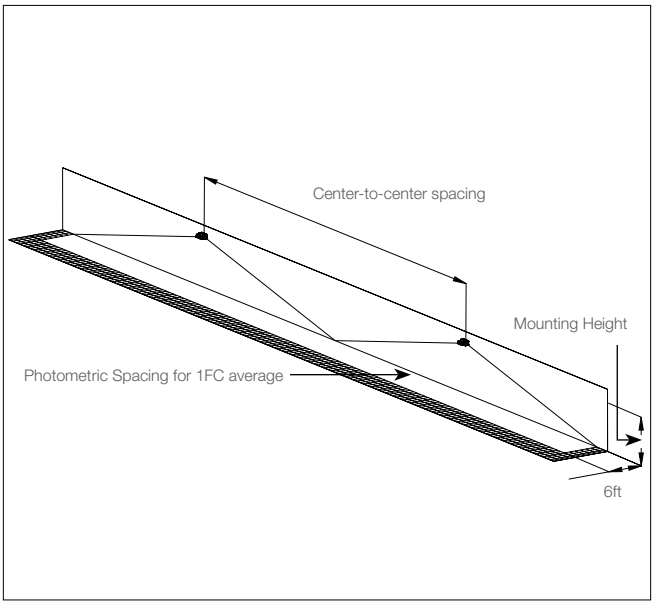
Photometry Performance

Whether installed indoors or outdoors, the HP Series of LED emergency lights deliver a stable and consistent illumination on the path of egress for a wide range of mounting heights. Depending on the application, one may select and specify among three level of lumen output and cross reference to traditional incandescent emergency lights below.

LED HEAD	POWER	TOTAL LUMENS	OUT-PERFORM SPACING OF THE INCANDESCENT
L6	6W	565	35W PAR36, MR16 Halogen
L10	10W	1000	50W PAR36, MR16 Halogen
L15	15W	1300	50W MR16-IR Halogen

Industrial environment: wall mounted equipment, reflectances: 10/10/10; 6-ft wide illumination path. 200 ft X 200 ft X 30 ft space. Illumination as per NFPA101; Average: 1fc; Min: 0.1fc; Max/min< 40:1

MOUNTING HEIGHT	SPACING CENTER-TO-CENTER (FEET)		
	LAMP L6 / 6W, 565LM	LAMP L10 / 10W, 1000LM	LAMP L15 / 15W, 1300LM
10 ft	80	110	140
15 ft	70	105	135
20 ft	60	100	130
25 ft	50	95	120



How to Order

SERIES	BATTERY TYPE AND CAPACITY	# OF HEADS	LED HEADS	DIAGNOSTIC	OPTIONS
12HP= High-Performance	**M30**= 12V-30W, High temperature Lead-Calcium battery, Temperature= 32°F to 122°F [0…50°C] **M60**= 12V-60W, High temperature Lead-Calcium battery, Temperature= 32°F to 122°F [0…50°C] **N40**= 12V-40W, Nickel-Cadmium battery, Temperature= 50°F to 104°F [10…40°C]	**0**= No head **1**= One head **2**= Two heads	**L6**= 12-24V, 6W (565 Lumens) **L10**= 12-24V, 10W (1000 Lumens) **L15**= 12-24V, 15W (1300 Lumens)	**D**= Advanced Diagnostic, non-audible* **DA**= Advanced Diagnostic, audible **NEX**= NEXUS® wired **NEXRF**= NEXUS® wireless	**CW4**= Cold-Weather -40°F [-40°C]* **D3**= Time Delay 15 minutes **RFI**= Radio frequency interference filter
24HP= High-Performance	**N90**= 24V-90W, Nickel-Cadmium battery, Temperature= 50°F to 104°F [10…40°C]			* Standard	* Only 12V equipment

Example: **12HPN402L6DRFI**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Weatherproof EF11X & EF11DX Series

Class I Division 2 Certified Remote Fixture



Features

- Class I Division 2 - Groups A, B, C, D
- Single lighting head with fully adjustable swivel with gray lamp heads
- Gasketed aluminum canopy and junction box
- Indoor use
- Available as a single or double PAR 36 size
- Surface mount
- Includes a universal aluminum canapy and junction box
- Conduit entry 1/2" NPT
- Lamps: PAR 36 sealed beam (6 or 12VDC maximum 12W)
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

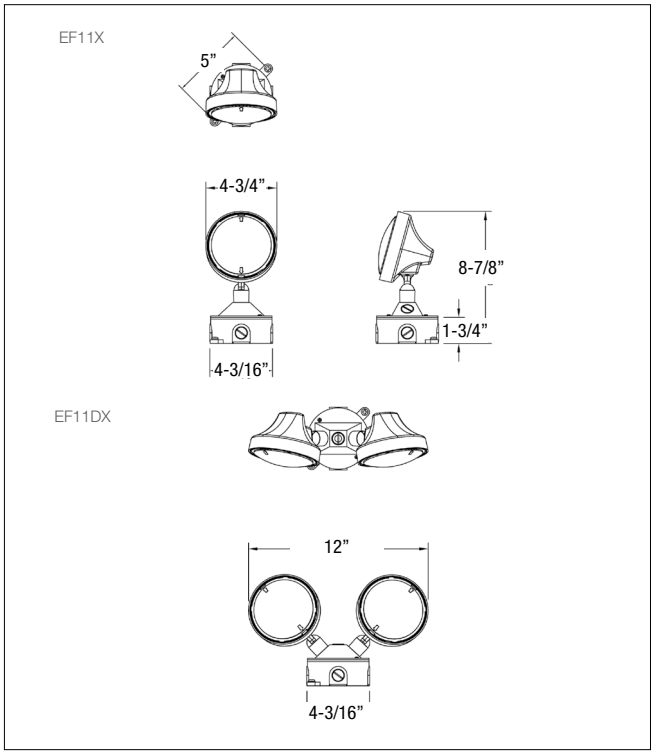
Lamp type(s), voltage and maximum wattage available for fixture are shown under lamp description. Determine lamp type, voltage and wattage required for your application, then select lamp from Lamp Chart in the Charts & Diagrams section. Do not exceed fixture wattage rating. Include lamp suffix and voltage as suffix to model number. Voltage must be stated.

Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Wire Guard	WG6-E

Dimensions

Dimensions are approximate and subject to change.



How to Order

EF11X SERIES

SERIES	MODEL	LAMP TYPE/WATTAGE
EF11= Hazardous locations Class.I Div.2 Groups A, B, C and D	**X**= Single head	**(XD)**= 6V-12W halogen sealed beam **(XG)**= 12V-12W halogen sealed beam

Example: **EF11X(XD)**

EF11DX SERIES

SERIES	MODEL	LAMP TYPE/WATTAGE
EF11= Hazardous locations Class.I Div.2 Groups A, B, C and D	**DX**= Double head	**(XD)**= 6V-12W halogen sealed beam **(XG)**= 12V-12W halogen sealed beam

Example: **EF11DX(XG)**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

GS Series

6 Volt Recessed Down Light



Standard Features

- An adjustable gimbal directs the light from one (1) 6V wedge-base PAR 36 lamp head
- The low-profile trim ring is molded in tough polycarbonate with a semi-gloss white finish to complement a variety of ceilings. The fully-recessed back box is constructed of 20-gauge steel
- Available with Lead-Calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC 60 Hz., 0.3/0.15 Amp, fused output circuit(s), long life LED pilot indicator, temperature compensated, sealed relay, low voltage battery disconnect, brownout protection and lock out (automatic battery connect)
- Inconspicuously mounted and easily accessed. The test switch and LED pilot light are located on the side of the lamp ring on the standard unit
- A slide-out chassis and two quick-connect plugs make installation and servicing easy. Adjustable bar hangers included
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Electrical

Power Requirements: 120/277 Vac, 60 Hz.,0.3/0.15 A.

Output: 6 volt, fused output circuit. **Transfer:** dust-tight, sealed relay automatically and instantly energizes lamp load upon failure of AC supply. **LVD:** low voltage battery disconnect circuit automatically shuts down lamp load and circuitry when battery reaches 87-1/2% discharge, preventing deep discharge and permanent damage to the battery. **Lockout:** labor saving electronic circuit automatically connects battery when AC circuit is activated. **Brownout:** close tolerance electronic circuit activates emergency unit when utility power dips below 80-85% of nominal voltage. **Charger:** the Pulse-Plus charging circuit utilizes an integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger is current limited, temperature compensated, shortcircuit proof and reverse polarity protected. The equipment is capable of full recharge in compliance with Underwriters Laboratories 924 specifications. **Transformer:** 120/277 Vac. **Controls:** test switch, LED pilot indicator light.

Unit Warranty*

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

Battery Warranty*

Unit batteries are warranted as follows:

Sealed Nickel-Cadmium: GSC – 10-year life expectancy,

5-year Full Warranty, plus 5-year pro-rata warranty.

Sealed Long-Life Lead: GSE – 12-year life expectancy,

5-year full warranty, plus 5-year pro-rata warranty.

Sealed Lead Calcium: GSM – 8-year life expectancy,

3-year Full Warranty, plus 3-year pro rata warranty.

*Subject to proper installation and maintenance

Suggested Specification

Supply and install **Emergi-Lite®** Series GSM_____, or GSC _____ in 6 volt, with electrically compatible remote fixtures or exit signs as indicated on the plans.

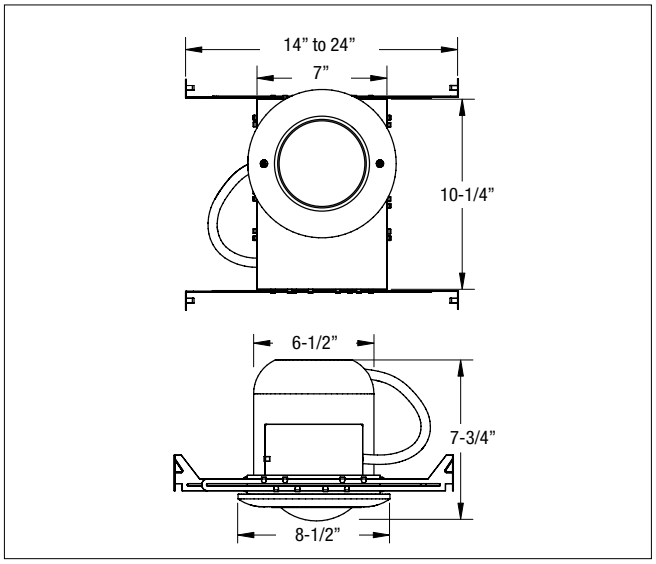
TYPE GSM to be supplied with Lead Calcium battery.

TYPE GSC to be supplied with long life Nickel-Cadmium battery The unit shall supply the rated load for a minimum of 90 minutes to 87-1/2% of rated battery voltage. The unit shall be rated 120/277 Vac, 60 Hz and be UL Listed to Standard 924. The unit charger shall utilize an integrated circuit which samples the batter y in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit proof and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, an electronic brownout circuit which will activate the unit when utility power dips be low 80-85% of nominal voltage and low voltage batter y protection circuit that will disconnect the load from the battery when it reaches 87-1/2% discharge. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with sealed dust-tight relay, a test switch and a long life LED pilot indicator light. The unit shall be designed for fully recessed installation in ceilings, including suspended grid type. Unit shall be constructed of 20 gauge steel back box with a thermoplastic matte white trim ring and gimbal assembly. Unit will be furnished with one (1) 6V 9W PAR 36 size light head. Fused output terminals shall be provided for ease of remote lamp connections.

Unit shall be **Emergi-Lite®** catalog number _____.

Dimensions

Dimensions are approximate and subject to change.



Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

Accessories (order as separate item)

DESCRIPTION	SUFFIX
Remote Test Switch (metal face plate)w	RTS
Remote Test Switch (plastic face plate)	RTS-1

Unit Rating

The GSM10 unit is furnished with one 6V-10W wedge-base lamp. Other wattages available, see lamp data sheet for selection of PAR lamps.

Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*				A.C. Voltage	
			1½ hrs	2 hrs	3 hrs	4 hrs	Unit Dual Voltage	Current Maximum
Lead-Calcium	6	GSM10-BH	10	8	–	–	120VAC	.3A

* National Electrical Code Specification

How to Order

For standard units without options only order Series, Battery and Watts. Options are added to units by listing suffix at end of model number.
NOTE: Includes standard lamp (570.0016)

COLOR	SERIES	BATTERY TYPE	LAMP OPTION	MOUTING OPTION	MODEL
Blank= White	**GS**= Series	**M10**= 10W Lead-Calcium	Wedge Base 9W standard	**BH**= Bar hanger (standard)	**-NYC**=Approved model* * Includes 12 watt lamp and metal trim.

Example: **GSM10BH-NYC**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

FPDL-HL-N Series

Convert new or existing fluorescent fixtures into emergency lighting units 3000 lumen emergency ballast



Features

- Steel housing contains, battery, battery charger, transfer circuit and high frequency inverter
- Operating temperature 32°F to 122°F (0°C to 50°C)
- External mounting to a fluorescent fixture
- Compatible with most one-, two-, three-, and four-lamp electronic standard and dimming AC ballast
- Operates two 8W-54W T5/T5HO, two 17W-40W, one 17W-215W T8 through T12, two 13W-42W 4-pin compact, two 18W-50W or one 18W-55W 4-pin long compact fluorescent lamps
- (1) Lamp 825-3000 Lumens
- (2) Lamps 900-3000 Lumens per lamp
- Can be wired to operate switched, un-switched or normally off fixtures without affecting normal operation
- Will cold start and illuminate lamps
- Fully Automatic solid state charger
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection
- Battery connector prevents battery discharge during installation
- Red charger monitor LED indicates charging of the battery and AC present
- Momentary test switch allows for quick operational check of entire system
- Nickel-Cadmium battery
- Provides 90 minutes of emergency operation
- Dual voltage 120/277VAC, 60Hz, 5.1W
- UL924 Listed
- Damp location listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Suggested Specifications

Supply and install **Emergi-Lite® FPDL-HL-N** Series.

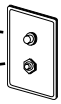
The FPDL-HL-N fluorescent emergency ballast shall be a single steel housing selfcontained unit including a sealed maintenancefree Nickel-Cadmium battery, battery charger, transfer circuit and high frequency inverter. The unit shall be rated 120/277VAC, 60 Hz and be UL924 listed.

The FPDL-HL-N fluorescent emergency ballast, sealed dust-tight relay inverter charger transfer circuit shall be of a solid state design being automatic and instantaneous capable of supplying an initial 3000 lumens output to cold start, operate switched, un-switched or normally off fixtures without affecting normal operation. The battery shall supply emergency operation for a minimum of 90 minutes and shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with, red charger monitor LED indicates charging of the battery and AC present to unit as well as a momentar y test switch allows for quick operational check of entire system.

Every FPDL-HL-N Series unit shall be fully warranted for five years, subject to proper installation and maintenance. UL listed to standard 924, complies with NEC, Life Safety Code and OSHA requirements.

Unit Shall be **Emergi-Lite®** catalog number_____ .

Accessories (order as a separate item)

Remote Test Switch (Metal faceplate)	**RTS**
Remote Test Switch (Plastic faceplate)	**RTS-1**
Recommended for inaccessible locations. Test switch and charging indicator on a single mounting plate.	Charging Indicator Light, Push Button Test Switch 
Replacement Test Switch	**TBTSBA-E**

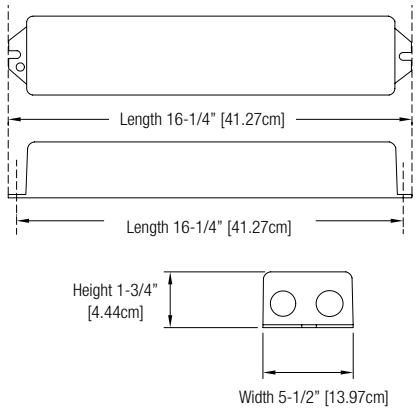
Ordering Format

SERIES	OPTIONS
FPDL-HL-N	**Blank**= Standard Unit **-DL**= Damp location Listed

EXAMPLE: **FPDL-HL-N**

Dimensions

Dimensions are approximate and subject to change.



Compatible Lamp Chart

LAMP	VOLTAGE	WATTAGE	INITIAL LUMENS	
			1-LAMP	2-LAMPS
T5	**120/277V**	**14W**	1150	1200
T5		**21W**	1750	1800
T5		**28W**	2350	2425
T5HO		**39W**	2700	2850
T5HO		**54W**	2900	3000
T8		**17W**	1100	1150
T8		**32W**	2950	3000
T12		**20W**	875	900
T12		**40W**	2250	2400
T8		**59W**	2800	–
T12		**110W**	2950	–
T12		**215W**	3000	–
4-pin PL CF		**13W**	825	900
4-pin PL CF		**18W**	1100	1200
4-pin PL CF		**26W**	1500	1600
4-pin PL CF		**32W**	2200	2300
4-pin PL CF		**42W**	2450	2500
4-pin Long CF		**18W**	1250	1400
4-pin Long CF		**24W**	1750	1900
4-pin Long CF		**36W**	2200	2300
4-pin Long CF		**40W**	2350	2400
4-pin Long CF		**50W**	2250	2400
4-pin Long CF		**55W**	2500	–

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

FPDL32 Series

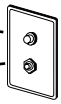
Convert new or existing fluorescent fixtures into emergency lighting units 500 lumen emergency ballast



Features

- Low profile steel housing contains, battery, battery charger, transfer circuit and high frequency inverter
- Optional end caps available
- Operating temperature 68°F to 122°F (20°C to 50°C)
- Internal or external mounting to a fluorescent fixture
- One 17-40W (2'-4') T8, T10, T12 or one 28W (2'-4') T5, T8, 40W Biax (Long CFL), or 50W Biax (Long CFL) fluorescent lamp
- (1) Lamp 375-500 Lumens
- Can be wired to operate switched, un-switched or normally off fixtures without affecting normal operation
- Will cold start and illuminate lamps
- Fully Automatic solid state charger
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection
- Battery connector prevents battery discharge during installation
- Red charger monitor LED indicates charging of the battery and AC present
- Momentary test switch allows for quick operational check of entire system
- Nickel-Cadmium battery
- Provides 90 minutes of emergency operation
- Dual voltage 120/277VAC, 2.5W
- UL924 Listed
- Damp location listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

	External mounting kit includes wire bundle cover	**071139-E**
Remote Test Switch (Metal faceplate)		**RTS**
Remote Test Switch (Plastic faceplate)		**RTS-1**
Recommended for inaccessible locations. Test switch and charging indicator on a single mounting plate.	Charging Indicator Light Push Button Test Switch	
Replacement Test Switch		**TBTSP-E**

Ordering Format

SERIES
FPDL32

EXAMPLE: **FPDL32**

Suggested Specifications

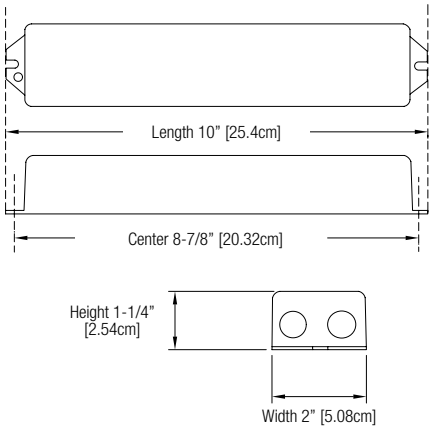
Supply and install **Emergi-Lite® FPDL-32** Series.

The FPDL-32 fluorescent emergency ballast shall be a single steel housing selfcontained unit including a sealed maintenance-free Nickel-Cadmium battery, battery charger, transfer circuit and high frequency inverter. The unit shall be rated 120/277VAC, 60 Hz and be UL924 listed. The FPDL-32 fluorescent emergency ballast, sealed dust-tight relay inverter charger transfer circuit shall be of a solid state design being automatic and instantaneous capable of supplying an initial 500 lumens output to cold start, operate switched, un-switched or normally off fixtures without affecting normal operation. The battery shall supply emergency operation for a minimum of 90 minutes and shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with, red charger monitor LED indicates charging of the battery and AC present to unit as well as a momentar y test switch allows for quick operational check of entire system. Every FPDL-32 Series unit shall be fully warranted for three years, subject to proper installation and maintenance. UL listed to standard 924, complies with NEC, Life Safety Code and OSHA requirements.

Unit Shall be **Emergi-Lite®** catalog number_____ .

Dimensions

Dimensions are approximate and subject to change.



Compatible Lamp Chart

LAMP	VOLTAGE	WATTAGE	INITIAL LUMEN
			1-LAMP
F17 T8	**120/277V**	**17**	450
F28 T8		**28**	460
F32 T8		**32**	475
28W T5		**28**	500
F15 T12		**15**	375
F20 T12		**20**	425
F40 T12		**40**	450
40W Long Compact		**40**	450
40W Circling		**40**	450

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

FPDL-28 Series

Convert new or existing fluorescent fixtures into emergency lighting units 750 lumen emergency ballast



Features

- Steel housing contains, battery, battery charger, transfer circuit and high frequency inverter
- Optional end caps available
- Operating temperature 68°F to 122°F (20°C to 50°C)
- Internal or external mounting to a fluorescent fixture
- One 14-50W or two 14-39W
- (2'-4') T5 and T8 lamps with instant start or rapid start or one 4-pin
- 18-50W long compact fluorescent or one 4-pi
- 32W compact fluorescent or one 24-32W U-Bend lamp
- T5 Lamps
- Long Compact Lamps
- 4-Pin Compact Fluorescent Lamps
- (1) Lamp 440-750 Lumens
- (2) Lamps 400-690 Lumens
- Can be wired to operate switched, un-switched or normally off fixtures without affecting normal operation
- Will cold start and illuminate lamps
- Fully Automatic solid state charger
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection
- Battery connector prevents battery discharge during installation
- Red charger monitor LED indicates charging of the battery and AC present
- Momentary test switch allows for quick operational check of entire system
- Nickel-Cadmium battery
- Provides 90 minutes of emergency operation
- Dual voltage 120/277VAC, 60Hz, 3.7W
- UL924 Listed
- Damp location listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Suggested Specifications

Supply and install **Emergi-Lite® FPDL-28** Series.

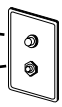
The FPDL-28 fluorescent emergency ballast shall be a single steel housing selfcontained unit including a sealed maintenance-free Nickel-Cadmium battery, battery charger, transfer circuit and high frequency inverter. The unit shall be rated 120/277VAC, 60 Hz and be UL924 listed.

The FPDL-28 fluorescent emergency ballast, sealed dust-tight relay inverter charger transfer circuit shall be of a solid sta te design being automatic and instantaneous capable of supplying an initial 700 lumens output to cold start, operate switched, un-switched or normally off fixtures without affecting normal operation. The battery shall supply emergency operation for a minimum of 90 minutes and shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with, red charger monitor LED indicates charging of the battery and AC present to unit as well as a momentar y test switch allows for quick operational check of entire system.

Every FPDL-28 Series unit shall be fully warranted for three years, subject to proper installation and maintenance. UL listed to standard 924, complies with NEC, Life Safety Code and OSHA requirements.

Unit Shall be **Emergi-Lite®** catalog number_____ .

Accessories (order as a separate item)

	External mounting kit includes wire bundle cover	**071139-E**
Remote Test Switch (Metal faceplate)		**RTS**
Remote Test Switch (Plastic faceplate)		**RTS-1**
Recommended for inaccessible locations. Test switch and charging indicator on a single mounting plate.		
Replacement Test Switch		**TBTSP-E**

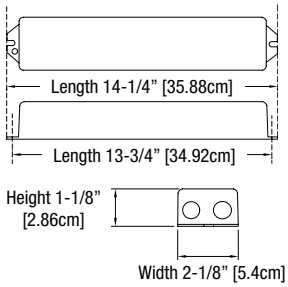
Ordering Format

SERIES
FPDL-28

EXAMPLE: **FPDL-28**

Dimensions

Dimensions are approximate and subject to change.



Compatible Lamp Chart

LAMP	VOLTAGE	WATTAGE	INITIAL LUMENS	
			1-LAMP	2-LAMP
F14W T5	**120/277V**	**14**	480	440
F21W T5		**21**	680	640
F24W T5/HO		**24**	440	410
F28W T5		**28**	750	690
F39W T5/HO		**39**	670	640
F54W T5/HO		**54**	600	650
F14W T8		**14**	450	400
F20W T8		**20**	550	520
F28W T8		**28**	625	580
F32W T8		**32**	700	670
F36W T8		**36**	680	650
F39W T8		**39**	620	580
F54W T8		**54**	500	–
F32W PLCF Quad 4pin		**32**	550	510
Long compact F36W		**36**	610	570
Long compact F40W		**40**	625	–
Long compact F50W		**50**	510	–
PLC F30BX, 40BX, 50BX		**30, 40, 50**	650	–
F24W U-BEND FBT8		**24**	580	550
F32W U-BEND FBT8		**32**	630	600

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

FPDL13-42-N Series

Convert new or existing fluorescent fixtures into emergency lighting units
750 lumen emergency ballast



Features

- Steel housing contains, battery, battery charger, transfer circuit and high frequency inverter
- Operating temperature 32°F to 122°F (0°C to 50°C)
- Internal or external mounting to a fluorescent fixture
- Compatible with most one-, two-, three-, and four-lamp electronic standard and dimming AC
- Operates one 17W-40W T8 through T12, two 13W-39W, one 13W-42W 4-pin compact or one 18W-40W 4-pin long compact fluorescent lamps
- (1) Lamp 350-750 Lumens
- (2) Lamps 425-750 Lumens
- Can be wired to operate switched, un-switched or normally off fixtures without affecting normal operation
- Will cold start and illuminate lamps
- Fully Automatic solid state charger
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection
- Battery connector prevents battery discharge during installation
- Red charger monitor LED indicates charging of the battery and AC present
- Momentary test switch allows for quick operational check of entire system
- Nickel-Cadmium battery
- Provides 90 minutes of emergency operation
- Dual voltage 120/277VAC, 60Hz, 1.8W
- UL924 Listed
- Damp location listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

Remote Test Switch (Metal faceplate)	**RTS**
Remote Test Switch (Plastic faceplate)	**RTS-1**
Replacement Test Switch	**TBTSBA-E**

Ordering Format

SERIES
FPDL13-42-N

EXAMPLE: **FPDL13-42-N**

Suggested Specifications

Supply and install **Emergi-Lite® FPDL13-42-N** Series.

The FPDL13-42-N fluorescent emergency ballast shall be a single steel housing selfcontained unit including a sealed maintenancefree Nickel-Cadmium battery, battery charger, transfer circuit and high frequency inverter. The unit shall be rated 120/277VAC, 60 Hz and be UL924 listed.

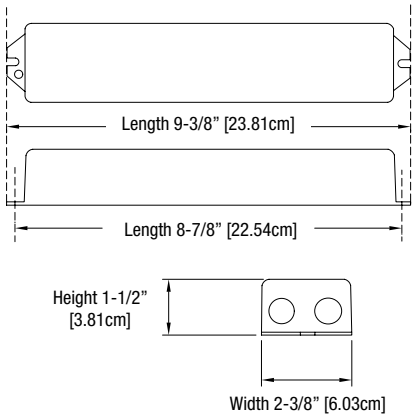
The FPDL13-42-N fluorescent emergency ballast, sealed dust-tight relay inverter charger transfer circuit shall be of a solid state design being automatic and instantaneous capable of supplying an initial 650 lumens output to cold start, operate switched, un-switched or normally off fixtures without affecting normal operation. The battery shall supply emergency operation for a minimum of 90 minutes and shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with, red charger monitor LED indicates charging of the battery and AC present to unit as well as a momentary test switch allows for quick operational check of entire system.

Every FPDL13-42-N Series unit shall be fully warranted for three years, subject to proper installation and maintenance. UL listed to standard 924, complies with NEC, Life Safety Code and OSHA requirements.

Unit Shall be **Emergi-Lite®** catalog number_____ .

Dimensions

Dimensions are approximate and subject to change.



Compatible Lamp Chart

LAMP	VOLTAGE	WATTAGE	INITIAL LUMENS	
			1-LAMP	2-LAMP
4-pin PL CF	**120/277V**	13W	350	425
4-pin PL CF		18W	400	550
4-pin PL CF		26W	475	650
4-pin PL CF		32W	600	750
4-pin PL CF		42W	750	–
4-pin Long CF		18W	550	–
4-pin Long CF		24W	600	–
4-pin Long CF		36W	650	–

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

FPDL/U Series

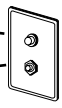
Convert new or existing fluorescent fixtures intemergency lighting units 1350 lumen emergency ballast



Features

- Steel housing contains, battery, battery charger, transfer circuit and high frequency inverter
- Optional end caps available
- Operating temperature 68°F to 122°F (20°C to 50°C)
- Internal or external mounting to a fluorescent fixture
- One 14-54W or two 14-39W
- (2'-4') T5 and T8 lamps with instant start or rapid start or one 4-pin
- 18-50W long compact fluorescent or one 4-pin
- 32W compact fluorescent or one 24-32W U-Bend lamp
- (1) Lamp 880-1350 Lumens
- 2) Lamps 850-1300 Lumens
- Can be wired to operate switched, un-switched or normally off fixtures without affecting normal operation
- Will cold start and illuminate lamps
- Fully Automatic solid state charger
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection
- Battery connector prevents battery discharge during installation
- Red charger monitor LED indicates charging of the battery and AC present
- Momentary test switch allows for quick operational check of entire system
- Nickel-Cadmium battery
- Provides 90 minutes of emergency operation
- Dual voltage 120/277VAC, 60Hz, 3.7W
- UL924 Listed
- Damp location listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

	External mounting kit includes wire bundle cover	**071139-E**
Remote Test Switch (Metal faceplate)		**RTS**
Remote Test Switch (Plastic faceplate)		**RTS-1**
Recommended for inaccessible locations. Test switch and charging indicator on a single mounting plate.		
Replacement Test Switch		**TBTSP-E**

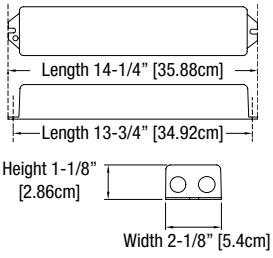
Ordering Format

SERIES
FPDL/U

EXAMPLE: **FPDL/U**

Dimensions

Dimensions are approximate and subject to change.



Compatible Lamp Chart

LAMP	VOLTAGE	WATTAGE	INITIAL LUMENS	
			1-LAMP	2-LAMP
F14W T5	**120/277V**	**14**	880	850
F21W T5		**21**	1000	960
F24W T5/HO		**24**	1250	1210
F28W T5		**28**	1300	1250
F39W T5/HO		**39**	1200	1130
F54W T5/HO		**54**	1150	–
F14W T8		**14**	900	850
F20W T8		**20**	1150	1120
F28W T8		**28**	1200	1180
F32W T8		**32**	1350	1300
F36W T8		**36**	1200	1150
F39W T8		**39**	1150	1100
F54W T8		**54**	1100	–
F32W PLCF Quad 4pin		**32**	1100	1050
PLC F36W		**36**	1050	1000
PLC F40W		**40**	1100	–
PLC F50W		**50**	1000	–
PLC F30BX, 40BX, 50BX		**30, 40, 50**	1300	–
F24W U-BEND FBT8		**24**	1050	1000
F32W U-BEND FBT8		**32**	1150	1100

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

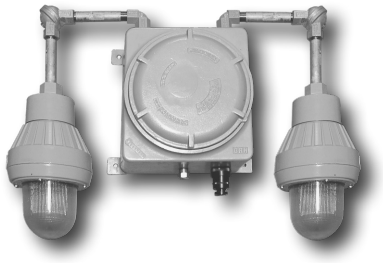
TYPE: _____

CATALOG #: _____

NOTES: _____

EXC Series

6 and 12 Volt – Class I, Div. 1 & 2, Groups C & D And Class II, Div. 1 & 2, Groups E, F & G Power Unit



Features

- Allows mounting up to 3 hazardous area fixtures directly on the power unit or remotely.
- Corrosion-resistant, copper-free cast aluminum construction. A weatherproof gasketed spinoff cover, UL listed stainless steel vent/drain and silicone conformal coating on the circuit board protect the electronics against humidity. Comes standard with epoxy finish for added corrosion protection in harsh environments.
- Available with sealed, maintenance-free Nickel-Cadmium batteries.
- Charger offers 120/277 VAC, 60 Hz, 0.3/0.15A, 36 watt (other inputs available), fused DC output circuit, AC pilot light supervision, temperature compensation, sealed relay, low voltage battery disconnect, brownout protection, lockout (automatic battery connect), solid state, current limited, constant current short circuit proof and reverse polarity protection.
- Meets hazardous location requirements: Class I Division 1 & 2 (Groups C & D), Class II Division 1 & 2 (Groups E, F & G).
- 3-year limited warranty

  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Fixtures

The **EXC Series** may be supplied with 1 or 2 hazardous fixtures mounted directly on the power unit and/or remotely as the application dictates (for remote fixtures, consult hazardous area fixture data sheet).

Lamp Fixtures (EP Series) See page 72: Fully directional U.L. listed copper-free cast aluminum construction, swivel-mounted, Pyrex® lens, complete with either 9, 18, or 25 watt HIT lamps (halogen optional). Available with optional guard or reflectors. Pyrex® is a registered trademark of Corning Glass.

Exit Fixtures (XP Series) See page 73: Mounted to the power unit, these exit signs are supplied standard with our unique integral transfer switch (TS) and utilize either a 6V-15W XX6 lamp or 12V-25W XX12 lamp. This enables the exit to operate in both the normal AC mode as well as DC mode. The exit sign consists of an EP fixture coupled with a heavy duty steel, baked enamel finish exit shroud with ample downlight. Supplied standard as a single face sign, red stencil faceplate; double face and green stencil also available.

For other legends, please consult your sales representative.

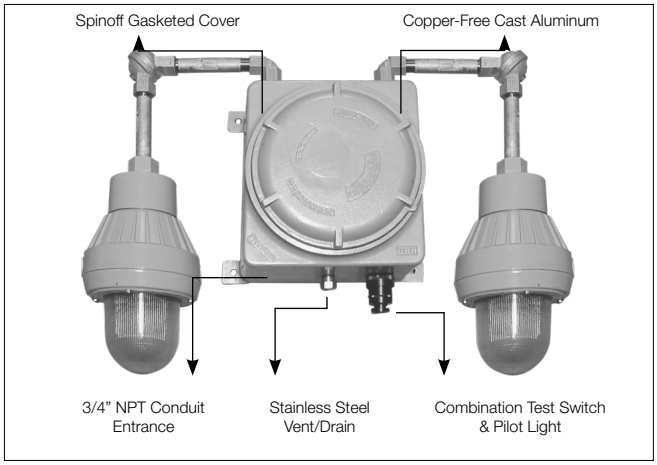
Unit Rating

UNIT EQUIPMENT - WITH REMOTE CAPABILITY						
Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*			
			1-1/2 hrs	2 hrs	4 hrs	8 hrs
Nickel-Cadmium	6	EXC1	18	12	–	–
	6	EXC2	25	18	9	–
	6	EXC3	36	21	12	6
	6	EXC5	50	36	18	10
	12	1EXC3	36	21	12	6
	12	1EXC5	50	36	18	10
	12	1EXC7	72	42	24	12

*National Electrical Code Specification

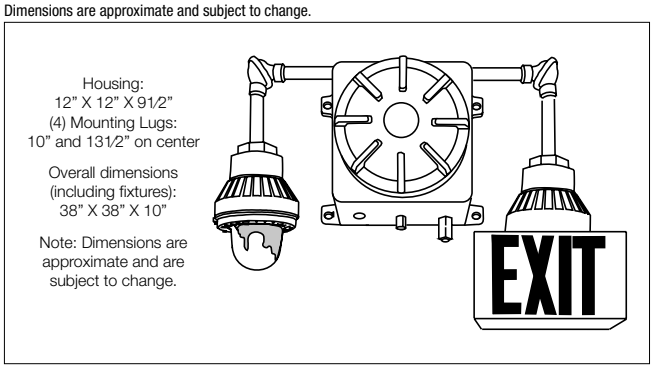
Electrical

Input Power Requirements: 120/277 Vac, 60 Hz., 0.3/0.15 Amp., 36W, Output: 6 or 12 Vdc; 18-72W. Transfer: Solid state, fused DC output circuit, automatically and instantaneously energizes lamp load upon failure of AC supply. Low Voltage Disconnect (LVD): 1/2% of its nominal voltage. Battery: Sealed maintenance-free Hi-Temp Nickel Cadmium Battery, specially suited for resistance to temperature extremes normally associated with this type of application. Charger: Solid state, current limited, constant current, short-circuit protected and reverse polarity protected. Controls: Combination test switch and pilot lig



Dimensions

Dimensions are approximate and subject to change.



Unit Warranty*

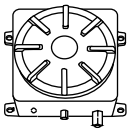
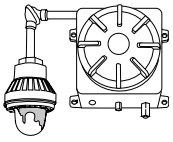
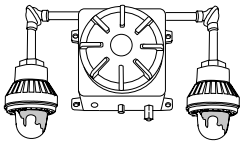
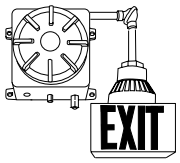
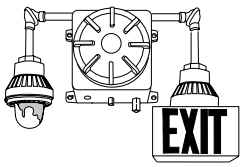
Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

Battery Warranty*

Unit batteries have a 10-year life expectancy and carr y a 5-year Full Warranty, plus 5-year pro rata warranty.

*Subject to proper installation and maintenance.

Standard Configurations for EXC Series

UNIT	CATALOG NUMBER	DESCRIPTION
 (Remote Capability)	1EXC5-0 1EXC5-TS	12 volt, 50 watt self-contained hazardous area emergency lighting power unit complete with battery and charger. (No heads) 12 volt, 50 watt self-contained hazardous area emergency lighting power unit complete with battery, charger and transfer switch. (No heads)
	1EXC5-1IG 1EXC5-1IG-TS	12 volt, 50 watt, single head unit with 12 volt, 25 watt HIT lamp. (One head) 12 volt, 50 watt, single head unit with built-in transfer switch and 12 volt, 25 watt HIT lamp. (One head)
	EXC3-2IB EXC5-2IB-TS	6 volt, 36 watt, self-contained hazardous area emergency lighting power units complete with battery and charger. Fixture supplied with one (IB) 18 watt HIT lamp (Two heads) 6 volt, 50 watt, double head unit with built-in transfer switch and 12 volt, 25 watt HIT lamp (Two heads)
	EXC2-T1SR	6 volt, 15 watt, self-contained unit with integral low voltage transfer circuit (TS) to operate exit lamp in both normal and emergency modes. Suggested catalog number shown indicates single face exit with red stencil faceplate. For green, substitute G for R. For double face, substitute D for S. (One Exit sign)
	EXC-1HD-T1SR	6 volt, 50 watt unit. In addition to the exit lamp which operates in both normal and emergency modes, emergency lighting can be achieved with (1) additional emergency lighting head. (Example: HD = 6V-12W). (One head & one Exit sign)

Note: Above units are supplied with appropriate wattage (HIT) High Intensity Tungsten lamps (unless otherwise specified). Alternate wattages lamps or halogen lamps may be substituted as required.
Exit provided with 25 watt lamps only.

How to Order

The **EXC Series** is available with a wide variety of fixtures, mountings, voltages, etc. To make your selection easier, we have listed the standard configurations in the chart above. When ordering exit fixtures, additional to the basic catalog number, you must specify single or double face and color of faceplate.
Insert these suffix letters at the end of model number.

SERIES	CAPACITY	NO. OF FIXTURES	LAMPS*	EXIT SIGN*	OPTIONS
EXC= 6V **1EXC**= 12V	**1**= 18W (6V only) **2**= 25W (6V only) **3**= 36W (6V, 12V) **5**= 50W (6V, 12V) **7**= 72W (12V only)	**-0**= No remote **-1**= One remote **-2**= Two remotes	**Blank**= No lamps **HB**= 6V-8W bi-pin halogen **HD**= 6V-12W bi-pin halogen **HF**= 12V-8W bi-pin halogen **HG**= 12V-12W bi-pin halogen * Lamps for emergency lights	**Blank**= No exits **-T1SR**= Single face red **-T1SG**= Single face green **-T1DR**= Double face red **-T1DG**= Double face green * Exit lamp included	**Blank**= No options **TS**= Transfer switch **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-RD**= Dome reflector **-RA**= Angle reflector **-GXP**= Aluminum guard

Example: **1EXC7-1HG-T1SR-D1**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

EverLite™ Series

Self Luminous Exit



Features

- Legend is constructed of non-glare polycarbonate, with 0.015 thick, open letters, field programmable arrows, and white letters with background colors of red or green. Contrast ratio for both conditions exceeds .5, and meets requirements of UL 924 and NFPA 101
- Constructed of rugged thermoplastic, the EverLite™ Series offers contemporary slim line design with smooth rounded corners, and a vibrant faceplate color. Frame finishes include off-white, black or gray. The entire unit is tamperproof and completely self-contained
- Tritium gas energizes the phosphor-coated borosilicate tubes in the EverLite™ sign. The low energy beta emission of tritium striking the phosphor coating inside the Pyrex® glass tubes causes illumination to be generated
- Signs mount flush to wall or ceiling surfaces, a canopy is not required.
- UL924 Listed. Complies with NFPA, Life Safety Code and OSHA
- EverLite™ signs are spark free and suitable for use in hazardous, explosive, corrosive, humid or any other harsh environment. Emergi-Lite® will replace free of charge any product in which the luminosity is found to be defective during its specified luminous life, or which falls below specified luminous life

Pyrex® is a registered trademark of Corning Glass.

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
White Pendant	P*-WT
Black Pendant	P*-BK
Gray Pendant	P*-GY
Wire Guard-Wall Mount	WG13-E
Wire Guard-Ceiling Mount	WG5-E
Wire Guard-End Mount	WG15-E

* Specify length in inches (12, 24, 36, etc)

Applications

(For use in harsh or dangerous environments)

- Meets full test specifications of ANSI (American National Standards Institute)
- Meets requirements of National Electrical Codes, Class I and II conditions
- Licensed for distribution by U.S. Nuclear Regulatory Commission

Licenses and Codes

- NFPA Life Safety Code 101
- UL 924
- City of Los Angeles
- State of California
- Council of American Building Officials (ICBO, SBCCI)
- OSHA
- USNRC
- ISO 9001

Suggested Specification

General

Supply and install **Emergi-Lite®** EverLite™ Series, internally illuminated, self luminous exit signs powered by a tritium gas source. Exit signs shall not require ambient light, electrical power, wiring or batteries. Signs shall be listed to UL924, NFPA 101, OSHA, MSHA and NRC. Signs shall be accepted by Uniform, Basic and Standard Building Codes.

Housing

Exit sign frame, backplate and canopy shall be of ABS molding. Signs shall utilize a tamper proof assembly, no removable fasteners. Faceplate shall be constructed of acrylic, (optional polycarbonate) .13 inches thick. Standard frame colors shall include off white, designer black or gray.

Legend

Legend shall be constructed of non-glare polycarbonate, .015 thick, open letters, field programmable arrows, and white letters with background colors of red or green. Contrast ratio for both conditions shall exceed .5, and shall meet requirements of UL 924 and NFPA 101.

Illumination

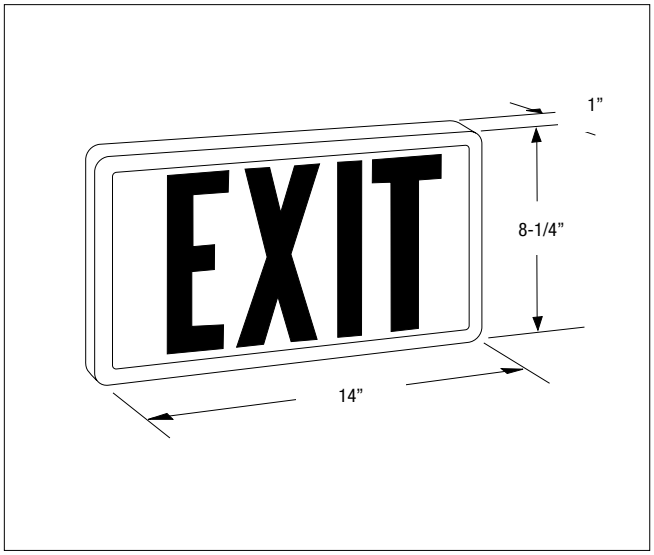
Internal illumination color shall be green averaging a wavelength of 5400 angstroms. **Emergi-Lite®** suggests a maximum distance for legibility of 125 feet.

Mechanical Test Performance

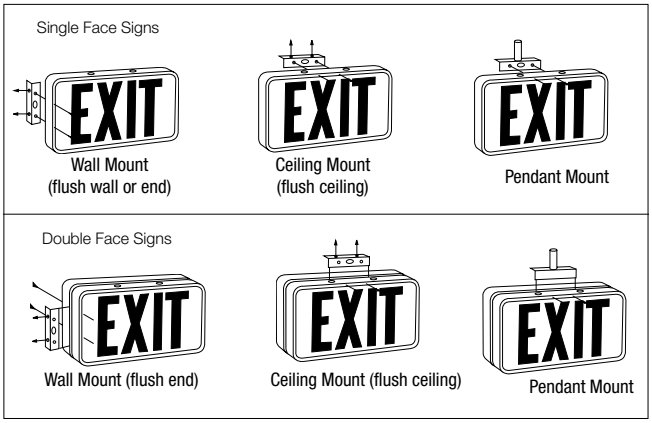
EverLite™ exit signs shall be spark free and suitable for use in hazardous, explosive, corrosive, humid or any other harsh environment. Signs shall meet requirements of National Electrical Code, Class I and II conditions. Signs shall be licensed for distribution by U.S. Nuclear Regulatory Commission.

Dimensions

Dimensions are approximate and subject to change.



Mounting



Harsh

Mines	Spray Booth Areas	Refineries
Off Shore Rigs	Paper Mills	Chemical Plants
Food Processing Plants	Grain Elevators	

How to Order

FRAME COLOR	SERIES	SIGN LIFE	# OF FACES	LEGEND	OPTIONS	NEW
W= Off white **B**= Black **G**= Gray	**SLX**= Series	**-10**= 10 years **-20**= 20 years	**61**= Single face **62**= Double face	**R**= Red **G**= Green	**-AF**= Aluminum frame **-AFPC**= Aluminum frame and Polycarbonate shield	**-N**= NEW

Example: **WSLX-1061R-AF-N**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

THE ESCORT II SERIES

ELXN400 LED Series

Low energy and low maintenance for moderate budget application



DISTRIBUTOR SELECT

Features

- Fully adjustable LED glare-free heads
- 3.6V-3.6W long-life LED illumination
- Legend illumination by red or green long-life LEDs

Construction

- Frame, faceplate, backplate and canopy are made of injection-molded, UV stabilized thermoplastic
- UL94, 5VA flame rated body
- Snap-together design
- Corrosion and scratch-resistant of mist white color

Electrical

- 3.6V Nickel-Metal Hydride battery
- Dual-voltage input capability 120/277VAC

Installation

- Surface mount ceiling or wall
- Canopy included for ceiling installation
- Backplate features universal knockouts for a standard 4" junction box, used in wall mount applications

Listings

- UL924 Listed
- Damp location listing is standard (68°F to 86°F)
- NFPA101 (Life Safety Code), NFPA70 NEC and OSHA illumination standard

Warranty

- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Power Consumption

Model	Current (A) / Power (W)
	120/277VAC, 60Hz
ELXN400R-2LED	0.044/0.017A
ELXN400G-2LED	0.032/0.015A
ELXN400R-2LEDR	0.037/4.06A
ELXN400G-2LEDR	0.036/3.8A
ELXN400R_2LEDR-AD	0.038/0.017A
ELXN400G_2LEDR-AD	0.038/0.017A

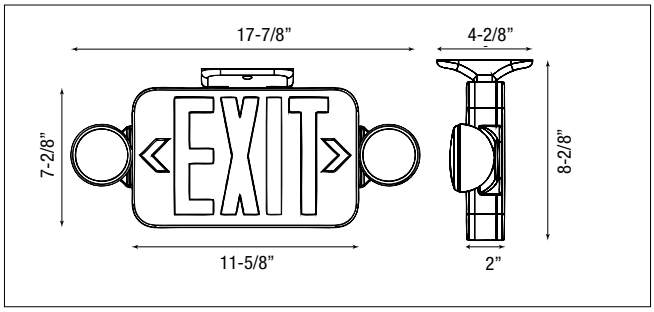
Suggested Specification

Supply and install the **Emergi-lite® ELXN400-LED Series** Combo Exit/emergency light unit. The compact housing and canopy shall be of impact resistant thermoplastic and allow for ceiling or wall installations. The overall dimensions (including canopy) shall be not more than 18-1/2in long by 8-1/2in high by 3in deep. The exit legend light source shall be long-life LEDs installed on a PCB strip. The emergency light source shall be long-life high output white LEDs with reflector/refractor combination optics inside a round shape housing. Unit shall have a dual input voltage of 120/277Vac 60Hz, be supplied with sealed Nickel-Metal Hydride maintenance free battery, and perform minimum 90 minutes of emergency illumination upon AC failure. The unit shall have provisions to power an extra dual remote light EF43D and EF44D for minimum 90 minutes of emergency illumination upon AC failure. The equipment shall be UL-924 listed for Damp location 50°F to 104°F (10°C to 40°C).

The equipment shall be **Emergi-lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



How to Order - Combination Unit

SERIES	LEGEND COLOR	LAMP	OPTIONS
ELXN400= ELX Combo Series	**R**= Red exit **G**= Green exit	**-2LED**= Round LED array	**Blank**= No option **R**= Remote capacity to power one double head remote* **R_AD**= One double head dedicated remote with Advanced-Diagnostics* * Remote capacity can only be used to power the EF43D or EF44D remote fixtures or to extend the battery units emergency run time beyond the standard 90 minutes.

Example: **ELXN400R-2LED**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

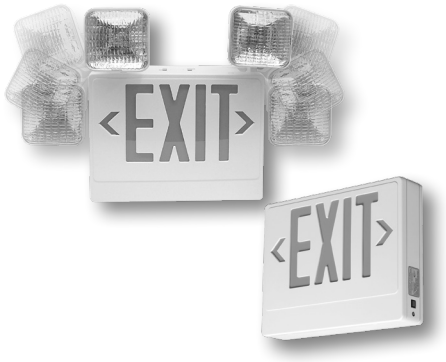
TYPE: _____

CATALOG #: _____

_____

NOTES: _____

THE ESCORT II series



ELX400 SQ Series

Thermoplastic Combination Units and Remote Capacity Exit Sign

Standard Features

- Comes with two fully adjustable glare-free SQ light heads for egress lighting, with two (2) 6V-5.4 watts DC T5 wedge base lamps.
- Low power consumption – LED lamps are operated in normal (AC input) and emergency (DC input) modes.
- Injection-molded UV stabilized thermoplastic housing, faceplates, and canopy. UL 94, 5VA flame rating. Two faces, backplate, and canopy.
- Available with a sealed, maintenance-free Lead-Calcium battery. Additional battery available for 12 watts remote load or extended unit run time (see How To Order).
- 120/277 VAC dual voltage operation. LED indicator light and push button test switch. Remote capacity exit with two heads may power additional remote heads up to 6 Volt, 12 watts. Remote capacity exit with no heads may power additional remote heads up to 6 Volt, 22 Watts. Low voltage battery disconnect.
- Innovative, snap-together design allows for fast installation. Wall or ceiling mounting. Canopy snaps to housing with a twist-lock feature tightly securing the canopy to the housing. Replaceable directional chevron inserts are easily removed and reinserted.
- UL924 Listed
- Damp location listing is standard on all models
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Wire Guard (heads in any position)	WG10-E
Replacement battery	860.0004-E
Replacement lamp	570.0012-E

* Do not exceed rated unit capacity.

Suggested Specifications

LED Exit Combination

The contractor will install the **Emergi-Lite®** _____ Combination Series. The Exit Combo shall be suitable for wall or ceiling mount. The face shall be constructed of a durable high impact thermoplastic. No screws are necessary to hold the face plate or canopy to the housing. Snap-together design allows for quick installation. The face plate shall be constructed of a one-piece thermoplastic mold. This combination unit shall be 120/277Vac compatible and be UL 924 listed. Emergency lights can be adjusted for side- mounting or top mounting. The unit will stay illuminated during emergency mode for a period of 90 minutes.

Electrical Features

Electrical

- 120/277VAC dual voltage operation
- Low power consumption - LED's
- LED indicator light and push button test switch
- Remote capacity - may power additional remote heads (up to 6V 12W) with additional battery
- Low voltage battery disconnect
- All models are damp location listed

Lamps

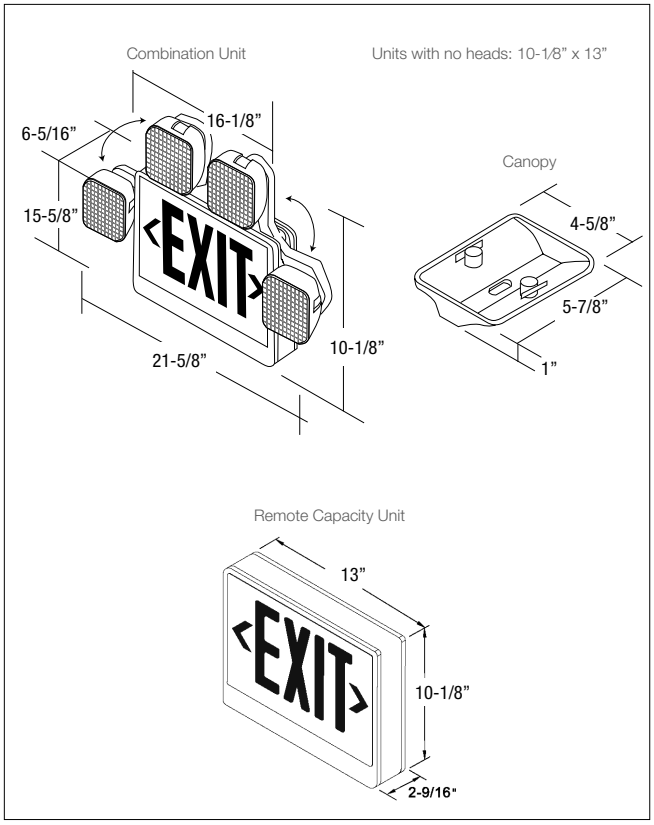
- LED's mounted on print circuit board (for exit sign)
- LED lamps are operated in normal (AC input) and emergency (DC input) modes.
- 2 x 6V 5.4 watts DC T5 wedge base lamps for emergency mode

Battery

- Sealed maintenance-free lead-calcium battery
- Additional battery available for 12 watts remote load or extended unit run time (see How To Order).

Dimensions

Dimensions are approximate and subject to change.



Note: Heads move from side to top in field

Unit Warranty*

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

Battery Warranty*

Lead Calcium (Combination and Emergency Light Unit): 3-years, 3-years pro-rata

Nickel-Cadmium (Exit Sign): 5-years, 5-years pro-rata.

*Subject to proper installation

Power Consumption Chart

DESCRIPTION
120/277VAC, 60Hz maximum 0.11/0.05A

How to Order

SERIES	LEGEND	LIGHT HEADS	CAPACITY INDICATOR	OPTION
ELXN400	**R**= Red **G**= Green	**-0**= Combo no heads* **-2SQ**= Lamp standard 6V-5.4W * Only available with remote capacity AD and red legend	**Blank**= No remote capacity **R**= 12W remote capacity* *Do not exceed rated unit capacity	**Blank**= No options **-AD**= Advanced Diagnostics (audible)* * Only available with remote capacity and red stencil

Example: **ELXN400R-2SQR-AD**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

THE ESCORT II series

ELX Series

Economical, Thermoplastic LED Exit Signs



DISTRIBUTOR SELECT

Features

- Rugged off-white thermoplastic construction
- Even illumination for excellent legibility
- Snap-together design for quick and easy installation
- Universal mounting, complete with 2 faces, backplate, and canopy
- Replaceable knockout directional chevrons
- Energy efficient, long-life red or green LEDs
- UL924 Listed
- Damp location listing is standard on all models
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

ELX Series Models

AC-only exit signs, red or green
Self-powered exit signs, red or green

Self-Powered Emergency Models

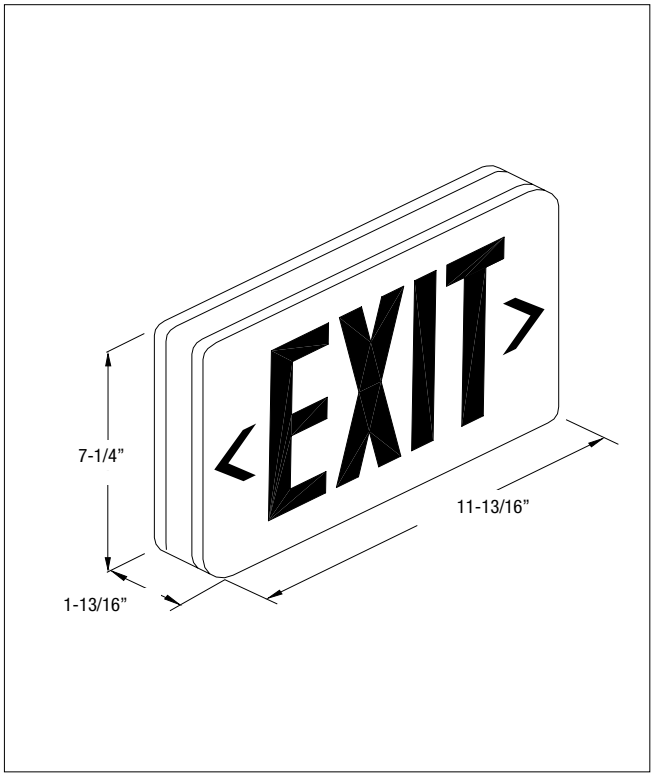
- Replaceable, sealed Nickel-Cadmium battery
- Provides a minimum 90 minutes of continuous emergency illumination
- Energy star compliant
- Batteries recharge per UL924 specifications
- Consumes less than 3W
- Optional: Advanced Diagnostic

Charger

- 120/277VAC input
- Fully automatic
- Temperature compensated
- Brownout protection
- Short circuit protected
- Low voltage battery disconnect
- Push to test switch
- AC pilot light

Dimensions

Dimensions are approximate and subject to change.



Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Wire Guard - Wall Mount	WG1-E
Ceiling or end mount	WG5-E

Power Consumption

DESCRIPTION
120/277VAC, 60Hz maximum 2.5W

How to Order

SERIES	LEGEND COLOR	OPTION
ELX400= AC-only **ELXN400**= Self-Powered	**RN**= Red **GN**= Green	**-AD**= Advanced Diagnostic* *Available only with Self-Powered model, no remote capacity

Example: **ELXN400RN**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

THE ESCORT II SERIES

ELX-MRS Series

Thermoplastic Exit Sign and Combination Unit



DISTRIBUTOR SELECT

Features

- Rugged off-white thermoplastic construction
- Even illumination for excellent legibility
- Snap-together design for quick and easy installation
- Universal mounting, complete with 2 faces, backplate, and canopy
- Replaceable knockout directional chevrons
- Energy efficient, long-life red or green LEDs
- 6 volt, sealed, maintenance-free Lead-Calcium battery
- Fully adjustable, glare-free, 6 volt MR16 lamps
- 4W LED lamps available
- UL924 Listed
- Damp location listing is standard on all models
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Charger

- 120/277VAC input
- Fully automatic charger
- Temperature compensated
- Brownout protection
- Short circuit protected
- Low voltage battery disconnect
- Push to test switch
- AC pilot light

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Replacement MR16 lamp 6V-5W	580.0072-E
Wire Guard Wall Mount	WG6-E

Power Consumption

DESCRIPTION
120/277VAC, 60Hz 0.11/0.05A

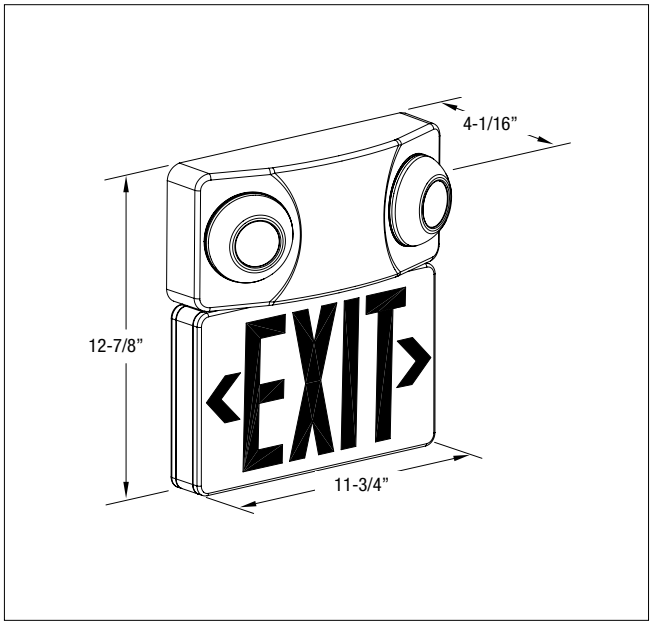
How to Order

SERIES	STENCIL FACE	LIGHT HEADS
ELXN400	**R**= Red **G**= Green	**-2MRSN**= 6V-5W MR16 **-2MRSN-LA**= 6V-4W, LED MR16

Example: **ELXN400R-2MRSN**

Dimensions

Dimensions are approximate and subject to change.



Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

EL-2SQ Series

Thermoplastic Housing 6V up to 23W Capacity Lead-Calcium Battery Unit

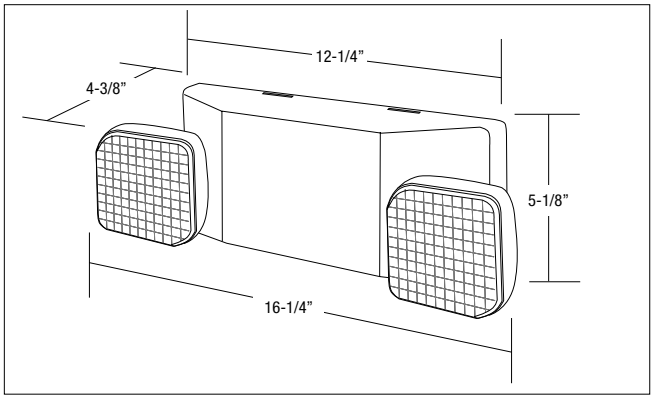


Features

- Two (2) fully adjustable glare-free 6V-5.4W DC T5 wedge base lamps for emergency mode egress light.
- Injection-molded UV stabilized thermoplastic housing and back plate. UL 94 Liste, 5VA flame rated.
- Sealed, maintenance-free Lead-Calcium batteries. Designed to power 11 watts remote load or extended unit run time.
- 120/277 VAC dual voltage operation. LED indicator light and push button test switch. Remote capacity may power additional remote heads (up to 6V-11W). Low voltage battery disconnect.
- Innovative, snap-together design allows for fast installation. Wall or ceiling mounting. Universal knock-out pattern on the back plate allows for junction box mounting.
- UL924 Listed
- Damp location listing is standard in all models
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Suggested Specifications

The contractor will install the **Emergi-Lite®** _____battery unit. The emergency lighting system shall consist of fully automatic equipment with 2 MR16 glare free halogen heads. Each unit shall contain a fully automatic, solid state charger with test switch and AC on pilot light. The unit shall contain a solid state transfer circuit and low voltage disconnect circuit. The battery shall be 6 volts with a design life of 8 years with a capacity of 12 watts for 90 min utes. The unit shall be UL924 listed.

Note: This unit does not have remote capabilities. For units with remote capacity please refer to the DLM-2 series.

Unit Warranty*

Entire unit (excluding lamps) carries a 3-year Full Warranty.

Battery Warranty*

Sealed Lead-Calcium: 8-year life expectancy. 3-year Full Warranty, plus 3-year pro rata warranty.

*Subject to proper installation and maintenance.

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Replacement battery	860.0018-E
Replacement lamp (standard)	570.0012-E
Vandal shield	VRS.BB
Vandal shield (NEMA 4X)	VRSBB.4X
Wire Guard (heads in any position)	WG10-E

Unit Rating

Series	Battery Type	DC Voltage	Watts to 87-1/2% of rated battery voltage*				Units Dual Voltage*	Current Maximum
			1-1/2 hrs	2 hrs	3 hrs	4 hrs		
EL-2SQ	Lead-Calcium	6V	12	–	–	–	120VAC	08A
EL-2SQR		6V	23	16	–	–	277VAC	.04A

* National Electrical Code Specification

How to Order

SERIES	LIGHT HEADS	CAPACITY INDICATOR
EL= Self-Powered	**-2SQ**= Standard lamp 6V-5.4W Incandescent	**Blank**= No remote capacity **R**= 11 watts remote capacity* * Do not exceed rated unit capacity.

Example: **EL-2SQR**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

EL-2MRS & 12EL50-2MRS Series

Completely Self-Contained or Heavy Duty Thermoplastic Battery Unit

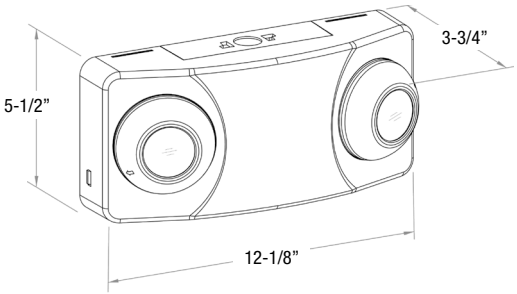


Features

- Each self-contained unit comes with two (2) 6V MR16 halogen or LED lamps housed in adjustable, gimbal-type assemblies to provide clean, adequate lighting
- High impact thermoplastic construction is UL recognized 94, 5VA
- Sealed, maintenance-free Lead-Calcium batteries
- Reliable integrated circuitry offers 120/277VAC 0.1/0.05A input standard, automatic charging, instantaneous transfer, test switch, long-life LED AC charge monitor, temperature compensated charger, short circuit protection, low battery voltage disconnect, brownout protection, and lock out (automatic battery detection during installation)
- Snap-together thermoplastic housing facilitates mounting in any orientation
- UL924 Listed
- Damp location listing is standard
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Accessories

DESCRIPTION	PART NUMBER
Replacement MR16 lamp 6V-5W	580.0072-E
Wire Guard	WG13-E
Replacement Battery	860.0004-E
Replacement MR16 LED lamp 6V-4W	580.0097-E

Power Consumption

Series	Battery Type	DC Voltage	Watts to 87-1/2% of rated battery voltage				Dual Voltage	Current Maximum	Power Maximum
			1-1/2 hrs	2 hrs	3 hrs	4 hrs			
EL-2MRS	Lead-Calcium	6V	12	–	–	–	120VAC 277VAC	.1A .05A	7.5W 7.5W
EL-2MRS-LA		6V	12	–	–	–			

How to Order

SERIES	LAMP OPTION
EL= Series	**-2MRS**= 6V-5W MR16 **-2MRS-LA**= 6V-4W, MR16 LED

Example: **EL-2MRS-LA**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

DISTRIBUTOR SELECT

EL-2LED Series

Low Energy, Low Maintenance Emergency Lighting for Moderate Budget Applications



Features

- Fully adjustable LED glare-free heads
- 3.6V-3.6W long-life LED illumination

Construction

- Injection-molded, UV stabilized thermoplastic
- UL94, 5VA flame rated body
- Snap-together design
- Corrosion and scratch-resistant in mist white color

Electrical

- Automatic, temperature compensated, pulse type charger
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection
- Battery lock-out prevents discharge during installation
- Sealed maintenance free 3.6V Nickel-Metal Hydride battery
- Red charger monitor LED indicates charging of the battery
- Momentary test switch allows for quick operational check of entire system

Installation

- Ceiling or wall mount
- Rear keyhole slots and universal knock-outs to mount to any standard 4" junction box

Listings

- UL924 Listed
- Damp location listing is standard (68º F to 86º F)

Warranty

- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

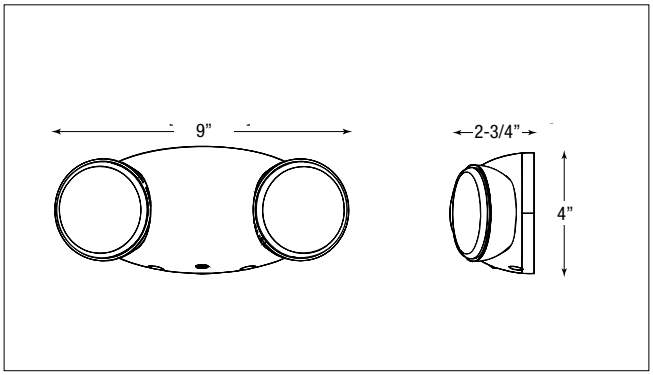
Suggested Specification

Supply and install the **Emergi-Lite® EL-2LED Series** emergency light unit. The compact housing shall be of impact resistant thermoplastic and allow for ceiling or wall installations. The overall dimensions shall be not more than 10in long by 5in high by 3in deep. The light source shall be long-life high output white LEDs with reflector/refractor combination optics inside a round shape housing. Unit shall have a dual input voltage of 120/277Vac 60Hz, be supplied with sealed Nickel-Metal Hydride maintenance free battery, and perform minimum 90 minutes of emergency illumination upon AC failure. The unit shall have provisions to power an extra dual remote light EF43D or EF44D for minimum 90 minutes of emergency illumination upon AC failure. The equipment shall be UL-924 listed for Damp location 50°F to 104°F (10°C to 40°C).

The equipment shall be **Emergi-Lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



Power Consumption

Model	Current (A) / Power (W)
	120/277VAC, 60Hz
EL-2LED	0.103/0.10A
EL-2LEDR	0.13/0.16A
EL-2LEDR-AD	0.058/0.029A

How to Order

SERIES	LAMP OPTION	OPTIONS
EL	**_2LED**= round LED array	**Blank**= No option **R**= Remote capacity to power one double head remote* **R_AD**= One double head dedicated remote with Advanced-Diagnostics*

* Remote capacity can only be used to power the EF43D or EF44D remote fixtures or to extend the battery units emergency run time beyond the standard 90 minutes.

Example: **EL_2LEDR**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

EFXPW= Wall Bracket Mount



EFXP Series

Explosion-Proof Remote Exit Signs

Standard Features

- Available with 6, 12 and 24 volt lamps for DC operation or 120 volt AC fixtures
- Exits shown are explosion-proof fixtures of heavy cast aluminum construction with Pyrex® lenses. Exit housing is an 18 gauge fabricated steel box with a baked enamel finish. Stenciled exit lettering is available on one or two faces. All EFXP Series have extra large downlight openings
- EFXP units are designed for mounting in locations that are remote from the power source. If the power source is installed outside hazardous areas, the length of the connection wires should be carefully considered to ensure that the voltage of the emergency power unit and the wire size of the connecting circuit are adequate to offset the voltage drop in the circuit
- Sealed test switch
- Complies with NEC, OSHA and NEMA specifications for the following Classes and Groups:
  Class I, Division 1 & 2, Groups C & D (300W PS-25 max)
  Class II, Division 1 & 2, Groups E, F & G (60W max)
  Class III, Division 1 & 2 (150W max)
  UL924 Listed for use in Paint Spray Areas (75W max)
  Suitable for Wet Locations
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Pyrex® is a registered trademark of Corning Glass.



EFXPP= Adjustable Pendant Mount



EFXPC= Ceiling Mount

Mounting

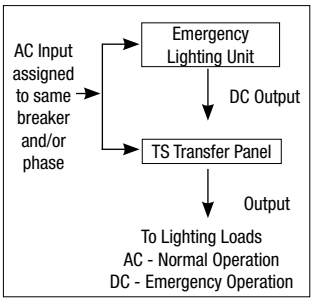
The transfer circuit is not designed for use in hazardous or explosive areas. The transfer circuit is to be mounted remotely from hazardous areas.

Electrical Specifications for Transfer Panel

Input Voltage:
From AC - 120 Volt, 60Hz, 1 phase (other voltages available).
From DC - 6, 12, 24 or 120 Volt (select).

Output Voltage: Must be identical to DC Input Voltage

Wattage: Panel oversized 10-20% greater than total connected load.



Unit Warranty*

Entire unit (excluding lamps) carries a 3-year Full Warranty.

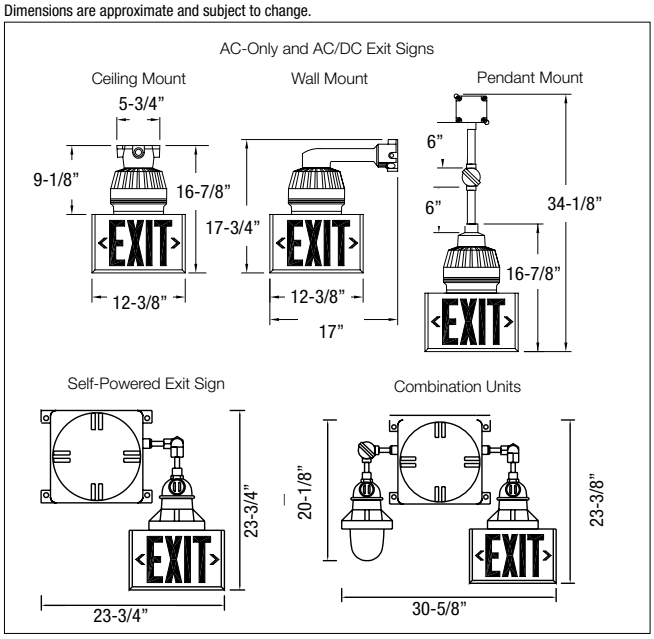
*Subject to proper installation and maintenance.

Power Consumption Chart

120/277VAC, 60Hz maximum 0.3/0.15A

Dimensions

Dimensions are approximate and subject to change.



Lamp Selection

Lamp Type	Voltage	Power	Lamp Type	Average Life (hours)	Suffix
Quartz Bi-Pin	6V	15W	JC-6V15W	2,000	XX6
Medium Base	12V	25W	25A-12	1,000	XX12
	24V	25W	143A	1,000	XX24
	120V	25W	A19	2,500	AC/20
LED Lamp, Red	120V	5W	–	100,000	XX120

How to Order

SERIES	MOUTING	LAMP TYPE		# OF FACES	LETTERS
EFXP= Exit series	**C**= Ceiling mount **P**= Pendant **W**= Wall	**XX6**= 6V-15W (DC only) **XX12**= 12V-25W (DC only) **XX24**= 24V-25W (DC only)	**AC120**= 120V-25W (AC only) **XX120**= 120V-5W LED	**1**= Single face **2**= Double face **3**= Triple face	**-R**= Red **-G**= Green

Example: **EFXPC(XX6)-2R**

AC VOLTAGE	DC VOLTAGE	SERIES	LOAD WATTAGE	
120= 120VAC **277**= 277VAC	**-6**= 6VDC **-12**= 12VDC **-24**= 24VDC	**-TS**= Transfer circuit	**-25**= 25W **-50**= 50W	**-75**= 75W **-100**= 100W

Example: **120-6-TS-25**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

EFEP Series

Remote Explosion-Proof Lighting Fixtures

EFEPC= Ceiling mount – 11 lbs.



EFEPP= Pendant Mount with hanger box & pendant – 14 lbs

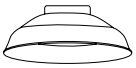


Features

- Available with 6, 12 and 24V lamps for DC operation or 120V AC fixtures.
- Manufactured of heavy cast aluminum with an epoxy finish and a Pyrex® lens. All attached hardware has been designed for explosion-proof applications.
- Designed for mounting in locations that are remote from the power source. If the power source is installed outside hazardous areas, the length of connection wires should be carefully considered to ensure that the voltage of the emergency power unit and the wire size of the connecting circuit are adequate to offset the voltage drop in the circuit.
- EFEPP and EFEP1, 2 and 3 fixtures include elbows swivels, a conduit extension pipe (6" increments), and a combination explosion-proof junction box/mounting plate (4" box, 6 1/4" mounting center).
- Complies with NEC, OSHA and NEMA specifications for the following Classes and Groups:
  Class I, Division 1 & 2, Groups C & D (300W PS-25 max)
  Class II, Division 1 & 2, Groups E, F & G (60W max)
  Class III, Division 1 & 2 (150 watt max)
  UL924 Listed for use in Paint Spray Areas (75W max)
  Suitable for Wet Locations
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Pyrex® is a registered trademark of Corning Glass.

Standard Configurations for EXC Series

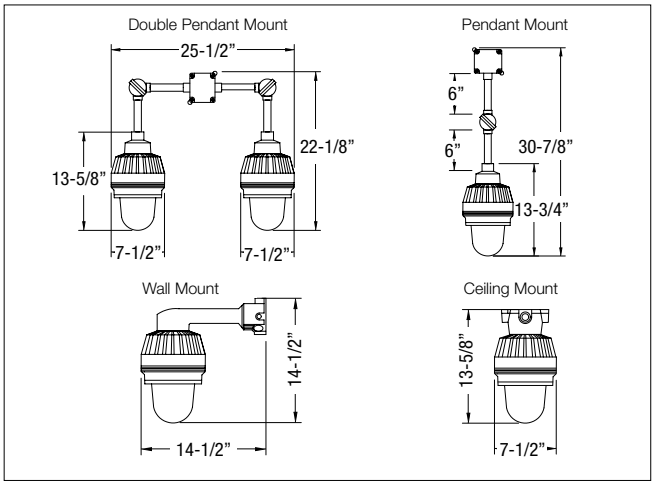
UNIT	DESCRIPTION	SUFFIX
	**Guard** One-piece aluminum casting construction, attaches to globe holder ring with four screws.	GXP
	**Dome Reflector** Highly reflective white finish inside and out, attaches to globe holder ring with four screws.	RD
	**Angle Reflector** Highly reflective white finish inside and out, attaches to globe holder ring with four screws.	RA

Lamp Selection

Lamp Type	Voltage	Power	Lamp Type	Average Life (hours)	Suffix
Quartz Bi-Pin	6V	15W	JC-6V15W	2,000	XX6
Medium Base	12V	25W	25A-12	1,000	XX12
	24V	25W	143A	1,000	XX24
	120V	25W	A19	2,500	AC/20
LED Lamp, Red	120V	5W	–	100,000	XX120

Dimensions

Dimensions are approximate and subject to change.



Typical Specifications

Supply and install the **Emergi-lite® EFEP Series** of hazardous location remote heads. The head housing will be die cast aluminum with gray epoxy powder coat finish. The lens shall be a clear, impact and heat resistant prismatic glass globe. The head shall be factory sealed. External seals shall not be required. The remote head shall come complete with a ___ mounting connecti<on and include _____ lamp(s) rated _____ volts _____ watts. The remote head shall be suitable for Class ___, Division ___, Group ___.

The remote head shall be **Emergi-lite®** Model - _____.

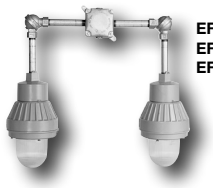
Unit Warranty*

Entire unit (excluding lamps) carries a 3-year Full Warranty.

*Subject to proper installation and maintenance.



EFEPW= Wall bracket mount 14 lbs.



EFEP1= Single 12 lbs.
EFEP2= Double 21 lbs.
EFEP3= Triple 30 lbs.

How to Order

SERIES	MOUNTING	LAMPS		OPTIONS
EFEP= Remote series	**C**= Ceiling mount **P**= Pendant **W**= Wall **2**= Double pendant mount	**(HB)**= 6V-8W bi-pin halogen **(HD)**= 6V-12W bi-pin halogen **(XX6)**= 6V-15W bi-pin halogen	**(HF)**= 12V-8W bi-pin halogen **(HG)**= 12V-12W bi-pin halogen **(AC)**= 120v-25W A19	**Blank**= No options **-GXP**= Aluminum guard **-RD**= Dome reflector **-RA**= Angle reflector

Example: **EFEPC(HB)-GXP**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____



EF43D & EF44D Series

Dedicated Indoor and Outdoor Remote Emergency Lighting

DISTRIBUTOR SELECT

Features

- Plastic housing and high output LED lamp source only available in 2-heads configurations
- Can only be powered from the EL-2LEDR battery or ELXN400-LEDR Combo exit unit
- EF43D is for remote indoor applications; draws 3.6V-3.36W
- EF44D is for remote outdoor applications; draws 3.8W
- 5-year full warranty

Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Construction

- Plastic housing and high output LED lamp source only available in 2 heads configurations
- Snap-together construction speeds installation
- Universal mounting plate with quick-connect feature
- Universal J-box pattern

Listings

- UL 924 listed
- UL indoor Damp location listed standard, 50°F (10°C)to 104°F (40°C)
- National Electrical Code (NEC)

Lamp Data

LED expected life is more than 10 years

Warranty

5-year full warranty

How to Order - Remote Heads

SERIES	NO. OF HEADS	LAMP	OPTIONS
EF43= Indoor series **EF44**= Outdoor weatherproof series	**D**= 2	**-LED**= round LED array	**Blank**= Indoor remote **WP**= Outdoor weather proof remote

Example: **EF43D-LED**

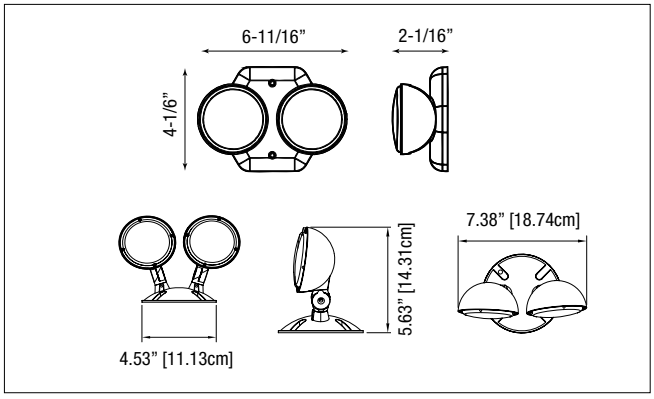
Suggested Specification

Supply and install the **Emergi-lite® ELXN400-LED Series** Combo Exit/emergency light unit. The compact housing and canopy shall be of impact resistant thermoplastic and allow for ceiling or wall installations. The overall dimensions (including canopy) shall be not more than 18-1/2in long by 8-1/2in high by 3in deep. The exit legend light source shall be long-life LEDs installed on a PCB strip. The emergency light source shall be long-life high output white LEDs with reflector/refractor combination optics inside a round shape housing. Unit shall have a dual input voltage of 120/277Vac 60Hz, be supplied with sealed Nickel-Metal Hydride maintenance free battery, and perform minimum 90 minutes of emergency illumination upon AC failure. The unit shall have provisions to power an extra dual remote light EF43D and EF44D for minimum 90 minutes of emergency illumination upon AC failure. The equipment shall be UL-924 listed for Damp location 50°F to 104°F (10°C to 40°C).

The equipment shall be **Emergi-lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

EC-2/ECX-2 Series

Thermoplastic Housing 6V-12W Capacity Lead-Calcium Battery

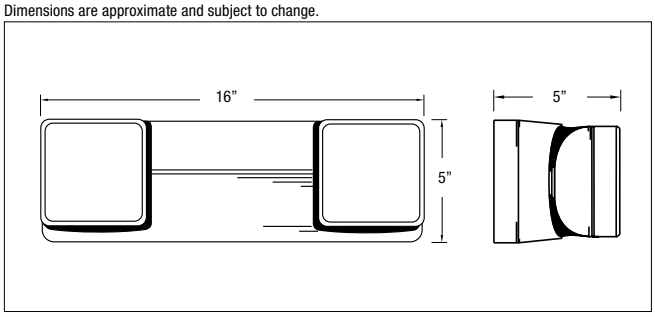


Features

- Each self-contained unit comes with two (2) 5.4W high intensity incandescent lamps mounted in polished reflectors
- Housing and heads are constructed of high-impact UL 94, 5VA flame classification, off-white thermoplastic. Resists denting, peeling, scratching and corrosion
- Available with sealed, maintenance-free Lead-Calcium batteries
- Integrated circuitry offers 120/277VAC 60 Hz, 0.3/0.15A standard operation, LED pilot light, automatic charging, instantaneous transfer, temperature compensated charger, low voltage battery disconnect, brownout protection, lock out (automatic battery connect) and reverse polarity protection
- Available with standard non-audible advanced diagnostic with 15 minutes time delay or advanced diagnostic audible with 15 minute time delay
- Universal mounting pattern, keyhole slots and conduit entry provide alternate mounting capability.
- The housing and back plate snap together for ease of installation
- UL924 Listed
- The EC-2 (12W max.) and ECX-2 (24W max.)
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Dimensions

Dimensions are approximate and subject to change.



Flexibility in an emergency lighting unit

• On the specification...

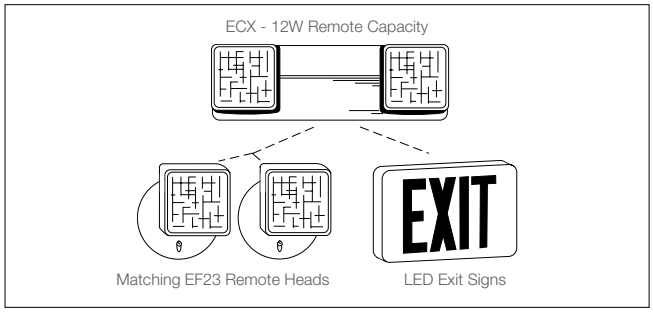
Its contemporary design allows you to coordinate the aesthetics of emergency specifications with matching models – an emergency unit and a remote head.

• On the job...

Changes on the job are never a problem with the EC Series. Its modular design allows you to field upgrade the basic model to a master unit for powering matching remote lighting heads or AC/DC exit signs, including the new LED even illumination models.

• On the shelf...

The modular design of the EC Series gives you a contemporary family of decorative emergency lighting units, matching exit signs and remotes.



Suggested Specification

Supply and install **Emergi-Lite® Model EC-2**, 6 volt, 12 watt _____ or ECX-2, 6 volt, 24 watt _____ emergency lighting unit. Unit shall be fully automatic, self-contained, maintenance-free and be UL listed to Standard 924.

Circuitry: shall include: 120/277 volt dual input transformer, automatic charging, instantaneous transfer, test switch and a long life LED AC charge monitor light. The charger shall utilize a computer tested integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, shortcircuit protected and reverse polarity protected. The charger shall recharge the battery to rated capacity as per UL924 specifications. Electrical features shall include a Low voltage batter y disconnect circuit to protect the battery from deep discharge damage. Brownout protection for automatic unit operation when utility power drops low enough to dim incandescent lamps and extinguish fluorescent and HID lamps. Battery lockout feature to prevent battery discharge during installation to a non-energized circuit.

Battery: shall be 6 volt, maintenance-free and have starved electrolyte in a sealed case. To prevent loss of electrolyte through gassing, the battery shall operate by the principle of electrolyte recombination.

Housing and Heads: The housing and heads shall be constructed of, UL 94V-5VA flame classification off white thermoplastic. The unit shall resist denting, peeling, scratching and corrosion. Heads shall have high intensity incandescent lamps mounted in polished reflectors.

Mounting: The unit shall be mountable in any orientation,on walls or ceilings. A universal mounting pattern, rear key-hole slots, and conduit entry on one side shall be provided. The housing and backplate shall be designed for snap-together assembly to eliminate screws and facilitate easy installation.

The unit shall be **Emergi-Lite®** model: _____.

Self-Diagnostic Models

Advanced Diagnostics (audible and non-audible versions) Our Advanced Diagnostic circuitry was designed to continuously monitor every critical function of the unit, attached remote lighting heads and exit signs. Operational status is indicated by colored LED lamps. A high-pitch audible alarm if selected and an LED status indicator alert maintenance personnel of a unit malfunction. The self-testing program will periodically test the unit in accordance with NFPA 101, Life Safety Code. This option saves the time spent on testing and trouble shooting by maintenance personnel. This new generation of Emergi-Lite diagnostics is perfect for any application.

Self-testing in accordance with NFPA 101, Life Safety Code. Unit tests itself every thirty days for one minute, thirty minutes on the sixth month and ninety minutes annually.

Unit Rating Chart

Furnished with two 5.4W high intensity incandescent lamps.

UNIT EQUIPMENT				
Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	Watts to 90 minutes	Remote Watts
Lead-Calcium	6	EC-2	12	–
Lead-Calcium	6	ECX-2	12	12
Lead-Calcium	6	EC-2-AD	12	–
Lead-Calcium	6	ECX-2-AD	12	12
Nickel-Cadmium	6	EC-2-AD-N	12	–
Nickel-Cadmium	6	ECX-2-AD-N	12	12

ECX-2 SERIES UNIT EQUIPMENT - WITH REMOTE CAPABILITY				
Sealed Maintenance-Free Battery Types	Watts to 87-1/2% of rated battery voltage*			
	1-1/2 hrs	2 hrs	3 hrs	4 hrs
Lead-Calcium	24	15	–	–
Nickel-Cadmium**	24	18	12	–

* National Electrical Code Specification

** Only available with Diagnostics

How to Order

COLOR	SERIES	HEADS/LAMPS	OPTIONS	BATTERY OPTION
B= Black housing **Blank**= Off white	**EC**= 6V-12W battery unit **ECX**= 6V-24W battery unit	**Heads** **-2**= Two heads (12W remote) **Lamps** **-2HA**= 6V-6W Bi-Pin halogen **-2HB**= 6V-8W Bi-Pin halogen **-2HC**= 6V-10W Bi-Pin halogen **-2HD**= 6V-12W Bi-Pin halogen	**-EG**= Standard unit **-AD**= Advanced Diagnostics (audible) **-ADNA**= Advanced Diagnostics (non-audible) **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes)* **-DL**= Damp Location listed (AD/ADNA units only) * Standard in -AD & -ADNA models	**Blank**= Lead-Calcium **-N**= Nickel-Cadmium battery (AD/ADNA units only)

Example: **BEC-2-EG-N**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

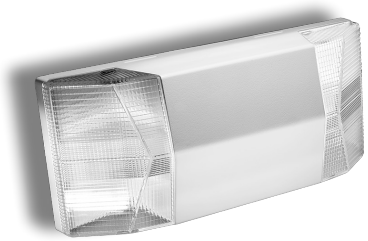
_____

NOTES: _____

THE ESCORT II SERIES

DLM-2 Series

Thermoplastic Housing 6V-12W Capacity Lead-Calcium Battery Unit



DISTRIBUTOR SELECT

Standard Features

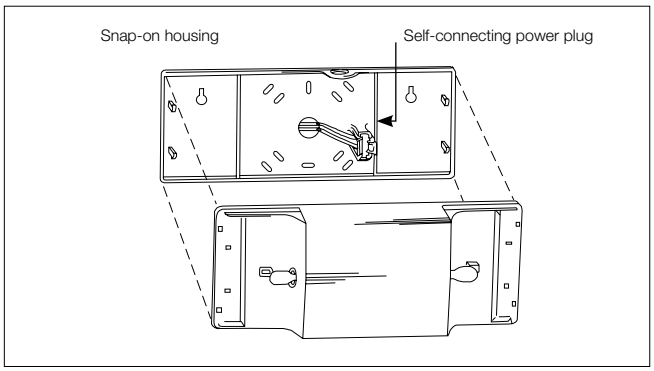
- Each self-contained unit comes with two (2) 6V high intensity glass wedge based incandescent lamps.
- Constructed of high-impact UL recognized 94V 5VA thermoplastic. Resists denting, peeling, scratching and corrosion. Transparent polycarbonate lens.
- Sealed, maintenance-free Lead-Calcium batteries.
- Integrated circuitry offers 120/277VAC 0.08/0.04A standard, automatic charging, instantaneous transfer, test switch, long life LED AC charge monitor light, temperature compensated charger, short-circuit proof and reverse polarity protected. Low battery voltage disconnect, brownout protection, and lockout (automatic battery connection).
- Can be mounted in any orientation on walls or ceilings. No screws or other mounting hardware is visible.
- UL924 Listed
- Damp location standard
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Performance

In both mechanical and electrical performance, the **DLM-2** is a superior value in its class.

Its tough thermoplastic body and flush mounted heads will not dent, peel or corrode. The snap-together lens and body and self-connecting power plug make installation quick and easy.

Electrical performance is assured by a 6 volt maintenance-free Lead-Calcium battery and a solid state charger with premium features such as: lockout, Temperature compensation, and low voltage disconnect. Selectable 120/277 standard operation.



Suggested Specification

Supply and install **Emergi-Lite® Model DLM-2**, 6 volt, emergency lighting unit. Unit shall be fully automatic, selfcontained, maintenance-free and listed to UL 924.

Circuitry: shall include a 120/277 Vac 60 Hz, 0.08/.04 Amps transformer, automatic charging/instantaneous transfer, test switch, long life LED AC charge monitor light. The charger shall utilize a computer tested integrated circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, shortcircuit protected and reverse polarity protected. The charger shall recharge the battery per UL924 specifications. Electrical features shall include: Low voltage battery disconnect, Brownout protection, and Battery lockout.

Battery: shall be 6 volt, maintenance-free and have starved electrolyte in a sealed case. To prevent loss of electrolyte through gassing, the battery shall operate by the principle of electrolyte recombination.

Housing/Heads and Lens: The housing/heads shall be constructed of high impact, UL recognized, 94, 5VA thermoplastic. The unit shall resist denting, peeling, scratching and corrosion. Lamps shall be high intensity allglass wedge base. The transparent lens shall be constructed of polycarbonate. Alternate lamp sockets shall be provided to adjust photometric pattern.

Mounting: The unit shall be mountable in any orientation, on walls or ceilings. A universal mounting pattern, rear key-hole slots, and conduit entry on the top shall be provided. The lens, housing and backplate shall be designed for snap-together assembly to eliminate screws. A self-connecting power-plug shall be provided to facilitate easy installation.

Lamps: two lamps 6V 5.4 W wedge-base incandescent).

Unit Warranty*

Entire unit (excluding lamps) carries a 3-year Full Warranty.

Battery Warranty*

Sealed Lead-Calcium: 8-year life expectancy.

3-year Full Warranty, plus 3-year pro rata warranty.

* Subject to proper installation and maintenance.

Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Wire Guard	WG3-E

Power Consumption/Unit Rating

Series	Battery Type	DC Voltage	Watts to 87-1/2% of rated battery voltage*				Units Dual Voltage*	Current Maximum
			1-1/2 hrs	2 hrs	3 hrs	4 hrs		
DLM-2	Lead-Calcium	6V	12	–	–	–	120VAC 277VAC	08A .04A

* Stand-by power consumption is 50% lower for Lead-Calcium batteries.

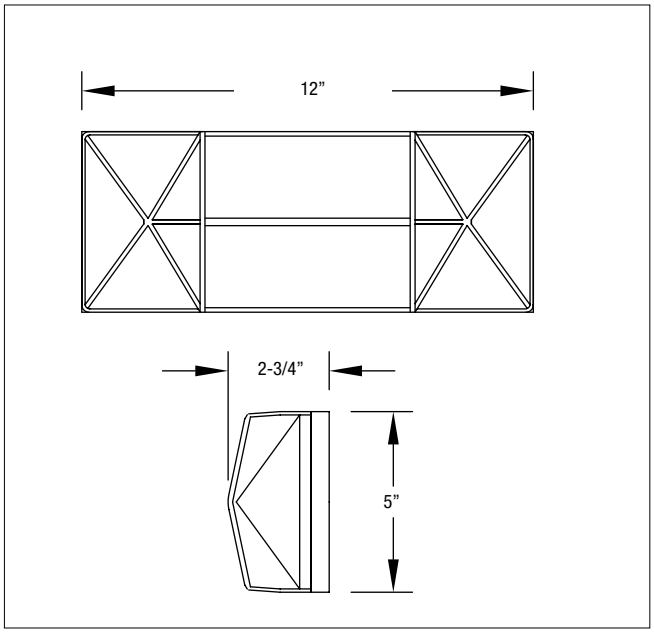
How to Order

SERIES
DLM-2= DLM-2 Battery-Powered Emergency Lighting

Example: **DLM-2**

Dimensions

Dimensions are approximate and subject to change.



All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Distinction™ EF150, EF150D & EF150T Series

Surface Mounted Designer Light Fixtures



Features

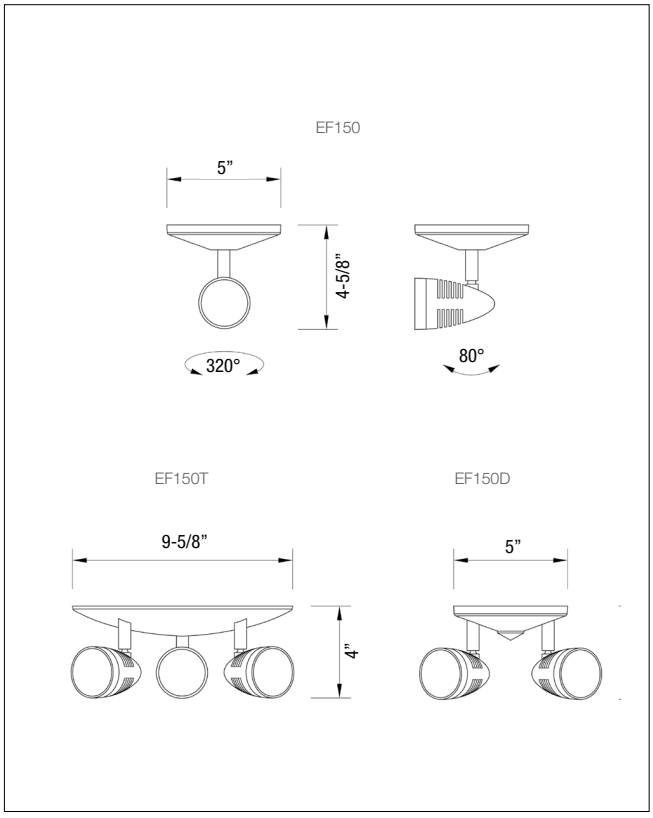
- White or black finish available.
- **EF150:** Single compact adjustable decorative lighting head.
  Dimensions: 4.48" diameter base, 5.2" height
- **EF150D:** Double compact adjustable decorative lighting heads.
  Dimensions: 4.48" diameter base, 4.0" height
- **EF150T:** Triple compact adjustable decorative lighting heads.
  Dimensions: 11.0" diameter base, 5.2" height
- Indoor use
- Die-Cast aluminum
- Fully tool-less adjustable aiming swivel head
- Clear glass lense
- Surface mount
- Includes canopy plate for mounting to a standard 4" octogonal electrical box
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	PART NUMBER
Wire Guard for EF150, EF150D	WG8-E
Wire Guard for EF150T	WG2-E

Dimensions

Dimensions are approximate and subject to change.



How to Order

SERIES	# OF HEADS	COLOR	LAMP TYPE/WATTAGE
EF150= Decorative MR16 remote head	**Blank**= Single head **D**= Double head **T**= Triple head	**Blank**= White **-B**= Black	**(LA)**= 6V-4W, MR16 LED **(LG)**= 12V-4W, MR16 LED **(LL)**= 24V-4W, MR16 LED **(LI)**= 12V-5W, MR16 LED **(LJ)**= 12V-6W, MR16 LED **(LV)**= 120V-4W, MR16 LED **(M_)**= Halogen MR16 50W max* * See lamp chart for lamp code 50W use heat shield

Example: **EF150D-B(MK)**

Thomas&Betts
A Member of the ABB Group

EMERGI-LITE®

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

Distinction™ Series

Remote Recessed Designer Light Fixtures



Features

- Indoor Use
- Powder-coated Die-Cast aluminum construction
- Tool-less lamp head adjust ability
- Glass MR16 lamp lens
- Choice of MR16 Halogen or LED lamp
- Choice of White, Black, Chrome, Brushed Nickel or Polished Brass
- Recessed ceiling mount
- Must order appropriate housing with decorative head selection for installation into new construction ceiling (EL-GRHR03) or insulated ceiling (EL-GRHR06)
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

How to Order

SERIES	COLOR*	LAMP TYPE/WATTAGE
EFR2 **EFR8R** **EFR8NB** **EFR9WH**	* Choose color from the above table	**-(L_)**= LED MR16 (see table above)* **-(M_)**= Halogen MR16* * For a complete list of available lamp types, please refer to the lamp data on p 140-141

Example: **EFR8R-BK-(MA)**

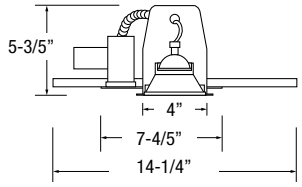
HOUSING

EL-GRHR03= New Construction
EL-GRHR06= Insulated Ceilings

Dimensions

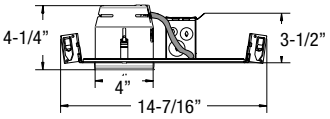
Dimensions are approximate and subject to change.

New construction housing.
Total height: 5.6".



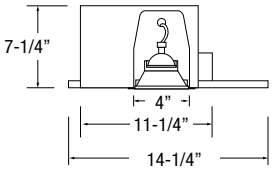
EL-GRHR03

New construction housing for GU10



EL-GRHR05

Insulated ceilings housing
Total height: 7.25"



EL-GRHR06

SERIES			LED LAMP SUFFIX
	EFR2	**Description:** Decorative pop-up adjustable lighting head **Dimensions:** 4.0" diameter base **Color Suffix:** -WH= White, -BK= Black, -CH= Chrome, -PB= Polished brass, -BN= Brushed Nickel **Required recessed housing**	**N/A**
	EFR8NB	**Description:** Decorative adjustable lighting head **Dimensions:** 4.0" diameter base **Color Suffix:** -WH= White or -BN= Brushed nickel **Requires recessed housing**	**LA**= 6V-4W, MR16 LED **LG**= 12V-4W, MR16 LED **LL**= 24V-4W, MR16 LED
	EFR8R	**Description:** Decorative adjustable lighting head **Dimensions:** 4.0" diameter base **Color Suffix:** -WH = White or -BN = Brushed nickel **Requires recessed housing**	**LA**= 6V-4W, MR16 LED **LG**= 12V-4W, MR16 LED **LL**= 24V-4W, MR16 LED **LI**= 12V-5W, MR16 LED **LJ**= 12V-6W, MR16 LED **LV**= 120V-4W, MR16 LED
	EFR9WH	**Description:** Decorative adjustable lighting head **Dimensions:** 4.0" diameter base **Color Suffix:** -WH = White **Requires recessed housing**	**LA**= 6V-4W, MR16 LED **LG**= 12V-4W, MR16 LED **LL**= 24V-4W, MR16 LED **LI**= 12V-5W, MR16 LED **LJ**= 12V-6W, MR16 LED **LV**= 120V-4W, MR16 LED
	EL-GRHR03	**Housing Enclosure** **Description:** New construction housing **Dimensions:** 5.6" x 14.24" **New construction housing – MR16 6-24V**	–
	EL-GRHR05	**Housing Enclosure** **Description:** New construction housing **Dimensions:** 5.6" x 14.24" **New construction housing – MR16 120V (GU10)** NOTE: For MR16 Halogen lamps, please consult Lamp Data p. 140-141	–
	EL-GRHR06	**Housing Enclosure** **Description:** Insulated ceilings housing **Dimensions:** 7.25" x 14.24" **Insulated ceilings housing – MR16 6-24V**	–

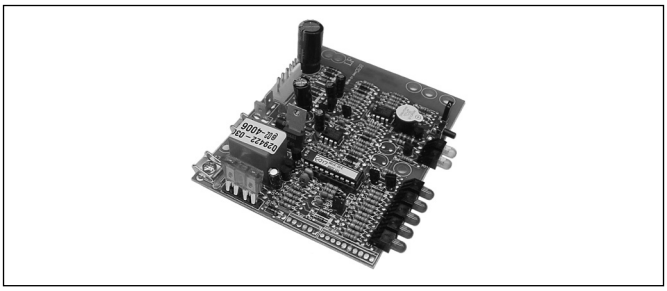
All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products. 2016© Thomas & Betts Limited. All rights reserved.

EMERGI-LITE®

TYPE: _____

CATALOG #: _____

NOTES: _____



Advanced Diagnostics

Standard Features

By incorporating our most popular standard diagnostics features with a high-powered 8-bit microcontroller, our new Advanced Diagnostics system assures unsurpassed reliability in one, totally contained system. In the event of an equipment malfunction, the Advanced Diagnostics system produces an audible warning in the form of an intermittent beep and the LED indicator associated with the fault will illuminate continuously. When the problem is acknowledged by depressing the alarm/silence/test button, the alarm is silenced and the LED indicator changes to a flashing mode until the problem is corrected.

- Continually monitors system parameters
- Incorporates state-of-the-art microcontroller technology
- AD includes audio and visual service alarms
- ADNA non-audible version for visual service alarms only
- Self-testing in accordance with NFPA101, Life Safety Code



Features

Battery Failure
(Red) Illuminates if the battery is shorted or battery voltage drops below preset value. Will also detect incorrect battery (ie.6Vdc vs. 12Vdc)

Battery Disconnect
(Red) Illuminates if the battery circuit is open.

Charger Failure
(Red) Illuminates when charger is not functioning properly by monitoring the charger current.

Lamp Failure
(Red) Illuminates when one or more emergency lamps fail. Also monitors remote lamps.

Service Alarm
(Red) Illuminates when a fault is detected that requires a qualified service technician.

AC-On
(Green) Lit when line voltage is present.

Charger On
(Amber) Illuminates when charger is recharging the battery.

Alarm On
Button is used to acknowledge and silence alarms. Also functions as a manual test switch to simulate a power failure.

Self Testing
Unit tests itself every thirty days for minimum of 30 seconds, thirty minutes on the sixth month and ninety minutes annually.

To Order for Compatible Unit

Add Suffix: AD to model number

Add Suffix: ADNA (for non-audible circuit) to model number

Thomas&Betts

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

_____

NOTES: _____

nexus ADVANCED AD DIAGNOSTICS

24 LS & 24 LC Series

24 Volt Steel Enclosure



Features

- Each unit comes with two (2) EF-18 heads with 9 watt high intensity incandescent lamps (standard)
- All-steel construction with an off-white baked enamel finish
- Available with sealed, maintenance-free Nickel-Cadmium, Lead-Calcium (Immobilized Electrolyte), or Lead-Calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC, input 60 Hz., 0.3/0.15A (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low voltage battery disconnect, brownout protection and lock out (automatic battery connect)
- Removable front panel
- UL924 Listed
- 3-year limited warranty
  Detailed warranty terms located at: www.emergi-lite.com/usa/files/EL_Warranty.pdf

Accessories (order as a separate item)

DESCRIPTION	SUFFIX
Mounting bracket (cabinet B)	B2
Mounting shelves (cabinet B)	MP3-EG
Mounting shelves (cabinet C)	MP6-EG
Mounting shelves (cabinet D)	MP12
Wire Guard (cabinet A)	WG2-E
Wire Guard (cabinet B & C)	WG3-E
Wire Guard (cabinet D)	WG4-E

Unit Data

Housing: Heavy duty code gauge steel construction, off-white baked enamel cabinet with a removable front panel for ease of install ation and servicing.

B cabinet has a universal mounting cluster. All cabinets are furnished with 7/8" conduit knockouts, rear keyhole mounting slots, and provisions for mounting up to 3 heads on cabinet. Light Source: two EF18 heads furnished standard with 9 watt lamps Self-testin g in accordance with NFPA 101, Life Safety Code. Unit tests itself every thirty days for one minute, thirty minutes on the sixth month and ninety minutes annually.

Electrical

Power Requirements: 120/277VAC, 60 Hz., 0.3/0.15 Amp (other inputs available). Output: 24 Vdc, 2 fused output circuits. **Transfer:** dust-tight sealed relay automatically and instantly energizes lamp load upon failure of A.C. supply. **LVD:** low voltage battery disconnect circuit automatically shuts down lamp load and circuitr y when battery reaches 87-1/2% of its nominal voltage, preventing deep discharge and permanent damage to the battery. **Lockout:** labor saving electronic circuit automatically connects battery when A.C. circuit is activated. **Brownout:** close tolerance electronic circuit activates emergency unit when utility power dips below 80-85% of nominal voltage. **Charger:** The Pulse-Plus charging circuit utilizes a microprocessor which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger is current limited, temperature compensated, short-circuit protected and reverse polarity protected. The equipment is capable of full recharge in compliance with UL 924 specifications. **Transformer:** 120/277VAC. **Controls:** test switch, dual diagnostic LED indicator lights (hi-charging, AC pilot).

Suggested Specification

Supply and install **Emergi-Lite®** Series 24 LSC_____ 24 LSE_____, 24 LC_____ or 24 LSM_____ in 24volt, double heads, with electrically compatible remote. exit signs as indicated on the plans. The emergency lighting unit shall be an architecturally designed, self-contained fixture including sealed, maintenancefree battery.

TYPE 24LSC to be supplied with long life Nickel-Cadmium battery.

TYPE 24LSE to be supplied with long life pure lead battery.

TYPE 24LSM to be supplied with Lead-Calcium battery.

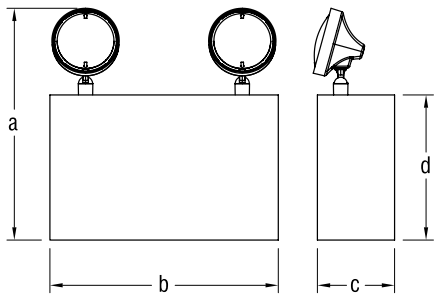
TYPE 24LC to be supplied with Lead-Calcium (free electrolyte) battery.

The unit shall supply the rated load for a minimum of 1-1/2 hour s or to 87-1/2% of rated battery voltage. The unit shall be rated 120/277VAC, 60 Hz and be UL924 listed. The unit charger shall utilize a solid-state circuit which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated and an electronic brownout circuit which will activate the unit when utility power dips below 80-85% of nominal voltage. A low voltage battery disconnect circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 87-1/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with a sealed dust-tight relay, a test switch and dual diagnostic LED indicator lights (hi-charge and AC pilot). The cabinet shall be constructed of ____*gauge steel in offwhite enamel color. A removable front panel shall be furnished to provide full access for ease of installation and servicing. B cabinet units shall have a universal mounting cluster. All cabinets shall be furnished with 7/8" conduit knockouts, rear keyhole mounting slots (bracket or shelf available as an option) and pr ovisions for mounting up to 3 heads on cabinet. Unit will be furnished with two EF18 lighting heads constructed of impact resistant, flame retardant thermoplastic material complete with 9 watt lamps. Fused output terminals shall be provided for ease of remote lamp connections . Every 24 LS & 24 LC Series unit shall complete three full cycles of d ischarge and recharge before shipment and will be certified that this tes ting has been done. Every 24 LS & 24 LC Series unit shall be fully warranted for three years, subject to proper installation and maintenance.

The unit shall be **Emergi-Lite®** model: _____.

Dimensions

Dimensions are approximate and subject to change.



Cabinet Size	Dimensions			
	a	b	c	d
B	16-3/8”	16-1/8”	5-7/16”	10-1/4”
C	18-3/8”	16-1/2”	7-1/4”	12-1/4”
D	18-3/8”	27”	7-/4”	12-1/4”

Unit Warranty*

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty.

For complete warranty information,see Data Sheet ELW.

Battery Warranty*

Unit batteries are warranted as follows:

Sealed Nickel Cadmium: 12LSC – 10year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Long Life Lead: 12LSE – 12-year life expectancy, 5-year Full Warranty, plus 5-year pro rata warranty.

Sealed Lead Calcium: 12LSM – 8-year life expectancy, 3-year Full Warranty, plus 3-year pro rata warranty.

Sealed Lead Calcium (Immobilized Electrolyte): 24LC – 12- year life expectancy. 5-year full warranty, plus 5-year pro rata warranty.

*Subject to proper installation and maintenance

Unit Rating

Furnished standard with two 9 watt High Intensity Incandescent lamps.

Sealed Maintenance-Free Battery Types	D.C. Voltage	Model Number	Watts to 87-1/2% of rated battery voltage*				# of Load Fuses	Cabinet size
			1-1/2 hrs	2 hrs	3 hrs	4 hrs		
Nickel-Cadmium	24	24LSC72-2	72	42	24	12	2	B
	24	24LSC100-2	100	73	37	20	2	B
Lead-Calcium (Immobilized Electrolyte)	24	24LC300-2	300	240	132	72	2	D
	24	24LC350-2	350	280	168	96	2	D
	24	24LC400-2	400	336	192	96	2	D
Lead-Calcium	24	24LSM110-2	110	72	40	24	2	B
	24	24LSM220-2	220	144	80	48	2	C

*National Electrical Code Specification.

How to Order

COLOR	SERIES/CAPACITY	# OF LAMPS	HEAD STYLE	LAMP TYPE	OPTIONS
Blank= Off white **B**= Black enclosure	**LSC Series** **24LSC100**= 24V-100W Ni-Cd **LSM Series** **24LSM110**= 24V-110W Lead-Calcium **24LSM220**= 24V-220W Lead-Calcium **LC Series** **24LC300**= 24V-300W Lead-Calcium **24LC350**= 24V-350W Lead-Calcium **24LC400**= 24V-400W Lead-Calcium	**-0**= No heads **-1**= 1 head **-2**= 2 heads **-3**= 3 heads	**Blank**= EF18 (PAR 36 plastic) **9**= EF9 mini plastic **10**= EF10 mini plastic MR16 **32**= EF32 cylinder lamp heads **150**= EF150 MR16 lamp heads	**I_**= Incandescent DC-bayonet **Z_**= Incandescent wedge **M_**= Halogen MR16* **H_**= Halogen Bi-Pin **L_**= MR16 LED * Available with EF10 & 150 only NOTE: For a complete list of available lamp types, please refer to the lamp data on p. 140-141	**Blank**= No options **-AD**= Advanced diagnostics* **-ADNA**= Diagnostics non-audible* **-NEX**= Nexus® wired **-NEXRF**= Nexus® wireless **-V**= Voltmeter (A cabinet units. Choose A or V only) **-A**= Ammeter* **-D1**= Time Delay (5 minutes) **-D2**= Time Delay (10 minutes) **-D3**= Time Delay (15 minutes) **-CP**= Cord and plug 120V** **-E**= Cord and plug 277V * Minimum lamp load required: 20% of unit capacity. Not available with 24V-100W Ni-Cd ** Standard cord is 3 ft.

Example: **24LSC100-2150MH**

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions.
Illustrations and diagrams within this specsheet may vary from actual products.
2016© Thomas & Betts Limited. All rights reserved.

X10 Steel Series - Self Powered LED Exits

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Use caution when handling batteries. Avoid possible shorting.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Do not use this equipment for other than intended use.
8. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Route AC unswitched circuit of rated voltage into electrical box and leave 6” of wire length.
3. Remove exit face. To open the sign, remove screws from the end cap (See Fig. 1) and slide out the exit face and the fibreglass diffuser.
4. Remove the appropriate chevron(s) on the exit sign by supporting the exit face either side of the chevron and knock out carefully with a screwdriver from the rear (See Fig. 2).

Wall Mount

a. Knock out the proper hole pattern in the back plate to mount to the standard junction box (including the large wire hole); place a support on either side of the hole to be removed and knock out with a screwdriver.

b. Feed AC supply leads through the center hole.

c. Mount the exit sign securely to the junction box using the junction box screws (See Fig. 3).

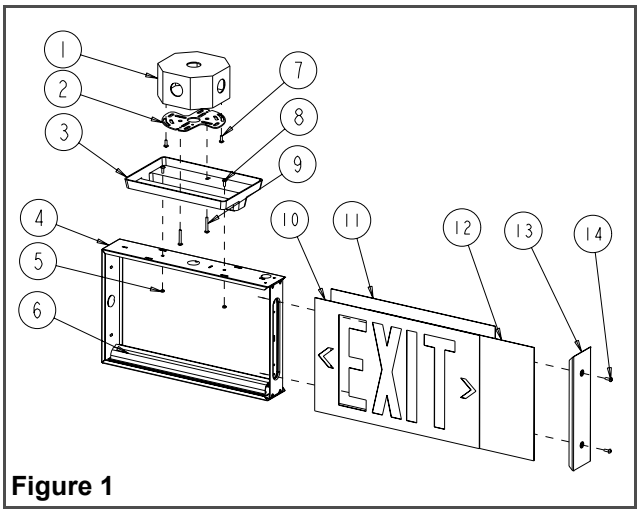


Figure 1

Part List

1. Junction box (existing)
2. Spider Plate
3. Canopy
4. Housing
5. Kep Nuts (2)
6. LED Strip
7. Junction box screws (not provided)
8. Screws #8-32 x 3/8” (2)
9. Screws #8-32 x 1-1/2” (2)
10. Exit face
11. Back Plate (or second exit face)
12. Diffuser Panel
13. End Cap
14. End cap screws (2)

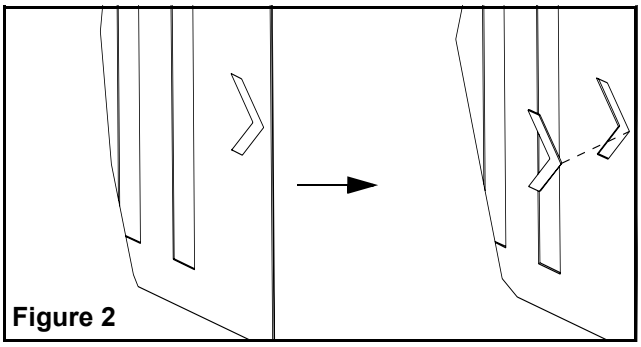


Figure 2

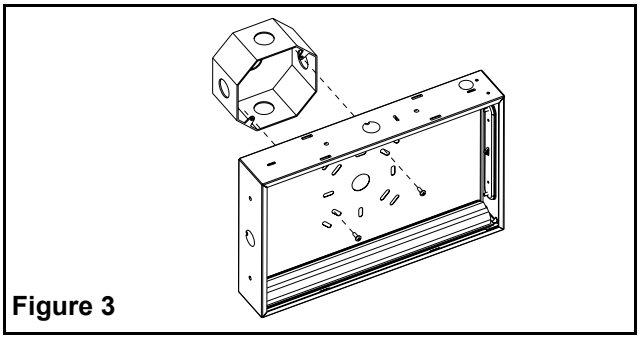


Figure 3

Canopy - Ceiling or End mount

a. Determine desired mounting location of sign.
b. Route AC wires from exit through large knockout. For ceiling mount, make sure backplate is mounted so exit face will be facing in desired direction.
c. Fasten the spider plate to the junction box using the junction box screws. Align the two threaded holes in the spider plate to line up with the canopy holes for correct mounting position, end or ceiling.
d. Fasten the canopy to the exit using #8-32 x 3/8" screws and kep nuts provided (See Fig. 4)
e. Fasten the canopy-exit assembly to the spider plate using the #8-32 x 3/4" screws provided.

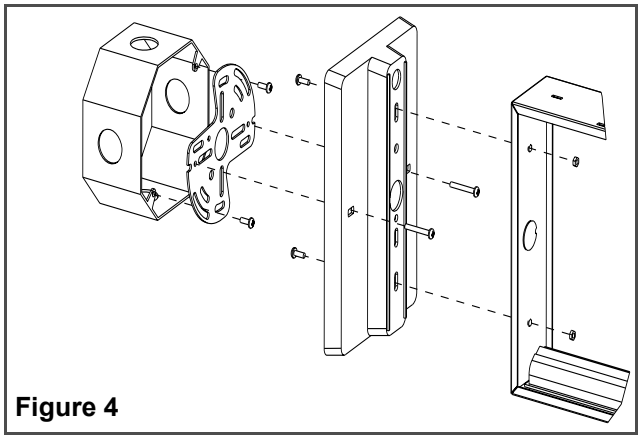


Figure 4

Electrical connection (LED models only)

a. Make the proper connections, our system accepts an input voltage of 120 to 350 VAC (see fig. 5). Connect the (120 to 350 VAC) and white (Neutral) leads to the building utility. Feed excess wire into the junction box. For remote power DC units, connect the red wire to the positive of the DC supply and the blue to the negative (6 to 24VDC).
b. Connect the green ground wire to the service ground or the ground connection in the junction box.
c. When ready to energize AC, plug in battery connector to circuit board. Connect battery and turn on AC power within 6 hours.
d. Turn on AC supply. LED strip will light and red pilot light will illuminate. Allow 24 hours charge before initial duration testing.
e. Slide the diffuser panel, exit face and back plate, if removed, into the housing. Secure end cap with the appropriate screws.
f. AC must be ON while battery is connected.

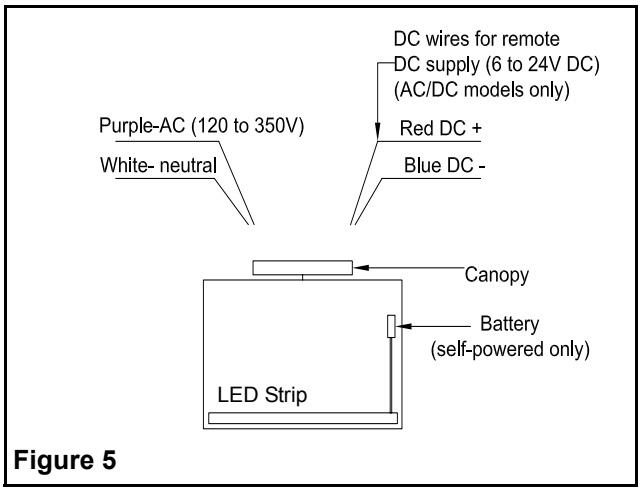


Figure 5

Electrical connection (Incandescent models only)

a. Connect wires, 120VAC to black and Neutral to white. Push the wirenuts back into the junction box and route wires as far away from the lamps as possible to avoid shadows or damage to the insulation.
b. Install AC lamps.
c. Turn on AC supply.
d. Slide the diffuser panel, exit face and back plate, if removed, into the housing. Secure end cap with the appropriate screws.

Testing

Operate test switch, LED strip will brighten. Release test switch, LED strip will dim and pilot light will be illuminated. If LED strip appears dim or does not light on test, leave AC connected for at least 15 minutes and retest. If still incorrect, contact a serviceman or the factory for assistance.

Maintenance

None required. Unit should be tested monthly in accordance with safety codes and local codes. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.

Installation instructions

Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp head.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the flat surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the lamp head into its final position.
5. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
6. Use the junction box screws to secure the canopy to the junction box.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).

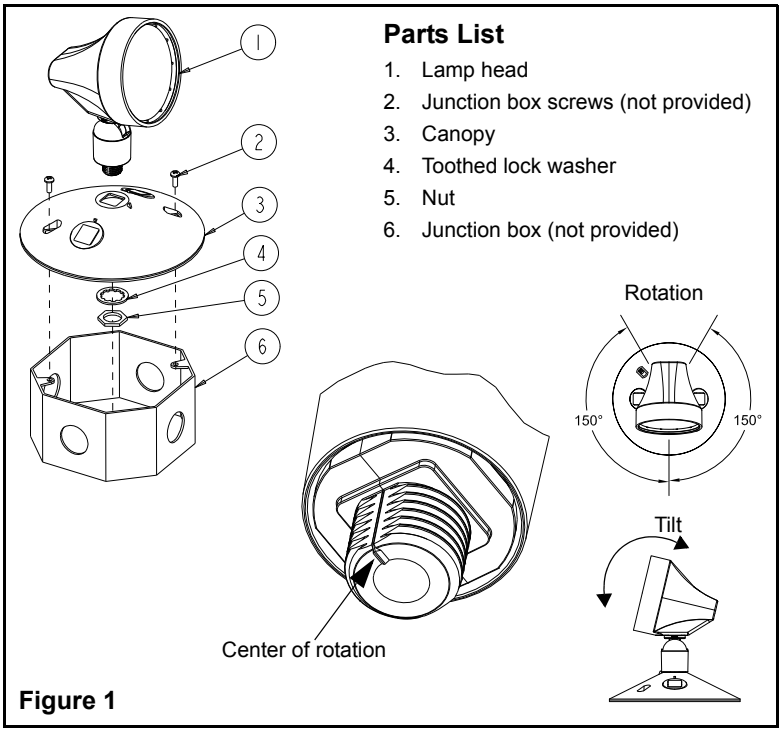


Figure 1

EMERGI-LITE

Remote heads – Installation instructions

Installation instructions

Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp head.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the flat surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the lamp head into its final position.
5. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
6. Use the junction box screws to secure the canopy to the junction box.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).

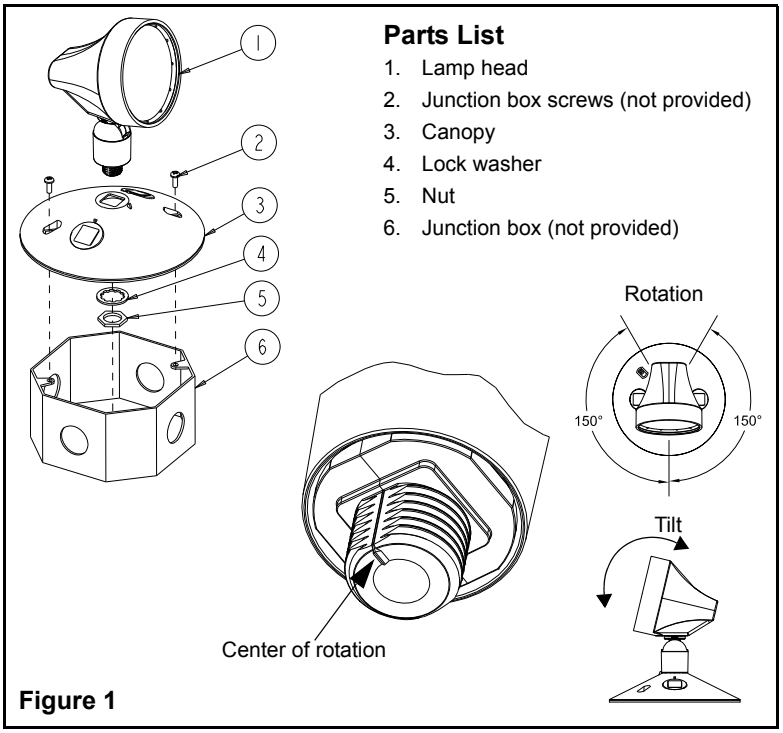


Figure 1

Emergi-Lite Tel: (888) 552-6467 Fax: (800) 316-4515 www.emergi-lite.com 10/12 750.1106 Rev. B

1/1

EC/IL/JS/LS/TS Series

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. All unused wires must be insulated to prevent shorting.
3. Do not use outdoors.
4. Do not let power supply cords touch hot surfaces.
5. Do not mount near gas or electric heaters.
6. Use caution when handling batteries. Avoid possible shorting.
7. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
10. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
11. Do not use this equipment for other than intended use.
12. Unit to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

Installation Instructions

IMPORTANT: Install fixture/lamp type combination no higher than the maximum mounting heights as stipulated in the “Lamp Mounting Height Cross-reference Table” (P/N 750.1924). Refer to “Technical Information” section of our website.

1. TURN OFF AC POWER.
2. Route AC circuit wires to electrical box and leave 12’’ of wire length.
3. Securely mount unit in place. Connect AC supply wiring to unit as follows:

For 120 VAC operation: Black to 120 VAC, White to neutral *
For 277 VAC operation: Orange to 277 VAC, White to neutral *
NOTE: Secure AC wires via wire clip after making connections.

IMPORTANT: Wiring connections need to be done away from PCBA and in designated area as shown in figure 1.

4. Extend DC wiring for remote fixtures, (if required), to unit. Wiring must comply with NEC articles 700 and 720. Do not exceed rated wattage of unit.
5. When ready to energize AC, plug polarized battery connector into circuit board. Lamps will not light at this time.
6. Energize AC. Pilot lamp and high charge LED will illuminate.
7. For conduit installation on the JS series, use 7/8’’ knockout located on the top of the enclosure.

Testing

(See separate booklet for units with AD option)
Allow one minute for unit to stabilize before testing. To test, depress test switch. Pilot lights will go out and emergency lamps will come on. When test switch is release, emergency lamps will go off and both pilot lights will come on. Allow a minimum of 24 hours charge time after installation or power failure for initial full load testing.

Maintenance

None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code, or local codes.

Important notice

This equipment is furnished with a low battery disconnect circuit in the emergency mode. If the building is to be unoccupied for an extended period of time and all the power is to be disconnected, the internal batteries must be unplugged from the circuit board to prevent damage. Do not allow the battery wires to short circuit.

WARNING: **Risk of serious injury.**
To prevent injury from falling battery, carefully hold batteries in place when removing and re-installing the securement bracket.
Take special care for ceiling mount configuration.

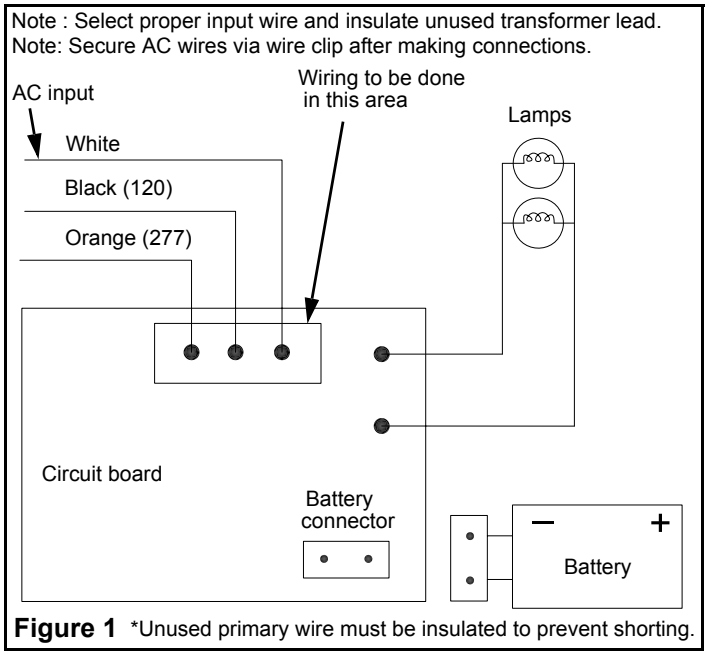


Figure 1 *Unused primary wire must be insulated to prevent shorting.

Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

Universal Recessed and Surface Mount LED EXIT Sign

AC and Self-Powered models

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Do not use outdoors.
3. Do not let power supply cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Do not use this equipment for other than intended use.
8. Use caution when handling batteries. Battery acid can cause burns to the skin and eyes. If acid is spilled on the skin or eyes, flush acid with fresh water and contact a physician immediately. Avoid possible shorting.
9. Allow battery to charge for 24 hours before first use.

SAVE THESE INSTRUCTIONS

Importunities sign shall be installed only where there is adequate colour contrast between the sign legend and the interior wall finish behind the sign, to provide for sufficient visibility.

Installation Instructions

Turn off AC power.

Recessed Ceiling Mounting

1. Refer to assembly drawing before you start installation (see figure 9).
2. Remove the front cover from the main frame by gently prying it open with a screwdriver then connect the battery connectors together.
3. Feed AC supply wires out of the main frame, then reinstall the front cover.
4. Remove 1 screw (PB3*12) from the top of the left and right end caps (see figure 2).
5. Mount the left bar hanger bracket onto the left end cap and screw it in with screws (PB3*15 and TM4*8), (do not pass the wires through this bracket) (see figure 3a).
6. Mount the right bar hanger bracket onto the right end cap and screw it in with screw (PB3*15 and plastic rivet), (pass the wires through this bracket) (see figure 3a).
7. Remove j-box cover and mount j-box case onto the main frame using the 2 screws (TM4*8). Feed AC supply wires into the j-box.
8. Mount bar hangers onto the bar hanger brackets with 4 screws (TM4*8) (see figure 3a or 3b depending on bar hanger configuration).

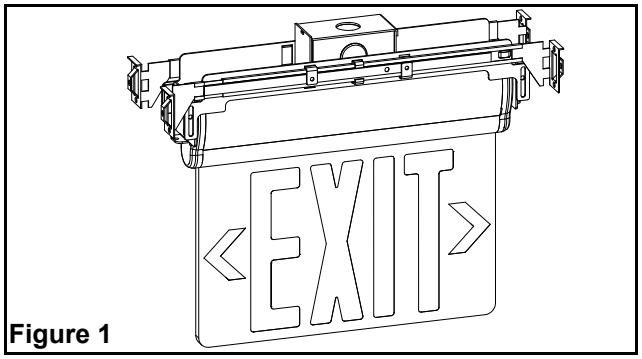


Figure 1

Package Contents

1. LED Edge-Lit EXIT Sign.
2. Adjustable Bracket and Bar hanger.
3. Hardware Bag.
4. Canopy
5. Mirror Film (Converts double face to single face.)



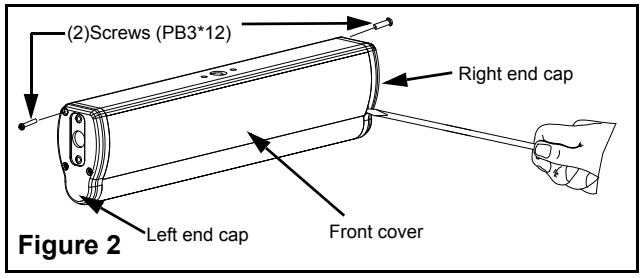


Figure 2

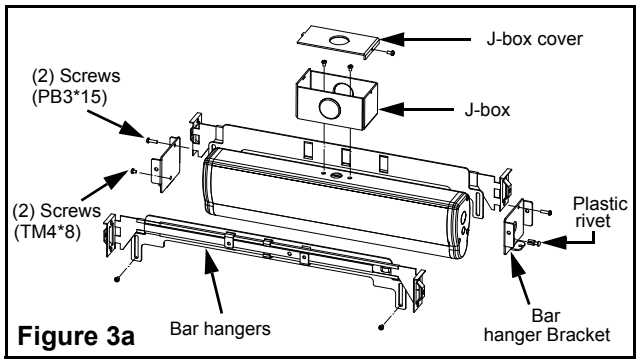


Figure 3a

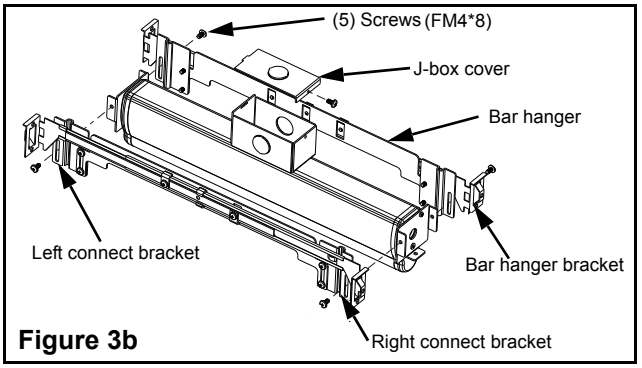


Figure 3b

9. Position bar hanger bracket and bar hangers between joists. Make sure bar hangers are oriented in the correct position. Bar hangers should be level with bottom of joists or T-bar (see figure 4). Note: when mounting onto a T-bar the bar hanger will need to be screwed into the T-bar with 4 self-drilling screw (not supplied) as shown in figure 9.
10. Adjust height of bracket vertically using adjusting slots and tighten all screws on adjusting slots and bar hanger bracket to secure bar hanger bracket and bar hanger.
11. Make the proper connections (see figure 5):
    a. For 120VAC, connect the black and white wires to the building utility.
    b. For 277VAC, connect the orange and white wires to the building utility.
    c. Connect the green ground wire to the ground.
    d. Cap unused wires. In all cases, use suitable wire nuts rated for the applicable voltage to connect to wires.

Self-powered models:

Be sure to snap the battery connector to the inverter PCB.

12. Connect the test switch connector and insert the LED indicator into the trim plate, (Self-power models only) then secure the trim plate by using the provided screws (see figure 6).
13. Insert EXIT panel into main body assembly gently. If EXIT panel is for a single face, make sure EXIT letter direction is correct (see figure 7).
14. Determine chevron placement: (see figure 8)
    a. If a chevron is needed leave the chevron on and remove only the film instruction.
    b. If no chevron is needed remove the chevron and film instructions together.
15. This unit can be mounted on any flat surface. The Exit panel can be rotated in any angle from 0° to 180° (see figure 10).

Recessed wall mount

Follow the same directions as in the ceiling mount except when finished the panel will rotate down 90°.

Recessed Ceiling and Wall Mount Assemble

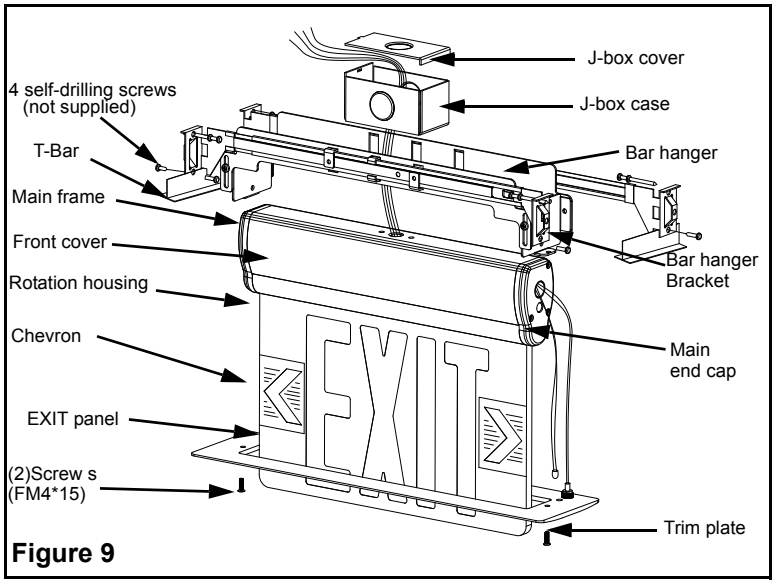


Figure 9

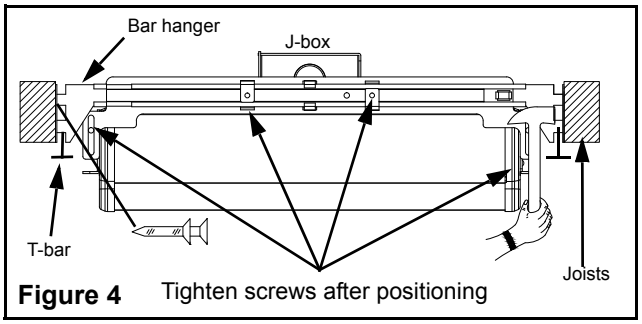


Figure 4 Tighten screws after positioning

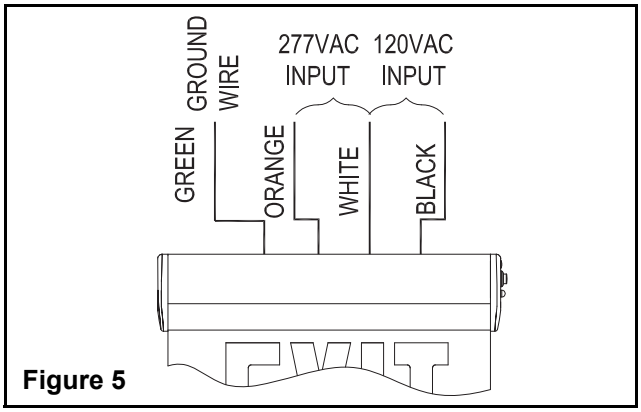


Figure 5

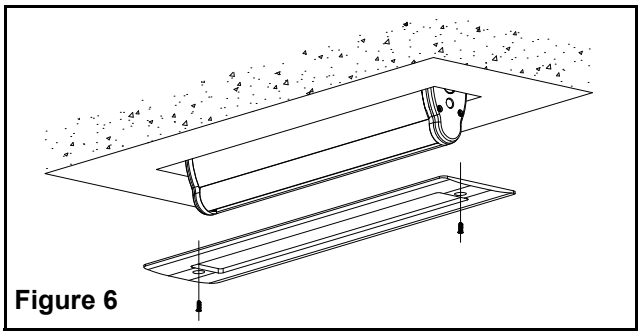


Figure 6

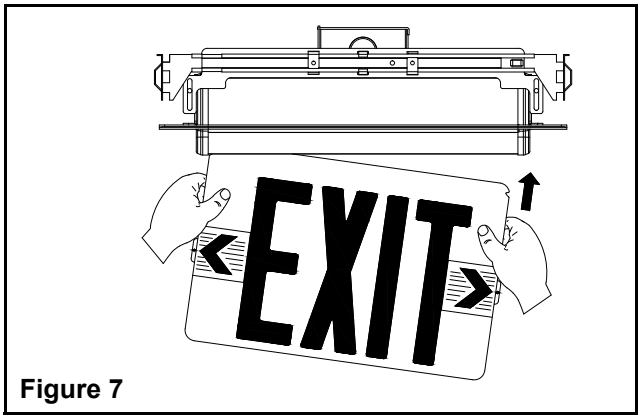


Figure 7

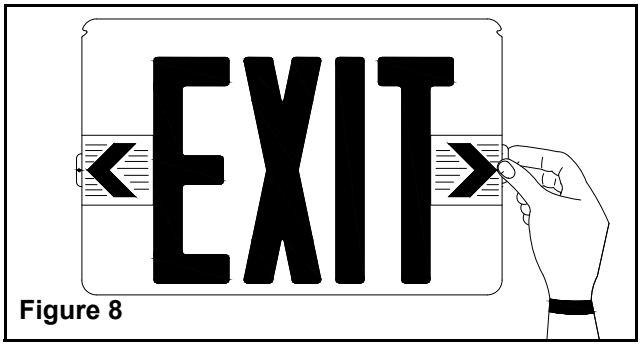


Figure 8

Surface Ceiling & Wall mounting

1. Attach the crossbar to the junction box with screws (not provided).
2. Feed AC supply wires through canopy center hole.
3. Assemble canopy onto main body assembly with 2 screws PM4"15 (supplied) and make the proper wire connections. (See #11 fig.5 of the Recessed Ceiling Mount).
4. Use 2 screws PM4-40 (supplied) to tighten canopy to the crossbar (see figure 10).
5. Insert EXIT panel into main body assembly gently. If EXIT panel is for a single face, make sure EXIT letter direction is correct (see figure 7).
6. Determine chevron placement: (see figure 8)
   a. If a chevron is needed leave the chevron on and remove only the film instruction.
   b. If no chevron is needed remove the chevron and film instructions together.
7. This unit can be mounted on any flat surface. The Exit panel can be rotated in any angle from 0° to 180° (see figure 11).

Surface End Mount

1. Attach crossbar to junction box with screws (not provided).
2. Remove the front cover gently by prying it open with a screwdriver then remove the hole plug from the slots or mounting end cap.
3. Pull out all AC supply wires and feed wires through the center hole of mounting end cap and then canopy.
4. Refer to steps 3,4,5 and 6 in surface ceiling & wall mounting above for surface end mounting.
5. This unit can be mounted on any flat surface. The EXIT panel can be rotated in any angle from 0° to 180° (see figure 11).

Surface End Mount Assembly

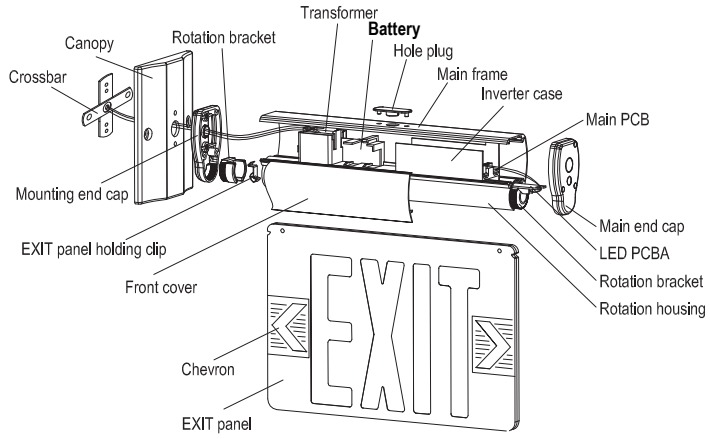


Figure 14

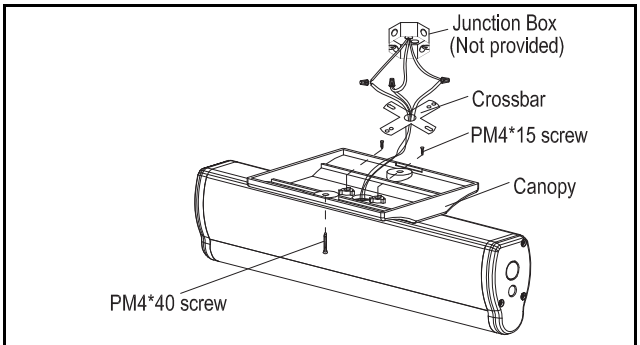


Figure 10

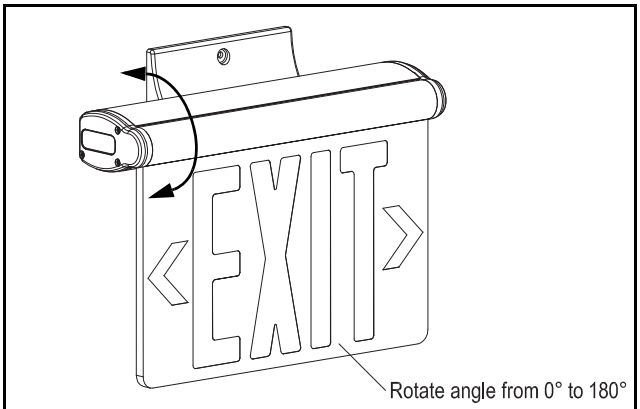


Figure 11 Surface mount shown

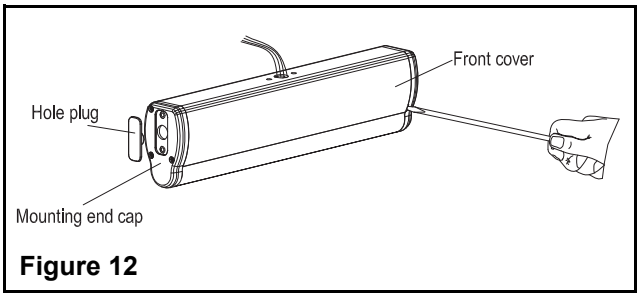


Figure 12

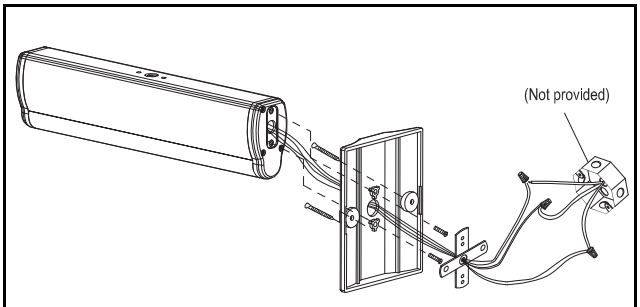


Figure 13

SVXHZ Series – Exit Sign

AC/DC & Self-Powered Models

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not let power supply cords touch hot surfaces.
2. Do not mount near gas or electric heaters.
3. Use caution when handling batteries. Avoid possible shorting.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off unswitched AC power.

Ceiling Mount

a. Remove j-box assembly from carton. Remove j-box cover from j-box assembly and retain securement screw.

b. Install junction box and route unswitched AC circuit wires into the junction box and leave 6” of wire length.

c. Remove lens, exit panel and diffuser panel on the front of the unit (use the supplied bit to remove the tamper-proof screws).

d. In order to access the knockouts of the frame, remove the 4 electronic module screw(s) holding the electronic module to the frame and separate them (see fig.2).

e. Remove knockout on top of the frame. Determine which holes in the exit frame will be used for mounting (see fig.1). Support frame by two blocks of wood, maximum one inch apart. Strike knockouts with a hammer and screwdriver. Clear holes of burrs to allow proper assembly of nipple/wire assembly.

f. Secure j-box cover to the frame using the provided nut.

g. Reassemble the electronic module inside the frame.

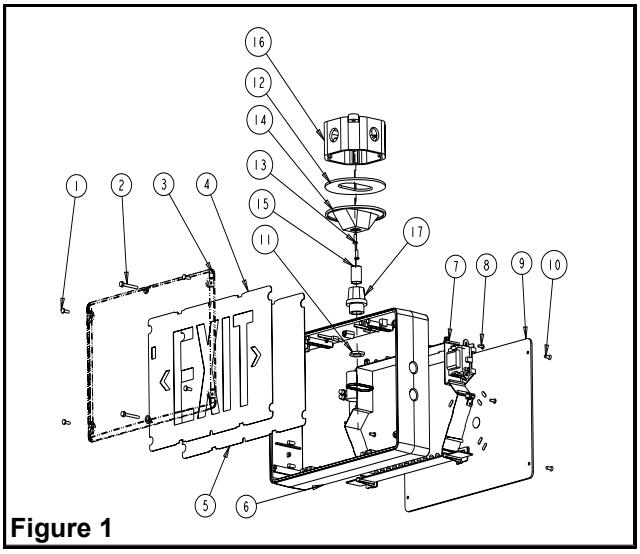


Figure 1

Part List

1. Tamper-proof screws short (4 per lens)
2. Tamper-proof screws long (2 per lens)
3. Lens
4. EXIT panel
5. Diffuser panel
6. Frame
7. Electronic module
8. Electronic module screws (4)
9. Backplate (single face sign)
10. Backplate tamper-proof screws (4)
11. Lock-nuts (2)
12. Junction box gasket
13. Junction box screws(2)
14. J-box Cover
15. Nipple
16. Juction box
17. Hub

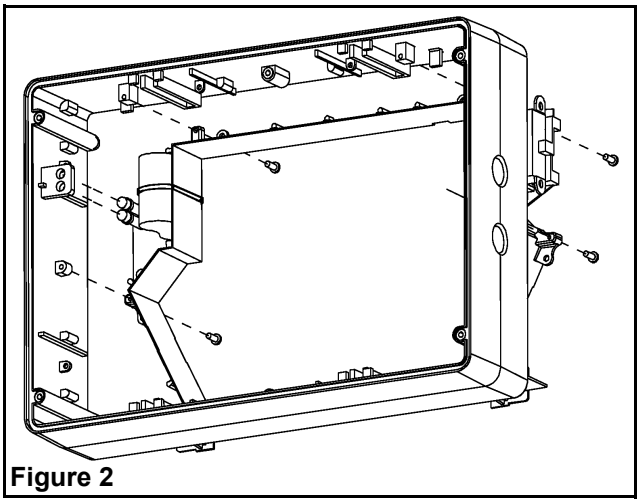


Figure 2

Wall Mount (Single Face Model Only)

a. Remove j-box assembly from carton. Remove j-box cover from j-box assembly, install Hub on j-box and retain securement screw.
b. Remove the backplate(9) from the packaging. Determine the proper knockouts to remove for mounting to the junction box (see fig.3).
c. Support area around knockouts with two blocks of wood. Strike knockouts from the inside with a hammer and a screwdriver.
d. Reinstall the backplate to the frame using the 6 tamper-proof screws (use the supplied bit).

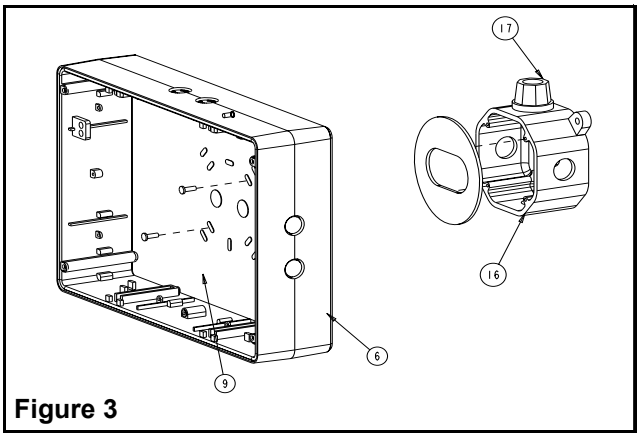


Figure 3

2. **Electrical connections:** Connect one end to the transformer leads, inside the enclosure, and the other end, to AC line voltage inside the junction box. Connect the white lead to neutral and the purple lead to AC line voltage (the input is universal 110 to 347 VAC). (See fig. 4). Connect the ground(green wire) to the junction box.
   Optional: For AC models used with DC remote power. One end connects to the LED-STRIP leads, inside the enclosure, and the other end to DC input inside the junction box. Connect the red lead to positive, and the blue lead to the negative of the remote DC input (See fig. 4).
3. **For ceiling mount:** Mount the frame and j-box cover assembly to junction box by using the provided securement screw.
   For wall mount: Attach the frame(6) to the junction box, using the junction box supplied screws.Install 2 stem washers to ensure bonding.
4. Reinstall the diffuser and the EXIT panel (if required, remove the appropriate chevron).
5. Install the lens by using the 6 tamper-proof screws.
   The tamper-proof screws should be equally torqued to approximately 5 lbs-in (0.6 N-m).
6. Energize AC. Sign will illuminate.

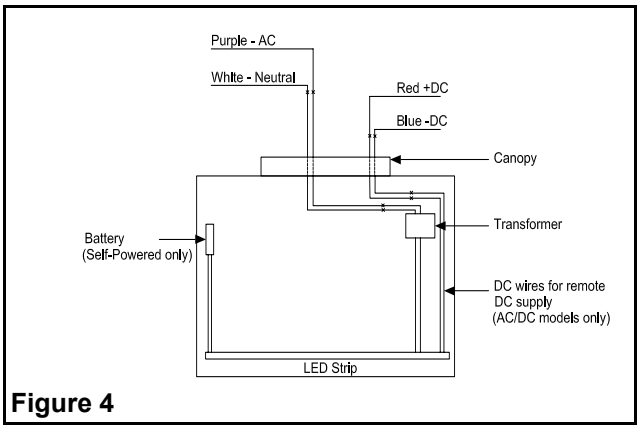


Figure 4

Manual Testing (Self-Powered Models)

Operate the magnetic “test switch” by holding the provided magnet underneath the unit where indicated on the frame. The AC pilot lamp will go out, the legend will flicker, but remain lit. Remove the magnet. The AC pilot light will turn on, the legend will flicker but remain lit.

Automatic Testing (Self-Powered Models)

The unit will perform an automatic self-test of 30 seconds every 30 days, 60 second every 60 days and a 90 minute self-test once a year.

Nexus models

Refer to figure 5 for the wiring of Nexus models.

These units can accept an input voltage of 120 or 277 VAC:

120 VAC — Connect the black (120 VAC) lead and white (neutral) lead to the building utility. Insulate the red wire.

277 VAC — Connect the orange (277 VAC) lead and white (neutral) lead to the building utility. Insulate the black wire.

Feed excess wire into the junction box.

Leave as much space as possible between the live voltage cabling and the unsheathed low voltage data cabling.

Run the double insulation of data cables past the line cabling section and only strip back the last 30mm of the data cable sheathing.

Nexus model wiring

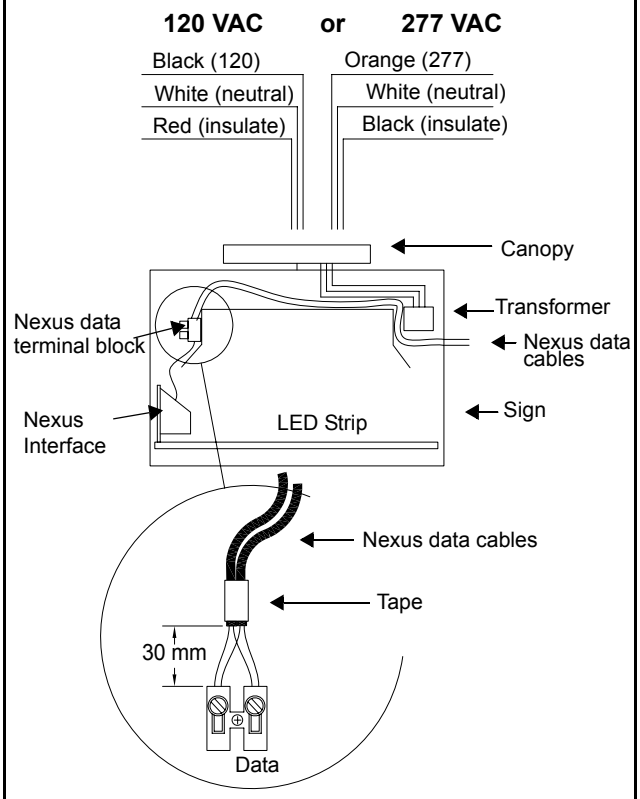


Figure 5

Automatic Diagnostics (Self-Powered Models)

There are three diagnostic indicators: one external and two internal. Unit must be opened to gain access to internal indicators.

External: General alarm, “Service Required”. The LED will blink if any alarm condition is detected (see fig. 6).

Internal: Battery Alarm & Charger Alarm. Steady ON if alarm condition exists (See fig. 7).

Normal operation, No fault — “Service Required” is OFF and one of the two internal LED blinks, showing that the micro controller is active.

Faulty operation — “Service Required” blinks.

Battery Alarm ON, Charger Alarm OFF: Check battery or replace battery.

Battery Alarm ON, Charger Alarm ON: Check LED strip.

Battery Alarm OFF, Charger Alarm ON: Check charger circuit.

Nexus models

Nexus models use two local indicators. One is a green LED for AC pilot lamp. The other is a tricolor LED (Service) which identifies and displays the Nexus status. The table below describes each status:

Nexus Tricolor LED — Status table

	Uncommissioned	***Commissioned***
Normal	Red/Off pulsing	Green steady
Under test	N/A	Green/Off pulsing
Wink mode	Yellow-orange/(red or off) pulsing	Yellow-orange/Off pulsing
Neuron faulty	Red Steady	Red steady
Power fail	Off	Off
Battery disconnected	N/A	Off

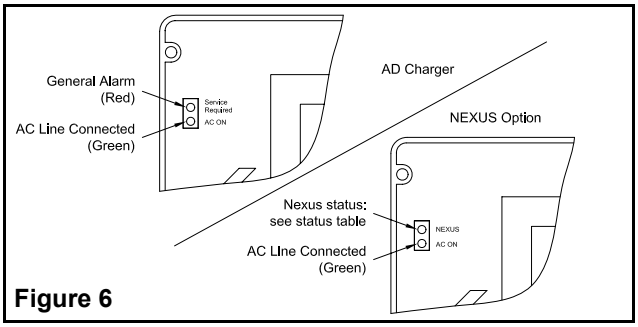


Figure 6

Maintenance (All Models)

None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected, Self-Powered Models only.

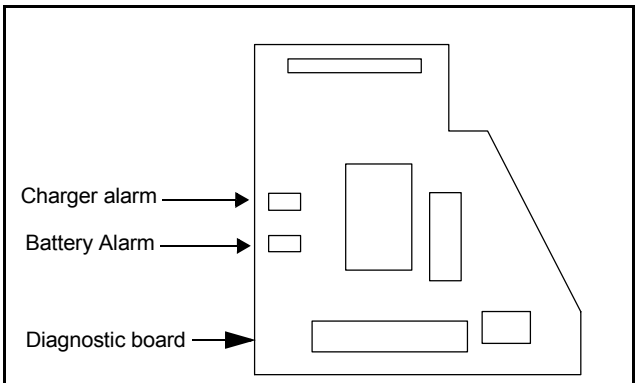


Figure 7

Double Face Installation

Installation Instructions

1. Turn off unswitched AC power.
2. Remove backplate by unscrewing the four tamper-proof screws holding the backplate to the frame (see fig. 8)
3. Install the four backpanel retention screws (see fig. 9)
   Note: The four screws may already be installed.
4. Install the diffuser panel by snapping the top edges under the two top retention screws and then snapping the bottom edges under the two bottom retention screws (see fig.10).
5. The EXIT panel installs in the same manner (if required, remove the appropriate chevron).
6. Install the lens by using the 4 short and 2 long tamper-proof screws (see fig.11).
   The tamper-proof screws should be equally torqued to approximately 5 lbs-in (0.6 N-m).
7. Energize AC. Sign will illuminate.

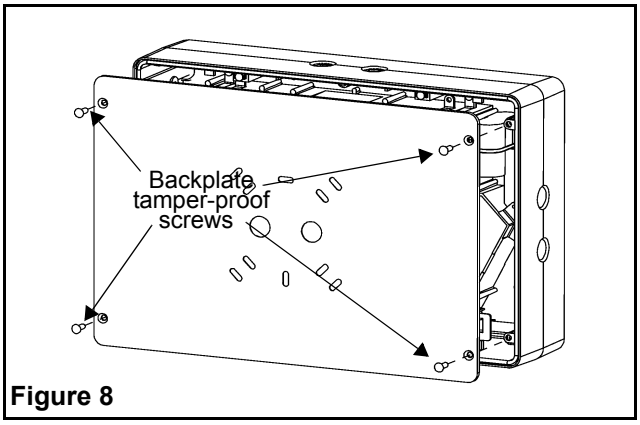


Figure 8

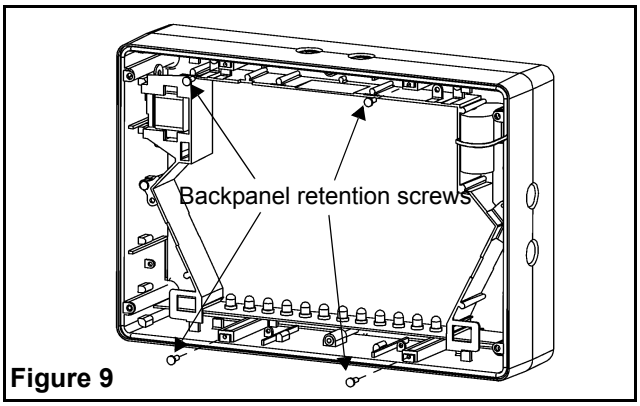


Figure 9

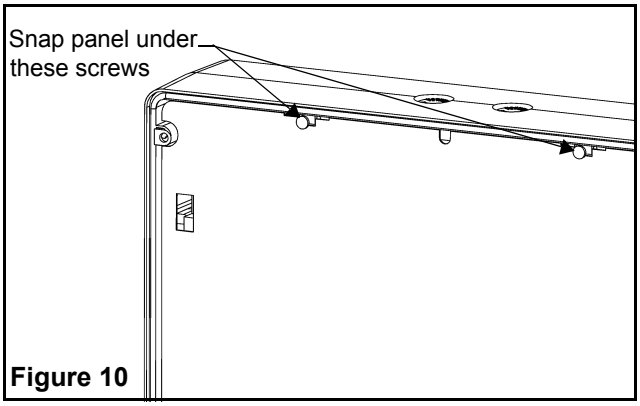


Figure 10

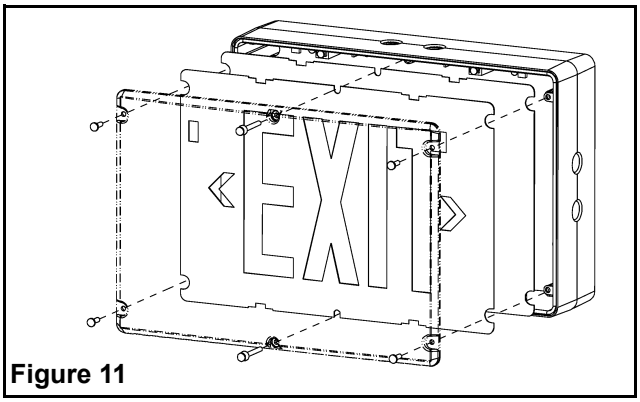


Figure 11

SVXH Series – Class I, Div 2 Combo Unit

Installation instructions

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Make sure the area is NON-HAZARDOUS before installing or servicing the unit.
2. Turn off electrical power before and during installation and maintenance.
3. Before opening, turn off electrical power and wait until the unit is cool.
4. Do not install where the marked operating temperatures (T-Code) exceed the ignition temperature of the hazardous atmosphere.
5. Do not operate in ambient temperatures above those indicated on the rating labels.
6. Keep tightly closed when in operation.
7. Do not use outdoors.
8. Do not mount near gas or electric heaters.
9. Use caution when handling batteries. Battery acid can cause burns to the skin and eyes. If acid is spilled on the skin or eyes, flush acid with fresh water and contact a physician immediatly. Avoid possible shorting.
10. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
11. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
12. Do not use this equipment for other than intended use.
13. Servicing of this equipment should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

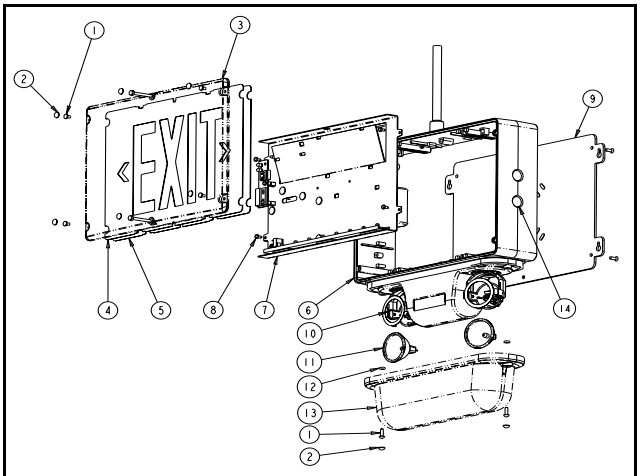


Figure 1

Part List

1. Tamper-proof screw
2. Screw covers
3. Lens-legend
4. EXIT panel
5. Diffuser panel
6. Frame
7. Electronic module
8. Electronic module screws (4)
9. Back plate
10. Swivel
11. MR16 lamp
12. O-ring
13. Lens-emergency light
14. Knock-out covers
15. Junction box

Installation Instructions

1. **Turn off unswitched AC power.**
   a. Remove the lens-legend (3). Disconnect the lamps from terminal block (see fig 4) and remove the electronic module (3). Four screws secure the electronic module to the housing.
   b. Determine which holes in the housing will be used for AC wires. Support frame by two blocks of wood, maximum one inch apart. Strike knockouts with a hammer and screwdriver. Clear holes of burrs to allow proper installation of the fitting. Install conduit fitting rated for Class I Div 2, on the housing. For **Nexus** option, install the liquid tight fitting, provided with the unit to route the data cable.

Conduit Entry

a. Install the unit on the wall with 4 screws (not provided). Use the ears located on each side (see figure 2).

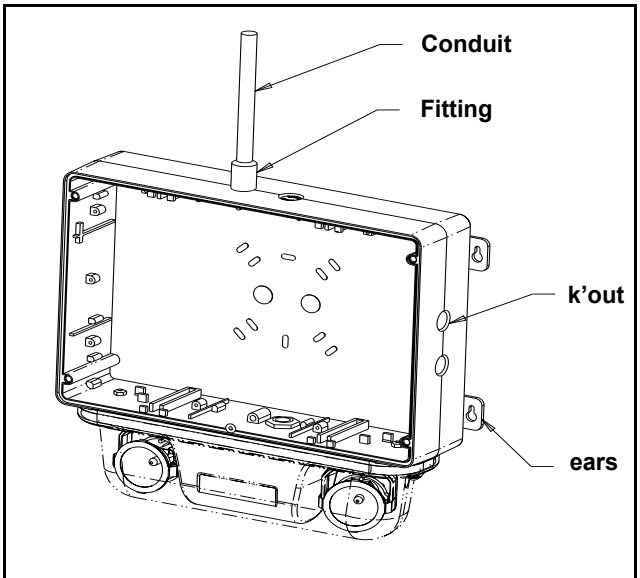


Figure 2

b. Route unswitched AC circuit wires into the housing through conduit.
c. Reinstall the electronic module inside the housing using the four screws.

Junction Box Entry

a. Remove appropriate knock-outs on back plate for installation on junction box (see figure 3).
b. Route unswitchd AC circuit wires into the housing through large hole in back plate.
c. Install the unit on the junction box (Rated for Class1 Div 2) with the junction box screws.
d. Reinstall the electronic module inside the housing using the four screws.

2. ELECTRICAL CONNECTIONS

Auto-diagnostic models (refer to figure 4.):

a. Connect transformer primary wires to AC wires from building: white wire with neutral; black (120Vac) or orange (277Vac) to line voltage. Unused primary wire must be insulated to prevent shorting. Connect green wire to the ground.
b. Reconnect the lamps on terminal blocks (L1+/L1-).
c. For units with remote capacity, connect the remote heads DC+ to L1+ and DC- to L1-.
d. Connect the battery to the charger board.

Nexus models:
See Nexus addendum for the details on electrical connection.

3. **Lamps adjustment:**
   a. To access the lamps, remove the lens. Remove the lamps protectors. Adjust the lamps in appropriate position. Put the lens back in place.
4. **Put the unit cover back in place. Make sure the unit is tightly closed.**
5. **Energize AC.**

Manual Testing

Operate the magnetic “test switch” by holding the provided magnet where indicated near the LED display (see figure 5). This will initiate a one minute test. The DC lamps will illuminate for approximately one minute, then the unit will automatically return to stand by mode. Test can be cancelled by holding the magnet near the test switch again.

Automatic Testing

The unit will perform an automatic self-test of 1 minute every month, 10 minutes every 6 month and a 30 minutes self-test once a year.

Automatic Diagnostics

There are five diagnostic indicators: one external and four internal. Unit must be opened to gain access to internal indicators.
External: Servicel alarm, “Service Required”. The LED will turn-on if any alarm condition is detected (see fig. 5).
Internal: Battery Failure, Battery Disconnect, Charger Failure & Lamp Failure. Steady ON if alarm condition exists.
Normal operation, No fault — “Service Required” is OFF.
Faulty operation — “Service Required” is ON.
(see AD charger owner manual for more details)

Nexus models
Nexus models use two local indicators. One is a green LED for AC pilot lamp. The other is a bicolor LED (Service) which identifies and displays the Nexus status. See Nexus addendum for details.

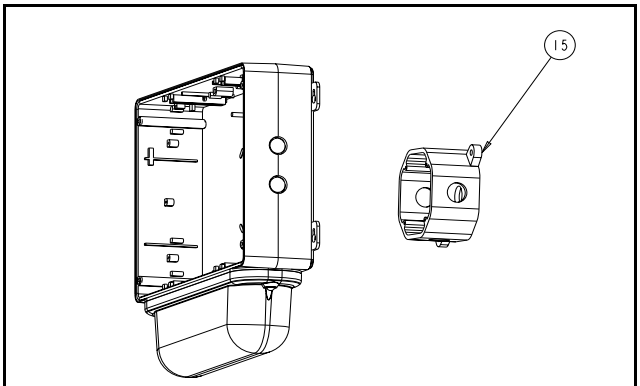


Figure 3

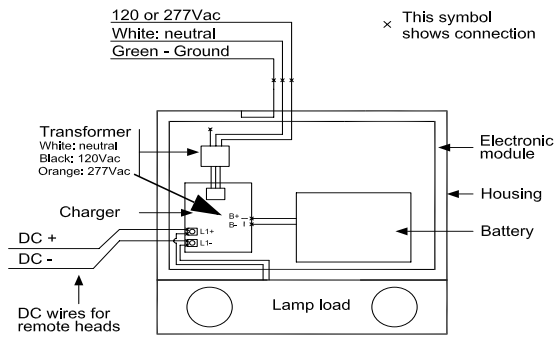


Figure 4

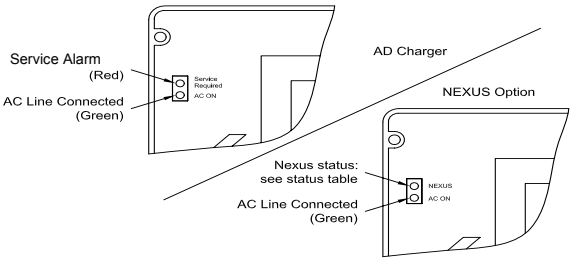


Figure 5

SVX Series – Survive-All Exit Sign

AC/DC & Self-Powered Models

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not let power supply cords touch hot surfaces.
2. Do not mount near gas or electric heaters.
3. Use caution when handling batteries. Avoid possible shorting.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off unswitched AC power.

Canopy Mount

a. Remove canopy assembly from carton. Remove mounting plate from canopy and retain securement screw.

b. Route unswitched AC circuit wires into the junction box and leave 6” of wire length.

c. Remove proper knockouts in canopy backplate for desired mounting position.
For **Nexus** option, install the liquid tight fitting, provided with the unit. For Ceiling mount, use the k’out located on side of the unit (opposite side of the diagnostic display). For Side mount, use the k’out located on top of the unit (see fig. 4).

d. Feed unswitched AC wires through large hole in canopy mounting plate.

e. Make sure the securement screw is accessible (see fig.1 part # 13). Use existing screws in junction box to secure canopy backplate to the junction box.

f. Remove lens, exit panel and diffuser panel on the front of the unit (use the supplied bit to remove the tamper-proof screws).

g. In order to access the knockouts of the frame, remove the 4 electronic module screw(s) holding the electronic module to the frame and separate them (see fig.2).

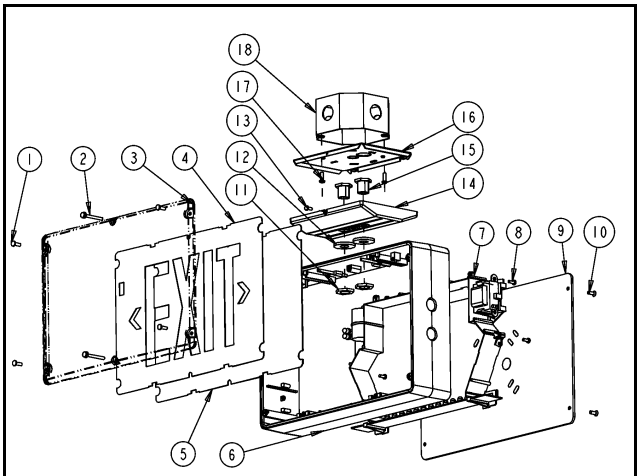


Figure 1

Part List

1. Tamper-proof screws short (4 per lens)
2. Tamper-proof screws long (2 per lens)
3. Lens
4. EXIT panel
5. Diffuser panel
6. Frame
7. Electronic module
8. Electronic module screws (4)
9. Backplate (single face sign)
10. Backplate tamper-proof screws (4)
11. Lock-nuts (2)
12. Gasket washer (2)
13. Canopy securement screw
14. Canopy
15. Nipple assembly (2)
16. Canopy backplate
17. Junction box screws (not supplied)
18. Junction box (not supplied)
19. Nylon washer (2 for wall mount)
20. Junction box gasket (for wall mount)

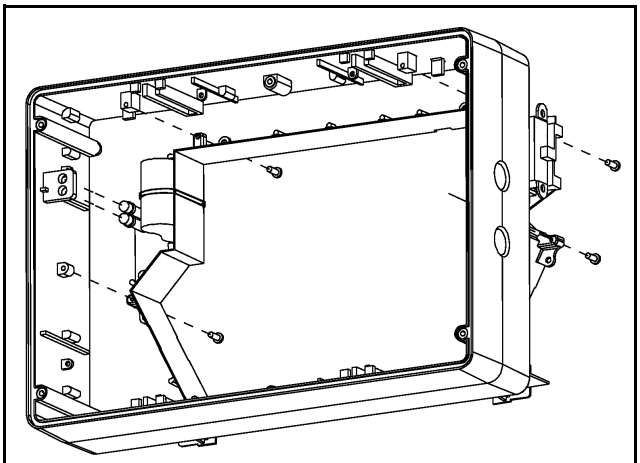


Figure 2

h. Determine which holes in the exit frame will be used for mounting (see fig.1 & fig.3). Support frame by two blocks of wood, maximum one inch apart. Strike knockouts with a hammer and screwdriver. Clear holes of burrs to allow proper assembly of nipple/wire assembly.

i. Secure canopy to the frame using the provided nipple/wire assembly. Make sure the gasket washers are between the canopy and frame, and the nuts inside the exit sign (see fig. 3).

j. Reassemble the electronic module inside the frame.

Wall Mount (Single Face Model Only)

a. Remove the backplate from the packaging. Determine the proper knockouts to remove for mounting to a junction box (see fig.4). For **Nexus** option, install the liquid tight fitting, provided with the unit (see fig. 4).

b. Support area around knockouts with two blocks of wood. Strike knockouts from the inside with a hammer and a screwdriver.

c. Mount parts 11, 12, 15, 17 & 19 to backplate, as shown in fig. 4, and reinstall the backplate to the frame using the 4 tamper-proof screws (use the supplied bit).

2. **Electrical connections:** Using the sealed AC nipple/wire assembly (3 wires), connect one end to the transformer leads, inside the enclosure, and the other end, to AC line voltage inside the junction box. Connect the white lead to neutral and the purple lead to AC line voltage (the input is universal 110 to 347 VAC). (See fig. 5).
   Optional: For AC models used with DC remote power, the sealed DC nipple/wire assembly (2 wires) will also need to be installed. One end connects to the LED-STRIP leads, inside the enclosure, and the other end to DC input inside the junction box. Connect the red lead to positive, and the blue lead to the negative of the remote DC input (See fig. 5).
3. **For canopy mount:** Attach the canopy backplate to the junction box using the junction box screws. Mount the frame and canopy assembly to canopy back plate by using the provided securement screw.
   For wall mount: Attach the frame to the junction box, using the junction box supplied screws.
4. Reinstall the diffuser and the EXIT panel (if required, remove the appropriate chevron).
5. Install the lens by using the 4 short and 2 long tamper-proof screws. ***The tamper-proof screws should be equally torqued to approximately 5 lbs-in (0.6 N-m).***
6. Energize AC. Sign will illuminate.

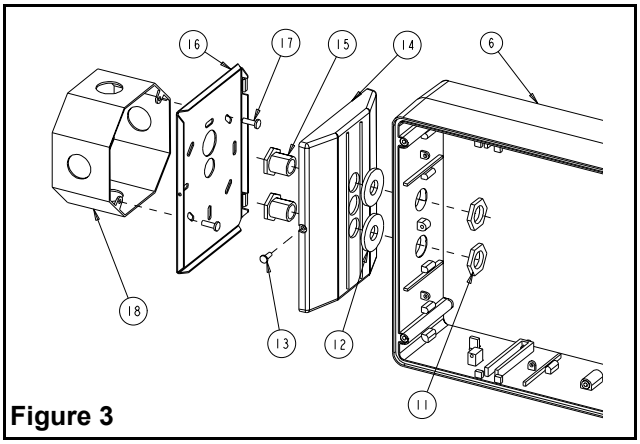


Figure 3

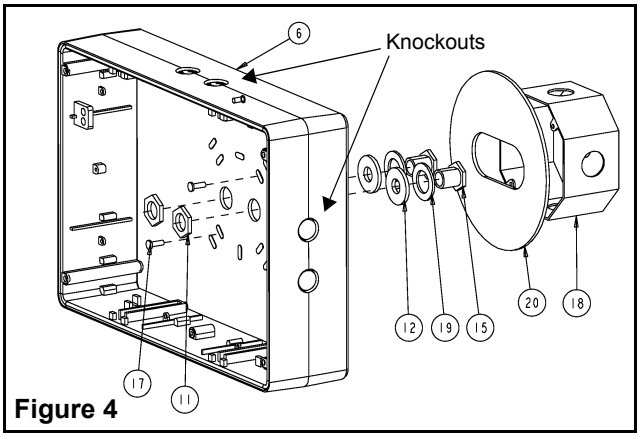


Figure 4

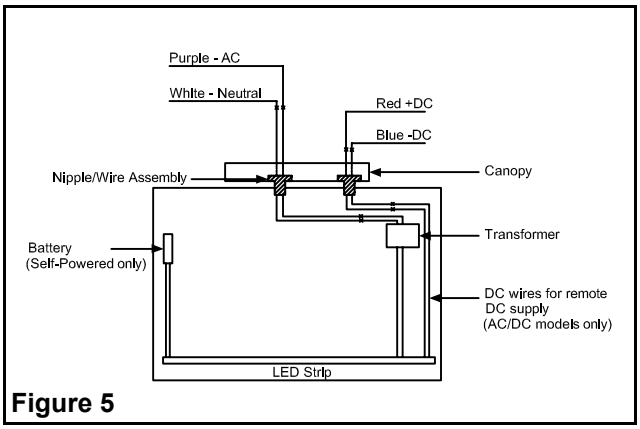


Figure 5

Manual Testing (Self-Powered Models)

Operate the magnetic “test switch” by holding the provided magnet underneath the unit where indicated on the frame. The AC pilot lamp will go out, the legend will flicker, but remain lit. Remove the magnet. The AC pilot light will turn on, the legend will flicker but remain lit.

Automatic Testing (Self-Powered Models)

The unit will perform an automatic self-test of 30 seconds every 30 days, 60 second every 60 days and a 90 minute self-test once a year.

Nexus models

Refer to figure 6 for the wiring of Nexus models.

These units can accept an input voltage of 120 or 347 VAC:

120 VAC — Connect the black (120 VAC) lead and white (neutral) lead to the building utility. Insulate the red wire.

347 VAC — Connect the red (347 VAC) lead and white (neutral) lead to the building utility. Insulate the black wire.

Feed excess wire into the junction box.

Leave as much space as possible between the live voltage cabling and the unsheathed low voltage data cabling.

Run the double insulation of data cables past the line cabling section and only strip back the last 30mm of the data cable sheathing.

Nexus model wiring

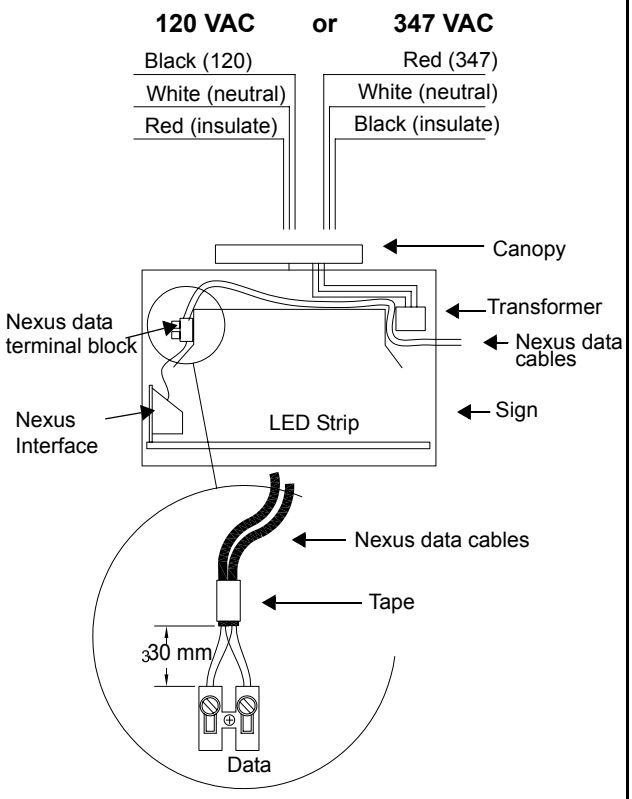


Figure 6

Automatic Diagnostics (Self-Powered Models)

There are three diagnostic indicators: one external and two internal. Unit must be opened to gain access to internal indicators.

External: General alarm, “Service Required”. The LED will blink if any alarm condition is detected (see fig. 7).

Internal: Battery Alarm & Charger Alarm. Steady ON if alarm condition exists (See fig. 8).

Normal operation, No fault — “Service Required” is OFF and one of the two internal LED blinks, showing that the micro controller is active.

Faulty operation — “Service Required” blinks.

Battery Alarm ON, Charger Alarm OFF: Check battery or replace battery.

Battery Alarm ON, Charger Alarm ON: Check LED strip.

Battery Alarm OFF, Charger Alarm ON: Check charger circuit.

Nexus models

Nexus models use two local indicators. One is a green LED for AC pilot lamp. The other is a tricolor LED (Service) which identifies and displays the Nexus status. The table below describes each status:

Nexus Tricolor LED — Status table

	Uncommissioned	***Commissioned***
Normal	Red/Off pulsing	Green steady
Under test	N/A	Green/Off pulsing
Wink mode	Yellow-orange/(red or off) pulsing	Yellow-orange/Off pulsing
Neuron faulty	Red Steady	Red steady
Power fail	Off	Off
Battery disconnected	N/A	Off

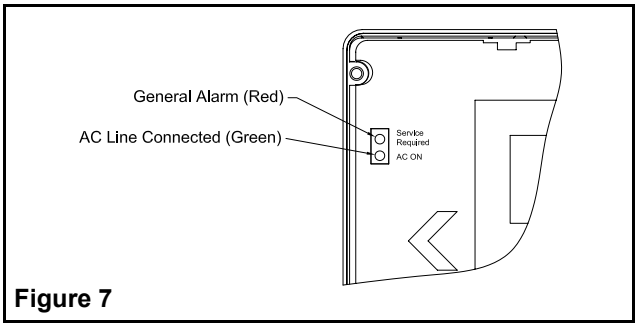


Figure 7

Maintenance (All Models)

None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected, Self-Powered Models only.

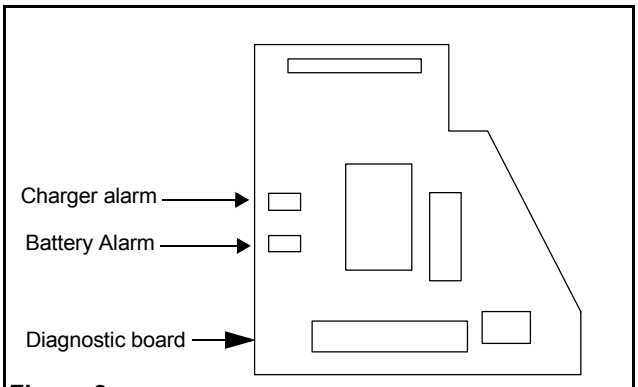


Figure 8

Double Face Installation

Installation Instructions

1. Turn off unswitched AC power.
2. Remove backplate by unscrewing the four tamper-proof screws holding the backplate to the frame (see fig. 9)
3. Install the four backpanel retention screws (see fig. 10)
   Note: The four screws may already be installed.
4. Install the diffuser panel by snapping the top edges under the two top retention screws and then snapping the bottom edges under the two bottom retention screws (see fig.11).
5. The EXIT panel installs in the same manner (if required, remove the appropriate chevron).
6. Install the lens by using the 4 short and 2 long tamper-proof screws (see fig.12).
   The tamper-proof screws should be equally torqued to approximately 5 lbs-in (0.6 N-m).
7. Energize AC. Sign will illuminate.

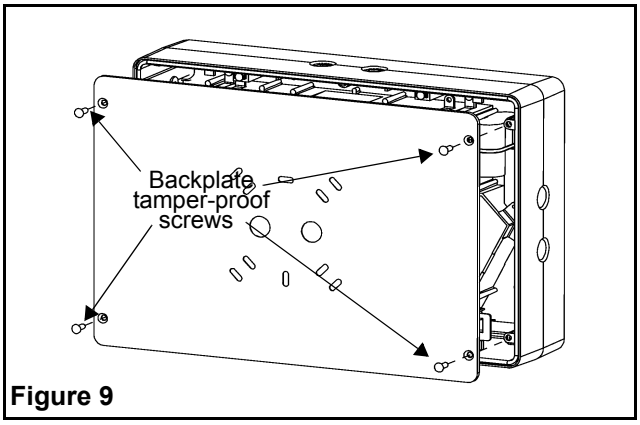


Figure 9

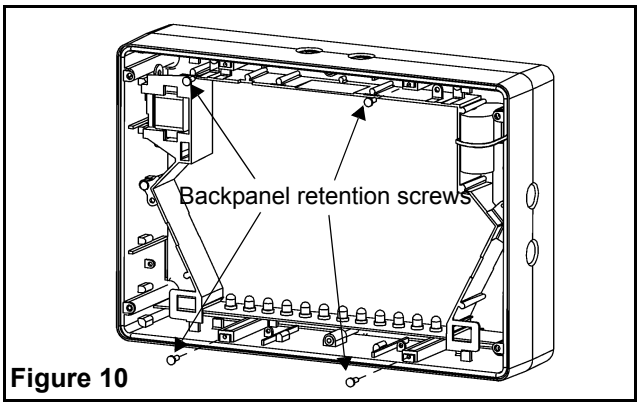


Figure 10

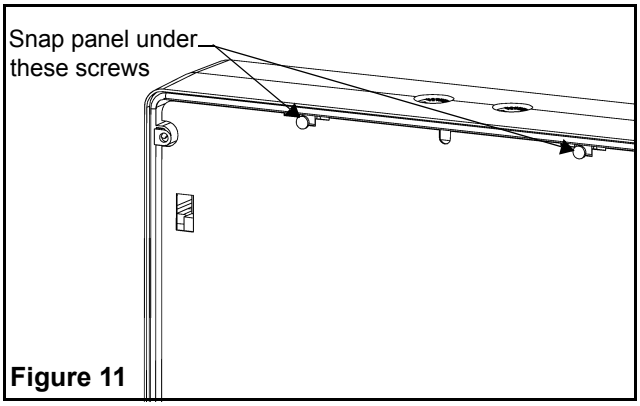


Figure 11

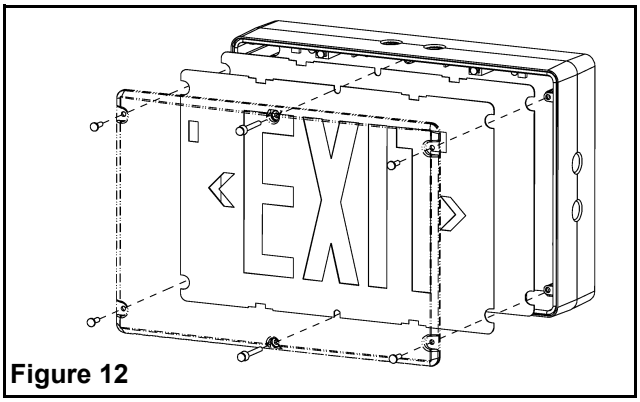


Figure 12

SVX Series – Survive-All Combination Unit

Emergency Light and Exit Sign

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. All unused wires must be insulated to prevent shorting.
3. Do not let power supply cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Use caution when handling batteries.
6. Avoid possible shorting.
7. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
10. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
11. Do not use this equipment for other than intended use.
12. Unit to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

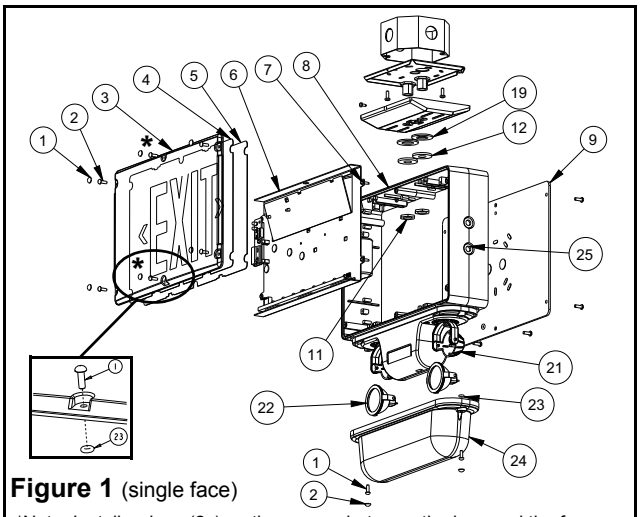


Figure 1 (single face)

*Note: Install o-rings (2x) on the screws between the lens and the frame.

Parts List

1. Tamper-proof screws (6 per side)
2. Screw covers
3. Lens-legend
4. EXIT panel
5. Diffuser panel
6. Frame
7. Electronic module
8. Electronic module screws (4)
9. Backplate (single face sign)
10. Diffuser (double-face)
11. Lock-nuts (2)
12. Gasket washer (2)
13. Canopy securement screw
14. Canopy
15. Nipple assembly (2)
16. Canopy backplate
17. Junction box screws (not supplied)
18. Junction box (not supplied)
19. Nylon washer
20. Junction box gasket (for wall mount)
21. Swivel
22. MR16 lamp
23. O-ring
24. Lens-emergency light
25. Knock-out cover

Installation Instructions

IMPORTANT: Install fixture/lamp type combination no higher than the maximum mounting heights as stipulated in the “Lamp Mounting Height Cross-reference Table” (P/N 750.1924). Refer to “Technical Information” section of our website.

1. Turn off AC power.

Canopy Mount

a. Remove canopy assembly from carton. Remove mounting plate from canopy and retain securement screw.

b. Route AC circuit wires into the junction box and leave 6” of wire length.

c. Remove proper knockouts in canopy backplate for desired mounting position. **For Nexus wired option**, install the liquidtight™ fitting, provided with the unit. For side mount, use the knockout located on top of the unit. For ceilling mount, use the knockout located on side of the frame (see fig. 5).

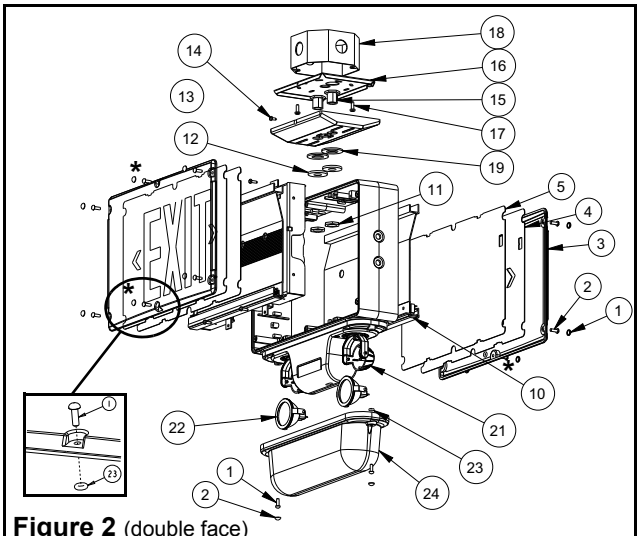


Figure 2 (double face)

*Note: Install o-rings (4x) on the screws between the lens and the frame.

d. Feed AC wires through large hole in canopy mounting plate.

e. Make sure the securement screw is accessible (see fig.1 & 2 part # 13). Use existing screws in junction box to secure canopy backplate to the junction box.

f. Remove lens, exit panel and diffuser panel from the packaging.

g. In order to access the knockouts of the frame, remove the 4 electronic module screws holding the module to the frame (see fig. 3 & 4), disconnect the lamps from charger board terminal “L+ & L-” (see on fig. 11) and remove the electronic module.

⚠ CAUTION: For Nexus RF models. To avoid damaging the antenna, you must be vigilant when removing and re-installing the electronic module.

For double face models, you must first remove the diffuser (10) to pull out the module from the frame.

h. Determine which holes in the exit frame will be used for mounting (see fig. 1,2 & 5). Support frame with two blocks of wood, maximum one inch apart. Strike knockouts with a hammer and screwdriver. Clear holes of burrs to allow proper assembly of nipple/wire assembly. Note: end mount installation is weatherproof but not certified for Nema 4X (see fig. 5).

i. Secure canopy to the frame by threading the provided nipple/wire assembly through the canopy and frame. Make sure the gasket washers are between the canopy and frame, and that the locknuts(11) are inside the exit sign (see fig. 5).

j. Reassemble the electronic module inside the frame and do the electrical connections inside the enclosure.

k. For double face models: Before re-installing the electronic module, you must first re-install the diffuser (10) by clipping the top section to the electronic module and then screwing the bottom section (see fig. 4).

Wall Mount (Single Face Model Only)

a. Remove the backplate from the packaging. Determine the proper knockouts to remove for mounting to a junction box (see fig. 6).

b. Support area around knockouts with two blocks of wood. Strike knockouts from the inside with a hammer and a screwdriver. For **Nexus** wired option, install the liquidtight fitting, provided with the unit.

c. Remove the 4 electronic module screw(s) holding the electronic module to the frame (see fig. 3 & 4),disconnect the lamps from terminal block and remove the electronic module.

d. Mount parts 11, 12, 15 & 19 to backplate (as shown in fig. 6) and reinstall the backplate to the frame using the tamper-proof screws (use the supplied bit).

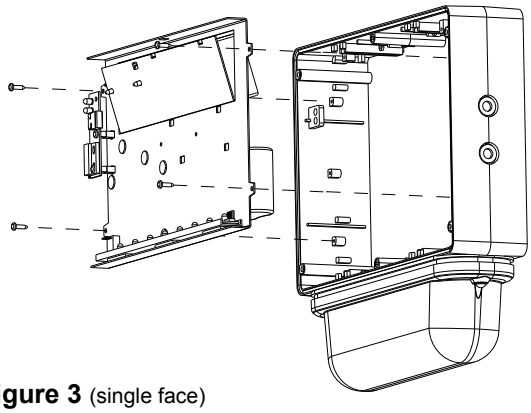


Figure 3 (single face)

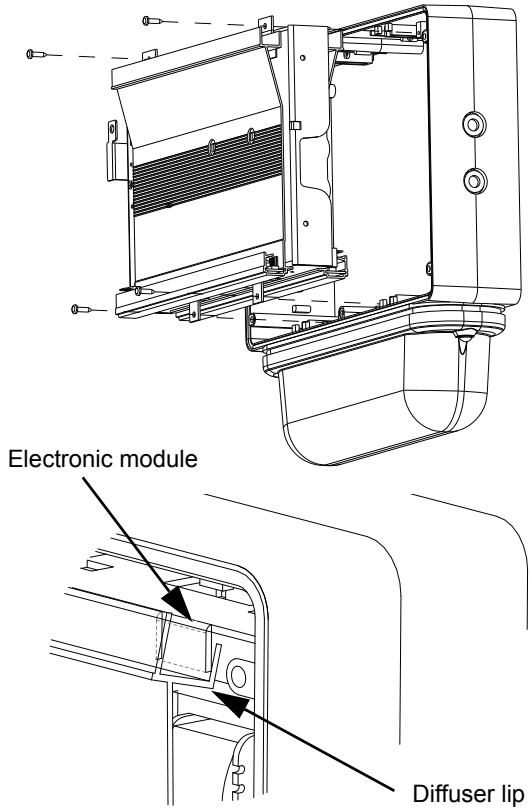


Figure 4 (double face)

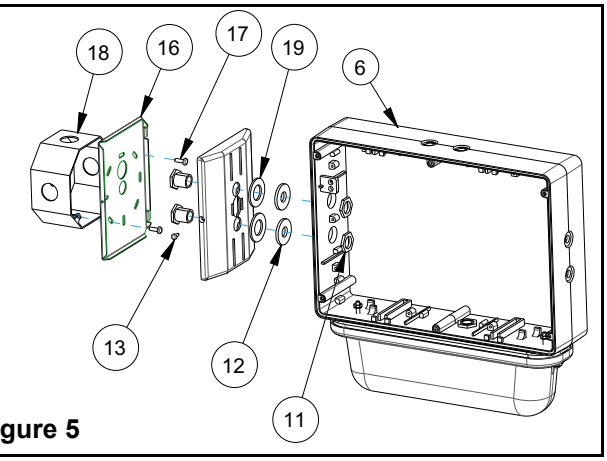


Figure 5

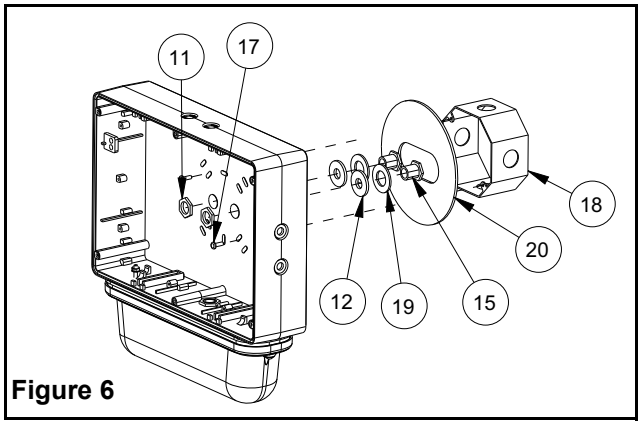


Figure 6

e. Make the electrical connections inside the junction box (see page 3).

f. Attach the frame to the junction box, using the junction box supplied screws.

g. Use the hook provided with-in the canopy to temporarily support the electronic module on the frame.

h. Complete electrical connections (see page 3).

2. **Electrical connections:** Using the sealed AC nipple/wire assembly (3 wires), connect one end to the transformer leads inside the enclosure and the other end to AC line voltage inside the junction box. Connect the white lead to neutral and the green lead to ground. Connect the purple lead to AC line voltage and to appropriate transformer lead (See fig. 7 for color code).

   Optional:

   For models with DC remote capacity, the sealed DC nipple/wire assembly (2 wires) will also need to be installed. One end connects to the AD charger terminal block inside the enclosure and the other end to DC output inside the junction box. Connect the red lead to positive, and the blue lead to the negative of the remote DC output (See fig. 7).

   For models with flasher-buzzer or fire alarm, the sealed DC nipple/wire assembly (2 wires) will also need to be installed. One end connects to the optional module terminal block inside the enclosure and the other end to DC input inside the junction box. Connect the red lead to positive, and the blue lead to the negative (See fig. 8)

Cold weather option

For electrical connections with cold weather option, refer to the document "Addendum for cold weather option".

Nexus wired models

Route the double insulated data cables through the liquid tight fitting previously installed on frame and strip one inch (25mm) of the double insulation. The two cables are identical and both contain 2 wires of different colors: “color A” and “color B”. Gather the “color A” wire from each cable, and connect them to the same pole on the terminal block. Gather the “color B” wire from each cable, and connect them to the other pole on the terminal block. The result must be 2 wires of the same color in each pole on the terminal block. Leave a minimum of one inch (25mm) between the live voltage cabling and the unsheathed low voltage data cabling (Refer to fig. 9).
Refer to the “Nexus Addendum” for additional information.

Nexus RF

Refer to the “Nexus RF Addendum”.

3. **For canopy mount:** Attach the canopy backplate to the junction box using the junction box screws. Mount the frame and canopy assembly to canopy backplate by using the provided securement screw.
4. **For wall mount:** Reinstall the electronic module inside the frame.
5. Connect the battery and reconnect the lamp to the charger board.
6. Reinstall the diffuser and the EXIT panel (if required, remove the appropriate chevron).
7. Install the lens-legend by using the 6 tamper-proof screws. The o-rings have to be installed on the center screws between the lens-legend and the frame (see fig. 1 & 2)
   The tamper-proof screws should be equally torqued to approximately 10 - 15 in-lbs (1.1 - 1.7 N-m).
8. Remove the lamps protectors.
9. Energize AC. Sign will illuminate.

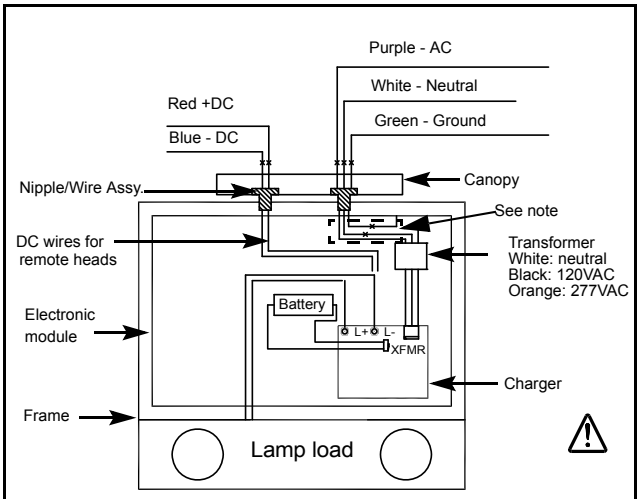


Figure 7

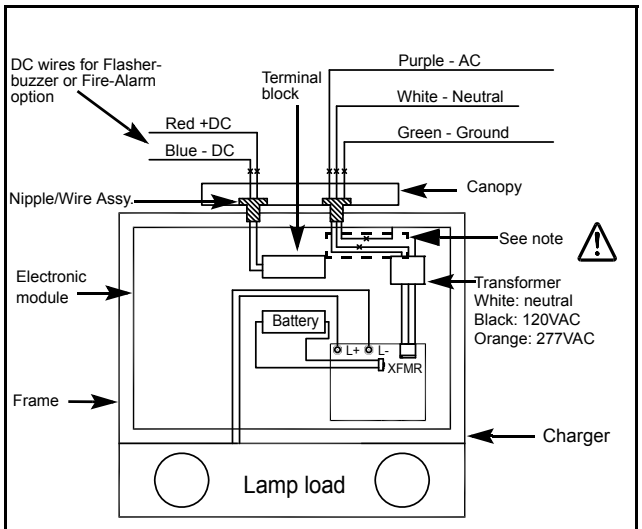


Figure 8

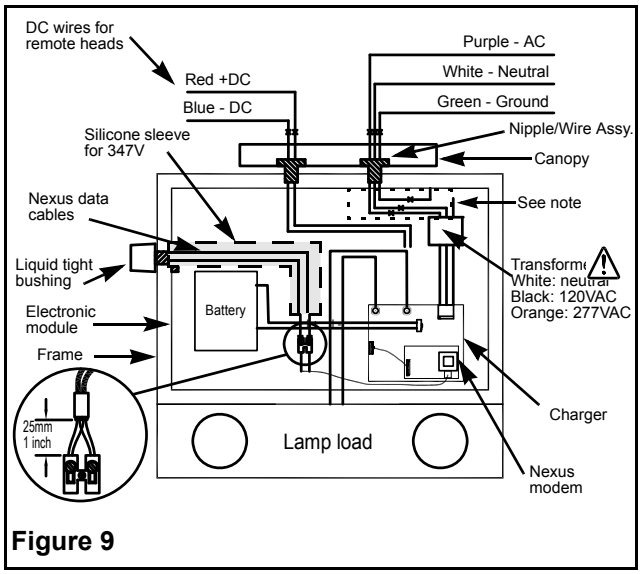


Figure 9

⚠ Primary wires connections must be isolated from charger.

Manual Testing

Operate the magnetic “test switch” by holding the provided magnet near the AC pilot lamp, where indicated on the legend. This will initiate a one minute test. The DC lamps will illuminate for approximately one minute, then the unit will automatically return to stand by mode. Test can be cancelled by holding the magnet near the test switch again.

Automatic Testing and diagnostics

The automatic testing and diagnostic function includes a micro controller which self-tests the unit on a monthly basis and identifies as well displays failures of the electrical components: battery, battery charger and lamps.

Self-test

The self-test is performed every month for 1 minute, every 6 months for 30 minutes, and annually for 90 minutes.

Diagnostic function

The diagnostic function uses an external red LED indicator. Service is required if the red LED is present indicating that an alarm condition is detected (See fig. 10).

o	Green	Steady On	AC On
o	Red	Steady On	Battery Disconnect
-o	Red	Blinking	Battery Failure
o-o	Red	Two Blinks	Charger Failure
o-o-o	Red	Three Blinks	Lamp Failure
o-o-o-o	Red	Four Blinks	LED Strip Failure

For Nexus models, refer to “Nexus addendum” and for additional information about the Nexus system, go to “www.nexus-system.com”.
For more information about the AD function, please consult the “Advanced Diagnostic Charger User Manuel - AD with Single LED Status User Manual”

Lamps adjustment

Adjust the lamps in appropriate position. The lamp can adjusted 90 degrees horizontally and vertically when wall mounted. For canopy mount, a plastic pin can be removed to increase horizontal adjustment up to 180 degrees (See fig. 12). Lamp shouldn’t be directed on opaque surface, closer than 1 meter.

Food processing facilities

Screw and knock-out covers (see fig. 1 part 2 & 25) are available in the hardware kit. These covers can be installed on screws and knockouts to avoid any food accumulation. Note: some detergent used in food processing industry can affect durability of polycarbonate lens (see fig. 1 part 3 & 24).

Maintenance (All Models)

None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.
Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

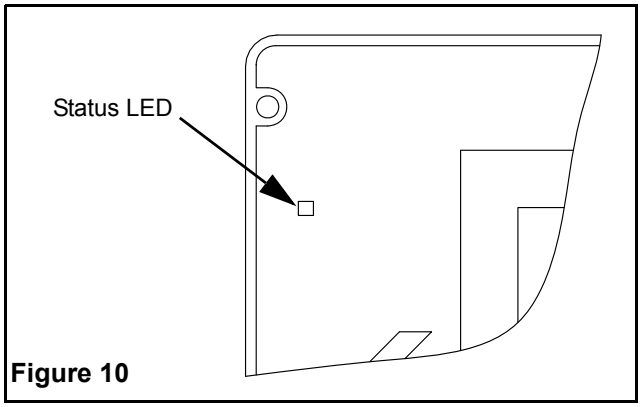


Figure 10

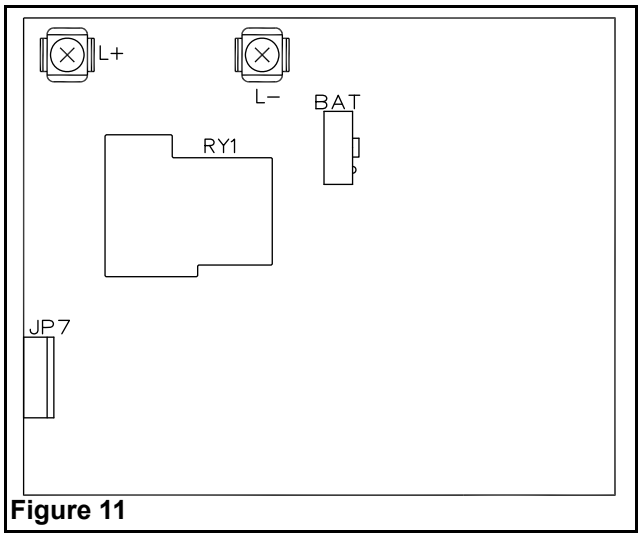
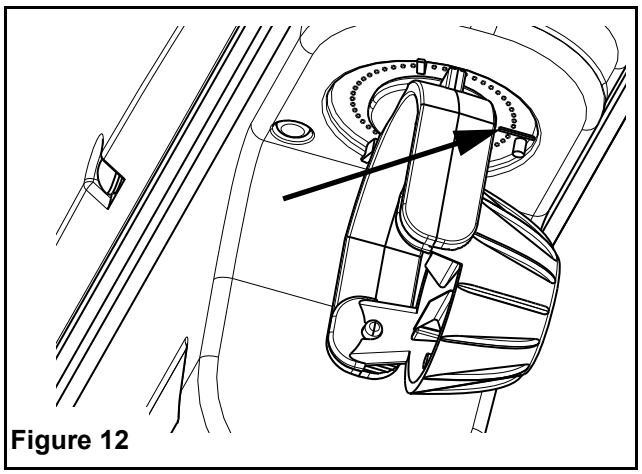


Figure 11


Figure 12

SVH Series Class I, Div.2 Battery Unit

Installation instructions

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Servicing of this equipment should be performed by qualified service personnel.
2. Make sure the area is clear of all HAZARDS before installing or servicing the unit.
3. Turn off electrical power before and during installation and maintenance.
4. Before conducting maintenance, turn off the unit and wait for it to cool.
5. Do not install where the marked operating temperatures (T-Code) exceed the ignition temperature of the hazardous atmosphere.
6. Do not operate in ambient temperatures above those indicated on the rating labels.
7. Keep tightly closed when in operation.
8. Do not use outdoors.
9. Do not let the power cords touch hot surfaces.
10. Do not mount near gas or electric heaters.
11. Use caution when handling batteries. Battery acid can cause burns to the skin and eyes. If acid is spilled on the skin or eyes, flush acid with fresh water and contact a physician immediatly. Avoid possible shorting.
12. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
13. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
14. Do not use this equipment for other than intended use.
15. Unit to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. **Turn off unswitched AC power.**
   a. Remove the unit cover (2). Disconnect the lamps from terminal block (see fig 3) and remove the electronic module (3). Three nuts secure the electronic module to the housing.
   b. Determine which holes in the housing will be used for conduit. Support frame with two blocks of wood, maximum one inch apart. Strike knockouts with a hammer and screwdriver. Clear holes of burrs to allow proper installation of the fitting. Thread conduit fitting rated for Class I Div 2 through the frame.
   For **Nexus** option, install the liquid tight fitting, provided with the unit to route the data cable.

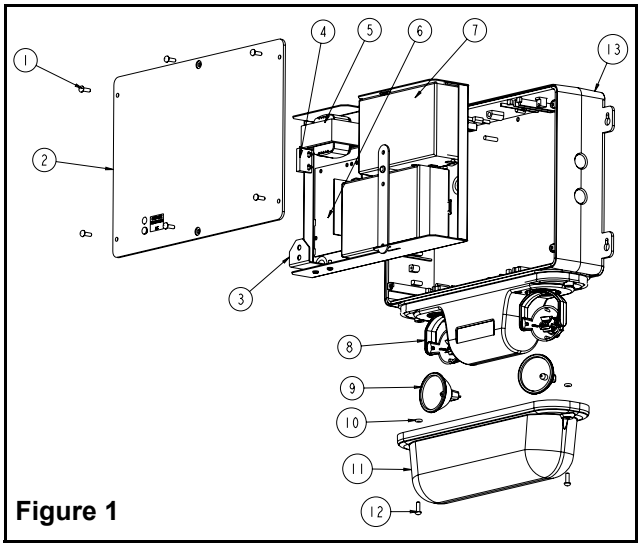


Figure 1

Parts List

1. Tamper-proof screw
2. Unit covers
3. Electronic module
4. Magnetic test switch
5. Transformer
6. Charger board
7. Battery
8. Lamp holder
9. Lamp
10. O-ring
11. Lens
12. Tamper-proof screw
13. Housing

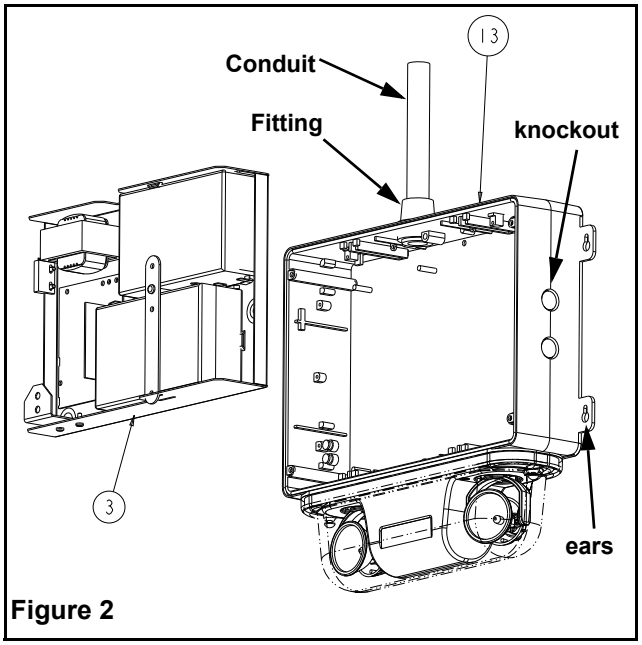


Figure 2

c. Install the unit on the wall with 4 screws (not provides). Use the ears located on each side (see figure 2). Route unswitched AC circuit wires into the housing.
d. Reinstall the electronic module inside the housing using the three nuts.

2. ELECTRICAL CONNECTIONS

Auto-diagnostic models (refer to figure 3):

a. Connect transformer primary wires to AC wires from building: white wire with neutral; black (120Vac) or orange (277Vac) to line voltage. Unused primary wire must be insulated to prevent shorting. Connect green wire to the ground.
b. Reconnect the lamps on terminal blocks (L1+/L1-).
c. For units with remote capacity, connect the remote heads DC+ to L1+ and DC- to L1-.
d. Connect the battery to the charger board.

Nexus models:
See Nexus addendum for the details on electrical connection.

3. Lamp adjustment:

a. To access the lamps, remove the lens. Remove the lamp protectors. Adjust the lamps in appropriate position. Reinstall the lens.

4. Reinstall the unit cover. Make sure the unit is tightly closed.
Note: The tamper-proof screws should be equally torqued to approximately 10 - 15 in-lbs (1.1 - 1.7 N-m).
5. Energize AC.

Manual Testing

Operate the magnetic “test switch” by holding the provided magnet where indicated on the side of the housing. This will initiate a one minute test. The DC lamps will illuminate for approximately one minute, then the unit will automatically return to stand by mode. Test can be cancelled by holding the magnet near the test switch again.

Automatic Testing

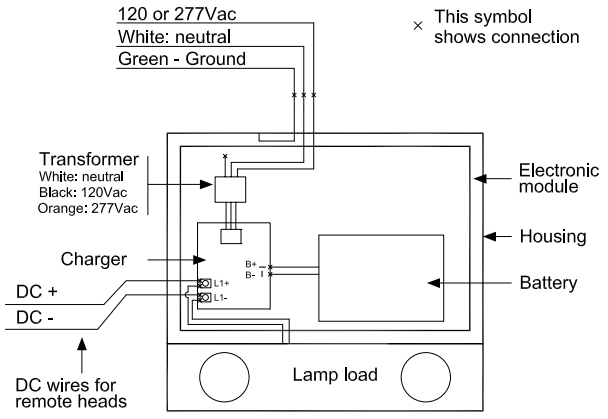
The unit will perform an automatic self-test of 1 minute every month, 30 minutes every 6 month and a 90 minutes self-test once a year.

Automatic Diagnostics

There are five diagnostic indicators: one external and four internal. Unit must be opened to gain access to internal indicators.
External: Service alarm, “Service Required”. The LED will turn-on if any alarm condition is detected (see fig. 4 & 5).
Internal: Battery Failure, Battery Disconnect, Charger Failure & Lamp Failure. Steady ON if alarm condition exists.
Normal operation, No fault “Service Required” is OFF.
Faulty operation“Service Required” is ON.
(see AD charger owner manual for more details)

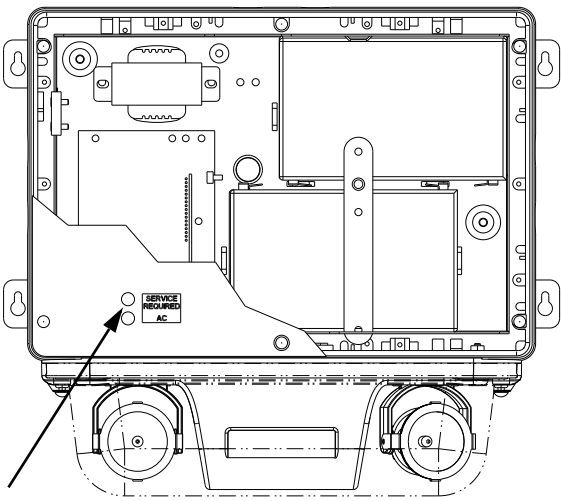
Nexus models

Nexus models use two local indicators. One is a green LED for AC pilot lamp. The other is a bicolor LED (Service) which identifies and displays the Nexus status. See Nexus addendum for details.



Primary wire connections must be isolated from charger.

Figure 3



Led indicator

Figure 4

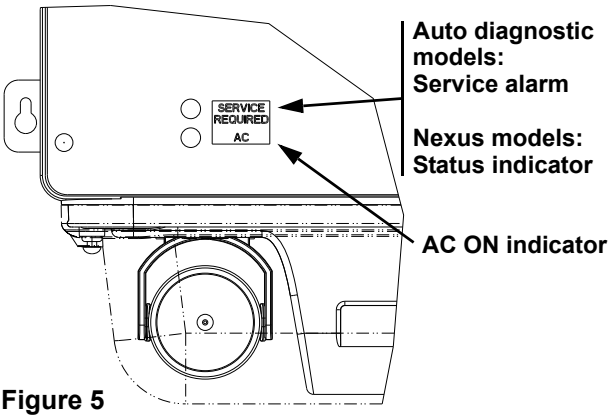


Figure 5

SV Series – Survive-All

Emergency Light unit

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Use caution when handling batteries. Avoid possible shorting.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
8. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
9. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

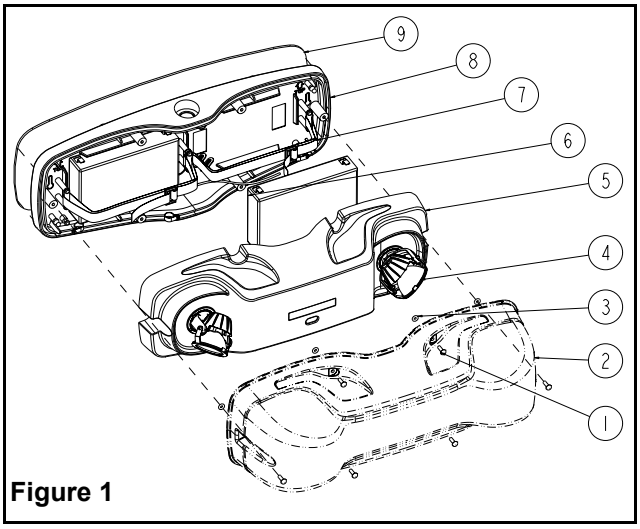


Figure 1

Part List

1. Tamper-proof screws (6)
2. Clear cover
3. Screw gasket
4. Lamps
5. Electronic module
6. Battery
7. Battery strap or bracket
8. Backplate
9. Gasket
10. AC harness
11. Ground wire
12. Wire nut
13. J-box (not supplied)
14. J-box screws (not supplied)
15. Screw cover

Installation Instructions

1. Turn off unswitched AC power.
2. Open clear cover by removing the screws making sure not to loose the screw gaskets. Remove lamp protectors.
3. Remove the electronic module. Pull on the cover until snapping features disengage or use a screw driver by inserting it into the slots shown in figure 12 and prying the cover open.
4. Remove the battery in order to access the knockouts (k'out).
5. Install back plate:

   Wall mounting on a junction (figure 2)

   a. Route unswitched AC circuit wires into the junction box and leave 6" of wire length.

   b. Remove the k'outs needed to mount back plate. Considering the weight of the unit, it's recommended to use key hole for additional securing(see fig.4). For Nexus wired option, install the liquidtight fitting, provided with the unit. Use the k'out located on the bottom of the unit.

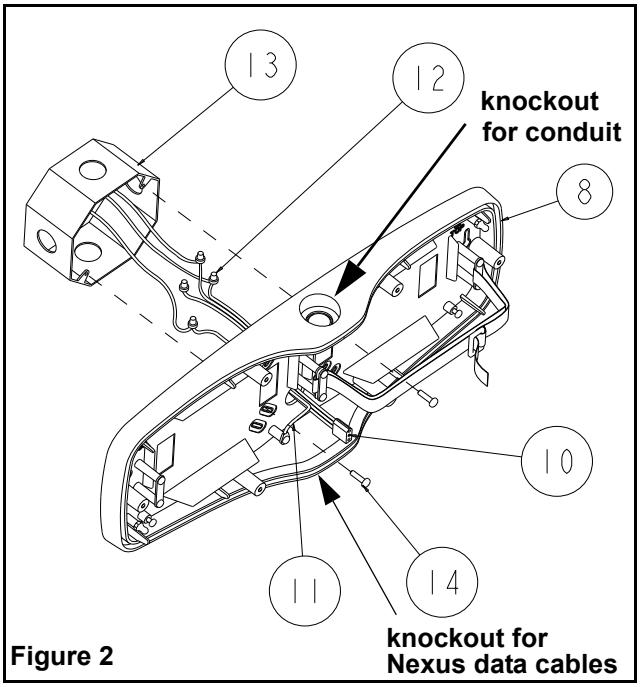


Figure 2

c. Remove AC harness from electronic module. Wire to AC circuit wires using wire nuts (see figure 2). Refer to hookup instructions on page 2.

d. Install the gasket on the back plate. Feed AC harness and the ground through the large hole in the backplate (see figure 2). Mount to J-box using the J-box screws (not provided). J-box should be properly secured directly to a stud.

Note: When back mounting the unit on uneven surface such as brick, silicone caulk should be used to prevent water from seeping in between the unit and the J-box.

Wall mounting with conduit

a. Remove k'out on top of the backplate for conduit entry and key hole k'out to fix the backplate to the wall. For Nexus wired option, install the two holes liquid tight fitting, provided with the unit, on the bottom of the back plate. Don't route data cables with AC wires.

b. Install a liquid tight conduit fitting on the backplate. Conduit size: 1/2" NPT (not provided).

c. Install the unit on the wall using screws (not provided).

d. Connect the conduit to fitting and route unswitched AC circuit wires in the unit.

e. Remove AC harness from electronic module. Wire to AC circuit wires using wire nuts. Refer to hookup instructions..

Pole or I-beam mounting (Option)

a. Universal bracket (part 16 on figure 4) is an accessory and needs to be ordered separately. Remove knockouts on top of the back-plate for conduit entry.

b. Install a liquidtight conduit fitting on the backplate. Conduit size: 1/2" NPT.

c. Install the universal bracket as shown in figure 4. Don't install the gasket (9). Note: this type of installation is not NSF certified for food processing areas.

d. Unit can be installed using steel banding for routing around the poles and I-beam. Standard banding ¾" in width or less can be used (not provided). It can also be mounted on Superstrut® metal framing (1 5/8" channel series) using 1/4" bolt (not provided). Holes are placed at 9" apart horizontally.

e. Connect the conduit to fitting and route unswitched AC circuit wires in the unit.

f. Remove AC harness from electronic module. Wire to AC circuit wires using wire nuts.Refer to hookup instructions.

6. Complete electrical connection:

Standard product:

a. Re-install batteries and electronic module as shown on figure 5. See figure 6 for batteries wiring diagram.

b. Connect transformer harness to AC harness.

Cold weather option:

a. Connect battery heater (18) to thermostat (19) and to AC harness (10) (see figure 7).

INSTRUCTIONS - HOOKUP

- 120 VAC OPERATION -	-277 VAC OPERATION-
White wire - Common Black wire - 120V Line Green wire - Ground	White wire - Common Orange wire - 277V Line Green wire - Ground

Unused primary wire must be insulated to prevent shorting

To ensure watertightness: install the screw gaskets inside the unit, as shown.

Put the screw in the lens hole and than install the screw gasket.

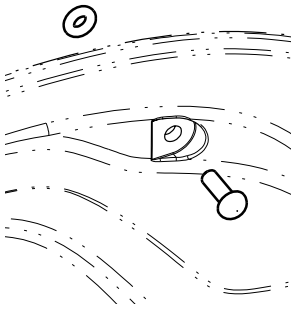


Figure 3

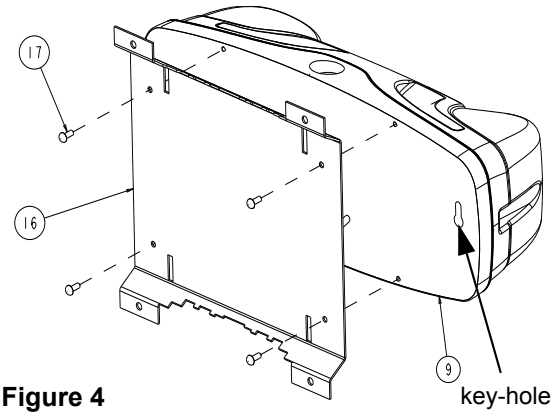


Figure 4

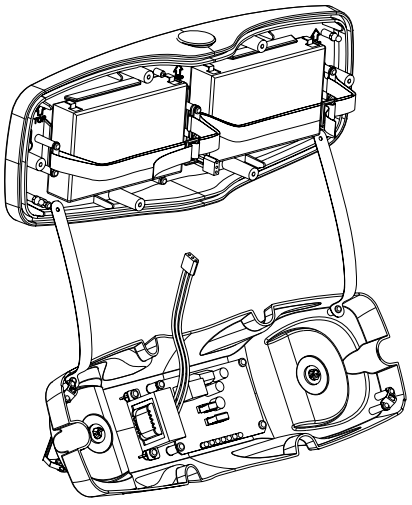


Figure 5

b. Refer to figure 8 for 120VAC input voltage and to figure 9 for 277VAC . Use wire taps provided with the hardware kit to connect battery heater. Unused wires must be insulated to prevent shorting.
c. Re-install the batteries. Battery heater is placed between the battery and the backplate. See figure 6 for battery wiring diagram. Re-install the electronic module as shown on figure 5.
d. Connect transformer harness to AC harness.

7. For unit with remote capacity, connect remote heads to terminal L+ and L- (see figure 11).

Calculation of total allowable remote capacity of unit:
Maximum remote lamp power = unit capacity minus the total power of lamps included with unit.

8. Snap electronic module on backplate.
9. Adjust lamp aiming.
10. Install the lens by using the 6 tamper-proof screws (1). To insure water tightness, gasket screws (x6) have to be installed from the inside (see figure 3). Tighten the screws approximately 5 Lb.-Ft. DO NOT OVER TIGHTEN.
11. For food processing areas, in order to avoid food accumulation, screw caps have to be installed (provided with the hardware kit).
12. Energize AC. Lamps will turn on for few minutes.
13. See page 4 for testing procedure.

Nexus:

For connections related to Nexus system, refer to Nexus Addendum.

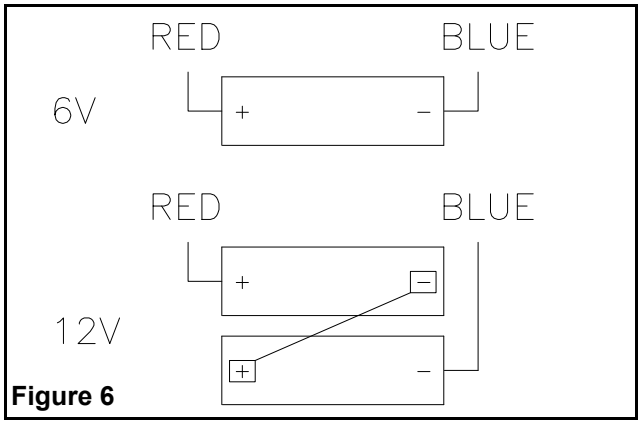


Figure 6

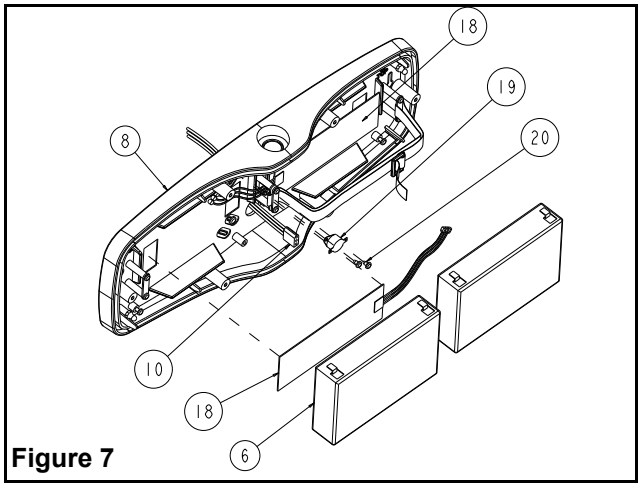


Figure 7

FOR COLD WEATHER OPTION ONLY

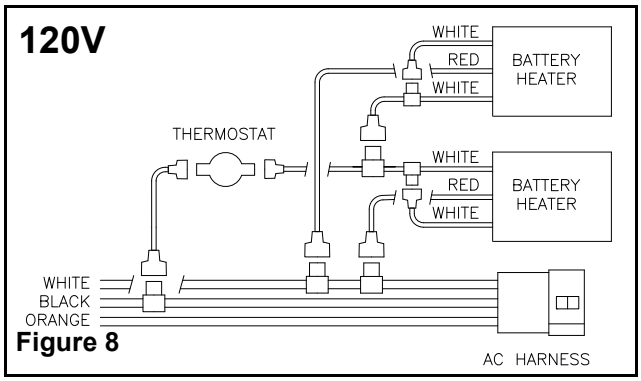


Figure 8

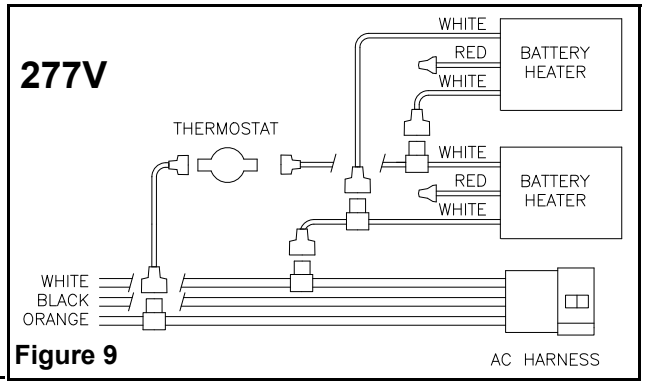


Figure 9

Unit testing

Manual Testing

Operate the magnetic test switch by holding the provided magnet near the status LED, where indicated. This will initiate a one minute test and the lamps will illuminate. At the end of the test, the unit will automatically return to stand by mode. Test can be cancelled by holding the magnet near the test switch again.

Automatic Testing and diagnostics

The automatic testing and diagnostic function includes a micro-controller which self-tests the unit on a monthly basis and identifies as well displays failures of the electrical components: battery, battery charger and lamps.

Self-test

The self-test is performed every month for 1 minute, every 6 months for 30 minutes, and annually for 90 minutes.

Diagnostic function

The diagnostic function uses an external red LED indicator. Service is required if the red LED is present indicating that an alarm condition is detected (See fig. 10).

o	Green	Steady On	AC On
o	Red	Steady On	Battery Disconnect
-o	Red	Blinking	Battery Failure
o-o	Red	Two Blinks	Charger Failure
o-o-o	Red	Three Blinks	Lamp Failure

For Nexus models, refer to “Nexus addendum” and for additional information about the Nexus system, go to “www.nexus-system.com”.

For more information about the AD function, please consult the web site for this user manual:

“AD with Single LED Status User Manual”

Food processing facilities

Screw covers are available in the hardware kit. These covers have to be installed on screws to avoid any food accumulation. Note: some detergent used in food processing industry can affect durability of Polycarbonate lens. Install unit on even wall surface to insure watertightness and avoid any gaps between the gasket and the wall.

Maintenance (All Models)

None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.

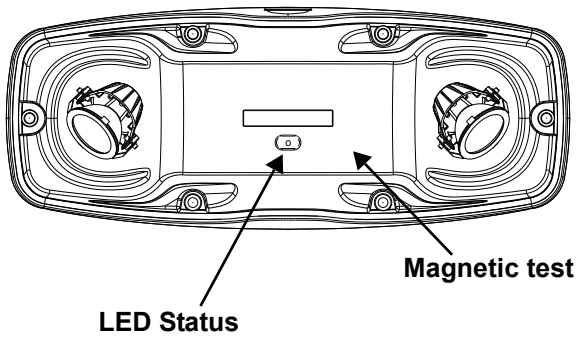


Figure 10

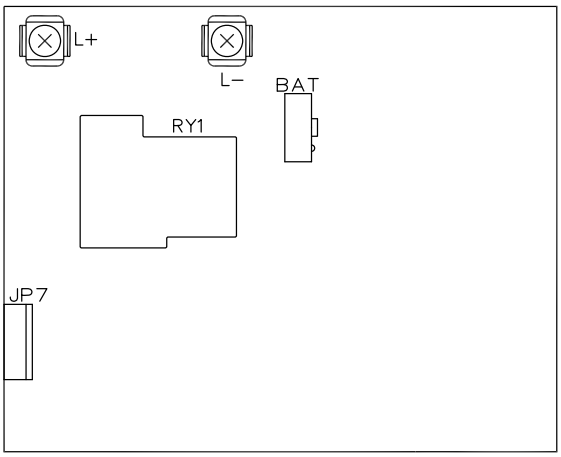


Figure 11

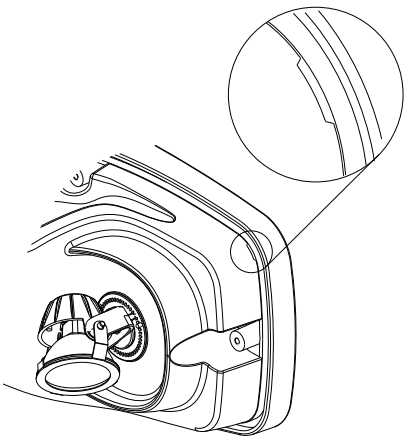


Figure 12

EF41 - Remote Heads

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

1. Servicing of this equipment should be performed by qualified service personnel.
2. Make sure the area is clear of all HAZARDS before installing or servicing the unit.
3. Turn off electrical power before and during installation and maintenance.
4. Before conducting maintenance, turn off the unit and wait for it to cool.
5. Do not install where the marked operating temperatures (T-Code) exceed the ignition temperature of the hazardous atmosphere.
6. Do not operate in ambient temperatures above those indicated on the rating labels.
7. Keep tightly closed when in operation.
8. Do not use outdoors.
9. Do not let the power cords touch hot surfaces.
10. Do not mount near gas or electric heaters.
11. Use caution when handling batteries. Battery acid can cause burns to the skin and eyes. If acid is spilled on the skin or eyes, flush acid with fresh water and contact a physician immediatly. Avoid possible shorting.
12. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
13. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
14. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off power.
2. Remove the lens (3).
3. Install the junction box on the wall or ceiling (9).
4. Install the gasket (8) on to the back plate(7).
5. Connect the lamp wires to the emergency circuit using wire nuts provided with the unit. For double lamp assembly fixtures, lamps should be connected in parallel, not in series. Refer to lamp voltage indicated on the unit. For 120V units, connect the ground(green wire).
6. Fasten the back plate to the junction box.
7. Adjust the lamp assemblies:
   - Rotation: hold the lamp assembly and turn it to either side.
   - Tilting: hold the lamp assembly and tilt it up or down.
8. Before installing the lens, make sure there is no particles on the gaskets, this can affect sealing. Secure the lens to the back plate with the screws provided. Make sure the o-rings (4) are installed between the lens and the back plate, as shown in figure 1.

ATTENTION: All lens and junction box screws must be tightened to a torque of 15inlb and plugs properly sealed with a sealing compound.

9. Turn on power and check the operation of you lighting fixture.

Lamp replacement

Refer to the relamping label located on the lamp holder for the recommended voltage and wattage. Do not exceed recommended voltage or wattage.

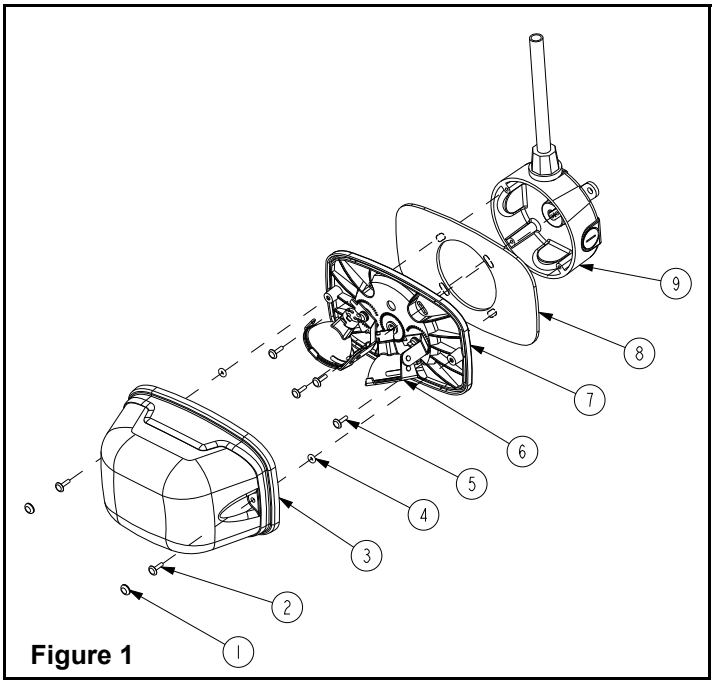


Figure 1

Part List

1. Screw cover (2)
2. Lens screw (2)
3. Lens
4. O-ring (2)
5. Junction box screws (4)
6. Head (1 or 2)
7. Back plate
8. Gasket
9. Junction box (provided with the unit)

EMERGI-LITE

EF39P-All plastic remote heads

WARNING:
Risk of Shock.
Disconnect Power before Installation.

Installation instructions

1. Turn off AC power.
2. Remove the lens.
3. Install the gasket (8) on the back plate.
4. Align and snap in place the lamp assemblies with "stopper" oriented per Figure 1. Note: handle lamp assemblies by applying a pressure on either end of the support as per Figure 1.
5. Connect the lamp wires to the emergency circuit using wire nuts. For double lamp assembly fixtures, lamps should be connected in parallel, not in series. Refer to lamp voltage indicated on the unit.
6. Fasten the back plate with 4 screws to either a nema 4X rated junction box or directly to a recessed junction box making sure the unit is properly sealed all around (gasket will not guarantee an adequate seal on all surfaces).

Important: the junction box must be circular and nema 4X rated for the unit to retain a nema 4X rating.

7. Adjust the lamp assemblies:
   - Rotation: hold the lamp assembly and turn it to either side.
   - Tilting: hold the lamp assembly and tilt it up or down.
8. Secure the lens to the back plate with the screws provided.

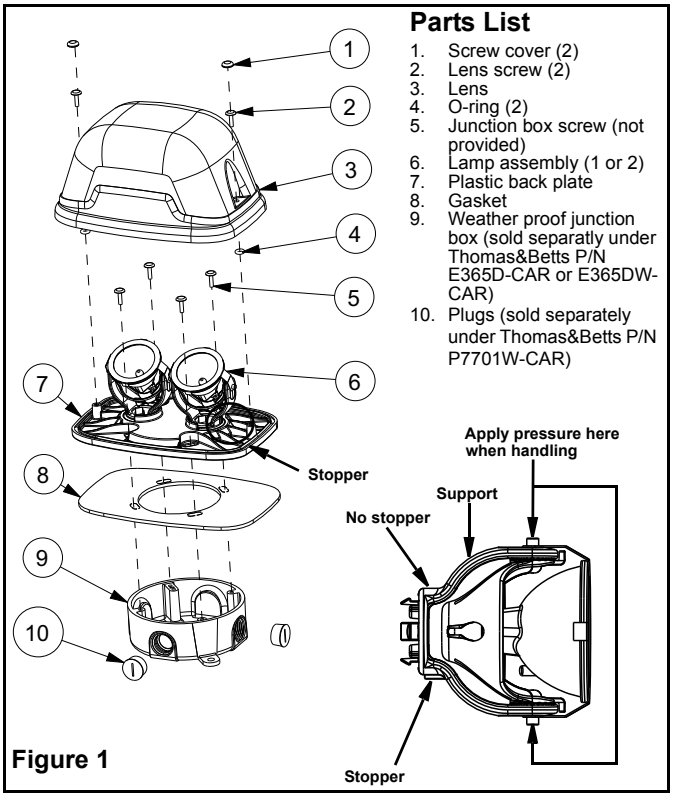
Caution: Do not tighten screws more than necessary. They are to be tightened just enough to start compressing the o-rings.

The screw covers can be installed to prevent the accumulation of debris on the screws.

9. Turn on power and check the operation of your lighting fixture.

Lamps replacement

Refer to the relamping label located near the lamp holder or the recommended maximum wattage. Do not exceed recommended wattage.



Parts List

1. Screw cover (2)
2. Lens screw (2)
3. Lens
4. O-ring (2)
5. Junction box screw (not provided)
6. Lamp assembly (1 or 2)
7. Plastic back plate
8. Gasket
9. Weather proof junction box (sold separatly under Thomas&Betts P/N E365D-CAR or E365DW-CAR)
10. Plugs (sold separately under Thomas&Betts P/N P7701W-CAR)

Figure 1

EMERGI-LITE

EF39P-All plastic Remote heads

WARNING:
Risk of Shock.
Disconnect Power before Installation.

Installation instructions

1. Turn off AC power.
2. Remove the lens.
3. Install the gasket (8) on the back plate.
4. Align and snap in place the lamp assemblies with "stopper" oriented per Figure 1. Note: handle lamp assemblies by applying a pressure on either end of the support as per Figure 1.
5. Connect the lamp wires to the emergency circuit using wire nuts. For double lamp assembly fixtures, lamps should be connected in parallel, not in series. Refer to lamp voltage indicated on the unit.
6. Fasten the back plate with 4 screws to either a nema 4X rated junction box or directly to a recessed junction box making sure the unit is properly sealed all around (gasket will not guarantee an adequate seal on all surfaces).

Important: the junction box must be circular and nema 4X rated for the unit to retain a nema 4X rating.

7. Adjust the lamp assemblies:
   - Rotation: hold the lamp assembly and turn it to either side.
   - Tilting: hold the lamp assembly and tilt it up or down.
8. Secure the lens to the back plate with the screws provided.

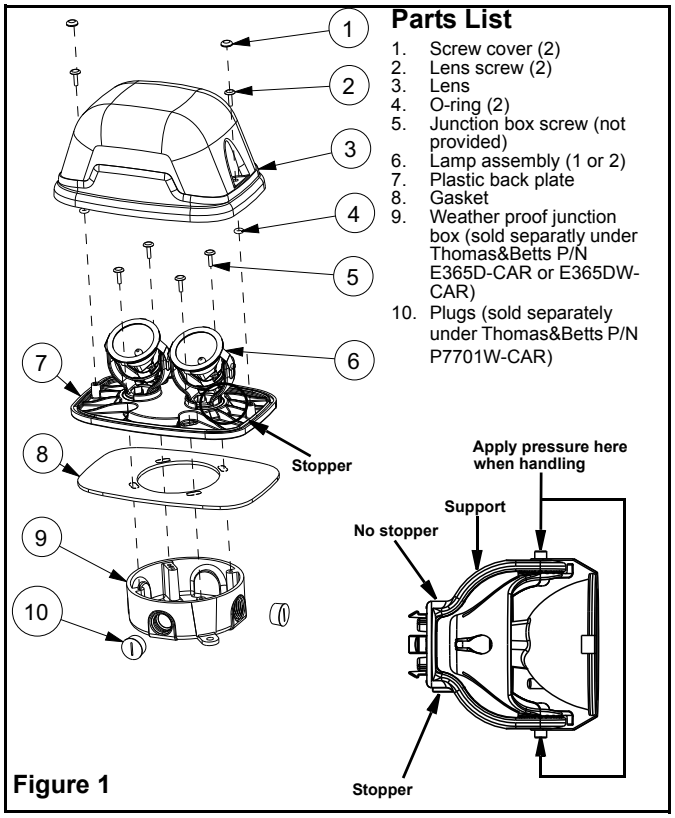
Caution: Do not tighten screws more than necessary. They are to be tightened just enough to start compressing the o-rings.

The screw covers can be installed to prevent the accumulation of debris on the screws.

9. Turn on power and check the operation of your lighting fixture.

Lamps replacement

Refer to the relamping label located near the lamp holder or the recommended maximum wattage. Do not exceed recommended wattage.



Parts List

1. Screw cover (2)
2. Lens screw (2)
3. Lens
4. O-ring (2)
5. Junction box screw (not provided)
6. Lamp assembly (1 or 2)
7. Plastic back plate
8. Gasket
9. Weather proof junction box (sold separatly under Thomas&Betts P/N E365D-CAR or E365DW-CAR)
10. Plugs (sold separately under Thomas&Betts P/N P7701W-CAR)

Figure 1

EF39 Nema-4X Die-cast remote heads

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Do not mount near gas or electric heaters.
3. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
4. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
5. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

Installation instructions

1. Turn off power.
2. Remove the lens.
3. Install the gasket (8) on the back plate.
4. Connect the lamp wires to the emergency circuit using wire nuts. For double lamp assembly fixtures, lamps should be connected in parallel, not in series. Refer to lamp voltage indicated on the unit.
5. Fasten the back plate with 4 screws to either a nema 4X rated junction box or directly to a recessed junction box making sure the unit is properly sealed all around (gasket will not guarantee an adequate seal on all surfaces).

IMPORTANT: The junction box must be Nema 4X rated for the unit to retain a Nema 4X rating. Plugs must be properly sealed with a sealing compound.

6. Adjust the lamp assemblies:
   - Rotation: hold the lamp assembly and turn it to either side.
   - Tilting: hold the lamp assembly and tilt it up or down.
7. Secure the lens to the back plate with the screws provided.

ATTENTION: All lens and junction box screws must be tightened to a torque of 15inlb.

   The screw covers can be installed to prevent the accumulation of debris on the screws, as required by NSF.
8. Turn on power and check the operation of your lighting fixture.

Lamps replacement

Refer to the relamping label located near the lamp holder or the recommended maximum wattage. Do not exceed recommended wattage.

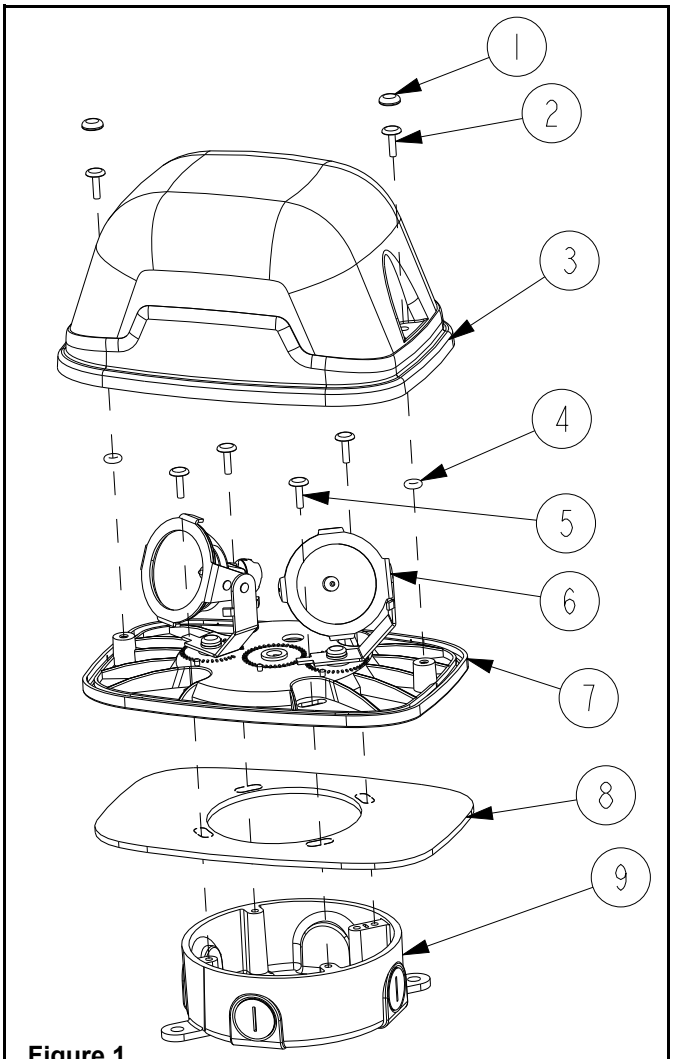


Figure 1

Parts List

1. Screw cover (2)
2. Lens screw (2)
3. Lens
4. O-ring (2)
5. Junction box screw (4 required) (not provided)
6. Lamp assembly (1 or 2)
7. Back plate
8. Gasket
9. Weather proof junction box (not provided).

Installation instructions

Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp head.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the flat surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the lamp head into its final position.
5. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
6. Use the junction box screws to secure the canopy to the junction box.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).

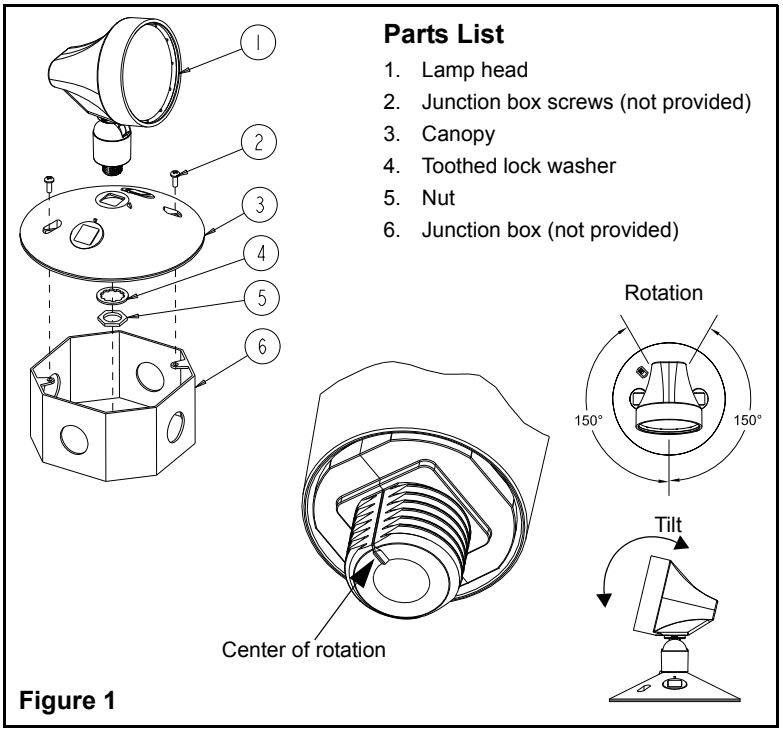


Figure 1

EMERGI-LITE

Remote heads – Installation instructions

Installation instructions

Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp head.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the flat surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the lamp head into its final position.
5. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
6. Use the junction box screws to secure the canopy to the junction box.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).

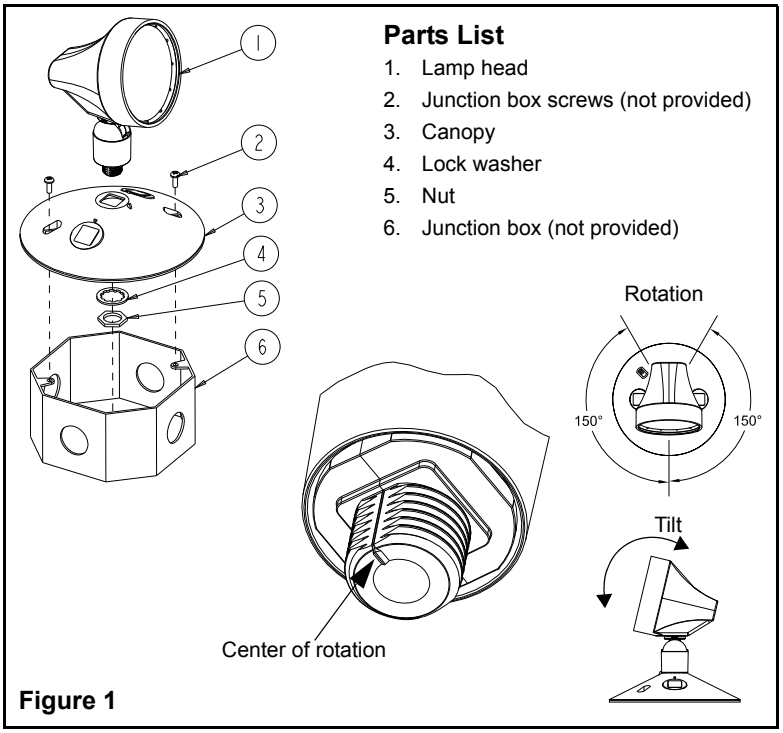


Figure 1

Emergi-Lite Tel: (888) 552-6467 Fax: (800) 316-4515 www.emergi-lite.com 10/12 750.1106 Rev. B

1/1

Installation instructions

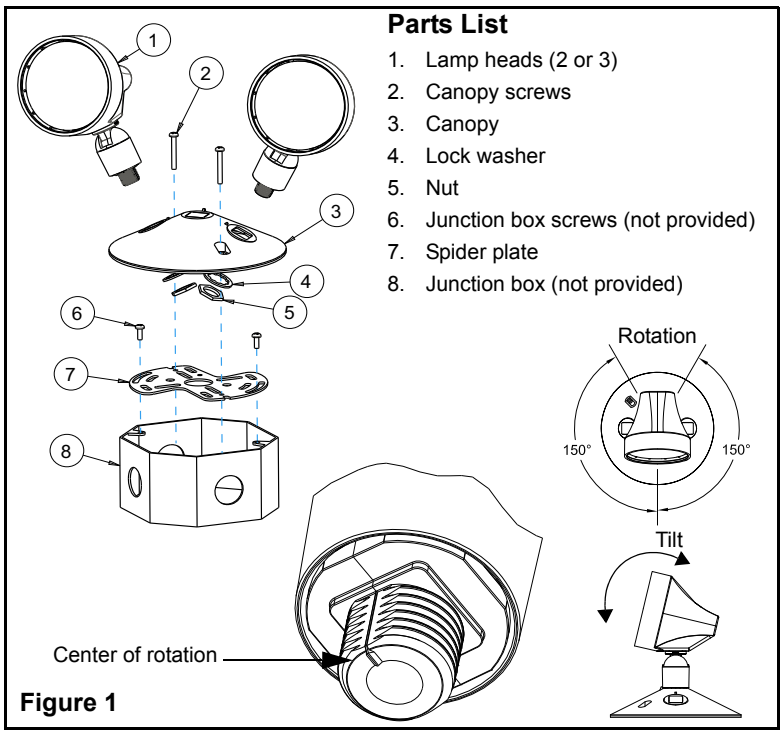
Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp heads.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the square surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the heads into there final position.
5. Install the spider plate to the junction box using the junction box screws.
6. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
7. Use the canopy screws to fix the canopy to the spider plate.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).



Parts List

1. Lamp heads (2 or 3)
2. Canopy screws
3. Canopy
4. Lock washer
5. Nut
6. Junction box screws (not provided)
7. Spider plate
8. Junction box (not provided)

Figure 1

EMERGI-LITE

Remote heads – Installation instructions

Installation instructions

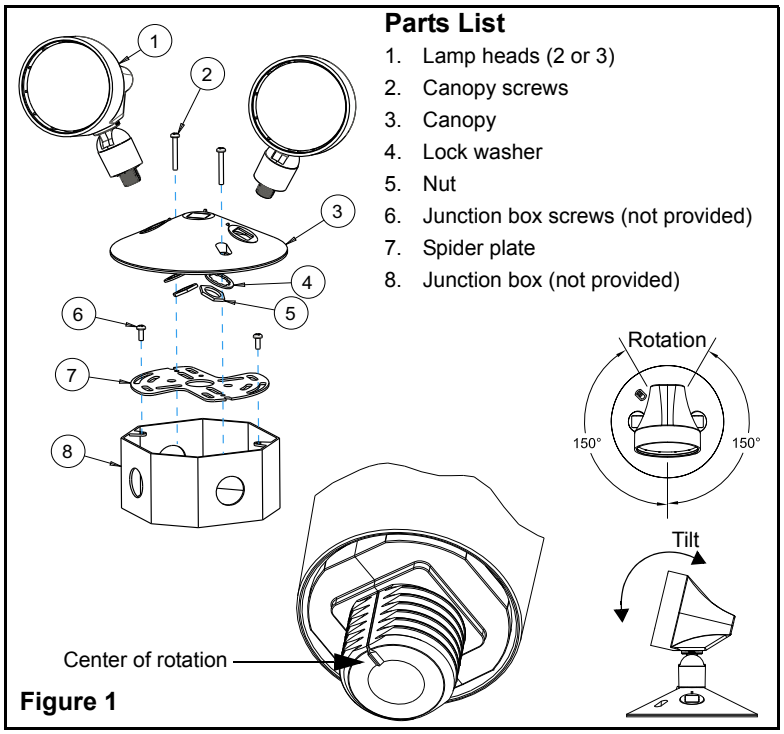
Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp heads.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the square surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the heads into there final position.
5. Install the spider plate to the junction box using the junction box screws.
6. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
7. Use the canopy screws to fix the canopy to the spider plate.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).



Parts List

1. Lamp heads (2 or 3)
2. Canopy screws
3. Canopy
4. Lock washer
5. Nut
6. Junction box screws (not provided)
7. Spider plate
8. Junction box (not provided)

Figure 1

Emergi-Lite Tel: (888) 552-6467 Fax: (800) 316-4515 www.emergi-lite.com 10/12 750.1694 Rev. A

1/1

Installation instructions

Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp head.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the flat surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the lamp head into its final position.
5. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
6. Use the junction box screws to secure the canopy to the junction box.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).

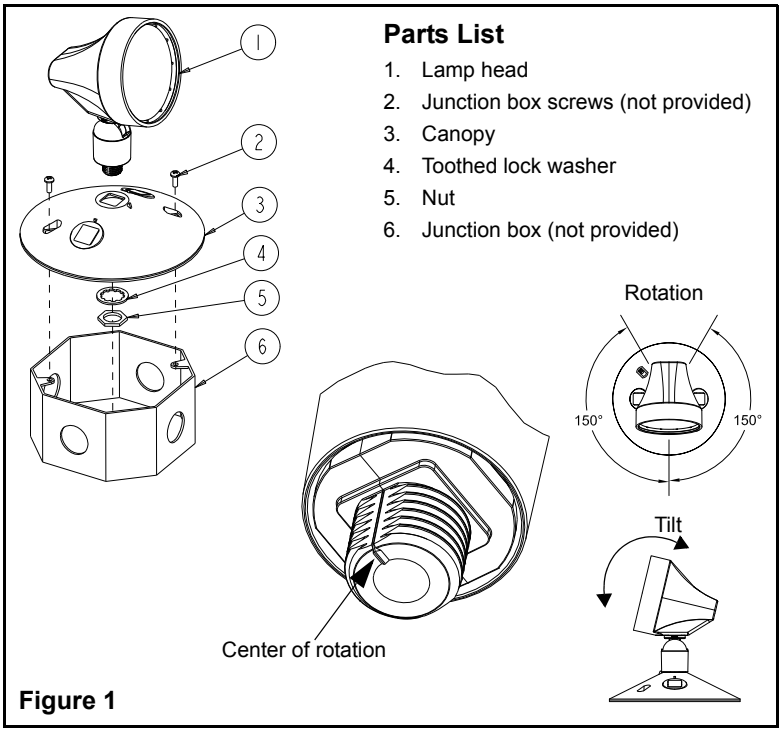


Figure 1

EMERGI-LITE

Remote heads – Installation instructions

Installation instructions

Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp head.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the flat surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the lamp head into its final position.
5. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
6. Use the junction box screws to secure the canopy to the junction box.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).

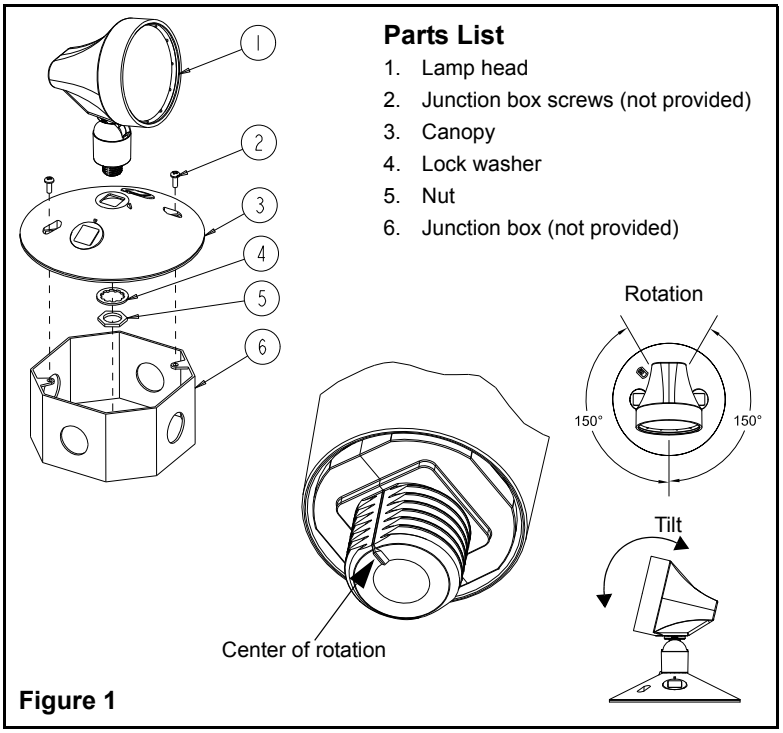


Figure 1

Emergi-Lite Tel: (888) 552-6467 Fax: (800) 316-4515 www.emergi-lite.com 10/12 750.1106 Rev. B

1/1

Installation instructions

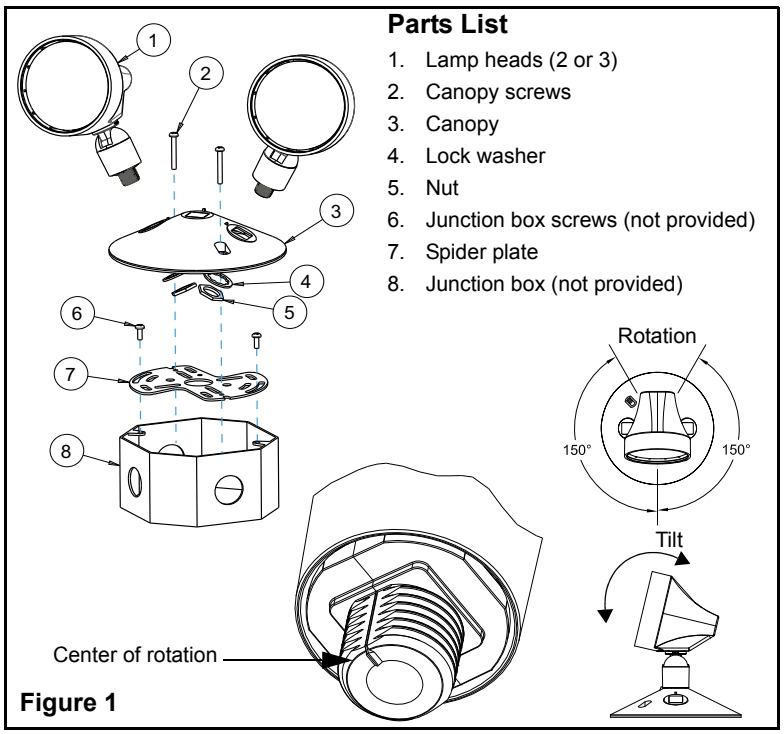
Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp heads.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the square surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the heads into there final position.
5. Install the spider plate to the junction box using the junction box screws.
6. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
7. Use the canopy screws to fix the canopy to the spider plate.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).



Parts List

1. Lamp heads (2 or 3)
2. Canopy screws
3. Canopy
4. Lock washer
5. Nut
6. Junction box screws (not provided)
7. Spider plate
8. Junction box (not provided)

Figure 1

EMERGI-LITE

Remote heads – Installation instructions

Installation instructions

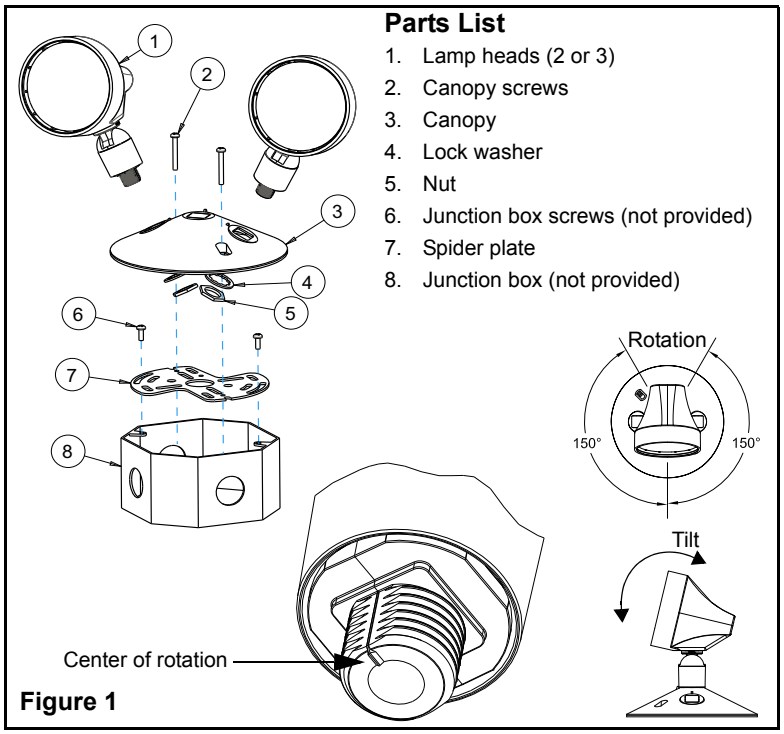
Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp heads.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the square surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the heads into there final position.
5. Install the spider plate to the junction box using the junction box screws.
6. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
7. Use the canopy screws to fix the canopy to the spider plate.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).



Parts List

1. Lamp heads (2 or 3)
2. Canopy screws
3. Canopy
4. Lock washer
5. Nut
6. Junction box screws (not provided)
7. Spider plate
8. Junction box (not provided)

Figure 1

Emergi-Lite Tel: (888) 552-6467 Fax: (800) 316-4515 www.emergi-lite.com 10/12 750.1694 Rev. A

1/1

Installation instructions

Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp head.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the flat surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the lamp head into its final position.
5. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
6. Use the junction box screws to secure the canopy to the junction box.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).

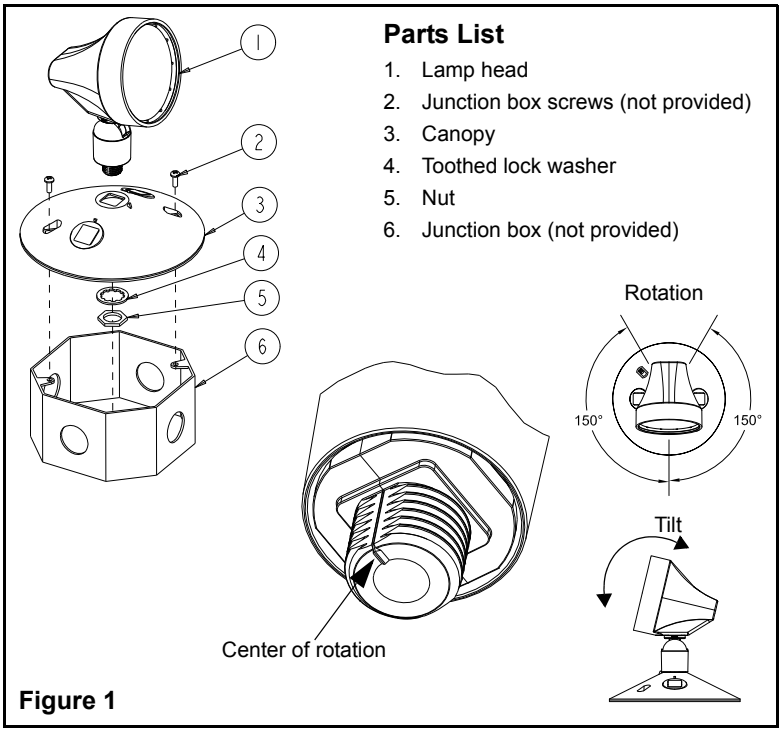


Figure 1

EMERGI-LITE

Remote heads – Installation instructions

Installation instructions

Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp head.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the flat surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the lamp head into its final position.
5. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
6. Use the junction box screws to secure the canopy to the junction box.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).

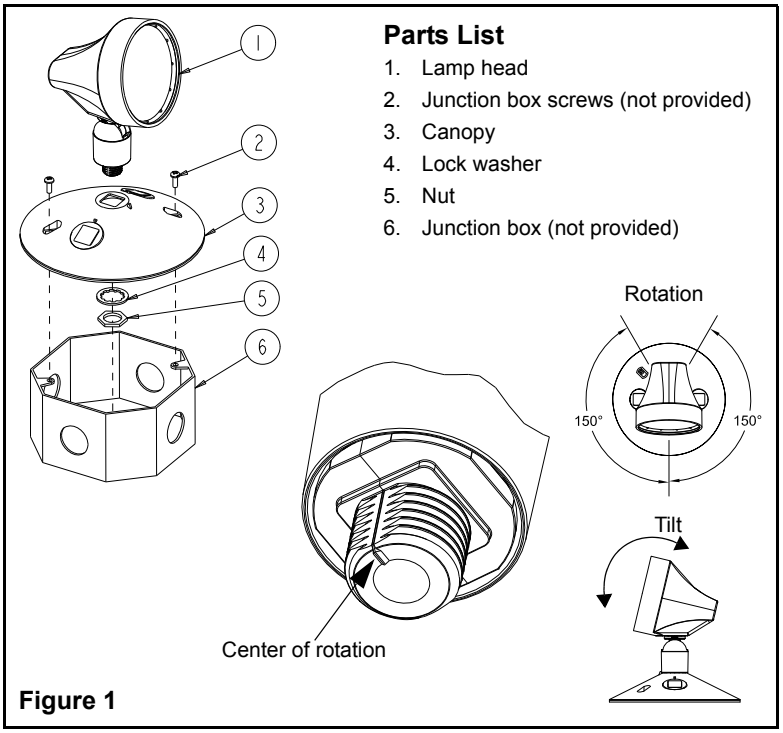


Figure 1

Emergi-Lite Tel: (888) 552-6467 Fax: (800) 316-4515 www.emergi-lite.com 10/12 750.1106 Rev. B

1/1

Installation instructions

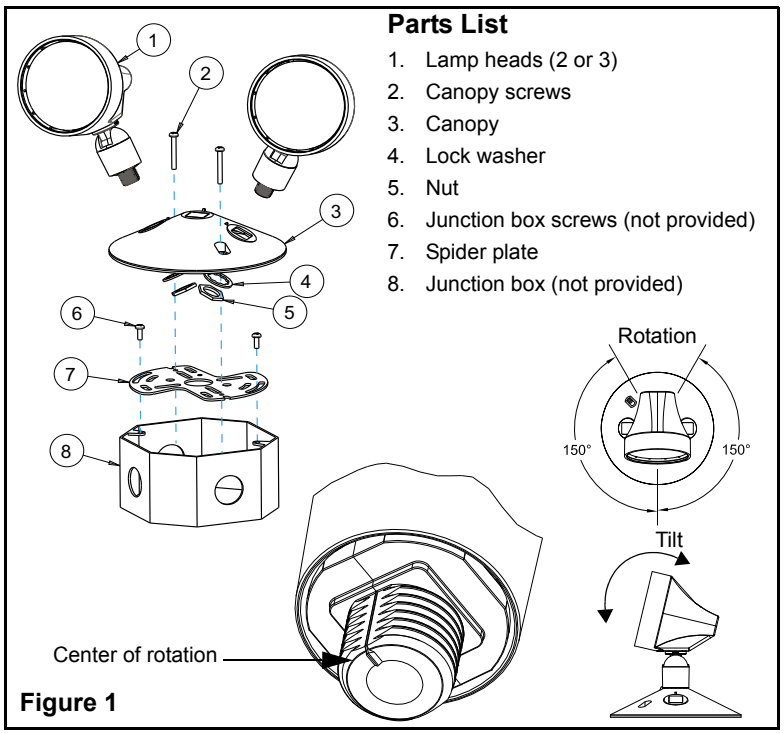
Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp heads.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the square surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the heads into there final position.
5. Install the spider plate to the junction box using the junction box screws.
6. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
7. Use the canopy screws to fix the canopy to the spider plate.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).



Parts List

1. Lamp heads (2 or 3)
2. Canopy screws
3. Canopy
4. Lock washer
5. Nut
6. Junction box screws (not provided)
7. Spider plate
8. Junction box (not provided)

Figure 1

EMERGI-LITE

Remote heads – Installation instructions

Installation instructions

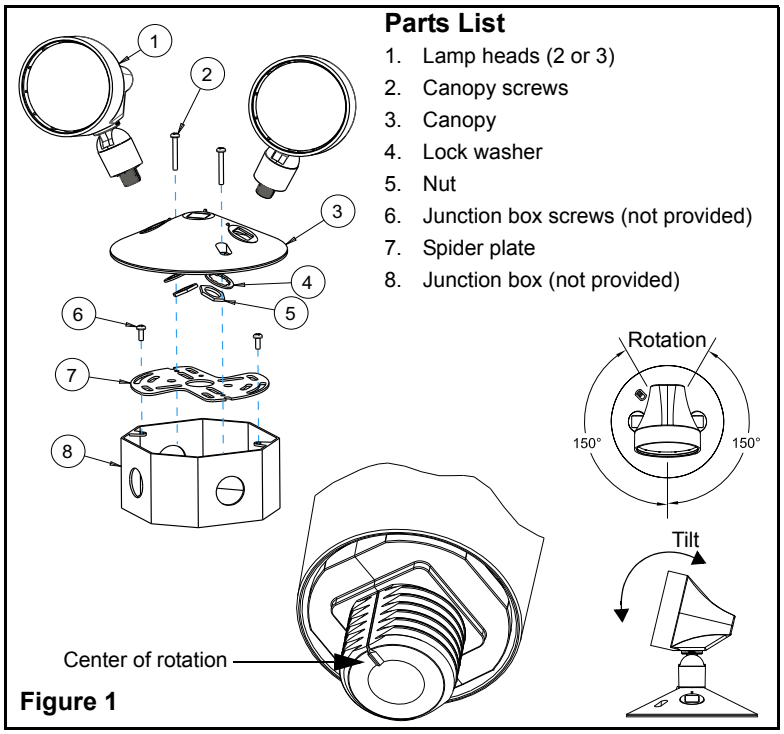
Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp heads.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the square surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the heads into there final position.
5. Install the spider plate to the junction box using the junction box screws.
6. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
7. Use the canopy screws to fix the canopy to the spider plate.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).



Parts List

1. Lamp heads (2 or 3)
2. Canopy screws
3. Canopy
4. Lock washer
5. Nut
6. Junction box screws (not provided)
7. Spider plate
8. Junction box (not provided)

Figure 1

Emergi-Lite Tel: (888) 552-6467 Fax: (800) 316-4515 www.emergi-lite.com 10/12 750.1694 Rev. A

1/1

RS Series - Emergency light unit

6 and 12 volt Decorator Recessed

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Use caution when handling batteries. Avoid possible shorting.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
8. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
9. Do not use this equipment for other than intended use.
10. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Remove the four cover screws and retain. Set cover/electronics assembly aside (see fig. 2).

Choose the proper mounting solution: wall mount, new construction wood framing or suspended ceiling. Follow the proper mounting section and continue the installation at step 3.

Wall mount

a. Remove appropriate knock out for AC supply.
b. Cut hole in sheet rock & frame.
c. Mount back box permanently into place by leaving the edge 3/8 of an inch away from the sheet rock surface.

New construction wood framing

a. Determine the desired orientation between framing members. Locate sides of the back box that will be at right angles to the framing members. Mount the adjustment brackets to these sides using the studs on the brackets and nuts. Do not tighten (see fig. 3)

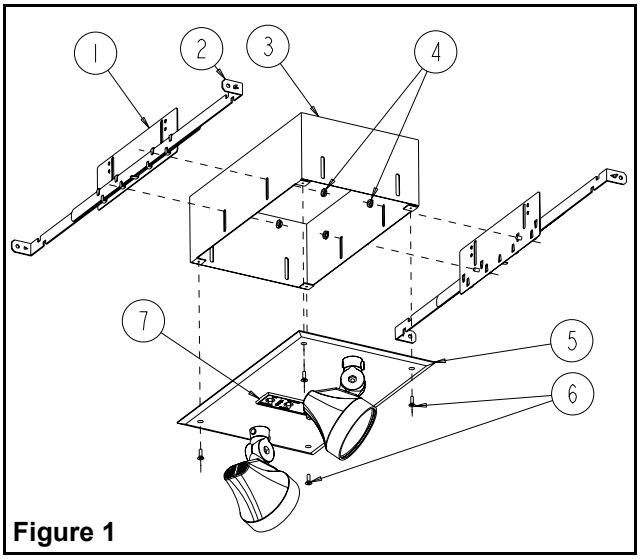
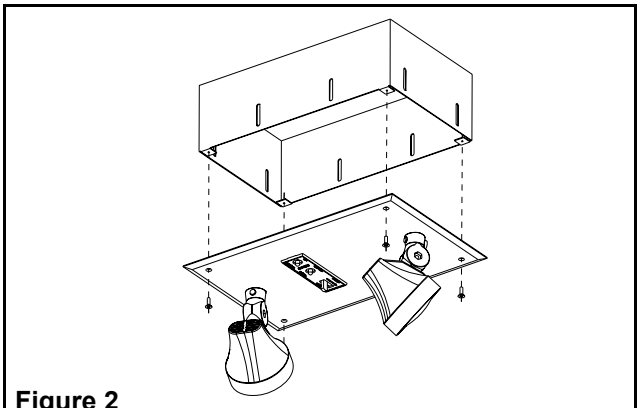
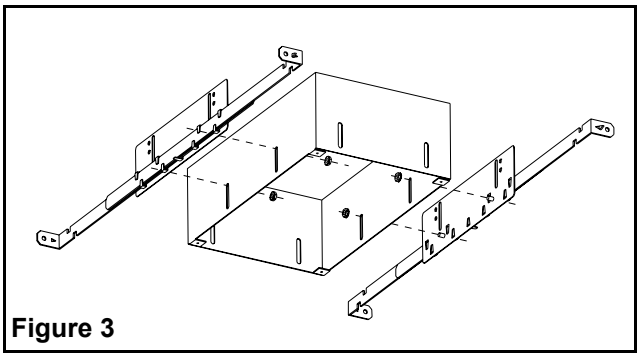


Figure 1

Part List

1. Adjustment brackets (2)
2. Hanger bars (4)
3. Back Box
4. Kep nuts (4 provided)
5. Cover
6. Cover screws (4 provided)
7. Test switch and/or diagnostics indicator


Figure 2


Figure 3

b. Remove appropriate knock out for AC supply.
c. Slide the hanger bars through the tabs in the adjustment brackets (see fig. 4) and place the assembly between the framing members. Align the back box as required and fasten bars to the framing members.
d. Align the open surface of box where the finished surface of sheet rock will be and tighten nuts and studs (see fig. 5).

Suspended ceilings

a. Determine the desired orientation between grid members. Locate sides of the back box that will be parallel to the longest grid members. Mount the adjustment brackets to these sides using the studs on the brackets and nuts. Do not tighten (see fig. 3).
b. Remove appropriate knock out for AC supply.
c. Slide hanger bars through the tabs in the adjustment brackets and rest assembly on top of grid members. Notch on bars should hook over grid member (see fig. 5). Align the back box as required and fix location by cutting a hole in the ceiling panel and allowing back box to hang through the panel.
d. Align the open surface of the box flush with the surface of the ceiling panels and tighten the nuts and studs (see fig. 5). Hang the fixture from the framing above ceiling grid with solid wires, (provided by others), if required by code.

3. Route AC unswitched circuit of rated voltage into the back box, allowing approximately 6" of wire for connection.
4. If required, extend DC wiring for remote DC fixtures into the back box.
   Note — Wiring must comply with NEC Art, 700 and 720. Do not exceed rated wattage of unit.
5. Connect DC wiring to load terminals on circuit board marked, "L+ and L-".
6. If removed, reinstall battery.
7. Make the proper connections. Our system can accept input voltages of 120 VAC or 277 VAC (see fig. 6).
   120 VAC — Connect the black (120 VAC) and white (Neutral) leads to the building utility. Insulate orange wire.
   277 VAC — Connect the orange (277 VAC) and white (Neutral) leads to the building utility. Insulate black wire.
8. When ready to permanently energize AC circuit, plug polarized battery connector into the PC board.
9. Replace cover/electronics assembly.
10. Energize AC circuit. Pilot lights will come on. Red indicates that the charger is on high charge (not present on RSC units). Yellow is an indication that the AC supply is present (see fig. 7). After the unit has reached full charge, it is normal for the red light to pulse on occasionnally. However, if the red pilot light remains on for more than a week, it is an indication of a malfunction.

Manual testing

Press test switch (see fig. 7). Lights will illuminate, AC pilot lamp will extinguish. On release, pilot lamp will illuminate, lights will turn off, and the automatic charger will restore battery to full charge.

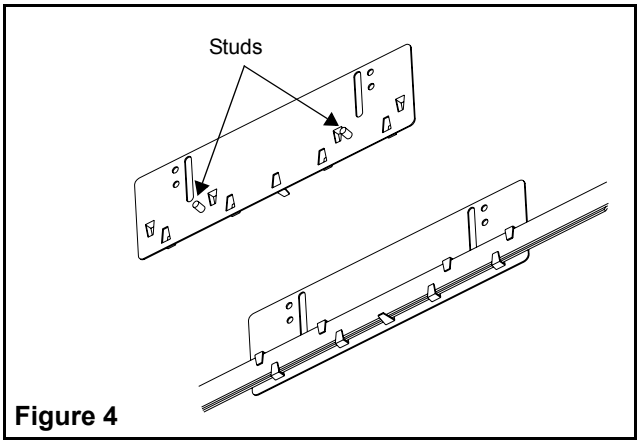


Figure 4

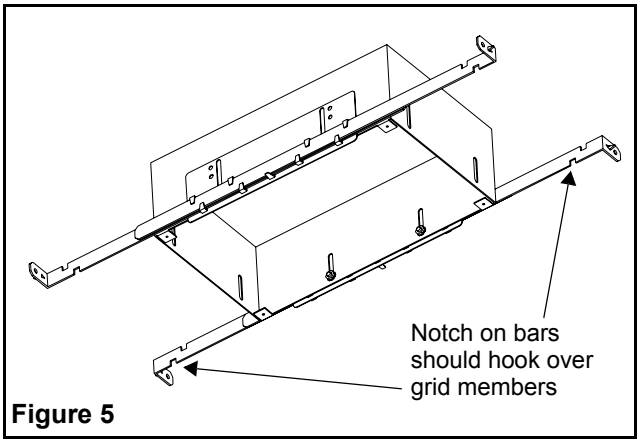


Figure 5

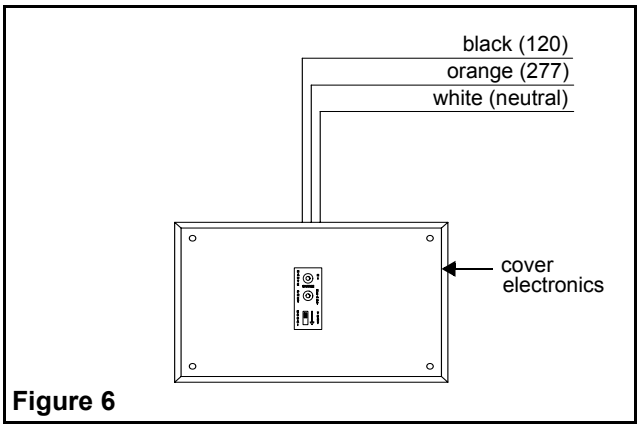


Figure 6

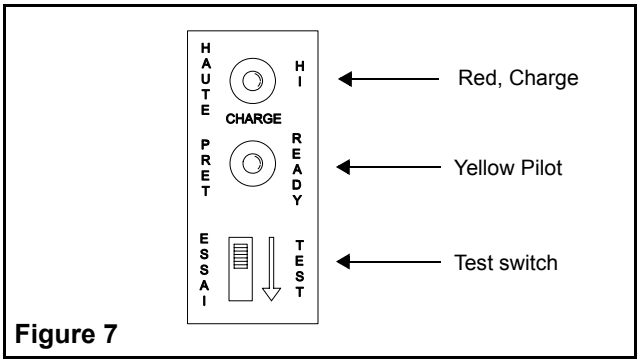


Figure 7

Automatic testing and diagnostics, (optional)

The models with automatic testing and diagnostics include a micro-controller which exercises, (self-tests), the unit on a monthly basis and identifies and notifies failures of the electrical components: battery, battery charger, lamps (LEDs) (see fig.8).

Please refer to the manual called “Advanced Diagnostic, Charger Board, owner’s manual” for all diagnostics features and functions.

Maintenance

None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.

Note — Nickel Cadmium battery units are shipped discharged and may require 10 minutes of connection to AC supply before start-up test procedure, and 96 hours to reach full charge.

Automatic testing and diagnostics option

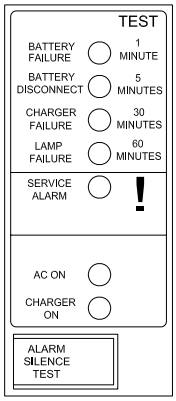


Figure 8

Retract-Lite: DC-Remote Lighting Fixture

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions (Figure 1)

The DC-remote fixture comes with :

= U-shape metal bracket, for rigid mount on wall studs and ceiling beams covered by drywall.

= Junction box for the DC wire connection.

Both these components can be installed (retrofit) after the drywall put in. For installation, the cable form the DC remote battery unit must be passed near a wall stud or ceiling beam. at the installation point, the drywall must be marked with an opening hole of 2 to 3 inch diameter near that stud or beam.

"U" Bracket Installation in the Wall or Ceiling (Figure 2a,b,c)

1. Open a rectanguler hole (8-1/4 inch by 5-3/4 inch) next to the wall stud or ceiling beam. The hole must have the short opening along the stud. Use the "U" bracket to mark the dimensions on the drywall.
2. Pass the electrical cable out through the hole.
3. Slide the "U" bracket in the hole: enter the flange side first then push the other side to the stud.
4. Fix the "U" bracket on the stud or beam with appropriate fasteners (not supplied).

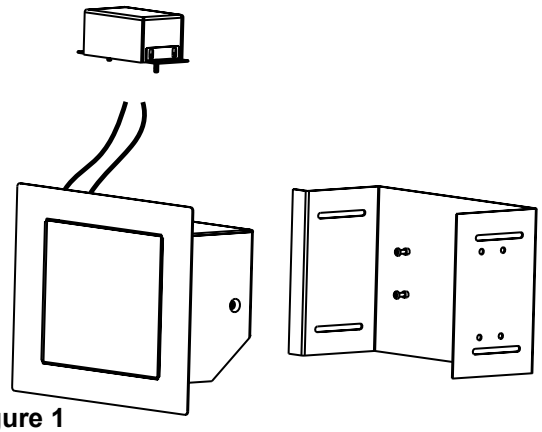


Figure 1

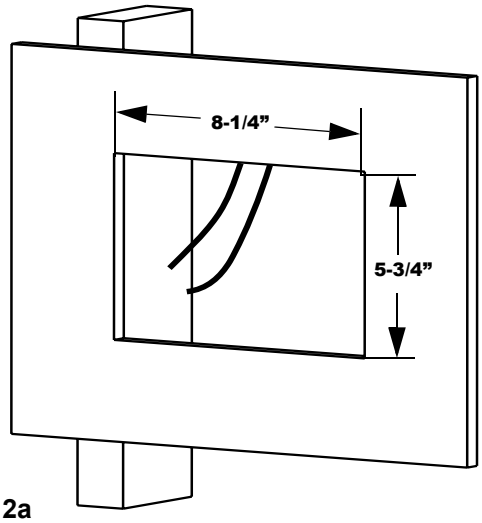


Figure 2a

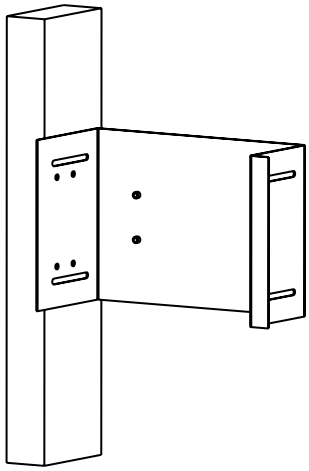


Figure 2b

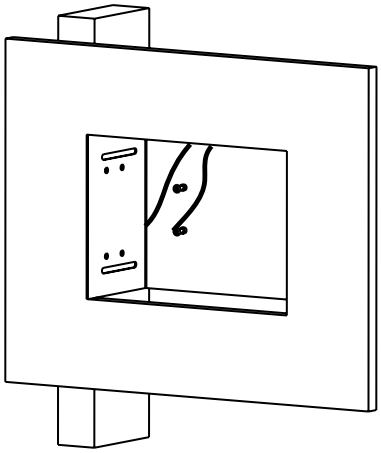


Figure 2c

"U" Bracket Installation in a T-bar Ceiling (Figures 3, 4 and 5)

The DC-remote fixture unit includes as an option (specify when ordering) a hardware kit for installation in T-bar ceiling structures.

1. Remove the four screws installed in the pem-studs of the "U" bracket and replace them with the longer, 1-inch screws provided in the hardware kit. Turn them two - three threades in the pem-studs.
2. Mount the adjustment brackets from the hardware kit on the two sides of the "U" bracket, using the studs and nuts. Do not tighten (see Figure 3).
3. Slide hanger bars through the tabs in the adjustment brackets. If needed, bend the middle tab of the adjustment brackets over the hanger bars (see Figure 4). Align the "U" bracket as required and fix location by cutting a hole in the ceiling panel of the size of the "U" bracket (8-1/4 inch by 5-3/4 inch).
4. Rest the assembly on top of grid members. The notch on bars should hook over grid member (see Figure 5). Place the "U" bracket with its flange sit on the panel and tighten the nuts on the studs of the side brackets (see Figure 4). If required by code, hang the whole assembly from the framing above ceiling grid with solid wires, (provided by others).
5. Pass the electrical cable out through the hole.

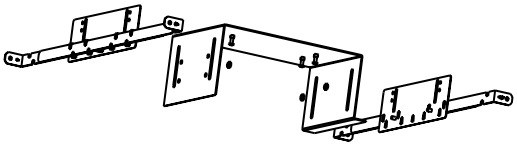


Figure 3

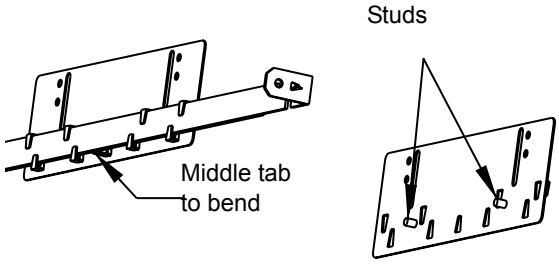


Figure 4

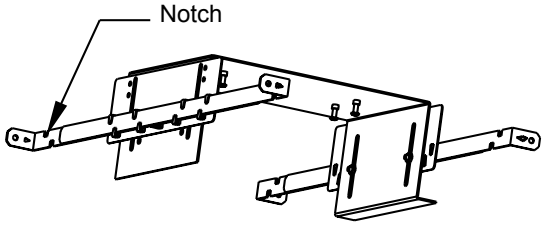


Figure 5

Lamp Module Installation (Figures 6 and 7)

1. Pass the DC cable about 2 inches through the junction box (provided).
2. Suspend the lamp module from the “U” bracket with the metal hooks (provided).
3. Connect the two wires from the lamp module to the DC cable. The connections don’t have a polarity. However, the emergency power must supply low-voltage DC current: 12Vdc or 24Vdc, as specified on the product label.
4. Cap the wire connections and install them in the junction box (see Figure 6a).
5. Install the juction box on the lamp module with the two screws provided. Make sure the whole juction box installation follows the code (see Figure 6b).
6. Force the door of the lamp module half-open and identify the four key holes in its housing.
7. Hold the lamp module. Disengage the hooks and leave it hooked in the wall, on the “U” bracket, for future utilization (see Figure 7).
8. Push the electical cable and the lamp module into the wall with the cable and junction box oriented downwards and engage the key holes in the four screws of the “U” bracket. Slide the lamp module so that the head of the screws are in the slotted end of the key hole.
9. Align the lamp unit on the wall (ceiling) then tighten the four screws until its trim is flush with the wall. For easy access to the screws, the door can be rotated one full turn of 360 degrees.
10. Orient the two lamps in their swivels and check that they are plugged into the sockets.
11. Close the door and make sure it is flush with the trim.

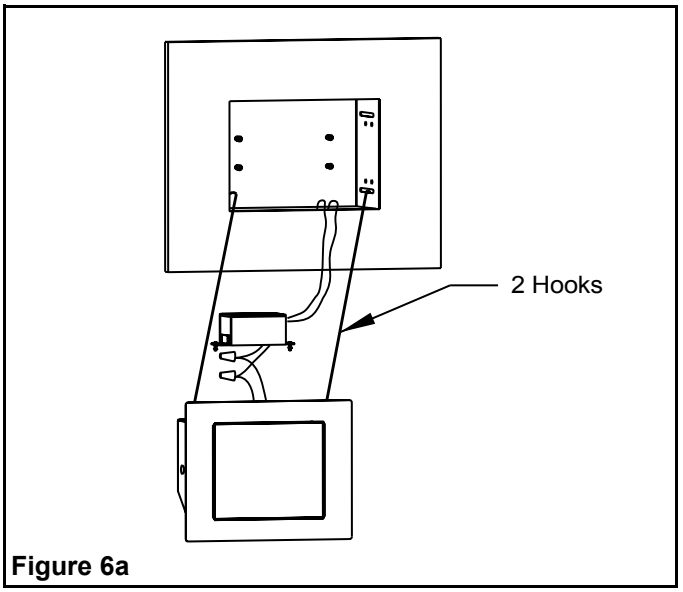


Figure 6a

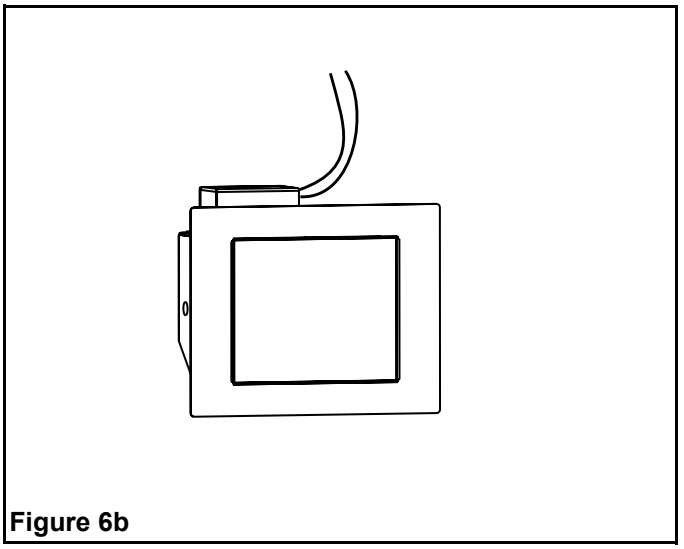


Figure 6b

Testing the DC-Remote Fixture

1. Activate the DC emergency line. The door will open and the lamps will illuminate.
2. Pivot the lamps in their swivels to illuminate the desired area.
3. Turn off the DC emergency power. The lamps will turn off and the door will close flush with the trim.
4. The unit requires no maintenance, but should be tested regulary in accordance with the codes.

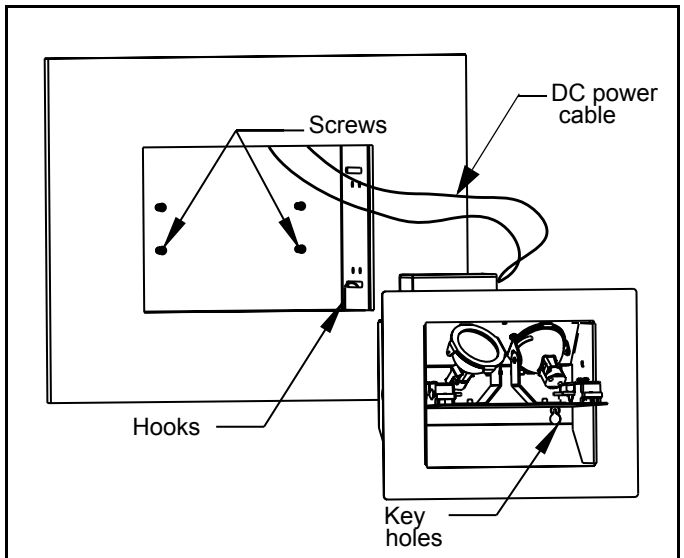


Figure 7

Important!

When powered, the fixture must be supplied for minimun 5 seconds in order to accumulate the energy required to close the door properly.

Retract-Lite – Emergency Lighting

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Use caution when handling batteries. Avoid possible shorting.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Do not use this equipment for other than intended use.
8. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

Turn off AC power.

Wall Mount Back-Box Installation (Figure 1)

1. Knock out the hole(s) on top of the back-box for incoming cable(s) (AC line and/or DC emergency line). (Figure 1)
2. Position the back-box at the desired location to be flush with the front edge of the stud observing mounting orientation (Figure 1).
3. Use appropriate fasteners (not supplied) to mount the back-box on the stud (Figure 1).
4. Connect the conduit to the K.O.'s on the top of the box.
5. Pull 10" of wire into the box for the final electrical connections.
6. Cap all wires.
7. CAUTION: failure to cap the wires may cause an unsafe condition.
8. Install the drywall over the back-box.
9. Locate the center of the opening and rout out drywall. Follow the outline of the opening in the back-box.

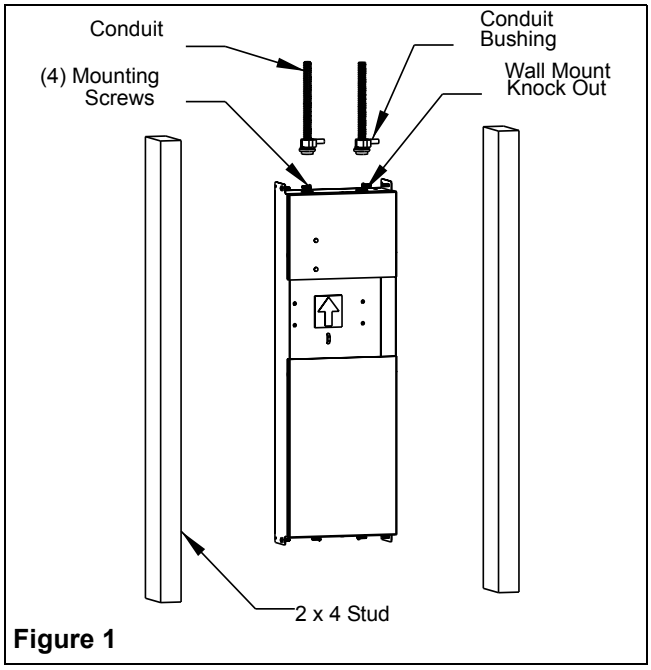


Figure 1

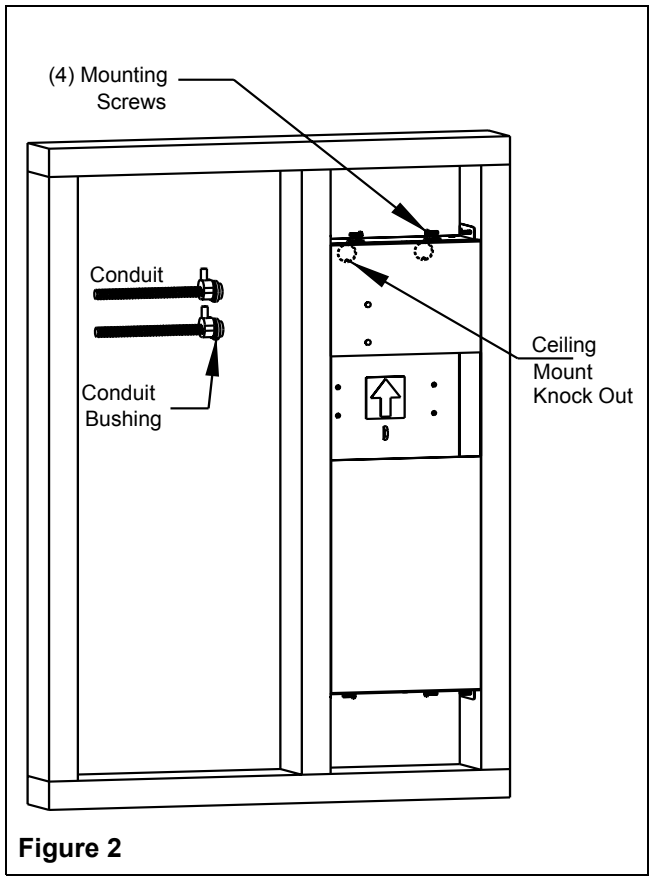


Figure 2

Drywall Ceiling Back-Box Installation (Figure 2)

1. Knock out the hole(s) on the back-box for incoming cable(s). (AC line and/or DC emergency line, Figure 2).
2. Position the back-box at the desired location to be flush with the front edge of the joist, observing mounting orientation (Figure 2).
3. Mount the back-box on the joist using screws (not supplied).
4. Frame the back-box as shown in Figure 2. Check for proper installation.
5. Follow instructions 5 to 9 of the Wall Mount Back-Box Installation.

T-bar Ceiling Back-Box Installation (Figure 3)

1. Knock out the hole(s) on the rear of the back-box for incoming cable(s). (AC line and/or DC emergency line) (Figure 3).
2. Mount the supplied T-bar brackets on the four tabs as shown in the Figure 3. Use position #1 hole for 1" T-bar and position #2 hole for 1.5" T-bar. For each position move the bracket to adjust the slot hole(s) for 1/2" or 5/8" ceiling tile thickness to locate the back-box flush with the back face of the ceiling tile. Tighten the screw(s).
3. Position the back-box at the desired location across the ceiling T-bars (Figure 4). Secure the Back-Box to the ceiling joists by chains, or "pencil rod" wire to support the unit.
4. Follow instructions 5 to 7 of the Wall Mount Back Box Installation.
5. Install the ceiling tile in position. There should not be any gap between the back-box and the tile if the mounting brackets have been installed properly.
6. Locate the center of the opening and route out the ceiling tile. Follow the outline of the opening of the back-box.

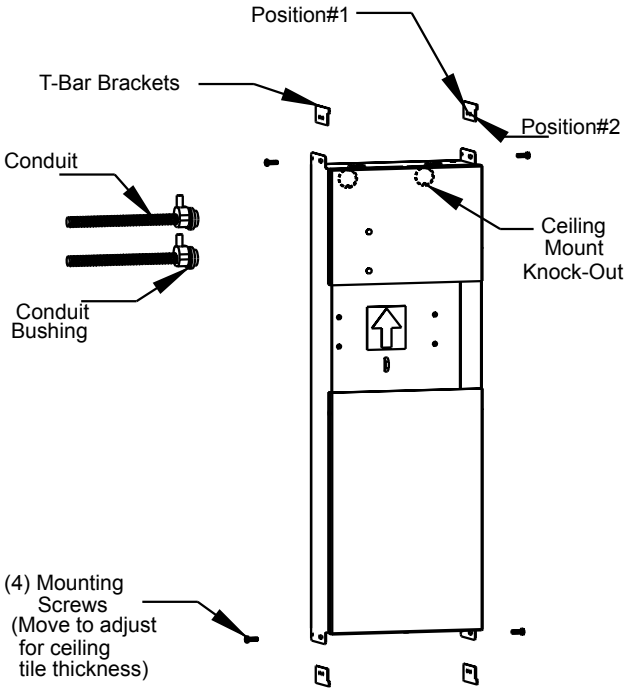


Figure 3

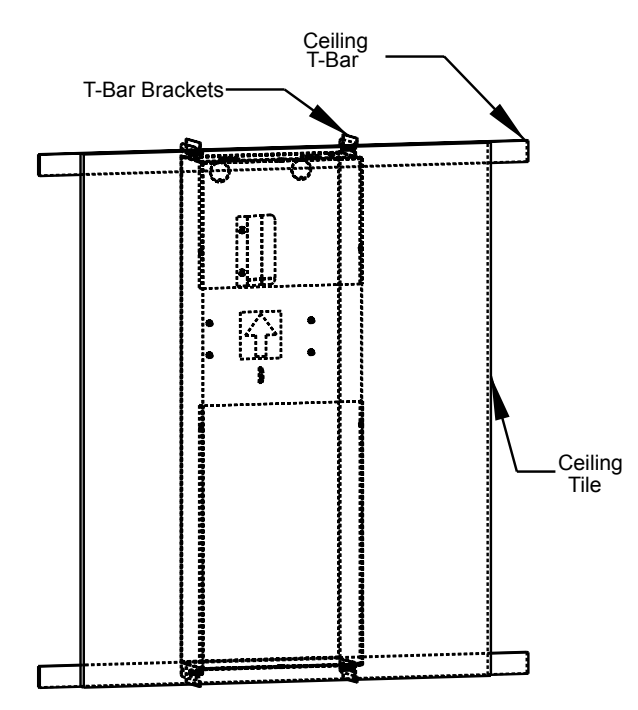


Figure 4

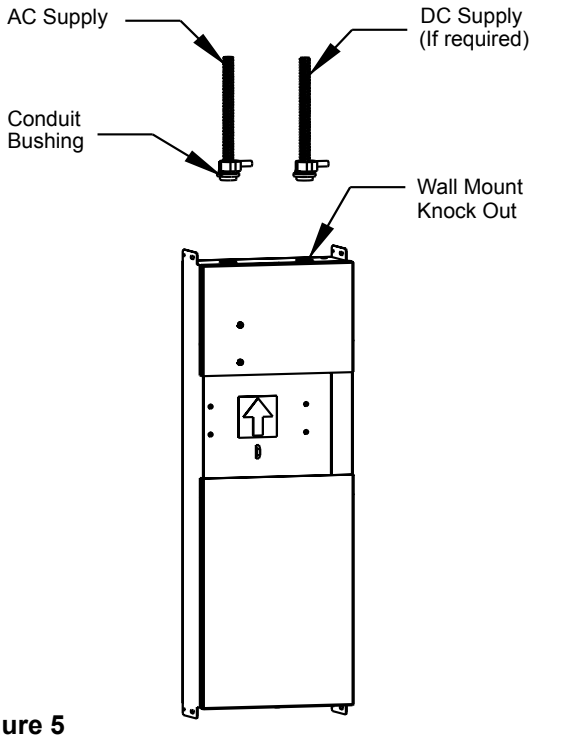


Figure 5

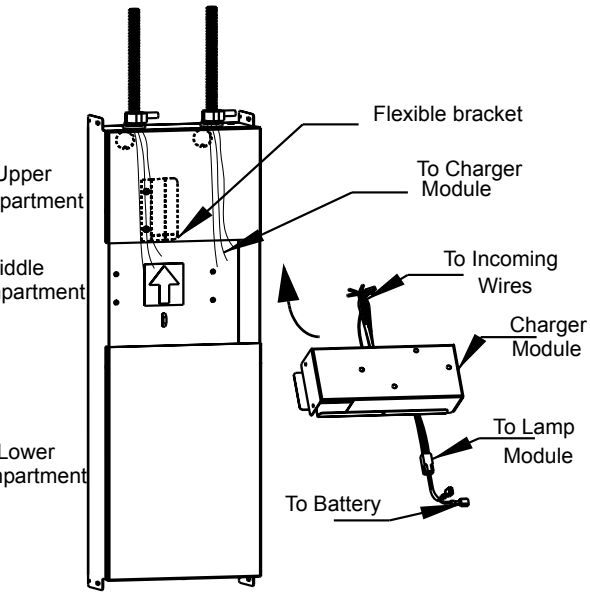


Figure 6

Charger Module Installation (Figure 6)

1. Pull out the electrical cables from the back box and cut the wires to leave 2 to 3 inches of wire outside the back-box.
2. Connect the GREEN wires from the charger module and the back-box to the GROUND supply wire.
3. For 120VAC connect the BLACK wire (labeled 120VAC) from the charger module to Line and the WHITE wire (labeled neutral) to Neutral.
4. For 277VAC connect the ORANGE wire (labeled 277VAC) from the charger module to Line and the WHITE wire (labeled Neutral) to Neutral.
5. For 347VAC connect the RED wire (labeled 347VAC) from the charger module to Line and the WHITE (labeled Neutral) to Neutrall.
6. If there are any remote heads to be connected to the unit, connect the RED wire (labeled L+) and the BLUE wire (labeled L-) to the load out going wires.
7. Note: make sure all unused wires are capped
8. Caution: failure to cap the wires may cause an unsafe condition
9. Place the charger module in the back-box with the outcoming wires on the right side. Enter the module at an angle, to bypass the flexibale bracket in the back-box; then slide the module upward, until it is latched by the flexible bracket. (Figure 6).
10. Check for secure installation.

Battery Installation (Figure 7a, b, c)

This equipment is provided with a battery module made up of one, twoor three sealed batteries, depending on the rated capacity. Follow the instructions below for the battery module configuration of your unit.

One-battery module (Figure 7a)

1. Take the 2 wires from the charger module (labeled: BATTERY CONNECTION) pass them under the tie-wraps and connect them to the battery (RED to positive and BLUE to negative).
2. Tighten the tie-wrap next to the battery terminals in order to secure the wires in place.
3. Place the battery in the lower compartment of the back-box, ensuring that the battery terminals are facing the left and the wires on the right side of the back box.
4. Place the two wires under the stopper bracket then slide the bracket towards the left into the slot all the way in the back-box (Figure 8).

Two-battery module (Figure 7b)

1. Take the battery with the wiring harness attached. Verify if the wire harness is well connected to the battery tab and tightly secured with the tie-wrap.
2. Place the battery in the lower compartment of the back-box, with the tabs to the left and the wire harness to the right side.
3. Take the second battery and run the wires with the female connectors under the tie-wraps and connect them to the battery (RED to positive and BLUE to negative).
4. Tighten the tie-wrap next to the battery terminals in order to secure the wires in place.
5. Place the second battery in the same direction as first battery.
6. Connect the male connectors of the wiring harness to the RED and BLUE wires from the charger module, as per the label indication (RED wire to RED wire;BLUE wire to BLUE wire).

7. Place the two wires under the stopper bracket then slide the bracket towards the left into the slot all the way in the back-box (Figure 8).

Three-battery module (Figure 7c)

1. Take the battery with the wiring harness attached. Verify if the wire harness is well connected to the battery tab and tightly secured with the tie-wrap.
2. Place the battery in the lower compartment of the back-box, with the tabs to the left and the wire harness to the right side.
3. Take the second battery and run the wires with the female connectors under the tie-wraps and connect them to the battery (RED to positive and BLUE to negative).
4. Tighten the tie-wrap next to the battery terminals in order to secure the wires in place.
5. Place this battery in the same direction as first battery.
6. Take the third battery and run the wires with the female connectors under the tie-wraps and connect them to the battery (RED to positive and BLUE to negative). Then follow the same instructions as in steps 4-5 above.
7. Connect the male connectors of the wiring harness to the RED and BLUE wires from the charger module, as per the label indication (RED wire to RED wire; BLUE wire to BLUE wire).
8. Place the two wires under the stopper bracket then slide the bracket towards the left into the slot all the way in the back-box (Figure 8).

Lamp Module Installation (Figure 8)

1. Install the four screws (provided with the stopper bracket) 2-3 threads into the pem-studs of the back-box.
2. Hold the lamp module by the harness and connect it to the 4-pin connector of the charger module.
3. Push on one side of the door of the lamp module to open it half-way and identify the four key holes in the housing.
4. Mount the lamp module by aligning it with the screws in the back-box. Slide the lamp module so that the head of the screws are in the slotted part of the key hole. (Make sure the harness and connector are placed in the space provided between the back-box and the charger module.)
5. Align the lamp module on the wall then secure it to the back-box by tightening the four screws (located in the key holes) until its trim is flush with the wall. (For easy access to the screws the door can be rotated one ful turn of 360 degrees.)
6. Orient the two lamps in their swivels and verify that they are plugged into the sockets.
7. Close the door and make sure that it is flush with the trim.

Testing the Equipment

1. Make the AC service.
2. The recessed pilot light/test switch will light in green.
3. Push the test button. The door will open and the lamps will illuminate for one minute, then the door will close. Orient the lamps to the desired position at this time. If more time is needed, push the test button again.
4. The unit requires no maintence, but should be tested regulary in accordance with the local codes.

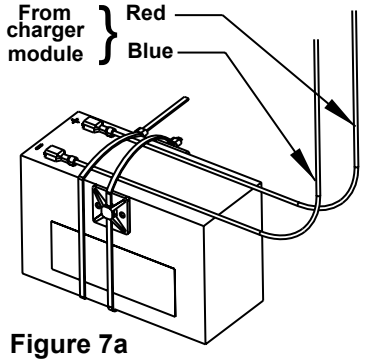


Figure 7a

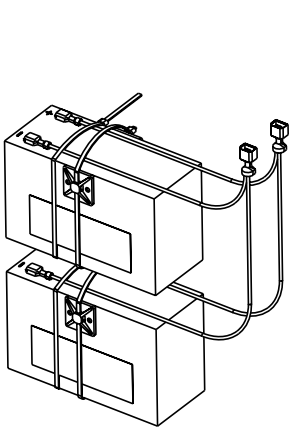


Figure 7b

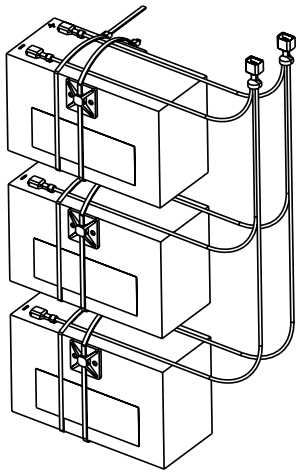


Figure 7c

Figure 7 a,b,c

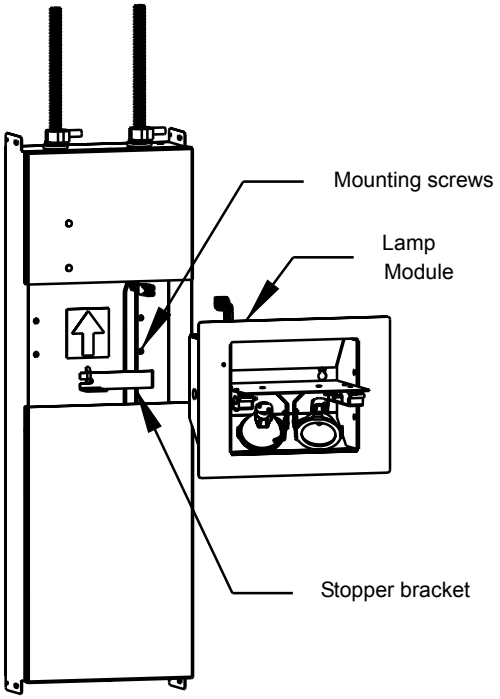


Figure 8

Provider Series - Emergency lighting

6 volt

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Do not use outdoors.
3. Do not let power supply cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Use caution when handling batteries. Avoid possible shorting.
6. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
8. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Route AC unswitched circuit of rated voltage into junction box and leave 6" of wire length.
3. Remove the backplate by pressing on the tabs (see fig. 2) with a screwdriver.
4. Locate the AC connector (if applicable) and attach to the AC circuit (or to the line cord for units with such an option). Refer to step 7.
5. Determine the desired position of the test switch (see fig. 5) before mounting the backplate.
6. Choose the proper mounting solution below and continue to step 7.

NOTE: For units with a safety wire, install the safety wire (see figure 1), after installing the back plate, as a means to support the unit while making connections. Insert one of the screws, used for fixing the backplate to the mounting surface or junction box, through the lug on the end of the safety wire before screwing it in place.

Important: all AC or DC connections must be done in individual external junction boxes.

a. Junction box mounting

Knock out the proper hole pattern in the back cover to mount to a standard junction box. Route the AC supply leads or connector through the large knockout and mount the backplate to the junction box (see fig. 3a).

b. Ceiling mount

Caution! DO NOT install unit to the ceiling unless its model number includes the suffix "CM".

For installation instructions refer to the addendum for ceiling mount.

c. Flexible conduit entry mounting

For conduit entry, mount the backplate to the wall. Break out the conduit hole on the housing (see fig. 3c). Assemble the conduit to the backplate.

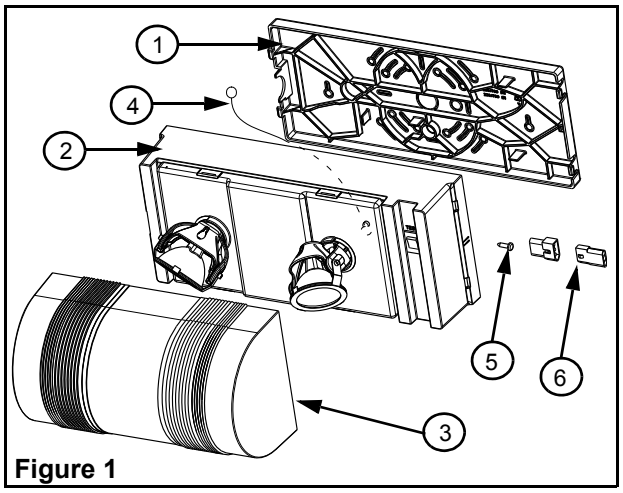


Figure 1

Parts List

1. Backplate
2. Housing
3. Clear lens
4. Safety wire (not available for all units)
5. Securement screw(ceiling mount)
6. AC connector (not available for all units)

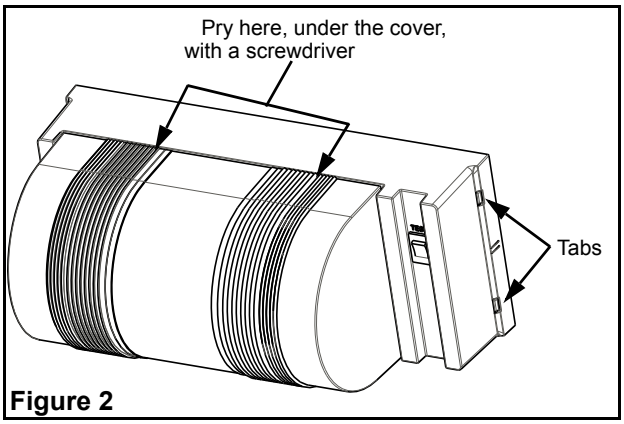


Figure 2

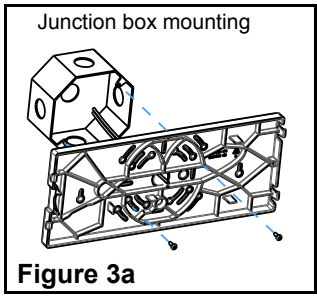


Figure 3a

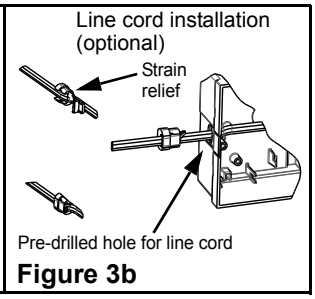


Figure 3b

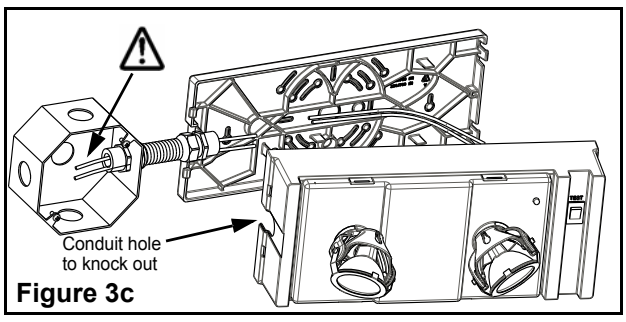


Figure 3c

d. Line cord installation (option)
Mount the backplate to the wall. Install the strain relief (see fig. 3b). Using pliers, crimp strain relief onto the line cord. Keeping pressure on the pliers, insert the strain relief into the pre-drilled hole on the housing.

7. Make the proper connections. The system can accept input voltages of 120/277 VAC (see fig. 4).
   120 VAC — Connect the black (120 VAC) and white (neutral) leads to the building utility. Insulate the unused wire.
   120 VAC with line cord (optional) — Before making the connections, follow the line cord installation instruction in section 6e. Make the proper connections. Connect the wire with the smooth side from the line cord to the black (120 VAC) on the unit and the ridged wire from the line cord to the white (neutral) on the unit. Insulate the unused wire. Connect the green wire on the transformer (if applicable) or insulate the unused green wire from the line cord.
   277 VAC — Connect the orange (277 VAC) and white (neutral) leads to the building utility. Insulate the black wire.

⚠ Route entry wires to avoid contact with the transformer, battery terminals and charger PCBA. Refer to figure 4.

8. Connecting external lamps: pass external DC wires into the unit and connect to internal lamp wires or directly to the PCBA depending on the model.
9. When ready to energize AC circuit, connect the battery.
10. Slide the housing over the tabs; conduit side on housing over conduit side on backplate (see fig. 5). Assemble the conduit side first, then align the tabs on the other side of the housing and of the backplate. Press together until it snaps.
11. Remove the clear lens by prying with a screwdriver, where indicated (see fig. 2).
12. Rotate heads to desired position and replace clear lens.
13. Energize AC. The AC pilot indicator, located under the cover, will illuminate (see fig. 5).

Vandal resistant (option)
Units with vandal resistant option: there are three vandal resistant screws. Two are securing the cover, and the other one secures the housing and the backplate (see fig. 6).

Unit testing

Manual testing
Press test switch (see fig. 5). The emergency lamps will illuminate. When switch is released, lamps will go off. Allow unit to charge for 24 hours before initial testing.

Automatic testing and diagnostics
The automatic testing and diagnostic function includes a micro-controller which self-tests the unit on a monthly basis and identifies as well displays failures of the electrical components: battery, battery charger, lamps.

Self-test
The self-test is performed every month for 1 minute, every 6 months for 30 minutes, and annually for 90 minutes.

Diagnostic function
–For diagnostic function, refer to “User Manual for AD”
–For Nexus models, refer to “Nexus addendum”

Maintenance
None required.
If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.

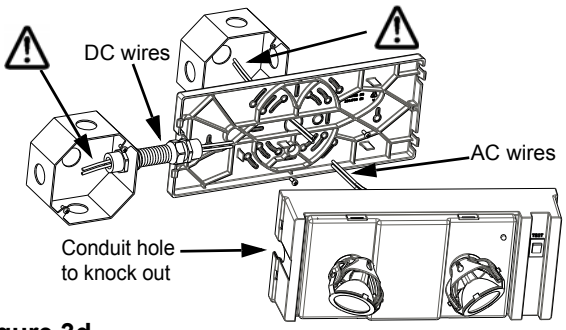


Figure 3d

⚠ **Important:** all AC or DC connections must be done in individual external junction boxes.

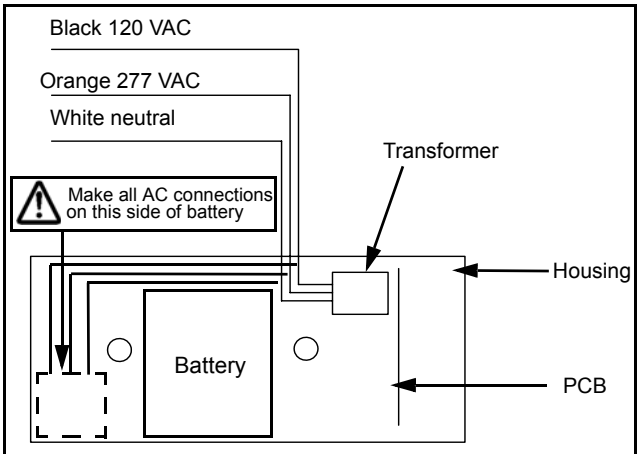


Figure 3

⚠ Unused primary wire must be insulated to prevent shorting.

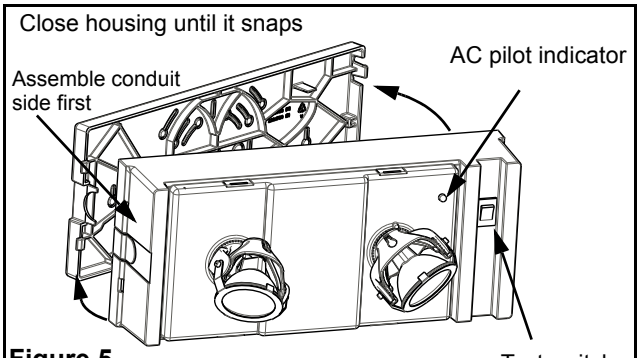


Figure 5

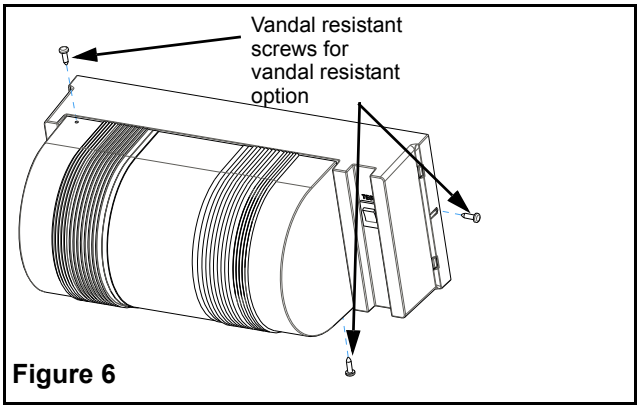


Figure 6

Prestige Series - Edge-Lit LED Exit Series

Flat trim AC, AC/DC and Self-Powered models

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

Turn off AC power.

Installation (Figure 1)

1. Remove the proper knockout in the back box for the entry of the AC wires.
2. Assemble the recessed mount brackets to the back box (see figure 2). Install the bar hangers in the adjustment brackets . Mount the back box so that it is flush with the ceiling surface.
3. Route AC unswitched circuit of rated voltage into the back box and leave 6” of wire length.
4. Connect the incoming ground to the short ground wire provided in the back box.

5. **Electrical connection (Figures 3,4)**
   a. Connect the long ground lead with eyelet from the back box to the trim plate assembly with the hardware provided.
   b. Make the proper connections. Our system can accept input voltages of 120 VAC to 347 VAC. For regular models connect the purple (hot) and white (common) leads to the building utility (Figure 3). For models with diagnostic feature connect the white (common), black (120 VAC) or orange (277 VAC) leads to the building utility (Figure 4).
   c. AC/DC Models only:
   For DC portion: wire the Red lead (+) to the positive DC input voltage and the Blue lead (-) to the negative DC input voltage. Note: DC input voltage range is 6 volts to 24 volts.
6. Compress the retention springs (Figures 5) and insert the trim plate assembly in the back box. Align to be flush with the back box or with the ceiling.

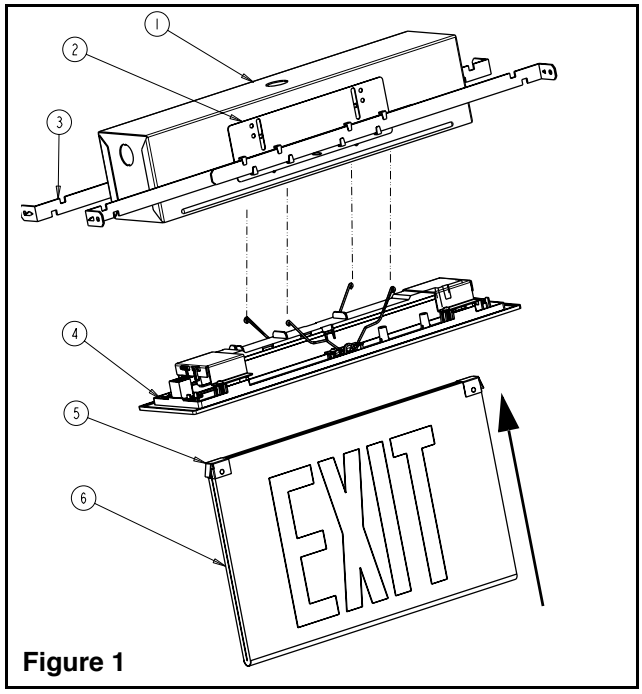


Figure 1

Part List

1. Back box
2. Adjusment brackets (2)
3. Bar hangers (2)
4. Trim plate assembly
5. Clips (2)
6. Exit panel

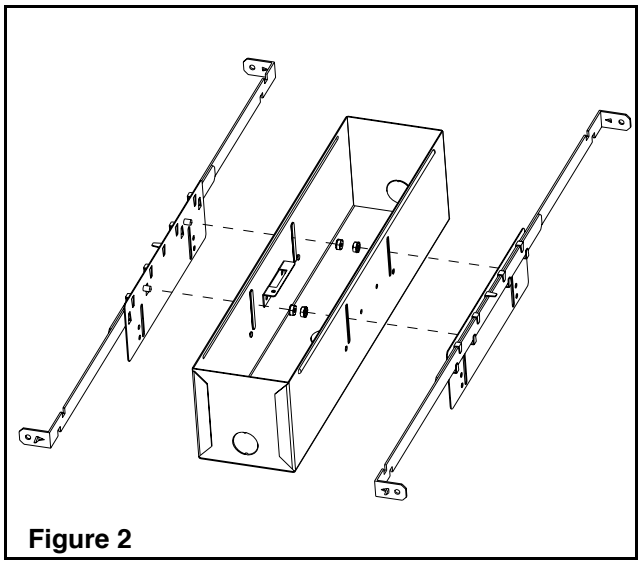


Figure 2

Exit panel installation (Figure 1)

1. Remove the exit panel form its carton, do not remove the protective sleeve until the installation is complete.
2. Partially remove the protective sleeve at the top of the exit panel. Push the exit panel, with the clips, into the slot in the trim plate assembly until it snaps. Gently try to pull out the panel to ensure that it is engaged in the trim plate assembly. Remove the protective sleeve.
3. Energize AC circuit. Legend and green pilot indicator (self-powered models), will illuminate.

Important: the Exit panel can only be removed by lowering the trim plate and pushing on the end clip located on the opposite side of the test switch with a screwdriver.

Self Powered models

Manual testing (Figure 6)

Press test switch. Legend will flicker then will remain lit. On release, external green LED will illuminate, and automatic charger will restore battery to full charge.

Automatic testing and diagnostics (optional)

The models with the automatic testing and diagnostic option include a micro-controller which tests the unit on a monthly basis and identifies as well displays failures of the electrical components: battery, charger circuit, LED lamps.

Self-test

The self-test is performed every 30 days for 30 seconds, every 60 days for 30 minutes, and annually for 90 minutes.

Diagnostic function **(Figure 6)**

The diagnostic function uses the pilot light LED indicator. Service is required if the green LED changes color to red indicating that an alarm condition is detected.

Pilot light	Status	Diagnostic
Green	Steady	Normal (AC On)
Green	Blinking	Auto Test
Red	Steady on	Battery Disconnect
Red	One Blink	Battery Failure
Red	Two Blinks	Charger Failure
Red	Four Blinks	LED Lamp Failure

Maintenance

None required. Models equipped with batteries: if AC supply is to be disconnected for 2 months or more, the battery must be disconnected (Self-Powered Models only).

Note — For safety reasons Nickel Cadmium batteries are shipped discharged. The unites may require 10 minutes of connection to AC supply before start-up test procedure, and two to seven days to reach full charge.

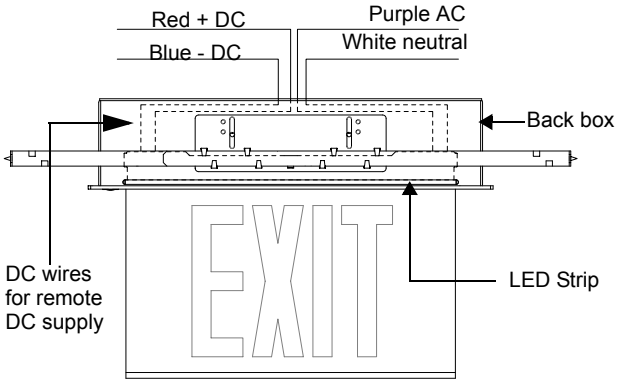


Figure 3 (Regular models)

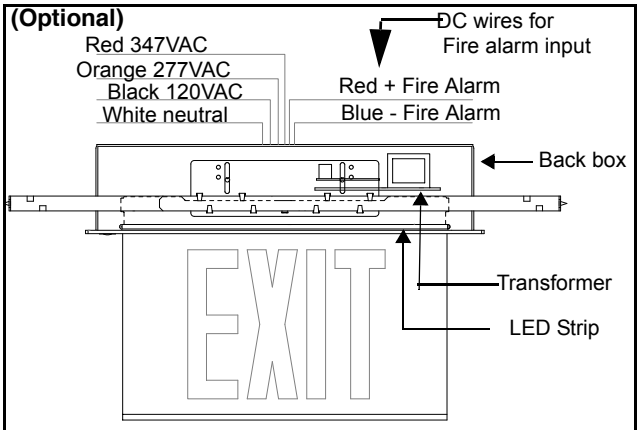


Figure 4 (Models with diagnostic feature)

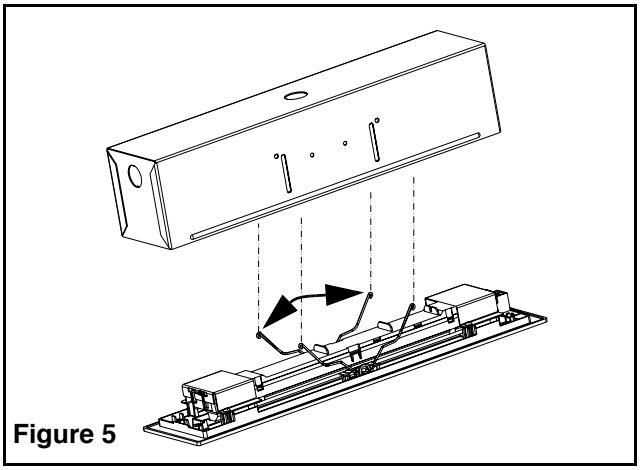


Figure 5

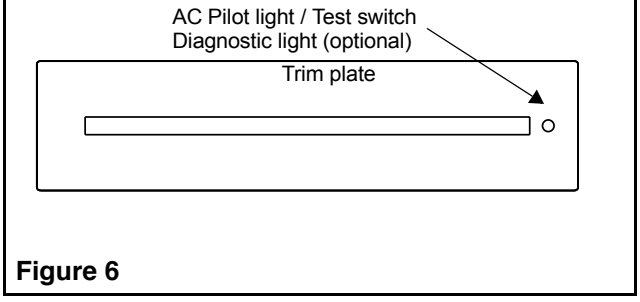


Figure 6

INSTALLATION INSTRUCTIONS

Thin Die-Cast Exit Sign



IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

⚠ **WARNING: FAILURE TO FOLLOW THESE INSTRUCTIONS AND WARNINGS MAY RESULT IN DEATH, SERIOUS INJURY OR SIGNIFICANT PROPERTY DAMAGE -** For your protection, read and follow these warnings and instructions carefully before installing or maintaining this fixture. These instructions do not attempt to cover all installation and maintenance situations.

⚠ **WARNING: RISK OF ELECTRIC SHOCK - NEVER CONNECT OR DISCONNECT ANY COMPONENT WHILE POWER SUPPLY IS ENERGIZED.**

⚠ **WARNING: DO NOT USE ABRASIVE MATERIALS, GLASS CLEANERS OR OTHER SOLVENTS. USE OF THESE SUBSTANCES MAY DAMAGE FIXTURE, WHICH MAY RESULT IN PERSONAL INJURY.**

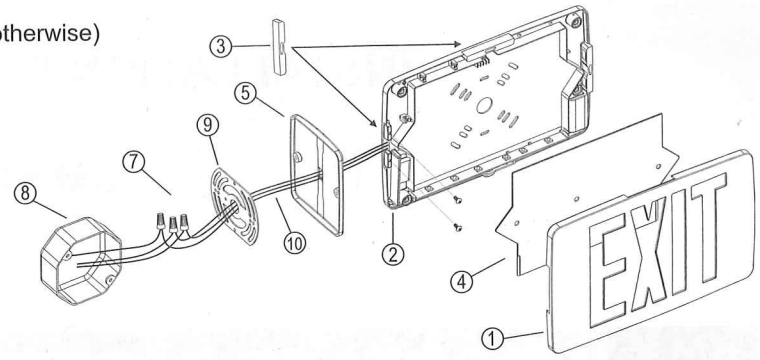
⚠ **WARNING: RISK OF PERSONAL INJURY -** This product may have sharp edges. Wear gloves to prevent cuts or abrasions when removing from carton, handling, installing and maintaining this product.

- Before wiring to power supply, turn off electricity at fuse or circuit breaker.
- Disconnect A.C. power before servicing.
- All servicing should be performed by qualified personnel.
- Consult your local building code for approved wiring and installation.
- May be used outdoors under cover (0° C - 50° C).
- Do not mount near gas or electric heater.
- Fixture must be grounded to avoid potential electric shock.
- Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Do not use this equipment for other than intended use.
- Do not install a damaged fixture.

SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER INSTALLATION

PARTS DESCRIPTION (All parts provided unless noted otherwise)

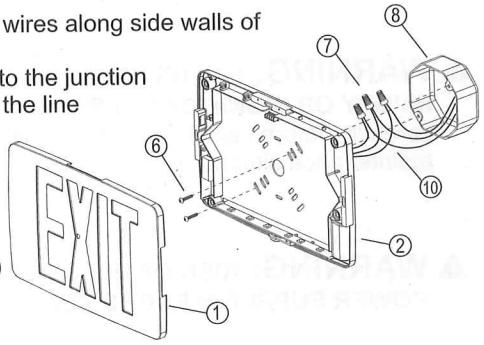
① Face Plate
② Back Plate
③ Mounting Hole Cover
④ Red or Green Lens
⑤ Canopy
⑥ Junction Box Screws (not shown)
⑦ Wire Nuts
⑧ Junction Box (not provided)
⑨ Mounting Bracket
⑩ Input Wires



NOTE: This fixture is for use only with 3-1/2" octagon, 4" octagon, 4"square or single-gang junction boxes, on an unswitched circuit. See Wiring Diagrams and "To Remove Directional Indicators" below before beginning fixture installation. **On fixtures with battery:** Connect battery only after continuous power can be supplied to fixture. Allow 24 hours before initial test or for full charge.

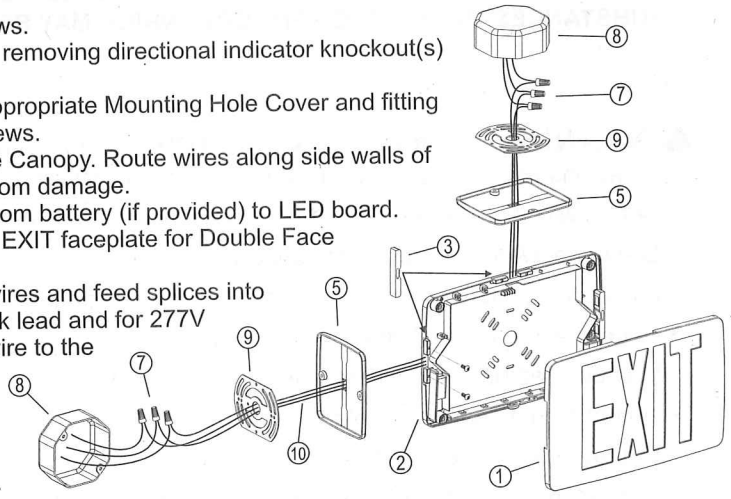
Back Mounting (single face units only)

1. Turn off AC power.
2. Remove appropriate knockouts in backplate of EXIT sign enclosure. KNOCKOUTS ARE NOT INTENDED FOR USE WITH CONDUIT FITTINGS.
3. Feed power supply module input wires from EXIT sign through the open knockout. Route wires along side walls of enclosure to assure proper sign illumination and to protect wires from damage.
4. Connect building supply wires to the power supply module input wires and feed splices into the junction box. For 120V supply connect the line wire to the black lead and for 277V supply connect the line wire to the orange lead. Connect neutral wire to the white lead. The ground wire (green lead) must be connected in accordance with local codes. **CAUTION**: The unused black or orange wire must be capped with wire nut or other approved insulator. Failure to do so may cause an unsafe condition.
5. Attach EXIT sign backplate to junction box with supplied screws.
6. After AC power can be continuously supplied, push in connector from battery (if provided) to LED board.
7. Snap EXIT faceplate into place on EXIT sign backplate.
8. Turn on AC power.



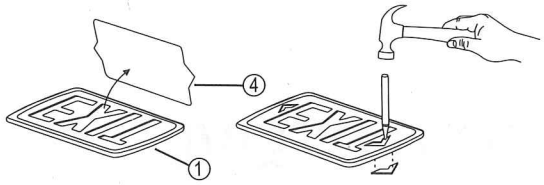
Top or End Mounting (single or double face unit)

1. Turn off AC power.
2. Install the Mounting Bracket to the junction box with supplied screws.
3. Prepare EXIT faceplate (two faceplates for Double Face signs) by removing directional indicator knockout(s) as required.
4. Secure the Canopy to the EXIT sign enclosure by removing the appropriate Mounting Hole Cover and fitting Canopy onto enclosure. Secure Canopy to enclosure with two screws.
5. Feed power supply module input wires from EXIT sign through the Canopy. Route wires along side walls of enclosure to assure proper sign illumination and to protect wires from damage.
6. After AC power can be continuously supplied, push in connector from battery (if provided) to LED board.
7. Snap EXIT faceplate into place on EXIT sign backplate or second EXIT faceplate for Double Face sign. Assure that canopy is positioned securely.
8. Connect building supply wires to the power supply module input wires and feed splices into the junction box. For 120V supply connect the line wire to the black lead and for 277V supply connect the line wire to the orange lead. Connect neutral wire to the white lead. The ground wire (green lead) must be connected in accordance with local codes. **CAUTION**: The unused black or orange wire must be capped with wire nut or other approved insulator. Failure to do so may cause an unsafe condition.
9. Secure the Canopy to the Mounting Bracket with supplied screws.
10. Turn on AC power.



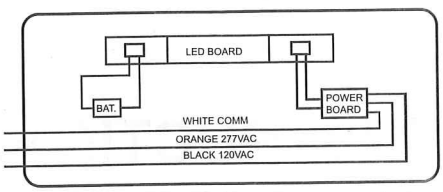
To Remove Directional Indicators:

Use punch or similar tool to tap out the desired knockout along its inside edges.

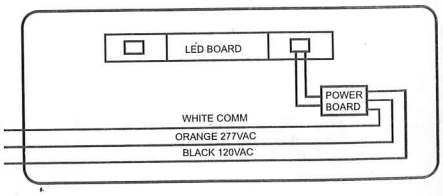


WIRING DIAGRAMS

BATTERY BACKUP:



AC ONLY:



EMERGI-LITE®
Member of Thomas & Betts

Prestige Series
Floor Proximity System

Floor Proximity Installation Instructions

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

1. ***READ AND FOLLOW ALL SAFETY INSTRUCTIONS***
2. Do not use outdoors.
3. Do not let power cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Use caution when handling batteries. Avoid possible shorting.
6. Equipment should be mounted at heights where it will not be tampered with by unauthorized personnel.
7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition
8. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

INSTALLATION

1. Turn Off AC power to Master Unit.
2. Mount back box for recessed floor proximity unit in wall. For mounting between wall studs, use four (4) screws through end holes. For surface mount, use two (2) holes provided in center of back box.
3. Connect leads, marked Floor Proximity Unit, from Master Unit to Floor Proximity Unit using contractor supplied wires and wirenuts, observing polarity. ***NOTE:*** *Cap all unused leads.* See diagrams.
4. After connection, push connectors into electrical box. Attach stencil face onto back box using four (4) vandal resistant screws provided.
5. Energize Master Unit, both Master Unit and Floor Proximity Unit will illuminate. ***NOTE:*** Dual Circuit, AC-Only, 120V or 277V systems, require the floor proximity sign to get its supply from the Master Unit.
6. ***WARNING:*** Floor Proximity signs consist of two models, one for use with AC-Only Master. The other for the Self-Powered Master.

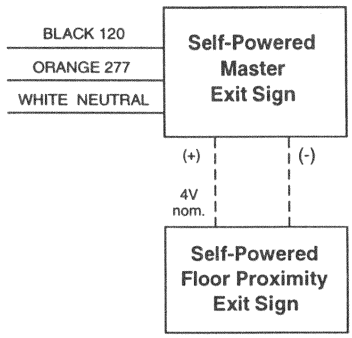
IMPORTANT NOTICE

DO NOT attempt to connect floor proximity unit to a master unit from another manufacturer as sign could be damaged.

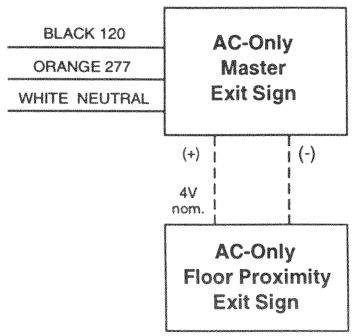
MAINTENANCE

None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code, or local codes.

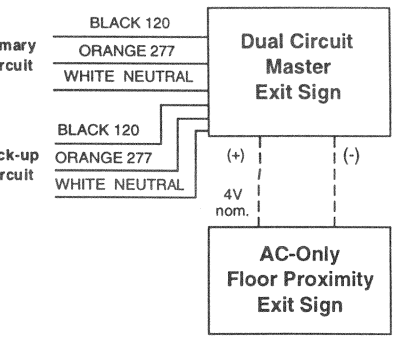
Red & Green Self-Powered Schematic



Red & Green AC-Only Schematic



Red & Green Dual Circuit Schematic



ALL SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL

Thomas & Betts • 1811 Hymus Blvd, Dorval, QC, Canada H9P 1J5 Tel.: (888) 935-3605 • Fax: (888) 867-1565 **4/01** PN 750.0528 Rev. B

Prestige Series Edge-Lit LED Sign

AC, AC/DC and Self-Powered models

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Do not use outdoors.
3. Do not let power supply cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Do not use this equipment for other than its intended use.

SAVE THESE INSTRUCTIONS

IMPORTANT: This sign shall be installed only where there is adequate colour contrast between the sign legend and the interior wall finish behind the sign, to provide for sufficient visibility.

Installation Instructions

Turn off AC power.

IMPORTANT: Wiring connections need to be done away from PCBA and in designated area as shown in figure 8 or 9.

Recessed mount installation (New construction or rear access) (Figure 2a & b)

1. Remove the proper knockout in the back box for the entry of the AC wires.
2. Assemble the recessed mounting brackets to the back box. Install the bar hangers in the adjustment brackets. Mount the back box.

IMPORTANT: The back box must be flush with the wall or ceiling surface (see figure 2b). Contact customer service in the event where it's not possible to have the back box flush with the wall or ceiling.

3. Route AC circuit of rated voltage into the back box and leave 6" of wire length.
4. Connect the incoming ground to the short ground wire provided in the back box.

Surface mount installation (Figures 3a,b,c)

1. Remove the proper knockout in the canopy plate to mount to the junction box, check the orientation of the back box (see figures 3a, b or c).
2. Route the wires through one of the Ø5/8" knockout holes in the canopy plate and mount the plate to the electrical box using the junction box screws. Make sure that the canopy plate will mount so the securement screw is accessible.

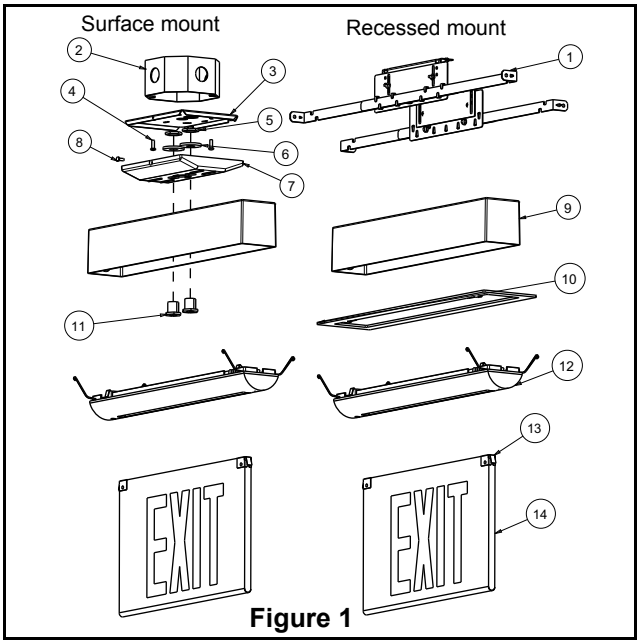


Figure 1

Parts List

1. Recessed mount brackets (recessed only)
2. Junction box
3. Canopy plate
4. Junction box screws (not provided)
5. Nuts (2)
6. Nylon washer (2)
7. Canopy
8. Securement screw
9. Back box
10. Trim ring (recessed only)
11. Nipples (2)
12. Trim plate assembly
13. Clips (2)
14. Exit panel
15. Hook (refer to fig.7)

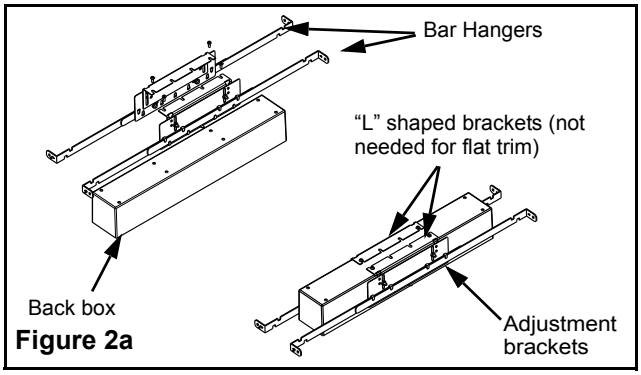


Figure 2a

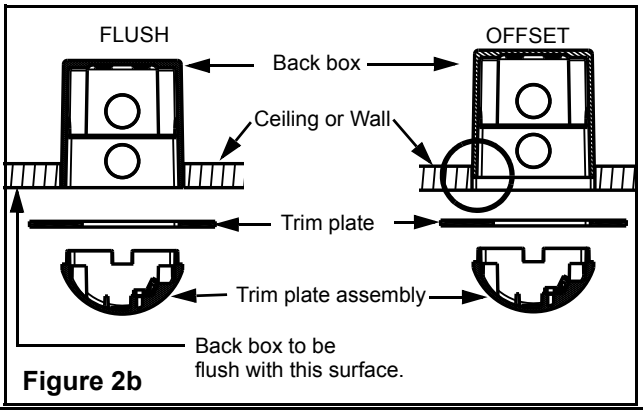


Figure 2b

3. Remove the proper knockouts in the back box to mount the canopy (see figures 3a, b or c).
4. Mount the canopy to the back box using the hardware supplied (see figures 3a, b or c).
5. Route wires from the harness through the back box/canopy assembly.
6. Using the hook provided, hang the canopy/back box assembly to the canopy plate (figure 7).
7. Go to electrical connections for wiring information.
8. Mount the canopy/back box assembly to the canopy plate using the securement screw provided.

Figure 3a Ceiling mount

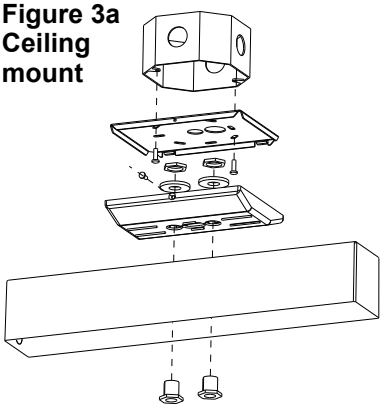


Figure 3b Wall mount

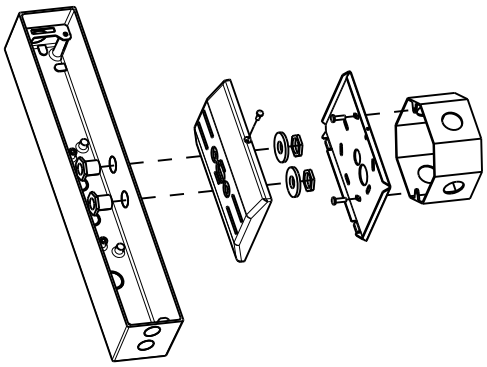
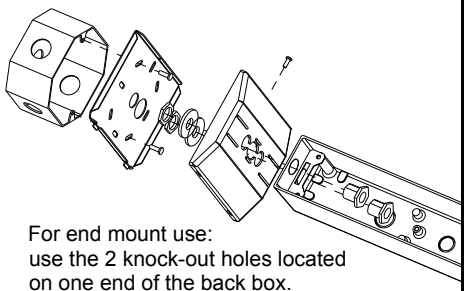


Figure 3c End mount



For end mount use:
use the 2 knock-out holes located on one end of the back box.

Trim plate installation

1. The trim plate module comes assembled for surface mount or recessed ceiling mount installation (figure 4). If surface or recessed ceiling mount, continue with step 3.

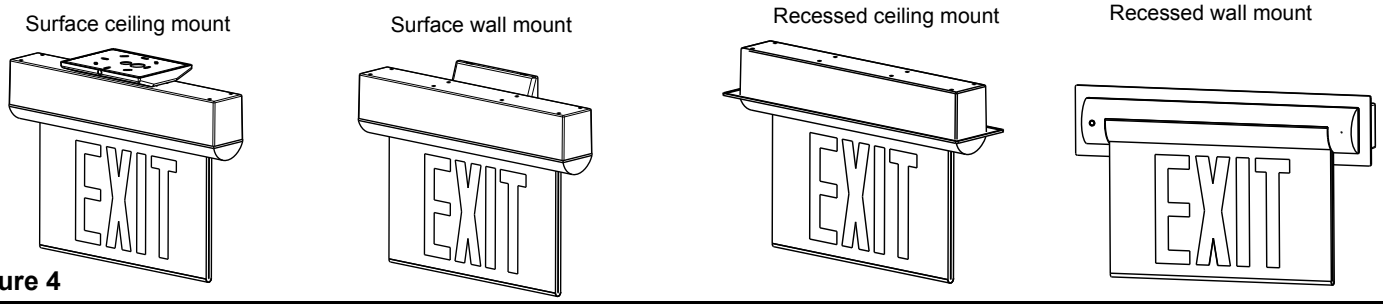
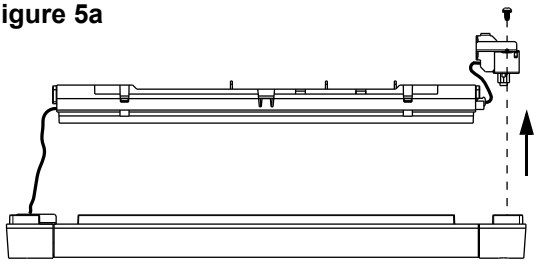


Figure 4

2. Recessed wall-mount installation (Figures 5a,b,c)

a. To remove the electronic module, unscrew the bracket on either end of the module. Disconnect the transformer harness from the electronic module in the plastic housing. Remove the electronic module.
b. Unscrew the side plate of the trim plate body. Turn the side plate around and screw it back in place, this time flush with the trim plate body.

Figure 5a



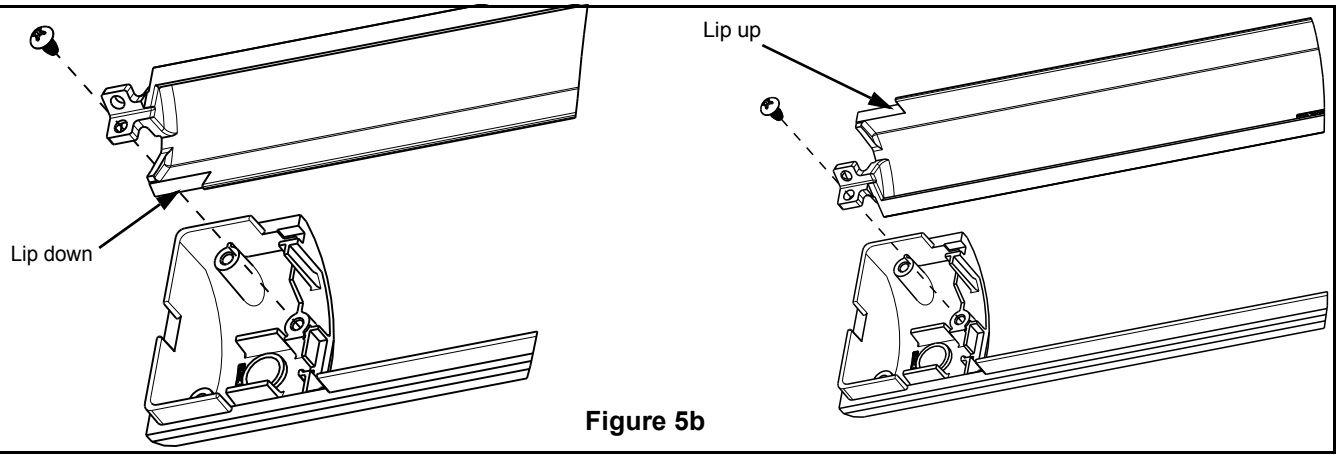


Figure 5b

c. Re-install the electronic module and the bracket, this time oriented as in (Figure 5c). Reconnect the transformer harness to the electronic module.

3. Recessed installation (figure 6). Attach the flat trim ring to the trim plate. Orient the trim ring and snap it with the two tabs behind the hooks of the side brackets.
4. **Electrical connection (Figures 8,9)**
   a. Connect the long ground lead with eyelet from the back box to the trim plate assembly with the hardware provided.
   b. Make the proper connections. The system can accept input voltages of 120 VAC to 347 VAC. For regular models connect the purple (line) and white (common) leads to the building utility (figure 8). For models with diagnostic feature connect the white (common) and black (120 VAC) or orange (277 VAC) leads to the building utility (figure 9).
   c. For remote power DC unites, connect the red wire to the positive of the DC supply and the blue to the negative (6 to 24 volts).
5. Take the trim plate assembly and connect the harnesses together with the back box mating colors.
6. Compress the retention springs and insert the trim plate assembly into the back box. Align the trim plate assembly flush with the back box, wall or ceiling installation.

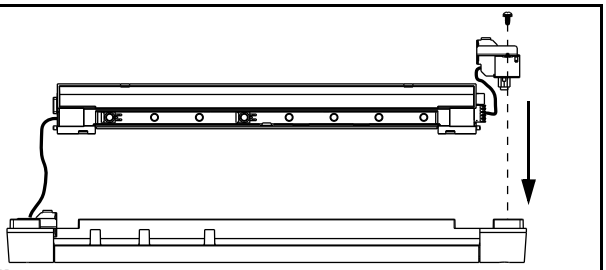


Figure 5c

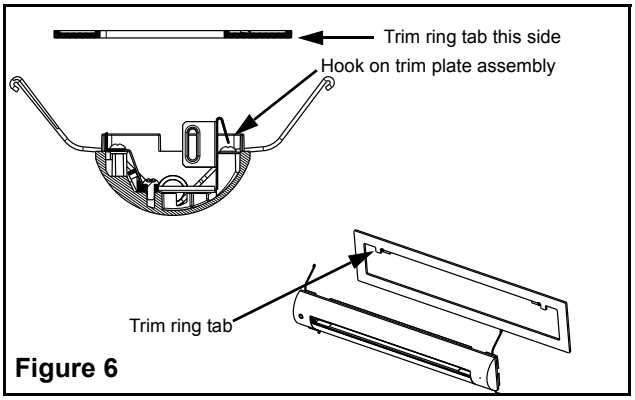
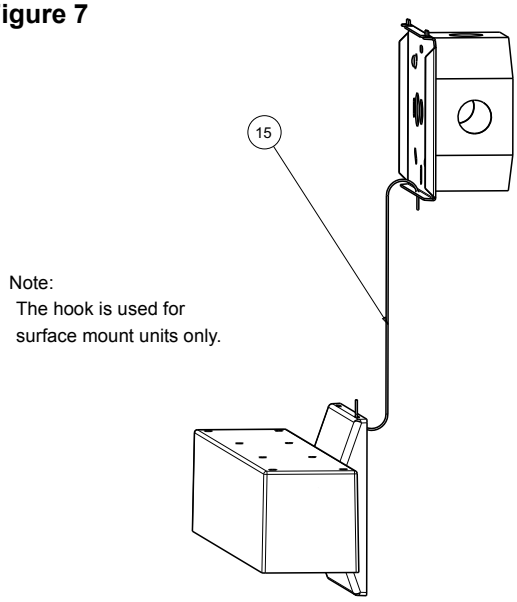


Figure 6

Figure 7



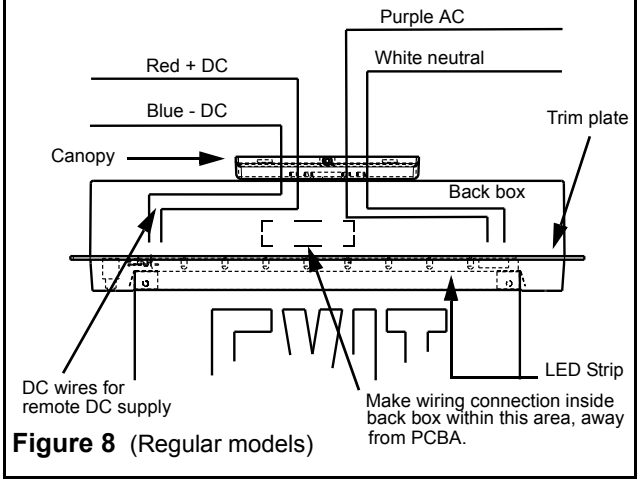


Figure 8 (Regular models)

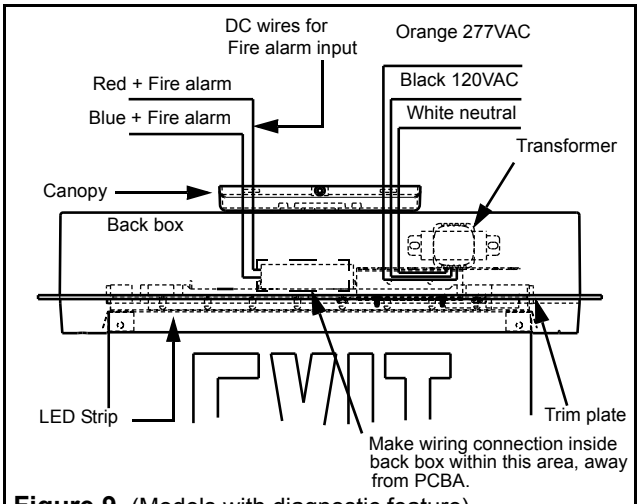


Figure 9 (Models with diagnostic feature)

Exit panel installation (Figure 10)

1. Remove the exit panel from its carton, do not remove the protective sleeve until the installation is complete.
2. Partially remove the protective sleeve at the top of the exit panel. Push the exit panel, with the clips, into the slot in the trim plate assembly until it snaps. Gently try to pull out the panel to ensure that it is engaged in the trim plate assembly. Remove the protective sleeve.
3. For self powered models, connect the two terminals (located on the red wires) together.
4. Energize AC circuit. Exit and green pilot indicator (self-powered models) will illuminate.

IMPORTANT: The exit panel can only be removed by lowering the trim plate and pushing on the end clip located on the opposite side of the test switch with a screwdriver.

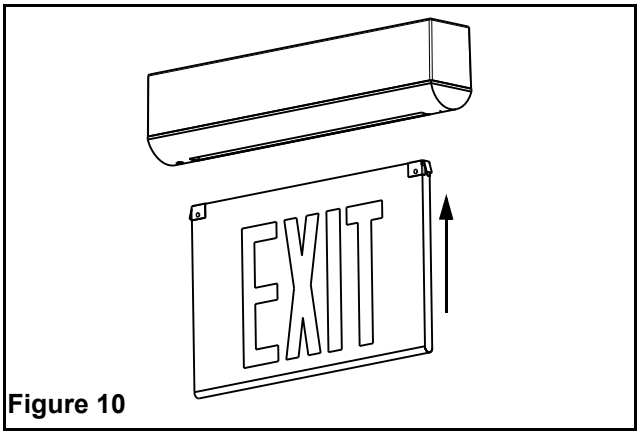


Figure 10

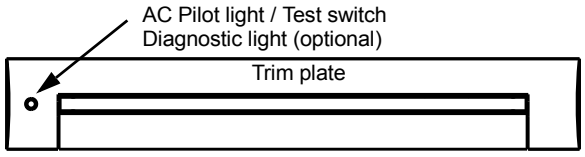


Figure 11

Self Powered models

Manual testing (Figure 11)

Press test switch. Legend will flicker then will remain lit. On release an external green LED will illuminate and the automatic charger will restore battery to full power.

Automatic testing and diagnostics (optional)

The models with the automatic testing and diagnostic option include a microcontroller which tests the unit on a monthly basis and identifies as well as displays failures of the electrical components: battery, charger circuit, LED lamps.

Self-test

The self-test is performed every 30 days for 30 seconds, every 60 days for 30 minutes, and annually for 90 minutes.

Diagnostic function **(Figure 11)**

The diagnostic function uses the pilot light LED indicator. Service is required if the green LED changes color to red indicating that an alarm condition is detected.

Pilot light	Status	Diagnostic
Green	Steady	Normal (AC On)
Green	Blinking	Auto Test
Red	Steady on	Battery Disconnect
Red	One Blink	Battery Failure
Red	Two Blinks	Charger Failure
Red	Four Blinks	LED Lamp Failure

Maintenance

None required. Models equipped with batteries: if AC supply is to be disconnected for 2 months or more, the battery must be disconnected (Self-Powered Models only).

Note — For safety reasons Nickel Cadmium batteries are shipped discharged. The unites may require 10 minutes of connection to AC supply before start-up test procedure, and two to seven days to reach full charge.

Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

Prestige Series - Edge-Lit LED Less panel

AC, AC/DC and Self-Powered models

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Do not use outdoors.
3. Do not let power supply cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

IMPORTANT: This sign shall be installed only where there is adequate colour contrast between the sign legend and the interior wall finish behind the sign, to provide for sufficient visibility.

Installation Instructions

Turn off AC power.

IMPORTANT: Wiring connections need to be done away from PCBA and in designated area as shown in figure 8 or 9.

Recessed mount installation (New construction or rear access) (Figure 2a & b)

1. Remove the proper knockout in the back box for the entry of the AC wires.
2. Assemble the recessed mounting brackets to the back box. Install the bar hangers in the adjustment brackets. Mount the back box.

IMPORTANT: The back box must be flush with the wall or ceiling surface (see figure 2b). Contact customer service in the event where it's not possible to have the back box flush with the wall or ceiling.

3. Route AC circuit of rated voltage into the back box and leave 6" of wire length.
4. Connect the incoming ground to the short ground wire provided in the back box.

Surface mount installation (Figures 3a,b,c)

1. Remove the proper knockout in the canopy plate to mount to the junction box -check the orientation of the back box (see figures 3a, b or c).
2. Route the wires through one of the Ø5/8" knockout holes in the canopy plate and mount the plate to the electrical box using the junction box screws. Make sure that the canopy plate will mount so that the securement screw is accessible.

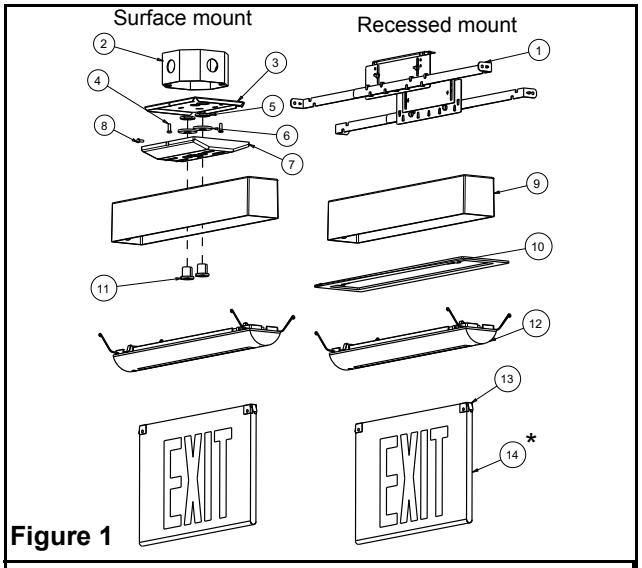


Figure 1

Back box or EXIT Panel may not be provided.
Refer to Back box /Panel assembly parts list
(located on last page) for ordering.
CAUTION: Only the listed assemblies can be installed with this unit.

Parts List

1. Recessed mount brackets (recessed only)
2. Junction box
3. Canopy plate
4. Junction box screws (not provided)
5. Nuts (2)
6. Nylon washer (2)
7. Canopy
8. Securement screw
9. Back box
10. Trim ring (recessed only)
11. Nipples (2)
12. Trim plate assembly
13. Clips (2) (Shipped with panel)
14. *Exit panel (Not included. Shipped separately. Refer to panel parts list).
15. Hook (refer to fig.7)

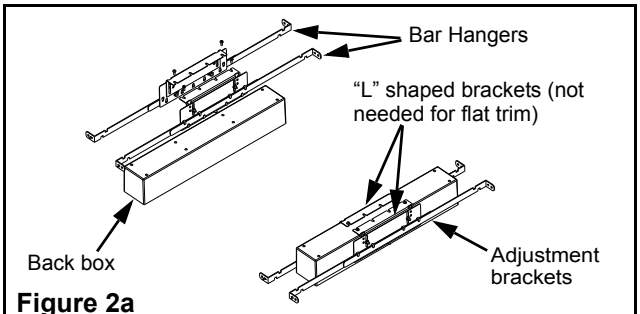


Figure 2a

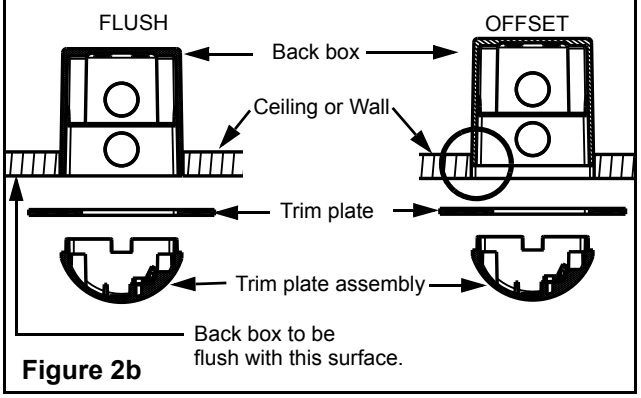


Figure 2b

3. Remove the proper knockouts in the back box for mounting to the canopy (see figures 3a, b or c).
4. Mount the canopy to the back box using the hardware supplied (see figures 3a, b or c).
5. Route wires from the harness through the back box and canopy.
6. Using the hook provided, hang the canopy/back box assembly to the spider plate (figure 7).
7. Go to electrical connections for wiring information.
8. Mount the canopy/back box assembly to the spider plate using the two 1" screws provided.

Figure 3a ceiling mount

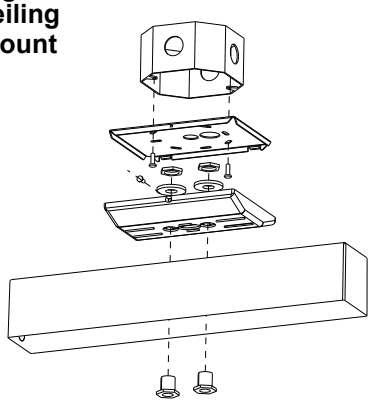


Figure 3b wall mount

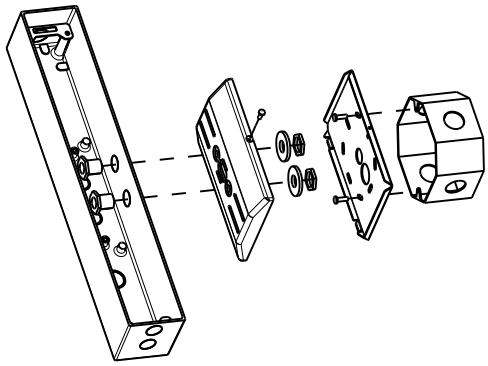
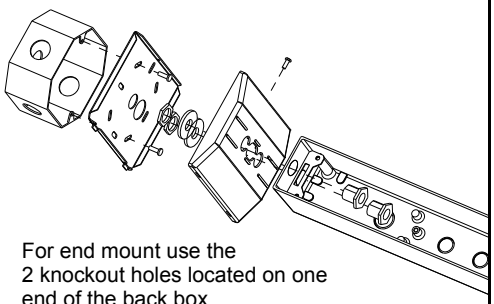


Figure 3c end mount



For end mount use the
2 knockout holes located on one
end of the back box.

Trim plate installation

1. The trim plate module comes assembled for surface mount or recessed ceiling mount installation (Figure 4). For surface or recessed ceiling mount, go to step 3.

Surface ceiling mount | Surface wall mount | Recessed ceiling mount | Recessed wall mount

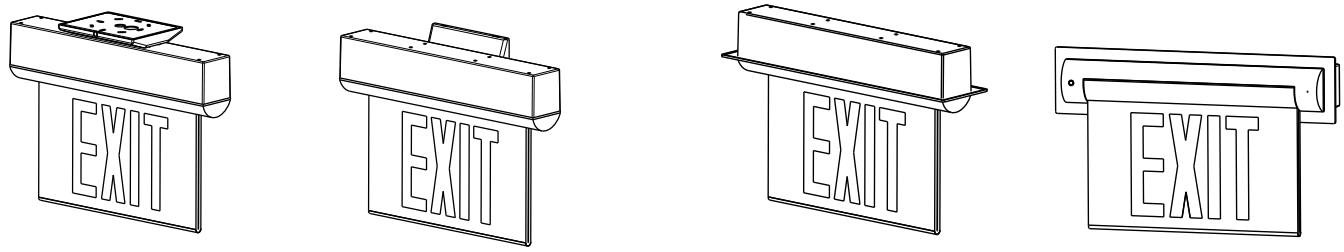


Figure 4

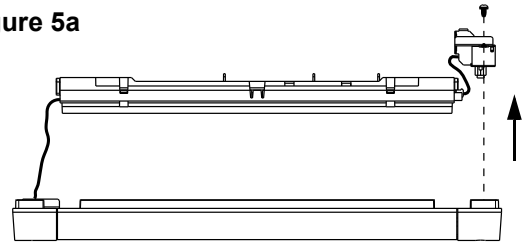
Back box or EXIT Panel may not be provided. Refer to Back box /Panel assembly part list (located on last page) for ordering.
CAUTION: Only the listed assemblies can be installed with this unit.

2. Recessed wall-mount installation (Figures 5a,b,c)

a. To remove the electronic module, unscrew a bracket on either end of the module. If the unit has a transformer: disconnect the transformer harness from the electronic module in the plastic housing. Remove the electronic module.

b. Unscrew the side plate of the trim plate body. Turn the side plate around and screw it back in place, this time flush with the trim plate body.

Figure 5a



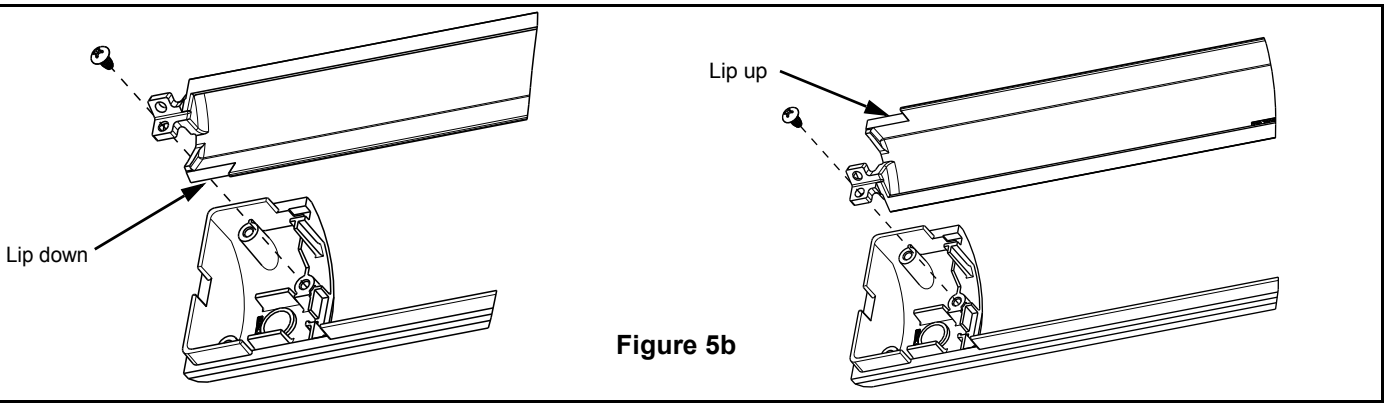
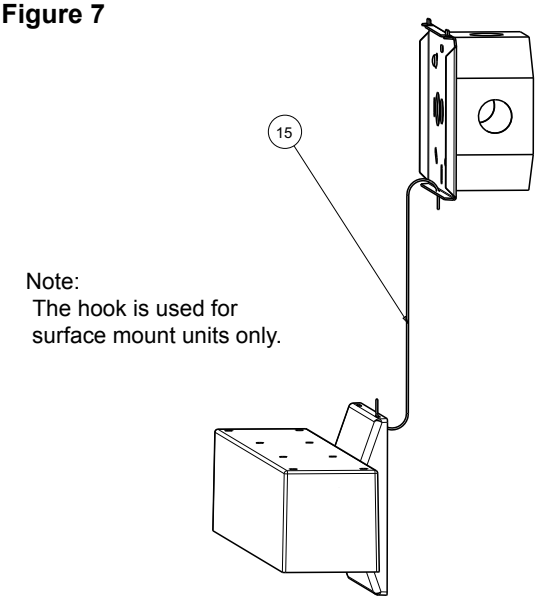


Figure 5b

c. Re-install the electronic module, this time oriented as in (Figure 5c). For units with transformer: reconnect the transformer harness to the electronic module.

3. Recessed installation (Figure 6). Attach the flat trim ring to the trim plate. Orient the trim ring and snap it with the two tabs behind the hooks of the side brackets.
4. **Electrical connection (Figures 8,9)**
   a. Make the proper connections. The system can accept input voltages of 120 VAC to 347 VAC. For regular models connect the purple (hot) and white (common) leads to the building utility (Figure 8). For models with diagnostic feature connect the white (common) and black (120 VAC) or orange (277 VAC) leads to the building utility (Figure 9).
   b. For remote power DC unites, connect the red wire to the positive of the DC supply and the blue to the negative (6 to 24 volts).
5. Take the trimplate assembly and connect the harnesses together with the back box mating connector.
6. Compress the retention springs and insert the trim plate assembly in the back box. Align the trim plate assembly flush with the back box, wall or ceiling as installed.

Figure 7



Exit panel installation (Figure 10)

1. Remove the exit panel from its carton, do not remove the protective sleeve until the installation is complete.
2. Partially remove the protective sleeve at the top of the exit panel. Push the exit panel, with the clips, into the slot in the trim plate assembly until it snaps. Gently try to pull out the panel to ensure that it is engaged in the trim plate assembly. Remove the protective sleeve.
3. For self powered models, connect the two terminals (located on the red wires) together.
4. Energize AC circuit. Legend and green pilot indicator (self-powered models) will illuminate.

IMPORTANT: The Exit panel can only be removed by lowering the trim plate and pushing on the end clip located on the opposite side of the test switch with a screwdriver.

Self Powered models

Manual testing (Figure 11)

Press test switch. Legend will flicker then will remain lit. On release an external green LED will illuminate and the automatic charger will restore battery to full power.

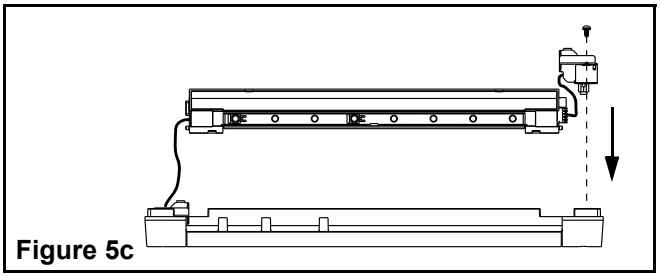


Figure 5c

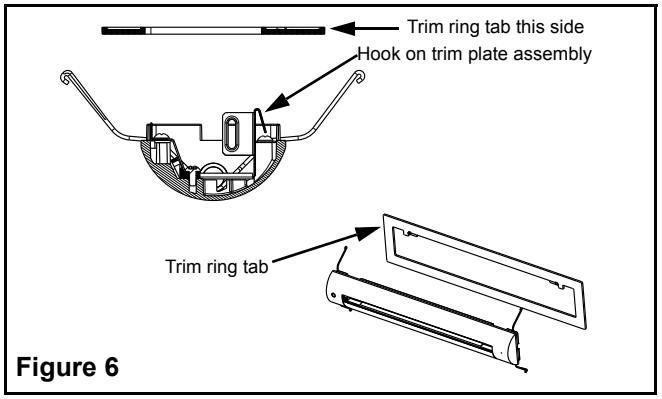


Figure 6

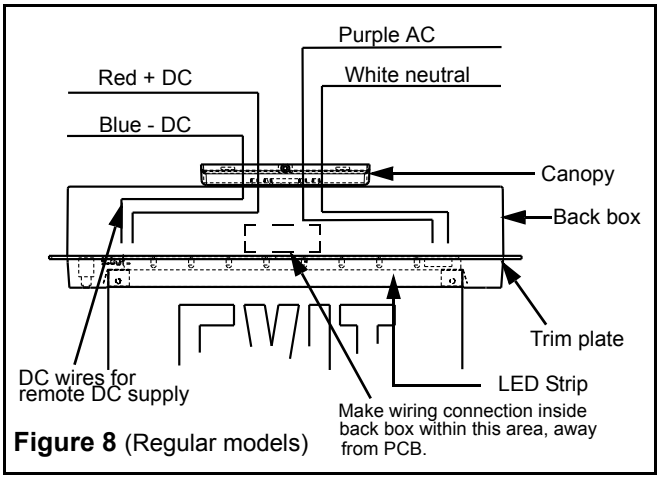


Figure 8 (Regular models)

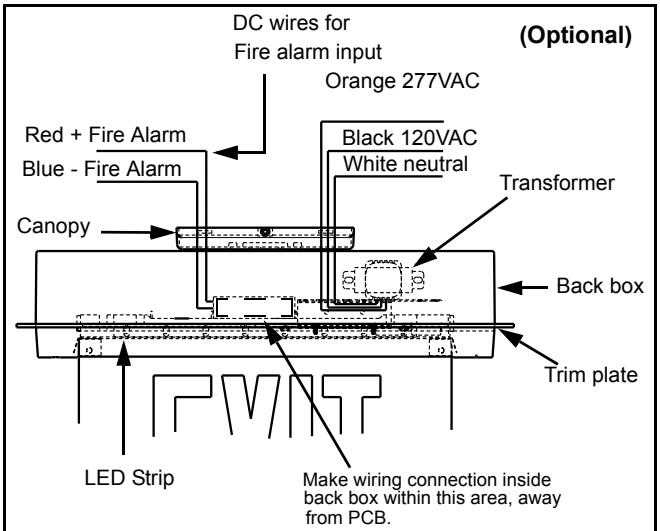


Figure 9 (Models with diagnostic feature)

Automatic testing and diagnostics (optional)

The models with the automatic testing and diagnostic option include a micro-controller which tests the unit on a monthly basis and identifies as well displays failures of the electrical components: battery, charger circuit, LED lamps.

Self-test

The self-test is performed every 30 days for 30 seconds, every 60 days for 30 minutes, and annually for 90 minutes.

Diagnostic function **(Figure 11)**

The diagnostic function uses the pilot light LED indicator. Service is required if the green LED changes color to red indicating that an alarm condition is detected.

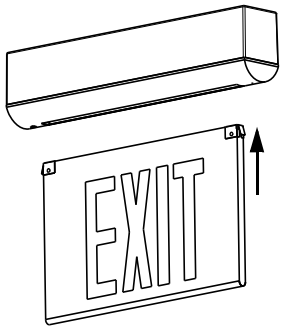
Pilot light	Status	Diagnostic
Green	Steady	Normal (AC ON)
Green	Blinking	Auto Test
Red	Steady on	Battery Disconnect
Red	One Blink	Battery Failure
Red	Two Blinks	Charger Failure
Red	Four Blinks	LED Lamp Failure

Maintenance

None required. Models equipped with batteries: if AC supply is to be disconnected for 2 months or more, the battery must be disconnected (Self-Powered Models only).

Note — For safety reasons Nickel Cadmium batteries are shipped discharged. The unites may require 10 minutes of connection to AC supply before start-up test procedure, and two to seven days to reach full charge.

Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).



Back box or EXIT Panel may not be provided.
Refer to Back box /Panel assembly part list
(located on last page) for ordering.
CAUTION: Only the listed assemblies can be installed in this unit.

Figure 10

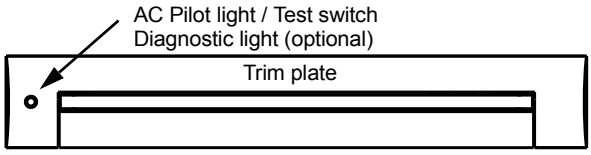


Figure 11

Part No.	Description Red Legend (Legend/Background color)	Part No.	Description Green Legend (Legend/Background color)	Part No.	Description Blue Legend (Legend/Background color)	Back Box
004216-E	1-F (Red/Clear) no Arrow	004251-E	1-F (Green/Clear) no Arrow	004713-E	1-F (Blue/Clear) no Arrow	005650 - Recessed mount Back Box (Recessed model only)
004216-E	1-F (Red/Clear) Arrow Left	004268-E	1-F (Green/Clear) Arrow Left	004741-E	1-F (Blue/Clear) Arrow Left	
004218-E	1-F (Red/Clear) Arrow Right	004269-E	1-F (Green/Clear) Arrow Right	004899-E	1-F (Blue/Clear) Arrow Right	
004219-E	1-F (Red/Clear) Dbl-Arrow	004252-E	1-F (Green/Clear) Dbl-Arrow	004900-E	1-F (Blue/Clear) Dbl-Arrow	005651 to 005XXX - Surface mount Back Box (the Three last digits designate color)
004208-E	1-F (Red/White) no Arrow	004243-E	1-F (Green/White) no Arrow	004901-E	1-F (Blue/White) no Arrow	
004209-E	1-F (Red/White) Arrow Left	004271-E	1-F (Green/White) Arrow Left	004902-E	1-F (Blue/White) Arrow Left	
004210-E	1-F (Red/White) Arrow Right	004279-E	1-F (Green/White) Arrow Right	004903-E	1-F (Blue/White) Arrow Right	
004211-E	1-F (Red/White) Dbl-Arrow	004270-E	1-F (Green/White) Dbl-Arrow	004904-E	1-F (Blue/White) Dbl-Arrow	
004229-E	2-F (Red/White) no Arrow	004274-E	2-F (Green/White) no Arrow	004905-E	2-F (Blue/White) no Arrow	
004230-E	2-F (Red/White) Arrow Right and Left	004264-E	2-F (Green/White) Arrow Right and Left	004742-E	2-F (Blue/White) Arrow Right and Left	
004255-E	2-F (Red/White) Dbl-Arrow	004284-E	2-F (Green/White) Dbl-Arrow	004906-E	2-F (Blue/White) Dbl-Arrow	
004242-E	1-F (Red/Mirror) no Arrow	004260-E	1-F (Green/Mirror) no Arrow	004907-E	1-F (Blue/Mirror) no Arrow	
004265-E	1-F (Red/Mirror) Arrow Left	004288-E	1-F (Green/Mirror) Arrow Left	004908-E	1-F (Blue/Mirror) Arrow Left	
004262-E	1-F (Red/Mirror) Arrow Right	004287-E	1-F (Green/Mirror) Arrow Right	004909-E	1-F (Blue/Mirror) Arrow Right	Note: 1-F = Single Side 2-F = Double Side
004257-E	1-F (Red/Mirror) Dbl-Arrow	004286-E	1-F (Green/Mirror) Dbl-Arrow	004910-E	1-F (Blue/Mirror) Dbl-Arrow	
004249-E	2-F (Red/Mirror) no Arrow	004261-E	2-F (Green/Mirror) no Arrow	004911-E	2-F (Blue/Mirror) no Arrow	
004259-E	2-F (Red/Mirror) Arrow Right and Left	004254-E	2-F (Green/Mirror) Arrow Right and Left	004743-E	2-F (Blue/Mirror) Arrow Right and Left	
004258-E	2-F (Red/Mirror) Dbl-Arrow	004253-E	2-F (Green/Mirror) Dbl-Arrow	004912-E	2-F (Blue/Mirror) Dbl-Arrow	

Prestige Economizer Series - Edge-Lit Led Exits

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Use caution when handling batteries. Avoid possible shorting.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Do not use this equipment for other than intended use.
8. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Route AC unswitched circuit of rated voltage into junction box and leave 6” of wire length.
3. Follow directions on the panel for chevron placement. (Note: for single sided units with clear background place chevron on back of the panel).
4. Unsnap cover (12) by using your fingers, lift the bottom of the cover and remove (if the cover is to difficult to open gently pry the cover using a flat head screw-driver at the point indicated in fig.1).

Wall Mount (See Figure 1)

a. Extend the AC supply leads with the extension wires supplied (follow the electrical wiring in figure 4).
b. Feed the supplied wires through the center hole of the spider plate then attach it to the junction box.
c. Feed the supplied wires through the center hole of the canopy then attach it to the spider plate using the screws provided (6).
d. Remove the knock out towards the inside with a screwdriver. Feed the supplied wires through the center hole and mount the housing to the canopy with the screws provided (4).

Ceiling or End mount (See Figure 2 & 3)

a. For ceiling mount: remove plugs (see figure 2)
a. For end-mount: remove the knock outs on the end cap towards the inside with a screwdriver (see figure 3).
b. Fasten the canopy to the housing using screws(4) and lock nuts provided (9).

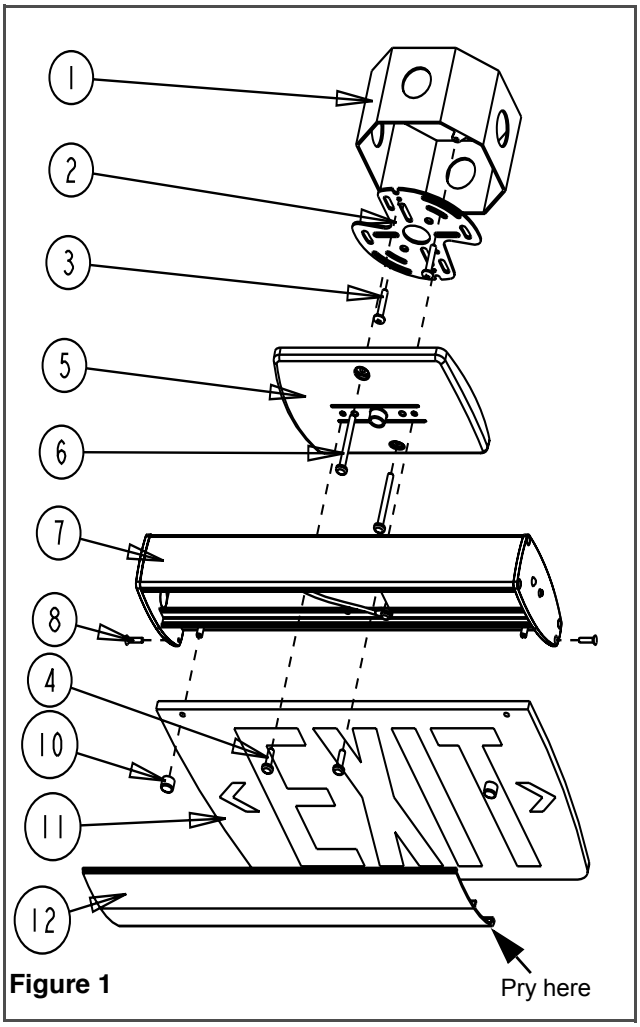


Figure 1

Part List

1. Junction box (existing)
2. Spider Plate
3. Junction box screws (not supplied)
4. Canopy screws - long(2)
5. Canopy
6. Canopy screws - short(2)
7. Housing
8. End cap screws
9. Lock Nuts
10. Panel holder plugs
11. Panel
12. Cover

c. Extend the AC supply leads with the extension wires supplied (follow the electrical wiring in Figure 4).
d. Route the supplied wires through the center hole of the spider plate.
e. Fasten the spider plate to the junction box using the junction box screws(3).
f. Feed wires into the unit through the center hole of canopy.
g. Fasten the canopy-housing assembly to the spider plate using the screws provided(6).

5. For remote power DC units, connect the red wire to the positive of the DC supply and the blue to the negative (6 to 24VDC).
6. Make the proper connections, our system accepts an input voltage of 120 to 277 VAC (see figure. 4). Connect the purple and white leads to the building utility. Connect the green ground wire to the service ground or the ground connection in the junction box.
7. **AC/DC or AC only models:** When AC is energized the LED strip will light.

For self-powered models only

a. When ready to energize AC, plug in battery connector to circuit board. Connect battery and turn on AC power within 6 hours.
b. When AC is energized the LED strip will light and green pilot light will illuminate. Allow 24 hours charge before initial duration testing.

8. Replace cover by squeezing it a little bit and pushing down. Secure the cover with the appropriate screws(8).
9. Reconnect the AC power.

Testing (self-powered models only)

Operate test switch: Press switch-"AC on" pilot light will turn off
- Release switch- "AC on" pilot will turn on
- Legend remains lit during testing.

Maintenance

None required. Unit should be tested monthly in accordance with safety codes and local codes. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.

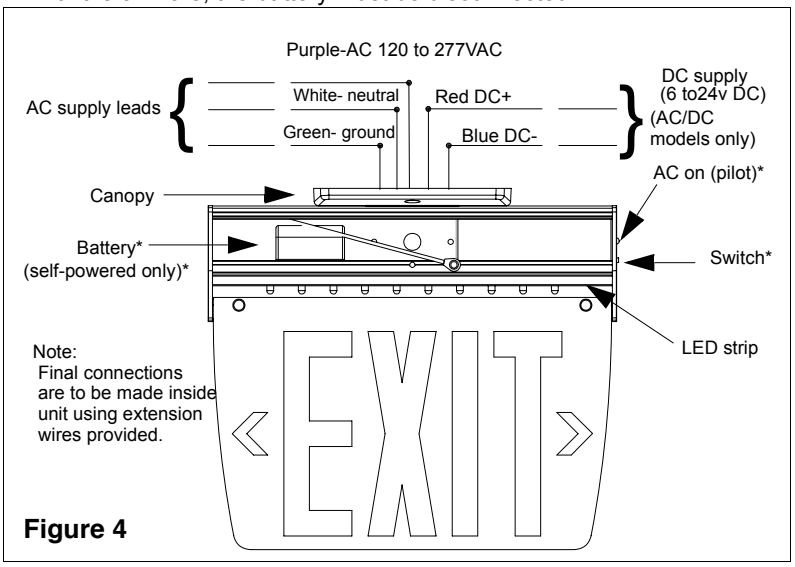


Figure 4

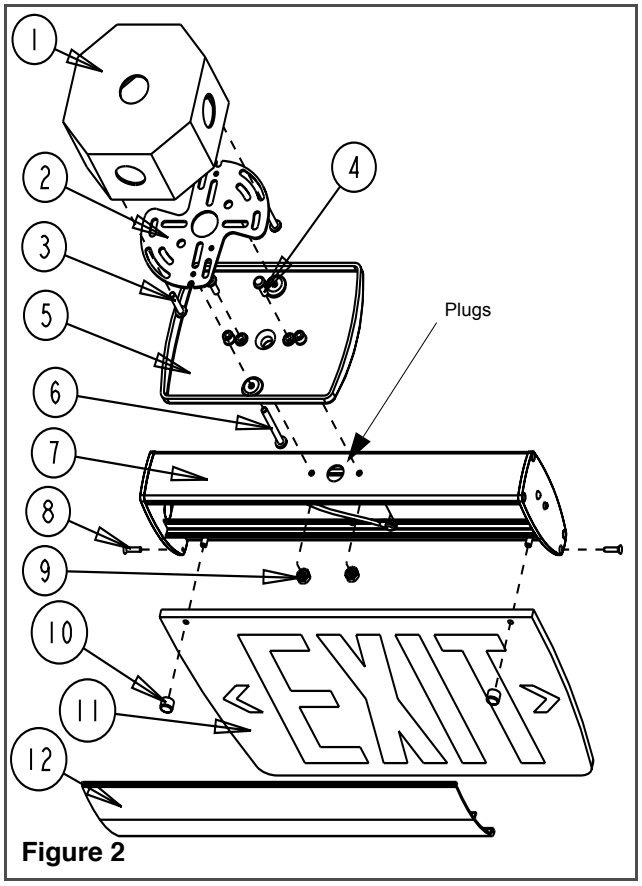


Figure 2

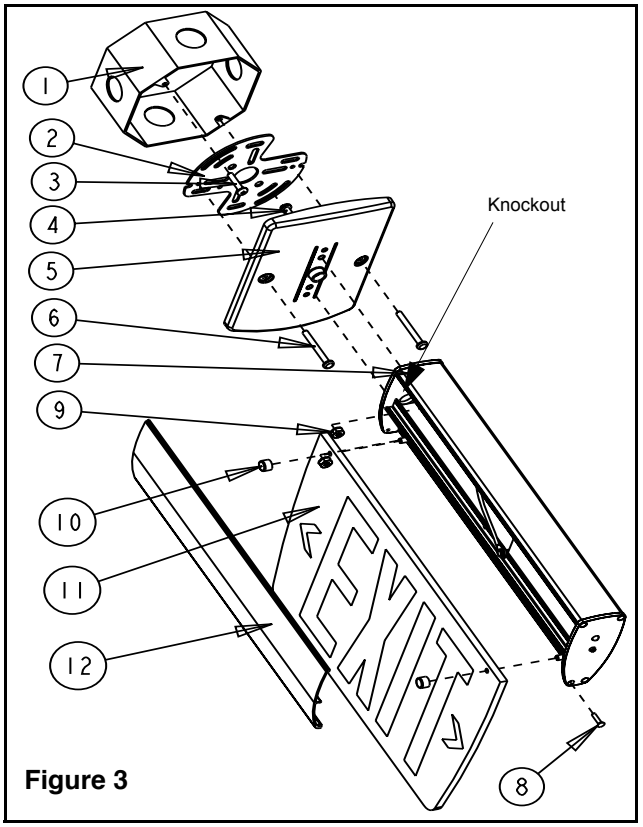


Figure 3

Prestige Series - Edge-Lit LED Exit Series

Flat trim AC, AC/DC and Self-Powered models

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Do not use outdoors.
3. Do not let power supply cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

Important: This sign shall be installed only where there is adequate colour contrast between the sign legend and the interior wall finish behind the sign, to provide for sufficient visibility.

Installation Instructions

Turn off AC power.

Installation

1. Remove the proper knockout in the back box for the entry of the AC wires.
2. Assemble the bar hangers (3) to the adjustment brackets (2) and the adjustment brackets to the back box (see figure 2). Install the bar hangers in the adjustment brackets. Mount the back box so that it is flush with the ceiling surface.
3. Route AC circuit of rated voltage into the back box and leave 6” of wire length.
4. Follow directions on the panel for chevron placement. (Note: for single sided units with clear background place chevron on back of panel).
5. Connect the incoming ground to the short ground wire provided in the back box.

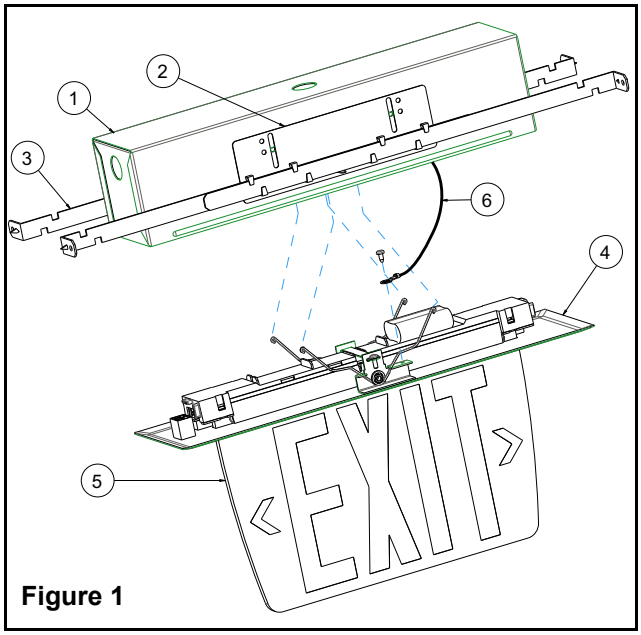


Figure 1

Parts List

1. Back box
2. Adjusment brackets (2)
3. Bar hangers (2)
4. Trim plate assembly
5. Exit panel
6. Ground wire

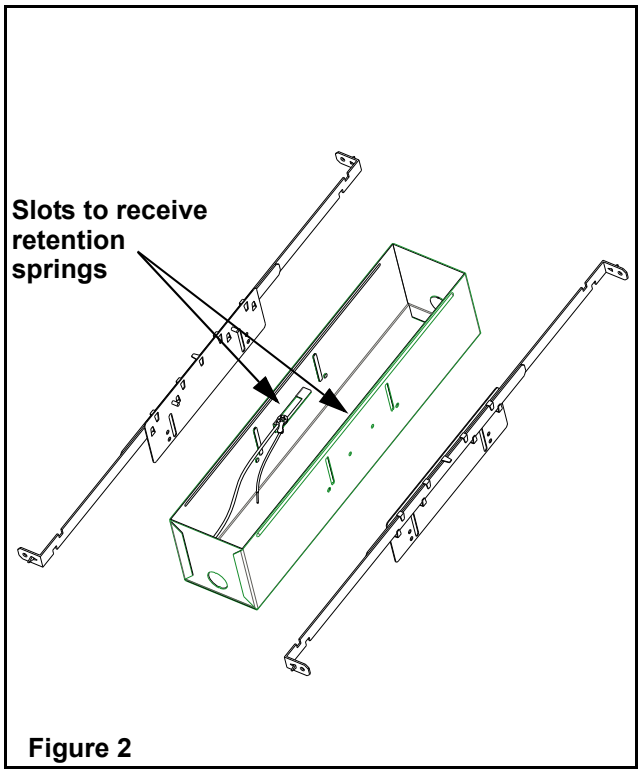


Figure 2

6. **Electrical connection**
   a. Connect the long ground lead from the back box to the spring bracket on the trim plate assembly with the hardware provided.
   b. Make the proper connections (see figure 3). This unit can accept input voltages of 120 VAC to 347 VAC. For regular models connect the purple (line) and white (common) leads to the building utility (Figure 3).
   c. AC/DC Models only:
   For DC portion: wire the red lead (+) to the positive DC input voltage and the blue lead (-) to the negative DC input voltage. Note: DC input voltage range is 6 volts to 24 volts.
7. Compress the retention springs (see figures 4) and pass them through the slots on the back box (1) (see figure 2) and Push the trim plate assembly into the back box. Align to be flush with the back box or the ceiling.
8. Plug battery (self powered models only).

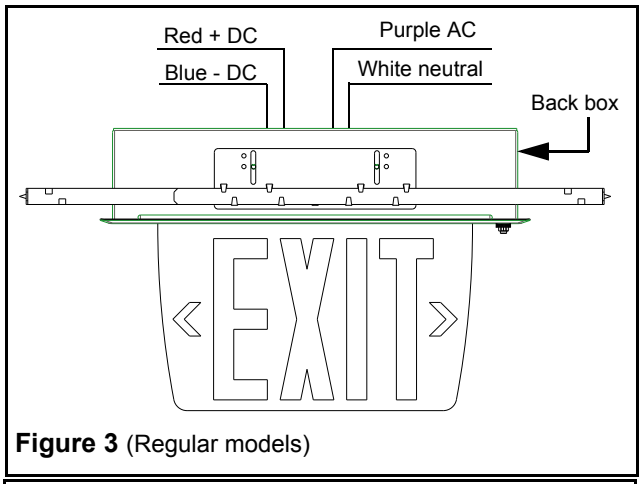


Figure 3 (Regular models)

Self Powered models

Manual testing

Press test switch (see figure 5). Legend will flicker then will remain lit. On release, external green LED will illuminate, and automatic charger will restore battery to full charge.

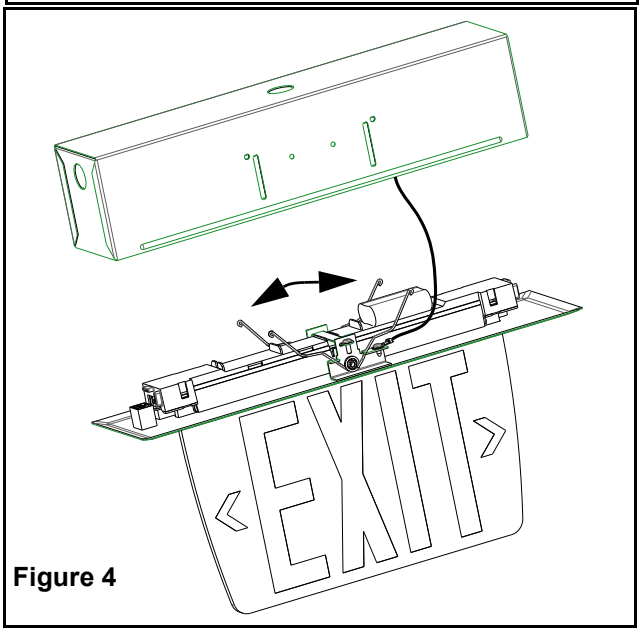


Figure 4

Maintenance

None required.

Models equipped with batteries: if AC supply is to be disconnected for 2 months or more, the battery must be disconnected (Self-Powered Models only).

Note — For safety reasons Nickel Cadmium batteries are shipped discharged. The unit may require 10 minutes of connection to AC supply before start-up test procedure, and two to seven days to reach full charge.

Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

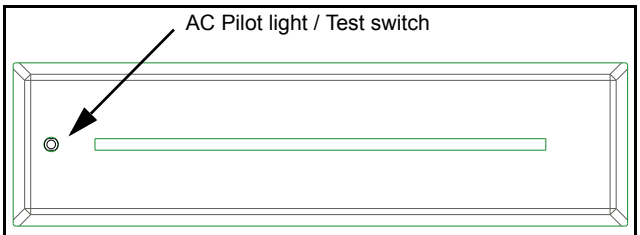


Figure 5 Trim plate

Thomas&Betts
A Member of the ABB Group

ADDENDUM :

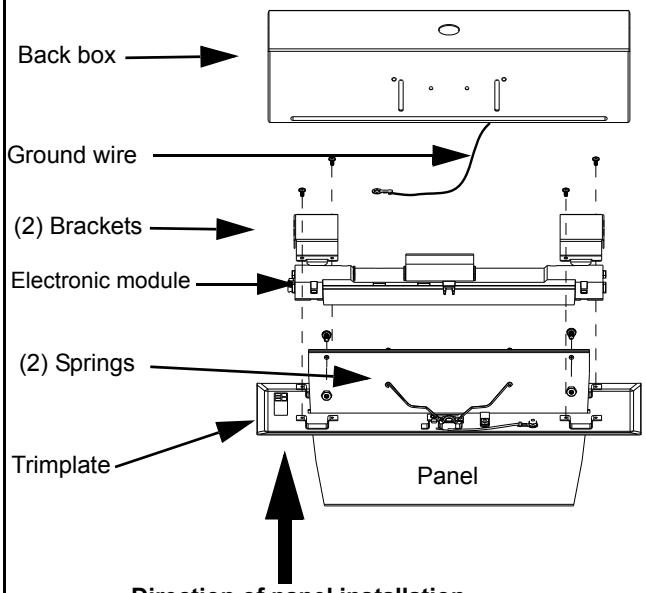
Flat trim panel replacement and installation kit AC, AC/DC, SP.

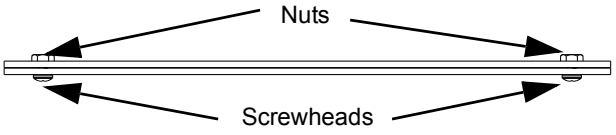
Step 1:Panel removal

1. Turn off AC power.
2. Pull the trimplate assembly away from the back box until it is allowed to hang freely.
3. Disconnect black and white wires.
4. Unscrew the ground wire.
5. Unscrew end brackets and remove the electronic module (trimplate with bracket see figure 1) or;
6. Unsnap and remove the electronic module from the trimplate (trimplate with clips see figure 2) or;
7. Unscrew center bracket and remove the electronic module (trimplate with center bracket see figure 3).
8. Pull the panel up to reveal the two screws and remove them. (Important: U shape panel can not be pulled all the way up through the trimplate).
9. Once the screws have been removed pull the panel down throught the trim plate.
10. Follow the steps below to replace the panel according to the appropriate trimplate assembly (see fig. 1,2 or 3).

Step 2A: Panel Installation for trimplate with brackets.

Figure 1

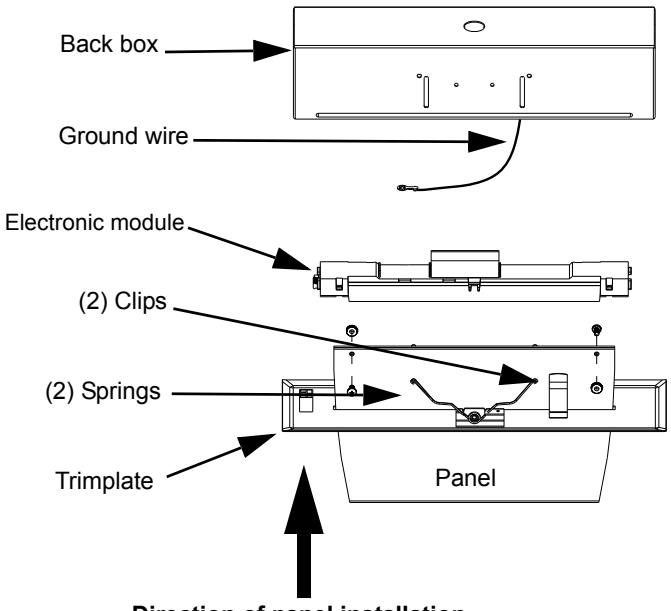


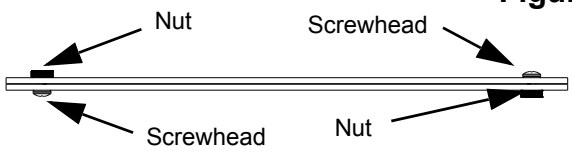


1. Slide the panel into trimplate the same way it was taken out.
2. Install the screws while respecting the orientation see view above.
3. Place the brackets onto the electronic module and screw them onto the trimplate.
4. Screw ground wire to trimplate.
5. Compress the retention springs and hook the trimplate assembly onto the back box.
6. Reconnect black and white wires.
7. Snap the trimplate assembly onto the back box.
8. Energize AC circuit.

Step 2B: Panel Installation for trimplate with clips.

Figure 2





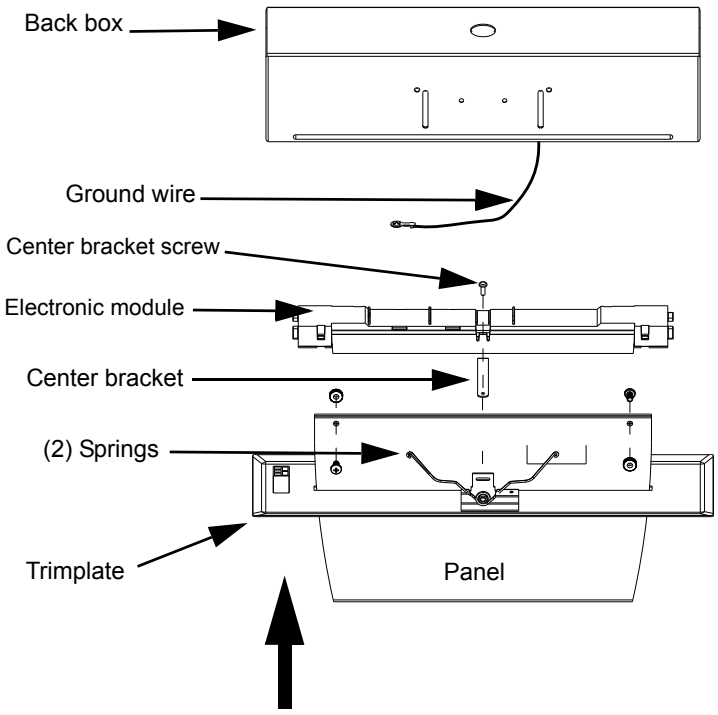
1. Slide the panel into trimplate the same way it was taken out.
2. Install the screws while respecting the orientation see view above.

> ⚠ **CAUTION:** Failure to respect screws orientation may prevent the panel from being vertically aligned once installed.

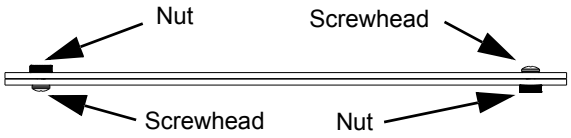
3. Snap the electronic module into the trimplate (snap on one clip at a time).
4. Screw ground wire to trimplate.
5. Compress the retention springs and hook the trimplate assembly onto the back box.
6. Reconnect black and white wires.
7. Snap the trimplate assembly onto the back box.
8. Energize AC circuit.

Step 2C: Panel Installation for trimplate with center bracket.

Figure 3



Direction of panel installation.



1. Slide the panel into trimplate the same way it was taken out.
2. Install the screws while respecting the orientation see view above.

> ⚠ **CAUTION:** Failure to respect screws orientation may prevent the panel from being vertically aligned once installed.

3. Slide the center bracket through the slot and over the electronic module then replace the screw into the center bracket.
4. Screw ground wire to trimplate.
5. Compress the retention springs and hook the trim-plate assembly onto the back box.
6. Reconnect black and white wires.
7. Snap the trimplate assembly onto the back box.
8. Energize AC circuit.

Prestige DX & DXN - Die Cast Aluminum LED Exit Series

AC, AC/DC, Self-Powered and Nexus

WARNING:
Risk of Electrical Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. All unused wires must be insulated to prevent shorting.
3. Do not use outdoors.
4. Do not let power supply cords touch hot surfaces.
5. Do not mount near gas or electric heaters.
6. Use caution when handling batteries. Avoid possible shorting.
7. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Do not use this equipment for other than intended use.
10. Unit to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Route AC circuit of rated voltage into electrical box and leave 6” of wire length.
3. Separate the housing assembly, back cover and exit door, using a screwdriver (see fig. 3).

Canopy mount

a. Separate the canopy plate from the canopy assembly and retain the securement screw (see fig. 2).
b. Remove the proper knockout in the canopy plate for desired mounting position.
c. Feed the AC wires through the large hole in the canopy plate. Use the junction box screws to secure the canopy plate to the junction box. Ensure the location for securement screw is accessible.
d. To knock out the chevrons, remove the diffuser panel. Support the door around the chevrons with two blocks of wood. Strike arrow knockouts from the inside with a hammer and screwdriver. Re-install the diffuser panel using the securement clips (see fig. 3).
e. Determine which side of the exit frame will be used for mounting. Break out the appropriate rectangular section at the canopy mounting position (see fig. 3). Make sure edges are free from burrs.

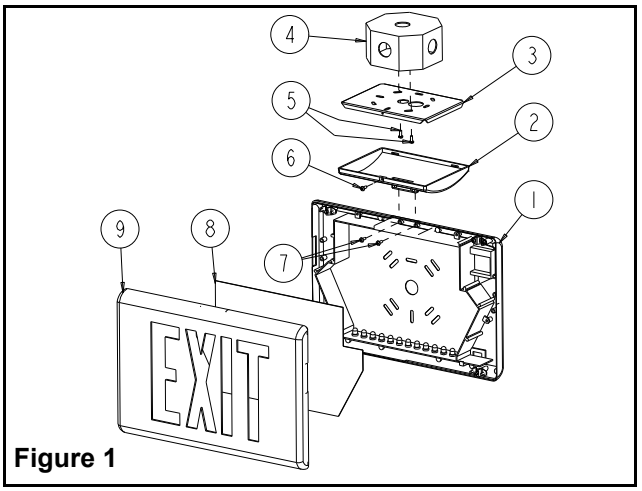
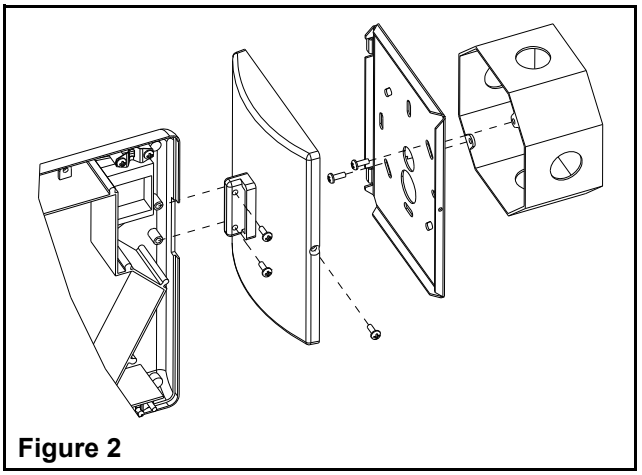


Figure 1

Parts List

1. Back cover
2. Canopy
3. Canopy plate
4. Junction box (not supplied)
5. Junction box screws (not supplied)
6. Securement screw
7. Canopy screws (2)
8. Diffuser Panel
9. Exit door


Figure 2

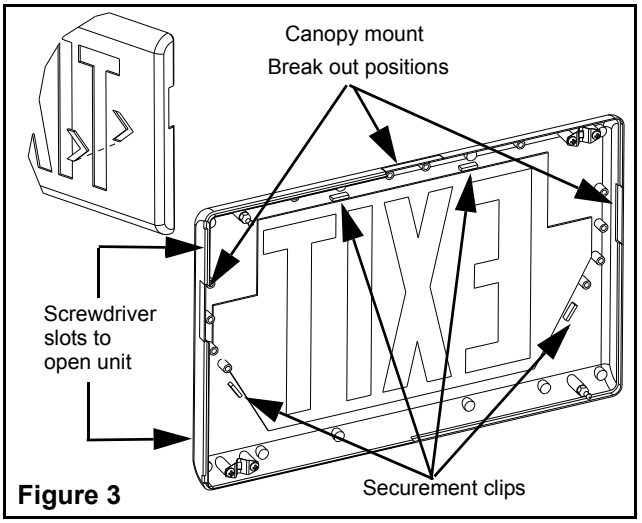


Figure 3

f. Secure the canopy to the exit housing by guiding flange on the canopy into the rectangular hole in the side (or top) of the housing. Use the canopy screws to fasten the canopy to the housing (see fig. 2).

g. Route the AC supply wires and ground wire from the exit through the rectangular hole in the exit housing and through the slot in canopy.

h. Make the proper connection. In standard unit, the system can accept input voltages from 120 to 347 Vac. Therefore, connect the purple (hot) and white (common) leads to the building utility (see fig. 5). For master exit sign wiring, connect the orange (277 Vac) or the black (120 Vac) and the white (neutral) to the building utility. Feed the excess wire into the junction box.

Note — For the Nexus models wiring, go to the section "Nexus Models" (see fig. 7).

i. Mount the exit/canopy assembly to the canopy mounting plate by guiding the two tabs on the canopy plate into the slots in canopy. Use the securement screw to fasten the canopy to the mounting plate (see fig. 2).

Wall Mount

a. No canopy required (see fig.4). Determine the proper knockout in the back cover for mounting. Support the area around knockout with two blocks of wood. Strike knockouts from the inside with a hammer and screwdriver. Follow the chevron's knockout procedure in the Canopy mount section, step e.

b. Route the AC wires through the large hole in the back cover.

c. Mount the back cover to the junction box using the junction box screws. Install ty-rap mount and use ty-rap to place wires against back plate to avoid shadowing in the legend.

d. Make the proper connections. In standard units, the system can accept input voltages from 120 to 347 VAC. Therefore, connect the purple (hot) and white (common) leads to the building utility. For master exit sign wiring, connect the orange (277 Vac) or the black (120 Vac) and the white (neutral) to the building utility. Feed excess wire into the junction box (see fig. 5).

Note — For the Nexus models wiring, go to the section "Nexus Models" (see fig. 7).

4. Snap the two halves of clamshell together.
5. Energize AC. Sign will illuminate.
6. For units with vandal resistant options, refer to fig. 6.

AC/DC Models (Except nexus models)

Refer to fig. 5 for AC & DC wiring.

For DC portion — Wire the Red lead (+) to the positive DC input voltage and the Blue Lead (-) to the negative DC input voltage.

Note: DC input voltage range is 6 volts to 48 volts.

Nexus models

Refer to figure 7 for the wiring of Nexus models.

These units can accept an input voltage of 120 or 277 Vac:

120 VAC — Connect the black (120 Vac) lead and white (neutral) lead to the building utility. Insulate the orange wire.

277 VAC — Connect the orange (277 Vac) lead and white (neutral) lead to the building utility. Insulate the black wire.

Feed excess wire into the junction box.

Leave as much space as possible between the live voltage cabling and the unsheathed low voltage data cabling.

Run the double insulation of data cables past the line cabling section and only strip back the last 30mm of the data cable sheathing.

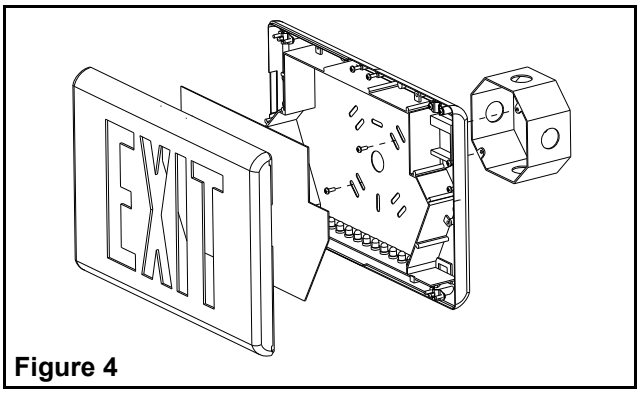


Figure 4

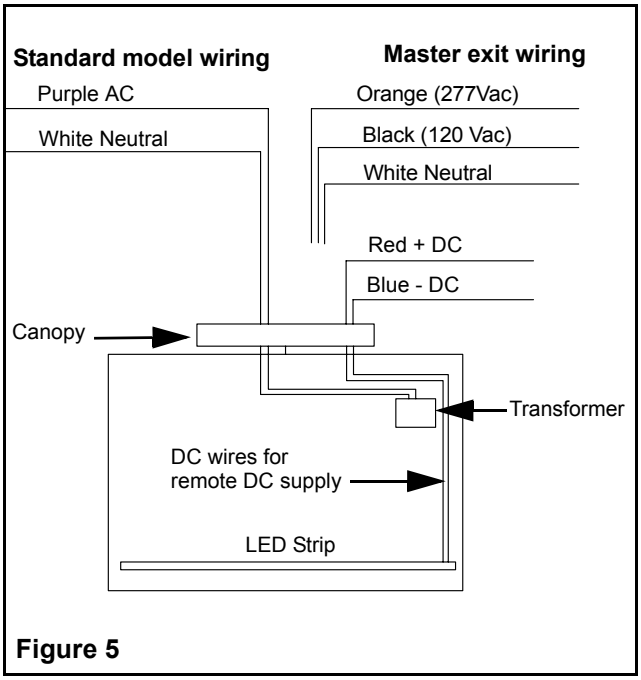


Figure 5

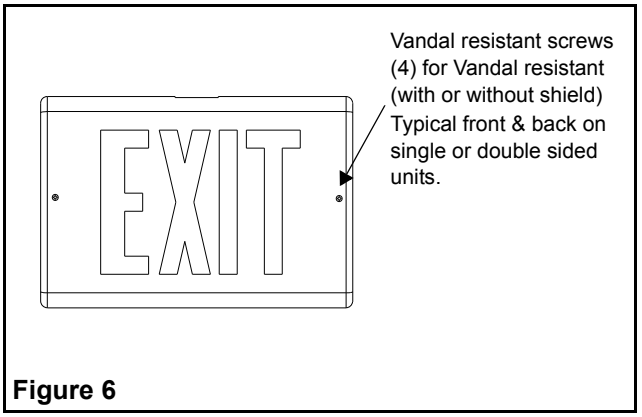


Figure 6

Self-Powered Models

Manual testing

Press test switch. Legend will flicker, but remain lit, AC pilot lamp will extinguish. On release, pilot lamp will illuminate, and automatic charger will restore battery to full charge.

Automatic testing and diagnostic

All models have automatic testing and diagnostics which includes a micro-controller that exercises and self-tests the unit on a monthly basis and identifies as well displays failures of the electrical components: battery, battery charger, lamps, LEDs.

Self-test

The self-test is performed every 30 days for 30 seconds, every 60 days for 30 minutes, and annually for 90 minutes.

Diagnostic function

The diagnostic function uses three red LED indicators: one external, near AC pilot lamp, and two internal, inside the unit. The unit has to be opened to read the status of the internal indicators.

External: Service Required. Blinks if any alarm condition is detected (See fig. 8).

Internal: Battery Alarm and Charger Alarm. Steady ON if alarm condition exists (See fig. 9).

Normal operation, No fault — Service Alarm is OFF and one of the two internal LED blinks, showing that the micro controller is active.

Faulty operation Service Alarm blinks.

Battery Alarm ON, Charger Alarm OFF: Check battery or replace battery.

Battery Alarm ON, Charger Alarm ON: Check LED strip.

Battery Alarm OFF, Charger Alarm ON: Check charger circuit.

Nexus models

Nexus models use two local indicators. One is a green LED for AC pilot lamp. The other is a tricolor LED (Service) which identifies and displays the Nexus status. The table below describes each status:

Nexus Tricolor LED — Status table

	Uncommissioned	***Commissioned***
Normal	Red/Off pulsing	Green steady
Under test	N/A	Green/Off pulsing
Wink mode	Yellow-orange/(red or off) pulsing	Yellow-orange/Off pulsing
Neuron faulty	Red Steady	Red steady
Power fail	Off	Off
Battery disconnected	N/A	Off

CAUTION: This unit is an integral component of a remotely monitored and controlled self-test / self-diagnostic emergency lighting system. In the event that control is suspended or becomes inoperable, this unit may have to be manually tested as required by local code regulations.

Maintenance

None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected (Self-Powered Models only).

Note — Nickel Cadmium battery units are shipped discharged and may require 10 minutes of connection to AC supply before start-up test procedure, and 96 hours to reach full charge or 24 hours to reach a 30 minute discharge.

Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

Nexus model wiring

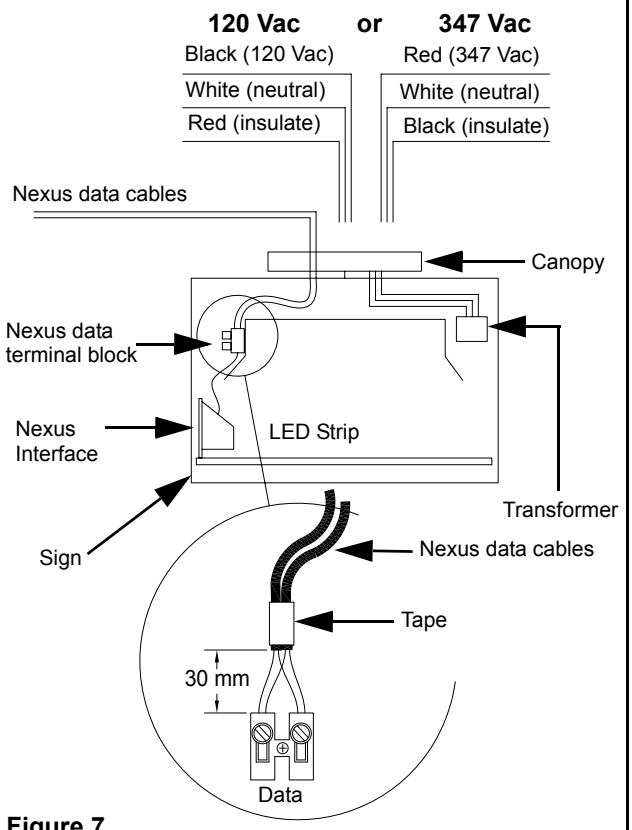


Figure 7

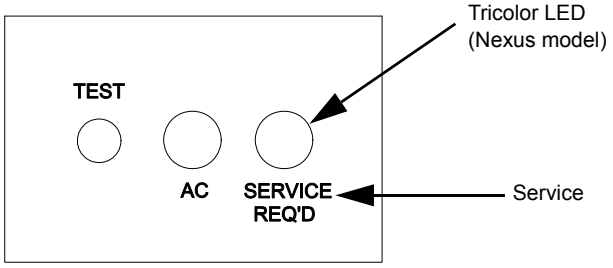


Figure 8

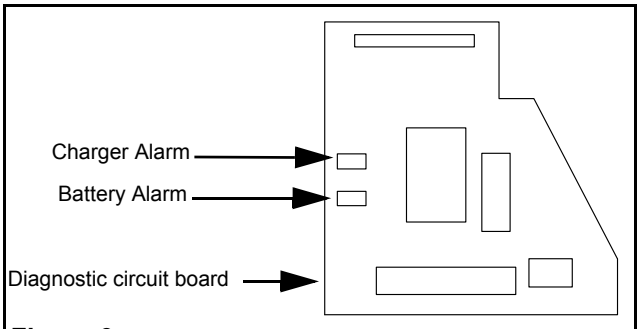


Figure 9

Thermoplastic LED Combo Sign

Self-Powered LED model

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be taken including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Do not use outdoors.
3. Do not let power supply cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Do not use this equipment for other than its intended use.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Route AC unswitched circuit of rated voltage into electrical box and leave 6" of wire length.
3. Remove face plate screws (only for some models). Remove the combo front door using a coin or a screwdriver at the top or bottom of the door. Arrows on the frame point towards the front door (See Fig. 2).
4. Determine the mounting position (wall or ceiling). Note: a canopy(6) is required for ceiling mount.

Wall mounting

No canopy required. Remove the battery(s) with wires. With the help of flat head screwdriver, knock out the proper hole pattern on the back cover, including the center hole, to mount to a standard junction box as well as the two wall anchoring points (See Fig. 2). Install means to anchor unit in line with "Wall anchoring points". Feed the AC supply leads (and DC leads for remote lamps if applicable) around inside the housing, through the plastic conduit and out through the center hole and make the proper connections (See step 5 and Fig. 6). Unused primary wire must be insulated to prevent shorting. Feed the excess wire into the junction box. Secure the back plate to the wall at wall anchoring points using wall mount screws(16), then to the junction box using the junction box screws(7). Proceed to step 6.

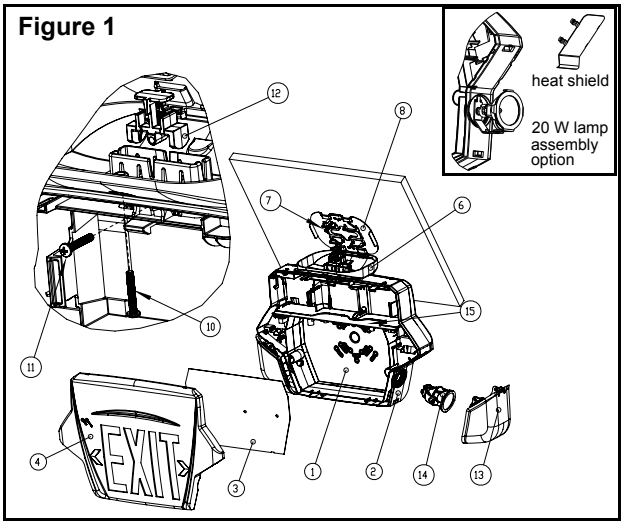
Conduit entry mounting

Remove knock-out for the conduit entry located on the top of the central housing (See Fig. 2).
Secure unit to the wall following "Wall mounting" instructions and make appropriate connections.

Ceiling mount

Canopy required. Remove the battery(s) with wires connected. Attach the spider plate to electrical box with the junction box screws(7). Remove the hole plug(5). Feed AC supply leads (and DC leads for remote lamps if applicable) out through top opening and then through canopy. Remove the canopy lock(12). Snap the canopy into the opening on top of frame. Reinstall the canopy lock into the canopy. Secure the assembly with canopy housing screw(11) (See Fig. 1). Make the proper wire connections. The "Quick-install" canopy is equipped with ribs allowing you to hang the unit spider plate to

Figure 1



Parts List

1. Back Plate
2. Central Housing
3. Diffuser Panel
4. Face Plate
5. Hole Plug for Canopy
6. Canopy
7. Junction Box Screws (not Provided)
8. Spider Plate
9. Junction Box
10. Canopy Plate Screw
11. Canopy Housing Screw
12. Canopy Lock
13. Lens
14. Lamp Assembly
15. PCB
16. Wall Mount screws (not Provided)

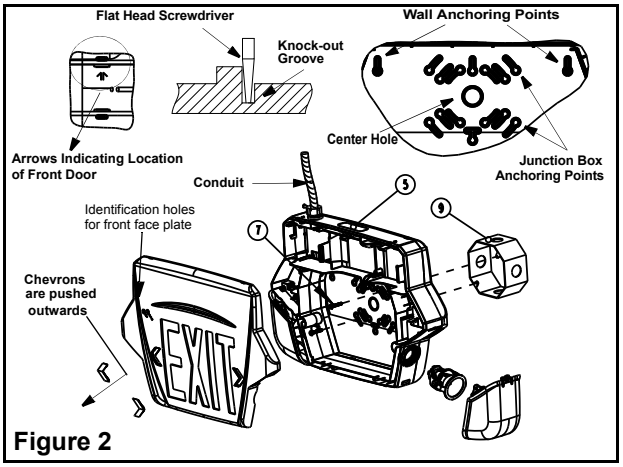


Figure 2

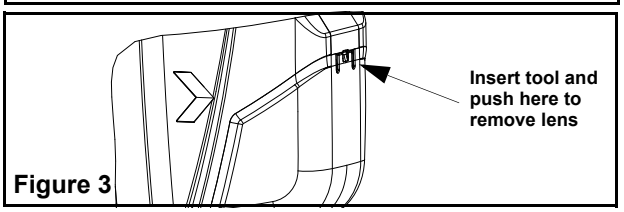


Figure 3

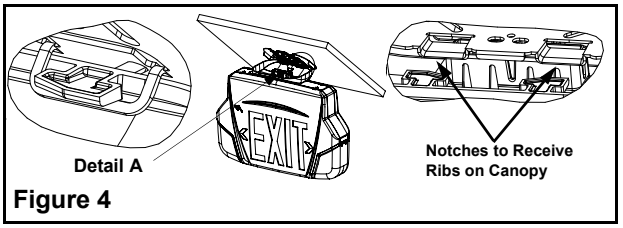


Figure 4

facilitate wiring (See Fig.4). Feed the excess wire into the junction box. Unhook unit and slide ribs on canopy into designated notches on the spider plate (See Fig. 4). Secure the canopy to the junction box using the canopy screws provided(10). Note: use tamper proof screws for vandal resistant units.

5. Our system can accept input voltages of 120 VAC, 277 VAC. Therefore, connect the black (120 VAC) or orange (277 VAC) and white (common) leads to the building utility. Connect the green wire to the ground.

⚠ Unused primary wire must be insulated to prevent shorting (See Fig.6).

6. Install battery(s) and wires.
7. Remove the appropriate chevron(s) on the exit door by holding sign with both hands. Push chevrons from the inside with thumb (See Fig. 2). You will need to unsnap the diffuser panel to do so.
5. Connect battery “T Connector” to PCB (“B” connection) (See Fig. 6).
6. Remote lamp(s) connection : Feed external DC+ & DC- wires through unit and connect to internal wires using wire nuts provided (See Fig. 6).
7. Reinstall combo door(s). Fasten screws (only for some models). Note: The front plate with holes must be installed on the front side (see Fig.2).
8. Remove lenses (See Fig. 3) and discard plastic bags. Install lamps as shown in figure 5. Adjust the lamps in appropriate position. Re-install both lens.

⚠ **Caution**: for 20 watt lamps a heat shield needs to be installed. See addendum for heat shield installation.

9. Energize AC. Sign will illuminate.

Note: DC input voltage is 6 or 12 volts depending on unit type.

Unit testing

Manual testing

Press test switch. Legend will flicker, but remain lit. On release, external green LED will illuminate, and automatic charger will restore battery to full charge.

Automatic testing and diagnostics

The automatic testing and diagnostic function includes a micro-controller which self-tests the unit on a monthly basis and identifies as well displays failures of the electrical components: battery, battery charger, lamps, LEDs.

Self-test

The self-test is performed every month for 1 minute, every 6 months for 30 minutes, and annually for 90 minutes.

Diagnostic function

1. Dual color LED lamp indicator shows the following status:
   a. Green color: AC on/Ready.
   b. Red color: (Service Alert) see figure 7.

o	Green	Steady On	AC On
o	Red	Steady On	Battery Disconnect
-o	Red	Blinking	Battery Failure
o-o	Red	Two Blinks	Charger Failure
o-o-o	Red	Three Blinks	Lamp Failure
o-o-o-o	Red	Four Blinks	LED Failure

For Nexus models, refer to “Nexus addendum”.
Units with automatic testing are shipped “non-audible”. If you wish to make the unit “audible” simply re-orient the jumper “JP5” as shown in figure 8.

Maintenance: None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.
Note: NiMH (Nickel Metal Hydride) batteries are shipped discharged and need to be connected to an AC supply for 10 minutes before start-up test procedure, 24 hours to charge to meet a 30 minute discharge or 96 hours to reach full charge.

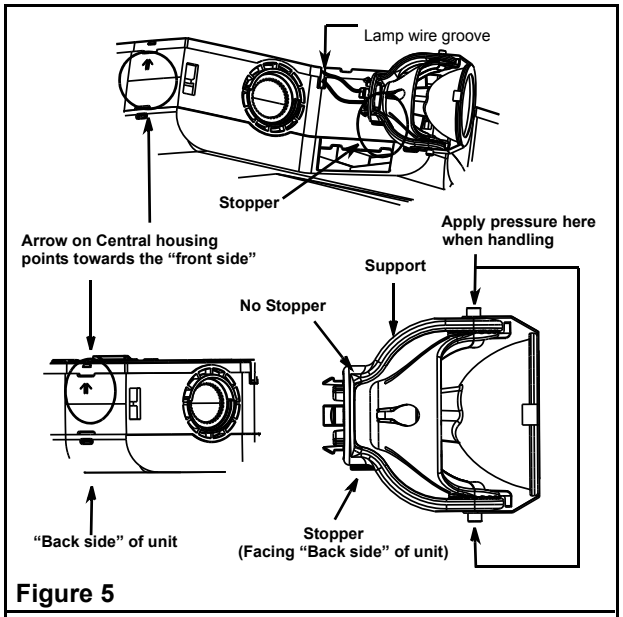


Figure 5

Assembly steps:
1. Remove lamp assemblies from plastic wrapping.
2. Place wires in respective grooves on the central housing.
3. Align and snap in place with "stopper" oriented per Figure 5.
4. Handle assemblies by applying a pressure on either end of the support per Figure 5.

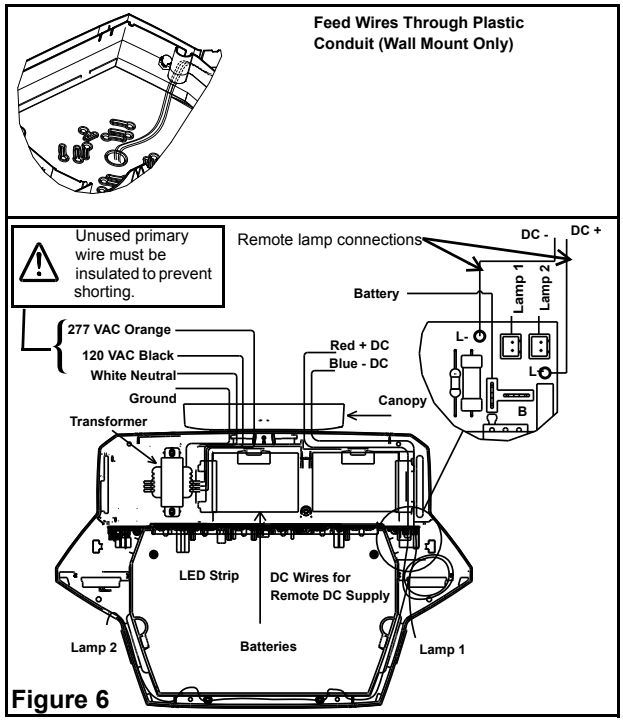


Figure 6

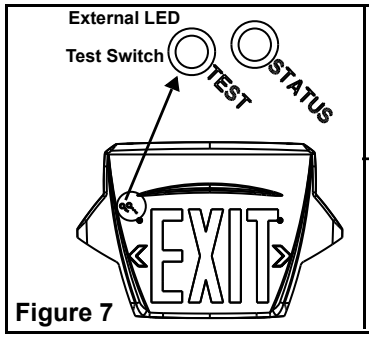


Figure 7

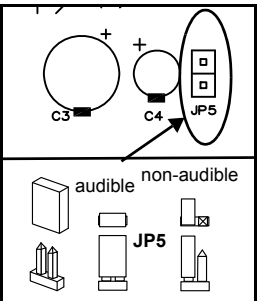


Figure 8

Premier Series - Thermoplastic LED Exit Sign

AC, AC/DC or Self-Powered

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be taken including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Route AC unswitched circuit of rated voltage into electrical box and leave 6” of wire length.
3. Remove the exit door using a coin or a screwdriver at the top or bottom of the door.
4. Determine the mounting position (end, wall or ceiling). Note: canopy is required for end or ceiling mount.
5. Our system can accept input voltages of 120 VAC or 277 VAC. Therefore, connect the black (120 VAC) or orange (277 VAC) and white (common) leads to the building utility. Connect the Green wire to the ground. Unused primary wire must be insulated to prevent shorting

Wall mounting

a. No canopy required. With the help of a flat head screwdriver, knock out the proper hole pattern in the back cover to mount to a standard junction box (See Fig. 2). Feed the AC supply leads out through the center hole and make the proper connections. Feed the excess wire into the junction box and secure the back cover to the junction box using the junction box screws. Proceed to step 6.

End or ceiling mount

a. Canopy required. Attach the spider plate to electrical box with the junction box screws. Remove appropriate hole plug. Feed AC supply leads through side or top opening and then through canopy. Snap canopy on top or side of frame (See Fig. 3). Screw canopy to frame(11). In the case where a canopy lock is supplied, you may refrain from screwing the canopy to the frame and simply snap the

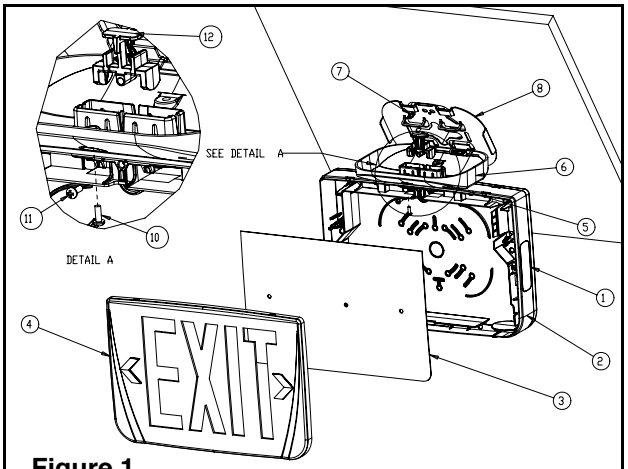


Figure 1

Part List

1. Back plate
2. Frame
3. Diffuser panel
4. Exit door
5. Hole plug for Canopy
6. Canopy
7. Junction box screws (not provided)
8. Spider plate
9. Junction box
10. Canopy plate screw
11. Canopy housing screw
12. Canopy lock

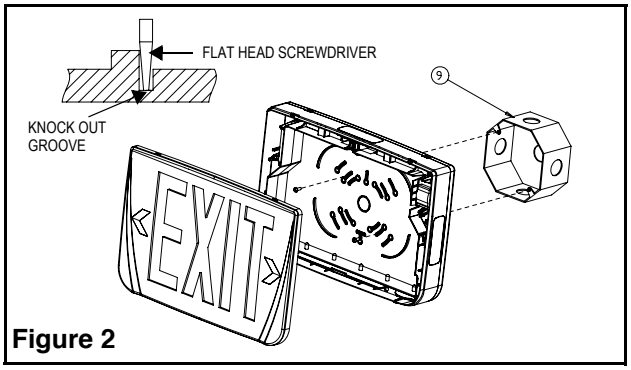


Figure 2

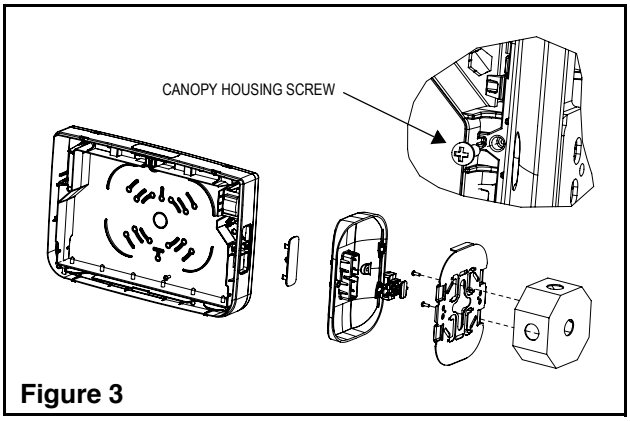


Figure 3

canopy lock to canopy. However, for applications having a greater risk of exposure to abnormal impacts, we suggest to always use the canopy housing screw(11) (fig. 1 and 3). Make the proper wire connections. The “Quick-install” canopy is equipped with ribs allowing you to hang the unit on the spider plate to facilitate wiring (See fig.4). Feed the excess wire into the junction box. Unhook unit and slide ribs on canopy into designated notches on the spider plate (See fig. 4). Secure the canopy to the junction box using the canopy screw(s) provided(10).

6. Remove the appropriate chevron(s) on the exit door by holding sign with both hands. Push chevrons from the inside with thumb (See Fig. 5). You may need to unsnap the diffuser panel to do so.
7. Connect the battery.
8. Reinstall exit door(s).
9. Energize AC. Sign will illuminate.

AC/DC Models

Refer to Fig. 6 for AC & DC wiring.

For DC portion — Wire the Red lead (+) to the positive DC input voltage and the Blue Lead (-) to the negative DC input voltage. Note: DC input voltage range is 6 volts to 48 volts.

Self-Powered Models

Manual testing

Press test switch. Legend will flicker, but remain lit. On release, external green LED will illuminate, and automatic charger will restore battery to full charge.

Automatic testing and diagnostics, optional

The models with the automatic testing and diagnostic option include a microcontroller which self-tests the unit on a monthly basis and identifies as well displays failures of the electrical components: battery, battery charger, lamps, LEDs.

Self-test

The self-test is performed every 30 days for 1 minute, every 6 months for 30 minutes, and annually for 90 minutes.

Diagnostic function

The diagnostic function uses an external green LED indicator. Service is required if the green LED blinks indicating that an alarm condition is detected (See Fig. 7).

o	Green	Steady On	AC On
-o	Green	One Blink	In Test
o	Red	Steady On	Battery Disconnect
-o	Red	One Blink	Battery Failure
o-o	Red	Two Blinks	Charger Failure
o-o-o-o	Red	Four Blinks	LED Strip Failure

Maintenance

None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected, Self-Powered Models only.

Note — NiCd (Nickel Cadmium) batteries are shipped discharged and may require 10 minutes of connection to AC supply before start-up test procedure, and 96 hours to reach full charge.

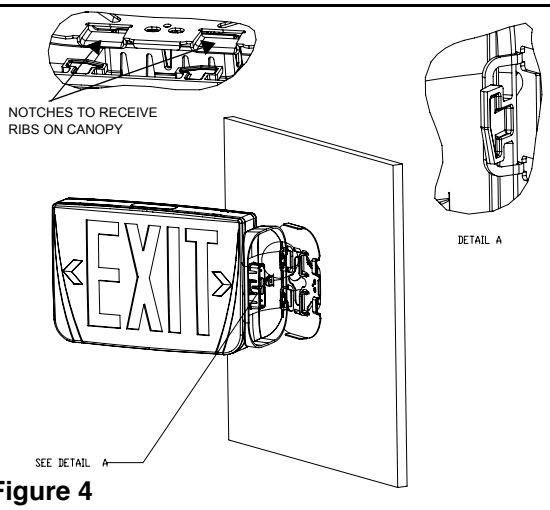


Figure 4

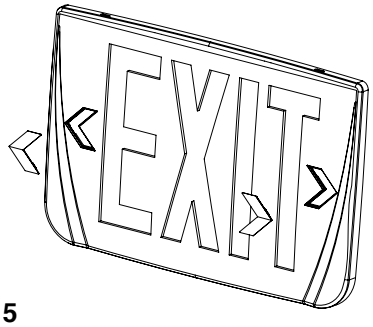


Figure 5

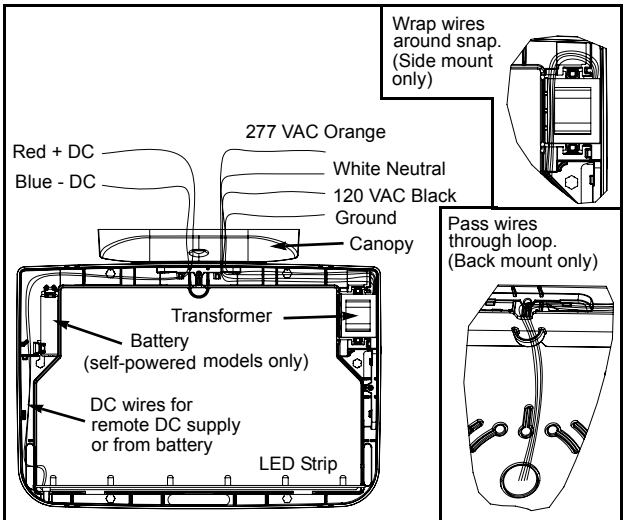


Figure 6

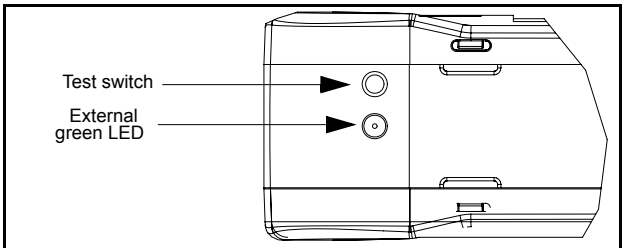


Figure 7 -for self-powered models only

Emergency Lighting

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not let power supply cords touch hot surfaces.
2. Do not mount near gas or electric heaters.
3. Use caution when handling batteries. Avoid possible shorting.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
7. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
8. Do not use this equipment for other than intended use.
9. All servicing should be performed by qualified service personnel.

Caution! For models including battery support plate (3) it is critical to ensure that the hooked end of the bracket is properly latched to the battery support plate (see Fig. 1). Failure to do so can cause a serious injury.

WARNING!

Velcro straps are a temporary means to support the batteries. You must always reinstall the battery retaining bracket(11).

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off unswitched AC power.
2. Route AC unswitched circuit of rated voltage into electrical box and leave 6" of wire length.
3. Lay unit on a flat surface face up. Remove lenses (8) and heat shields (13) (for units with 20W lamps) (See Fig. 1) and leave lamps detached from the housing.
4. Remove the front cover (1).
5. Remove the battery support bracket (11) (See Fig.2) and battery(ies) and note how they are connected to reproduce this upon re-assembly.
6. Determine the mounting position (wall or ceiling).

Wall Mounting

1. Knock-out the proper hole pattern in the housing (6) to mount to a standard junction box (9) (See Fig. 2) according to the required orientation. To do so, it is recommended to place the unit on a flat solid surface with the back of the housing facing the surface. Prop up the unit on a roll of tape or other solid means to facilitate the removal of the knock-outs. Place the tip of a flat head screwdriver in the groove and knock out each detail with the help of a hammer (See Fig. 2).
2. Remove bubble wrap and install lamp assemby (7) (See Fig. 1).
3. Install means to anchor unit in line with "Wall anchoring points" (see Fig. 2). This is recommended for a more secure installation.
4. Install junction box screws until they protrude 1" minimum from the wall.
5. Feed the AC supply leads and wires from remotes (if applicable).

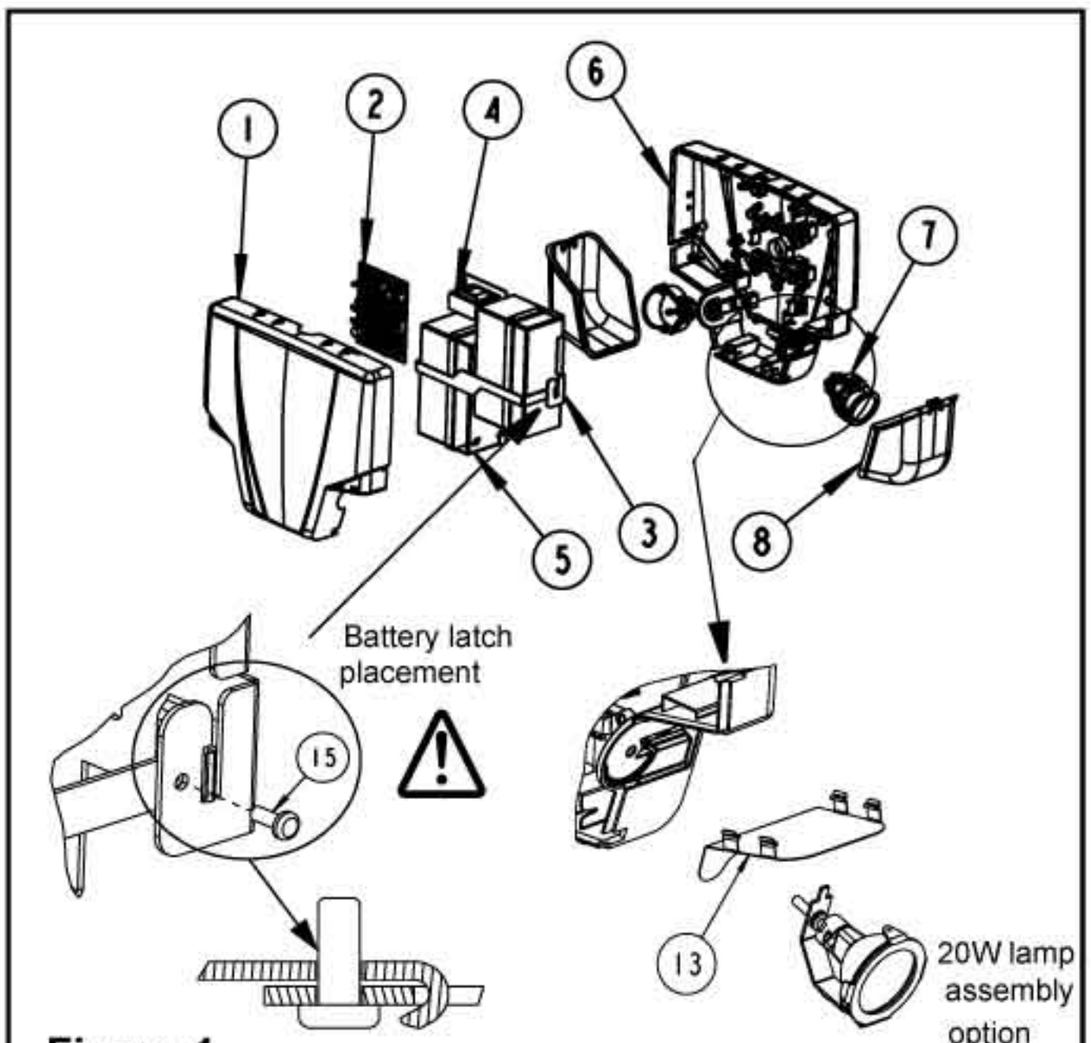


Figure 1

Part List

1. Front cover
2. Charger board
3. Battery Support plate (only for certain models)
4. Transformer
5. Battery (1 or 2 depending on models)
6. Housing
7. Lamp assembly
8. Lens
9. Junction box
10. Junction box screw 8-32 x 1-1/2"
11. Battery retaining bracket
12. Velcro strap
13. Heat shield (20W units only)
14. Wall mounting screws (not provided)
15. Bracket locking screw

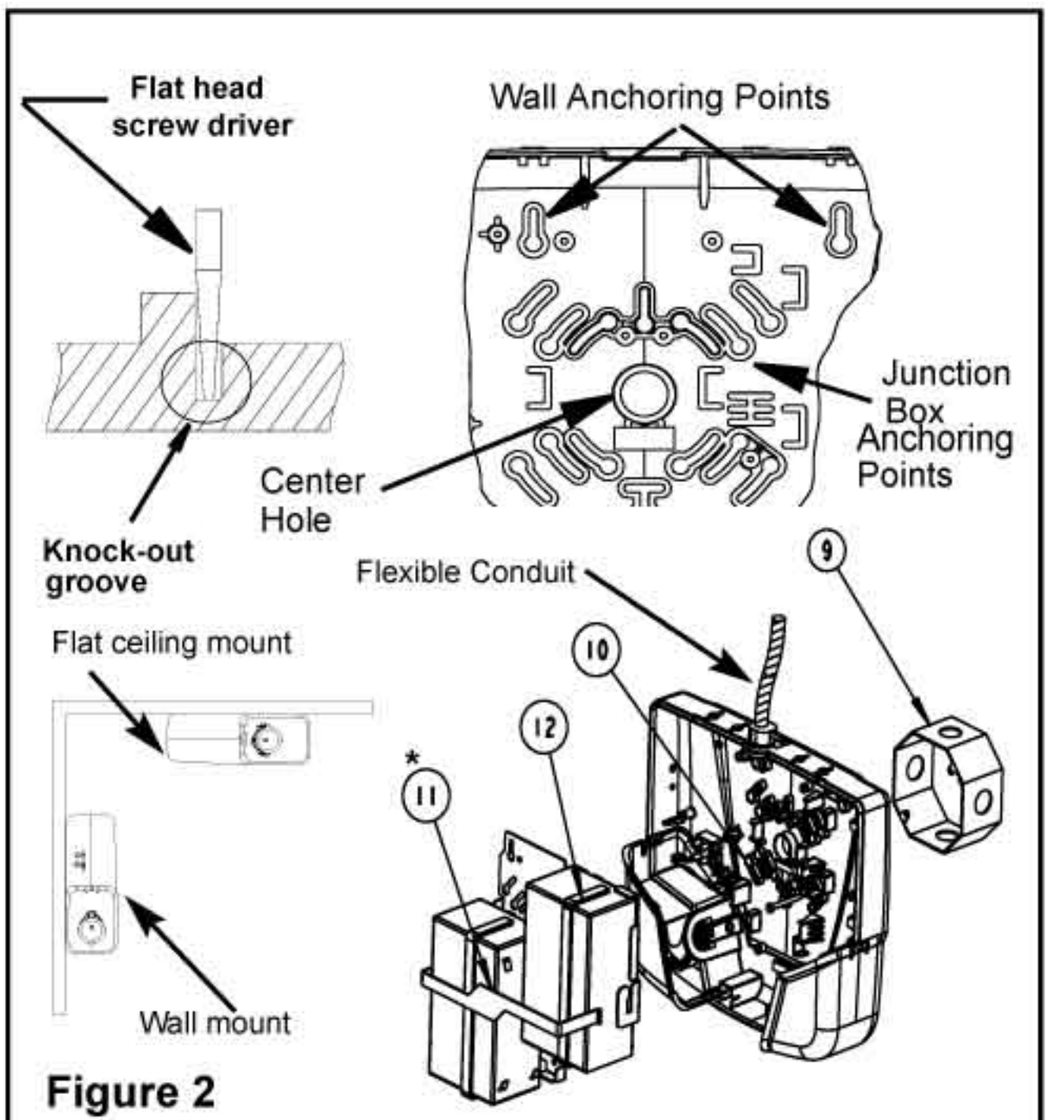


Figure 2

*Shape of bracket and means to install them varies.

Thermoplastic Battery Unit

6. Mount housing to the junction box.
7. Make the proper connections: our system can accept input voltages of 120 VAC or 347 VAC. Therefore, connect the black (120 VAC) or red (347 VAC) and white (common) leads to the building utility. Connect the green wire to the ground.

⚠ **Unused primary wire must be insulated to prevent shorting.**

Route entry wires to avoid contact with the transformer, battery terminals and charger PCBA. Refer to figure 3.

8. Secure the housing to the wall at wall anchoring points using wall mount screws (14), then to the junction box using the junction box screws (10).
9. Connect the tips of each Velcro strap to form the largest possible loop.
10. Reinstall the battery(ies) by connecting the wires first before securing each battery in the housing. Secure the Velcro strap(s) and battery bracket with locking screw (15) when supplied. Connect the battery to the charger board.
11. For units with remote capacity, connect the remote heads to L+ and to L-.
    Calculation of total allowable remote capacity of unit:
    Maximum remote lamp power = unit capacity minus the total power of lamps included with unit.
12. Adjust the lamps in an appropriate position.
13. Put the unit cover back in place.
14. Install the heat shields (units with 20W lamps only) and lenses.
15. Energize AC.

Flat Ceiling Mounting (optional)

Follow same steps as outlined for Wall Mounting. No canopy is required.(See Fig.2.)

⚠ **Caution! DO NOT install unit to the ceiling unless its model number includes the suffix " -CM "**

Pendant Mounting

Refer to Addendum for Pendant Mounting.

Conduit Entry Connection (Flexible conduit only)

Remove knock-out for the conduit entry located on the top of the housing (See Fig. 2).
Secure unit to the wall following "Wall mounting" or "Ceiling mounting" instructions and make appropriate connections. Isolate wires from building to avoid contact with the transformer.

Manual Testing

Press test switch. On release, external green LED will illuminate and automatic charger will restore battery to full charge.

Automatic Testing

The unit will perform an automatic self-test of 1 minute every month, 10 minutes every 6 month and a 30 minutes self-test once a year.

Automatic Diagnostics

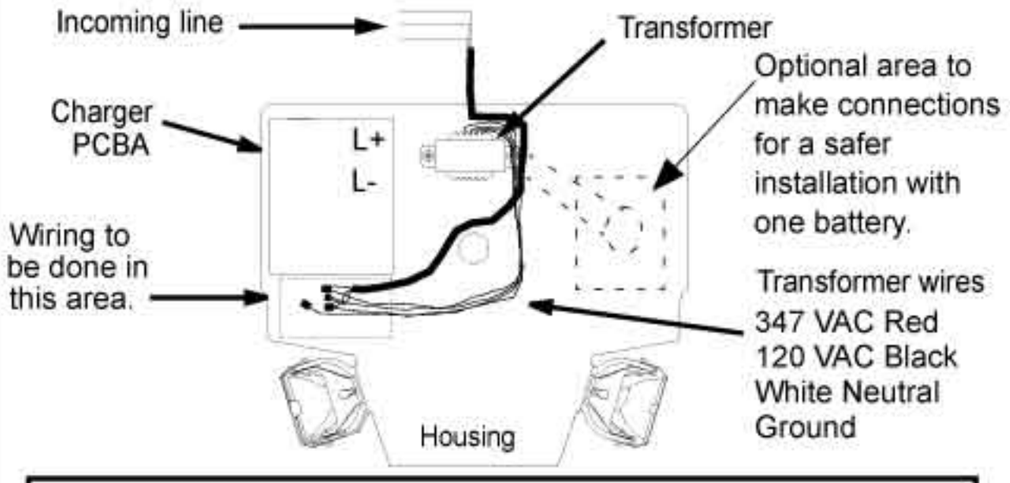
The diagnostic function uses an external LED Status indicator. Service is required if the LED blinks indicating that an alarm condition is detected (See Fig. 4). For more information refer to the website address indicated on the unit label located inside the unit. For more information about the AD function, please consult the web site for this user manual:
"AD with Single LED Status User Manual"

For Nexus models, refer to "Nexus addendum" and for any additional information, go to www.Nexus-System.com.
If you wish to make the unit "audible" or "non-audible" simply re-orient the jumper "JP5" as shown in figure 4.

Maintenance

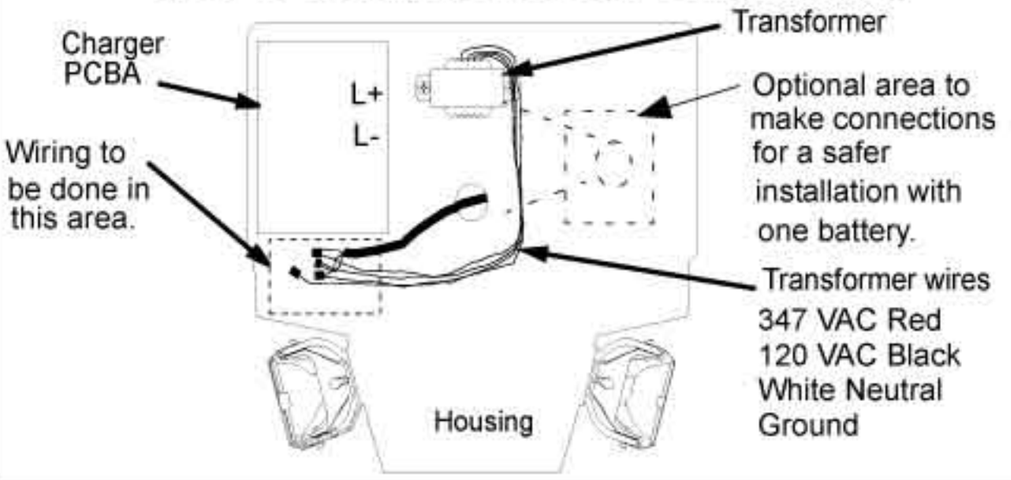
None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.
Note — Nickel Cadmium battery units are shipped discharged and may require 10 minutes of connection to AC supply before start-up test procedure, and 96 hours to reach full charge or 24 hours to charge to meet a 30 minute discharge.

***Flexible conduit or Pendant mount wire configuration**



⚠ **Caution:**
Route entry wires to avoid contact with the transformer, battery terminals and charger PCBA.

***Wall or ceiling mount wire configuration**



***Wire configuration with battery(ies) installated**

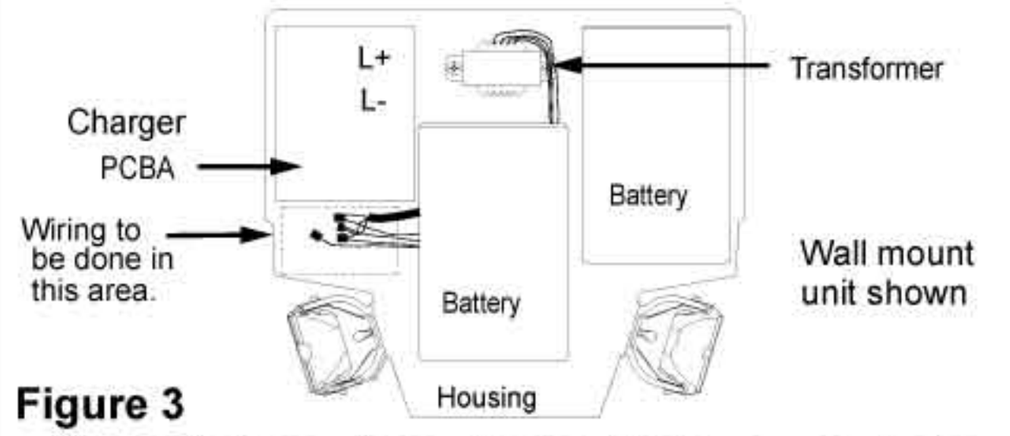
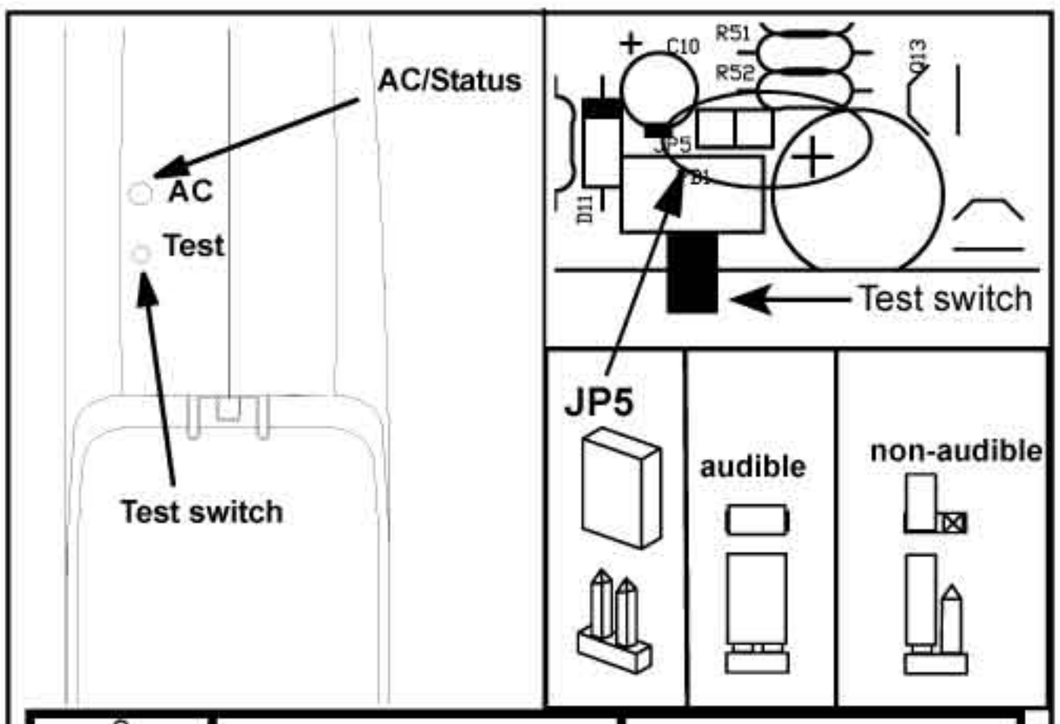


Figure 3

*Unused primary wire must be insulated to prevent shorting.



o Green	Steady	AC On
-o Green	Blinking	In Test
o Red	Steady on	Battery Disconnect
-o Red	Blinking	Battery Failure
o-o Red	Two Blinks	Charger failure
o-o-o Red	Three Blinks	Lamp Failure

Figure 4

New Preceptor Series Die Cast LED Exit Sign

AC, AC/DC or Self-Powered

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be taken including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Route AC unswitched circuit of rated voltage into electrical box and leave 6” of wire length.
3. Remove the exit door by inserting a coin or a screwdriver in a notch at the top or bottom of the door.
   Note: back plate is screwed to the housing.
4. Remove plastic frame with everything attached on the plastic housing.
5. Determine the mounting position (end, wall or ceiling).
   Note: canopy is required for end or ceiling mount.
6. Our system can accept input voltages of 120 VAC or 277 VAC. Therefore, connect the Black (120 VAC) or Orange (277 VAC) and White (common) leads to the building utility.
   Connect the green wire to the ground.
   Note: for dual curcuit option, there will be two sets of wires.

⚠ Unused primary wire must be insulated to prevent shorting.

Wall mounting

a. No canopy required.
b. With the help of a flat head screwdriver, knock out the proper hole pattern, including the center hole, in the back cover to mount to a standard junction box (See Fig. 2).
c. Feed the AC supply leads out through the center hole and make the proper connections (See step 5 and Fig.5).
d. Feed the excess wire into the junction box and secure the back cover to the junction box using the junction box screws.

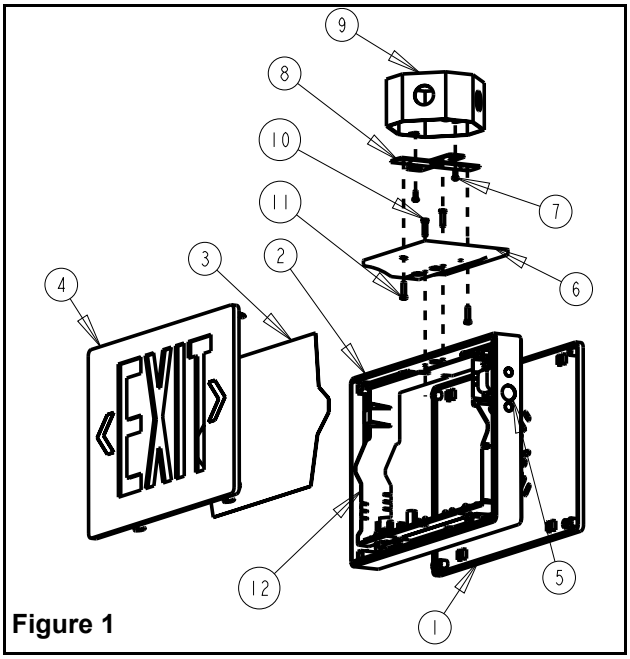


Figure 1

Part List

1. Back plate
2. Frame
3. Diffuser panel
4. Exit door
5. Hole plugs for Canopy
6. Canopy
7. Junction box screws (not provided)
8. Cross-bar
9. Junction box
10. Canopy housing screw
11. Canopy cross-bar screw
12. Plastic housing
13. Back plate screws

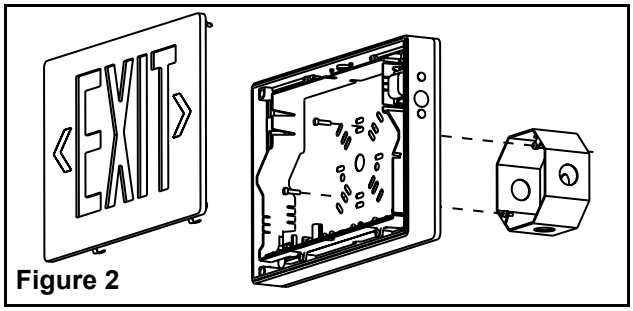


Figure 2

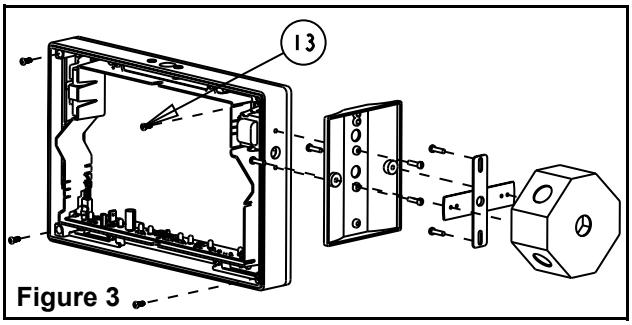


Figure 3

End or ceiling mount

a. Canopy required. Attach the cross bar to junction box with the junction box screws.
b. Remove appropriate hole plugs according to mounting position and screw canopy on to the frame.
c. Feed AC supply leads through hole and make the proper connection (See step 5 and Fig.5)
d. Feed the excess wire into the junction box and secure the canopy to the cross-bar using the canopy housing screws.

7. When required, lift the tip of the diffuser panel (3) to access the chevron to remove. Support the door around the chevrons with two blocks of wood. Strike chevron from the inside with a hammer and screwdriver (See Fig. 4).
8. Connect the battery.
9. Reinstall exit door(s). It is important to direct the green ground wire, installed in the lower right corner of the unit, before clipping the front door to the frame.
10. Energize AC. Sign will illuminate.

AC/DC Models

Refer to Fig. 5 for AC & DC wiring.

For DC portion Wire the Red lead (+) to the positive DC input voltage and the Blue Lead (-) to the negative DC input voltage. Note: DC input voltage range is 6 volts to 48 volts.

Self-Powered Models

Manual testing

Press test switch. Legend will flicker, but remain lit. On release, external green LED will illuminate, and automatic charger will restore battery to full charge. For models equiped with diagnostic function the LED will blink to indicate an alarm (see table below).

Automatic testing and diagnostic (optional)

The models with the automatic testing and diagnostic option include a micro-controller which self-tests the unit on a monthly basis and identifies as well displays failures of the electrical components: battery, battery charger, lamps, LEDs.

Self-test

The self-test is performed every 30 days for 1 minute, every 6 months for 30 minutes, and annually for 90 minutes.

Automatic Diagnostic function

The diagnostic function uses an external green LED indicator. The DEL normally green turn red when an alrm condition is detected; that mean service is required (See Fig. 6).

o	Green	Steady On	AC On
-o	Green	One Blink	In Test
o	Red	Steady On	Battery Disconnect
-o	Red	One Blink	Battery Failure
o-o	Red	Two Blinks	Charger Failure
o-o-o-o	Red	Four Blinks	LED Strip Failure

Maintenance

None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected, Self-Powered Models only.

Note: NiCd (Nickel Cadmium) batteries are shipped discharged and may require 10 minutes of connection to AC supply before start-up test procedure, and 96 hours to reach full charge.

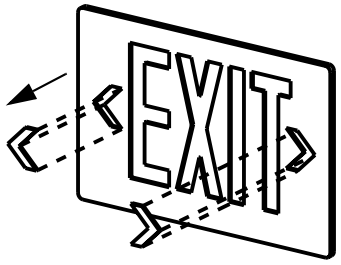
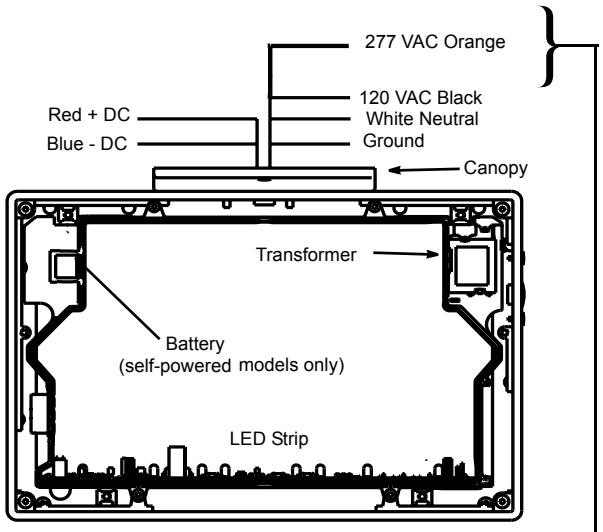


Figure 4



Unused primary wire must be insulated to prevent shorting.

Figure 5

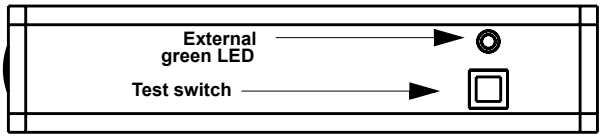


Figure 6 **For Self-Powered Models only**

Preceptor Series – Remote Load Die Cast EXIT Series

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Use caution when handling batteries. Avoid possible shorting.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
8. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
9. Do not use this equipment for other than intended use.
10. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off unswitched AC power.
2. Route unswitched AC wires into the junction box and leave 12” of wire length.
3. Remove canopy assembly from carton. Remove canopy backplate from canopy and retain securement screws.
4. Remove proper knockouts in canopy backplate (including the center knockout) to mount to the wall. Route unswitched AC wires through center hole in canopy backplate. Mount canopy backplate to the electrical box using the existing screws.
   Note — For wall mounted signs, make sure that the screw holes on the canopy backplate are facing down - this will ensure that the test switch and pilot light face downwards.
5. Disconnect male half of the AC connector (located in the canopy, see fig. 2) from AC wire harness and make the proper connections. Our unit accepts an input voltage of 120 VAC or 277 VAC (see fig. 5).

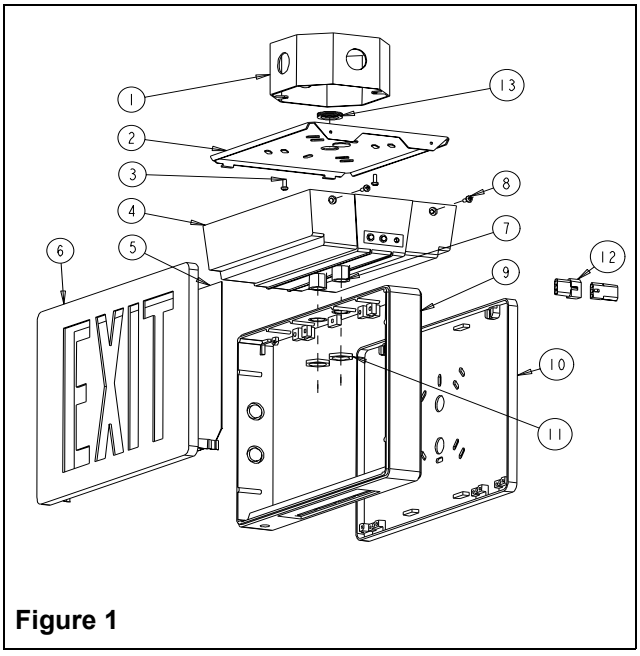


Figure 1

Part List

1. Junction box (not supplied)
2. Canopy backplate
3. Junction box screws (not supplied)
4. Canopy
5. Colored diffuser (one for single sided units and two for double sided units)
6. Exit door
7. Hex. nipple (2)
8. Securement screws (2)
9. Exit frame
10. Exit back (or second exit door for double faced units)
11. Hexagonal nuts (2)
12. AC connector
13. Bushing

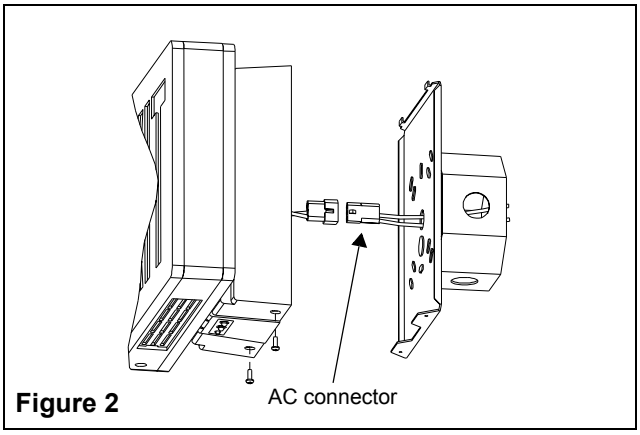


Figure 2

120 VAC — Connect the black wire (120 VAC) and white (neutral) to the building utility. Insulate the orange wire.

277 VAC — Connect the orange (277 VAC) and white (neutral) to the building utility. Insulate the black wire.

Push excess wires into junction box.

6. Remove exit from carton.
7. Remove exit door. Firmly grip top of door and pull forward. Push against side of exit door to disengage hinge tab.

   Note — On double-faced signs, only one side will open. Other side must be detached by removing screws from inside of sign.
8. To knock out chevrons (see fig. 3), remove colored lens(es) by warping center of lens and pulling out from the securement clips. Support door chevrons with two blocks of wood, strike chevron knockouts from the inside with a hammer and screwdriver. To reinstall colored lens(es), warp to slide under securement clips. Press securement clips tightly onto lens. If sign is double-faced, repeat the procedure for the second face.
9. Determine which two holes in the exit frame will be used for mounting. Support area around knockouts by two blocks of wood, maximum one inch apart. Strike knockouts from the inside with a hammer and screwdriver. Clear holes of burrs to allow proper fit with hex. nipples.
10. Remove hexagonal nuts from hex. nipples.
11. Push hex. nipples, attached to canopy, through knockouts in exit frame (see fig. 4). Fasten canopy to exit frame using large hexagonal nuts. Thread nuts onto nipples and tighten.
12. Route the 4-pin harness from the EXIT sign into the canopy through either nipple.
13. For regular charger board, connect the EXIT sign harness to the J3 terminal (see fig.6 A). For AD charger board, connect the EXIT sign harness to the JP8 terminal (see fig.6 B).
14. Connect the remote load wires to the TB1 terminal block. Check for correct polarity before connecting (see fig. 6). Do not exceed the rated remote power of the equipment (check catalogue for details).
15. Connect the battery harness to J2, for regular charger board (see fig.6 A) or to JP3, for AD charger board (see fig.6 B).
16. Mount EXIT sign and canopy assembly to canopy backplate by guiding the notches on the canopy backplate into the slots of the canopy. Secure with the two provided screws (see fig. 4).
17. Re-install exit door.
18. Energize AC. EXIT sign will illuminate. The Green "AC ON" indicator will be ON continuously.

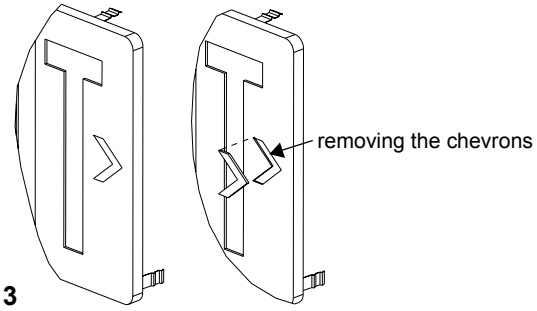
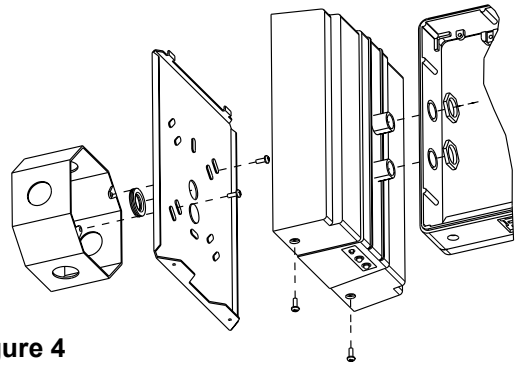


Figure 3


Figure 4

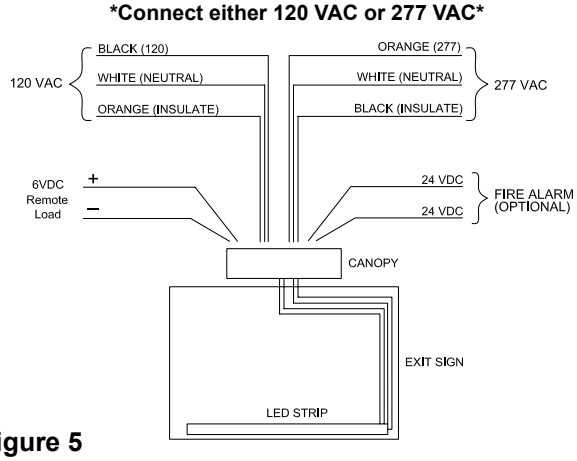


Figure 5

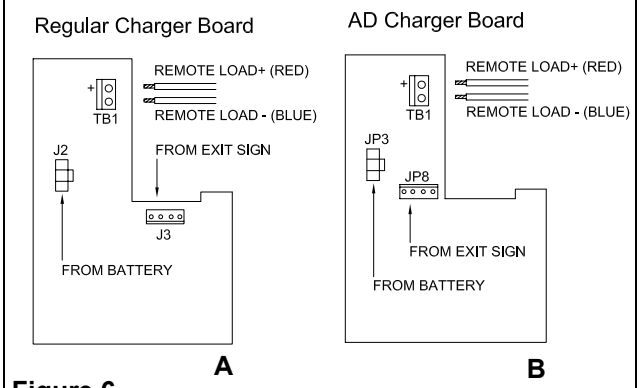


Figure 6

Testing

Depending on the type of battery charger unit installed in the canopy, follow the appropriate section below.

Unit with regular battery charger (green & yellow LED)

The display of the regular charger includes a green LED for “AC ON” and a yellow LED for “Charger ON” (see fig. 7). In normal AC operation the green LED is on and depending on the type of battery used and the charge level of the battery, the yellow LED may light in different ways:

- Continuously ON: The battery is in full charge mode
- Flashing at a rate of one flash per second or less: Lead acid battery at the end of charge
- Flashing continuously, approximately 10 flashes per second: NiCad or NiMH battery in trickle charge.

1. Manual test

Push the test button. The "AC ON" indicator will stay ON and the "CHARGER ON" indicator will be OFF. The EXIT sign will stay illuminated (may flicker once or twice during the transfer) and the remote loads will be on. The remote loads will stay ON for "one minute" if the test button is not pushed again. The transfer test can be aborted by pushing the test button any time during the one minute. After one minute or if the test button is pushed again, the unit will automatically go back to charging mode. The remote loads will turn OFF and the "CHARGER ON" indicator will turn on.

2. Automatic Unit Cycle test (optional)

For the units equipped with AUC function, the unit will automatically run a 10 minute or 30 minute emergency testing cycle once a month.

3. Time Delay (optional)

For the units equipped with TD function, turn the AC power OFF and ON again, the "CHARGER ON' indicator will be OFF. The unit will stay in emergency mode with the remote loads turned on, for the length of the time delay (5,10,15, 20 or 30 minutes). Once this time has elapsed, the unit will automatically go back to charging mode.

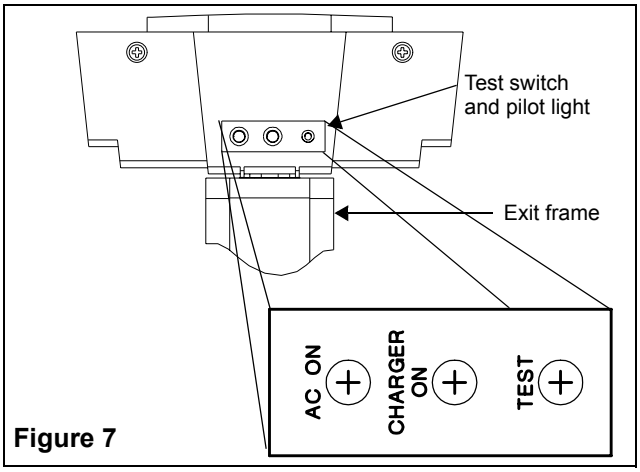


Figure 7

Unit with Advanced Diagnostic battery charger (green & red LED)

The display of the advanced diagnostic charger includes a green LED for "AC ON" and a red LED for "Service Alarm" (see fig. 8). In normal AC operation the green LED is on and the red LED is off. The "Service Alarm" turns on whenever the equipment has identified a component fault in either the charger circuitry, the battery, the emergency remote load, etc. If the "service alarm" turns on, the canopy has to be opened for troubleshooting - for details read the *Remote Canopy AD - Owner's Manual.*

1. Manual Test

Push the test button: the "AC ON" indicator will stay on, the EXIT sign and the remote lights will turn off. The one-minute test can be aborted earlier by pressing the test button another time.

2. Time Delay (optional)

After a short-duration power failure, the unit equipped with the time delay option will remain in emergency mode with the remote load turned ON for the length of the time delay (5,10,15,20 minutes). Once this time has elapsed, the unit will automatically go back to stand-by.

3. Advanced Diagnostic Testing

For details, see the Owner's Manual "Remote Canopy Advanced Diagnostic".

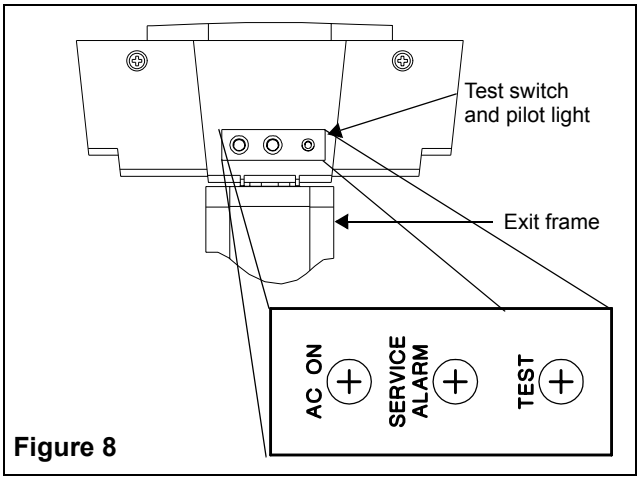


Figure 8

Maintenance

None required. The regular charger unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code or local codes. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.

Preceptor Series Tungsten, Fluorescent and LED Lamp Recessed Exit Installation Instructions

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

1. ***READ AND FOLLOW ALL SAFETY INSTRUCTIONS***
2. Do not use outdoors.
3. Do not let power cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Use caution when handling batteries. Avoid possible shorting.
6. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
8. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

INSTALLATION

1. Turn off AC power.
2. Remove exit front by gripping both ends and pulling forward.
3. Remove (2) securement screws located in the lamp housing and detach lamp housing from the back box. See Diagram A.
4. Remove desired knockouts from back box and mount into wall. Route AC supply wire into box.
5. Attach wires from unit to AC supply as follows:
   For 120 VAC operation — White to Neutral AC input wire, Black to 120 VAC input wire. NOTE: Be sure to insulate unused wire. See Diagram B.
   For 277 VAC operation — White to Neutral AC input wire, Orange to 277 VAC input wire. NOTE: Be sure to insulate unused wire. See Diagram B.
6. To knock out chevron(s), first remove colored lens by removing four (4) retaining clips. Knock out chevron arrow(s) from the inside with a hammer and screwdriver. See Diagram C. Remove backing from tape squares on inside of exit door and reinstall colored lens.
7. Install support strap to lamp housing.

FOR TUNGSTEN LAMP UNITS

1. For AC/DC models, connect remote DC feed wires to DC lamps. **NOTE:** Polarity does not need to be observed when wiring DC lamps.
2. For self-powered units, connect red battery leads together with wire nut provided.
3. Mate AC connector from supply wires to AC connector from lamp housing.
4. Mount lamp housing in back box with securement screws.
5. Install AC and, if applicable, DC lamps.
6. Reinstall exit front.
7. Energize AC. AC lamps will illuminate.

Diagram A

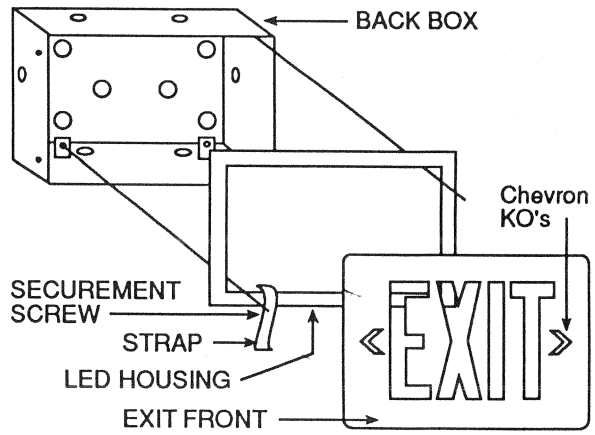


Diagram B

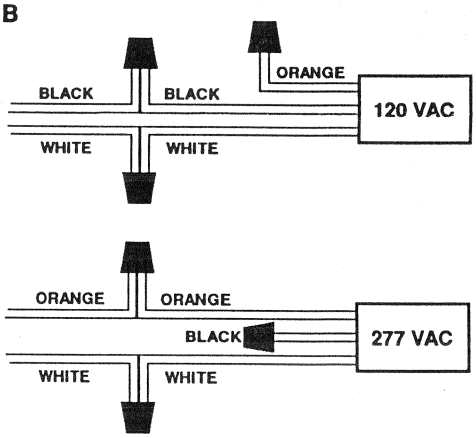
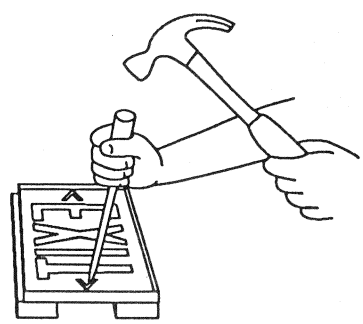


Diagram C



(Continued on Back)

ALL SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL

2/99 PN 750.0051 Rev. E
Printed in Canada

FOR FLUORESCENT LAMP UNITS

1. For AC/DC models, connect remote DC feed wires to DC lamps. NOTE: Polarity does not need to be observed when wiring DC lamps.
2. Mate AC connector from supply wires to AC connector from lamp housing.
3. Mount lamp housing in back box with securement screws.
4. Install AC and, if applicable, DC lamps.
5. Reinstall exit front.
6. Energize AC. Fluorescent lamps will illuminate.

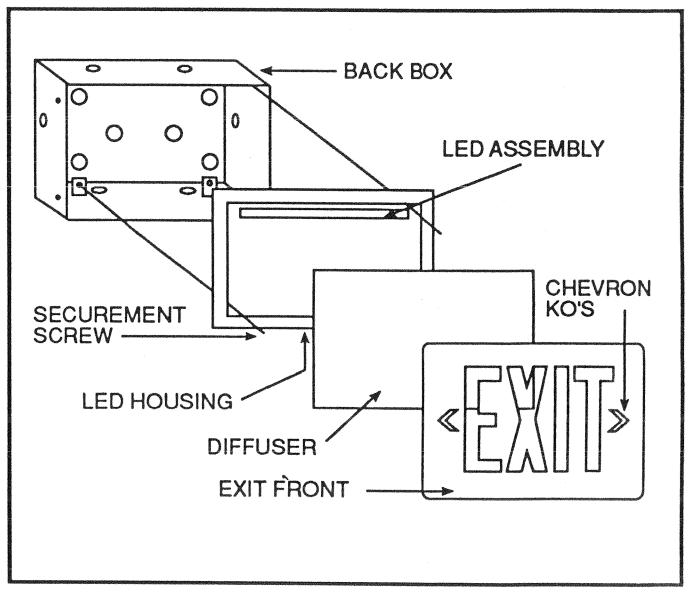
TESTING

For Tungsten and Fluorescent Self-Powered Signs

To test, depress test switch, DC lamps will illuminate. Allow unit to charge for 24 hours before initial full load testing.

FOR LED UNITS

1. For AC/DC models, connect remote DC feed wires to DC input harness, RED, positive and BLUE, negative. **NOTE: Polarity Must Be Observed.**
2. For Self-Powered units, connect red battery leads together.
3. Mate AC connector from supply wires to AC connector from lamp housing. See Diagram B.
4. Mount lamp housing in back box with securement screws.
5. Reinstall exit front.
6. Energize AC. Exit legend and pilot lamp will illuminate.



TESTING

For LED Self-Powered Signs

Power up unit for a minimum of 30 minutes. Depress test switch, pilot light will extinguish and legend will remain illuminated, (briefly for initial installation). Allow unit to charge for 24 hours prior to initial full load testing.

MAINTENANCE (All Units)

None required unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code, or local codes.

IMPORTANT NOTICE

Self-Powered units are furnished with a battery. If the building is to be unoccupied for an extended period of time and all the power is to be disconnected, then the internal batteries must be disconnected to prevent damage. Do not allow the battery wires to short-circuit.

ALL SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL

2/99 PN 750.0051 Rev. E
Printed in Canada

MINI Retract-Lite: Concealed Emergency Lighting

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions (Figure 1)

The emergency lighting unit comes with a U-shaped metal bracket, for rigid mounting on wall studs and ceiling joists covered by drywall. This bracket can be installed (retrofit) after the drywall is put in. For installation, the cable(s) for AC power supply (and DC remote) must be passed near a wall stud or ceiling joist.

“U” Bracket Installation in the wall (Figures 2a, b, c)

1. Cut a rectangular opening (8-1/4 inch by 5-3/4 inch) in the drywall next to the wall stud. The opening must have the short side along the stud. Use the "U" bracket to mark the dimensions on the drywall.
2. Pass the electrical cable(s) out through the hole.
3. Slide the “U” bracket in the hole: enter the flange side first then push the other side to the stud.
4. Fix the “U” bracket on the stud with appropriate fasteners (not supplied).
5. Check that the four mounting screws are turned 2-3 threads in the pem-studs.

IMPORTANT: If the electrical cables pass in the wall from the ceiling, make sure they are long enough to go out **at least 3 to 4 feet** through the rectangular hole. This will ensure the flexible cables will loop and access the bottom of the equipment about 1 ½ feet below the rectangular hole.

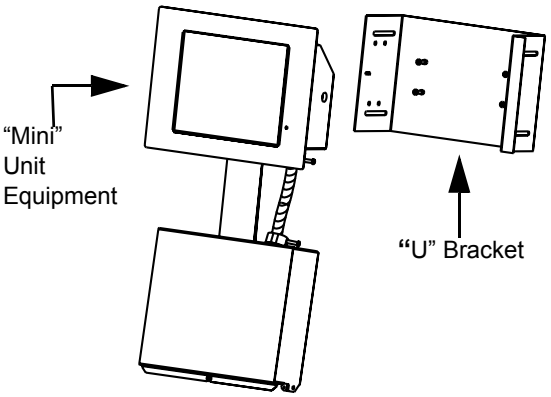


Figure 1

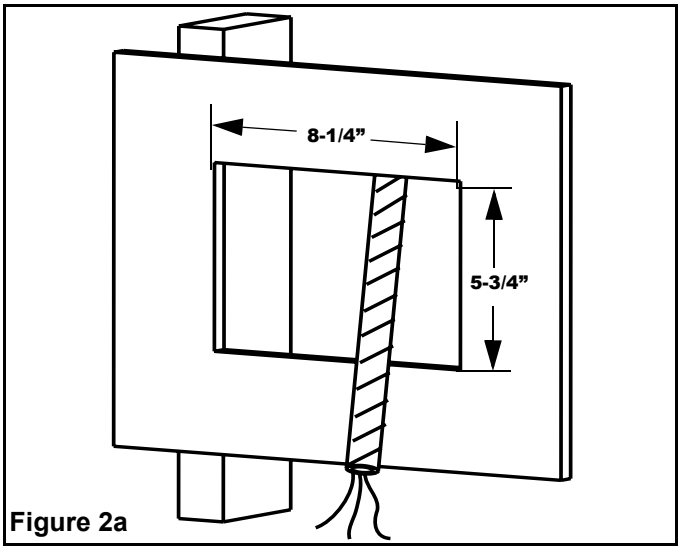
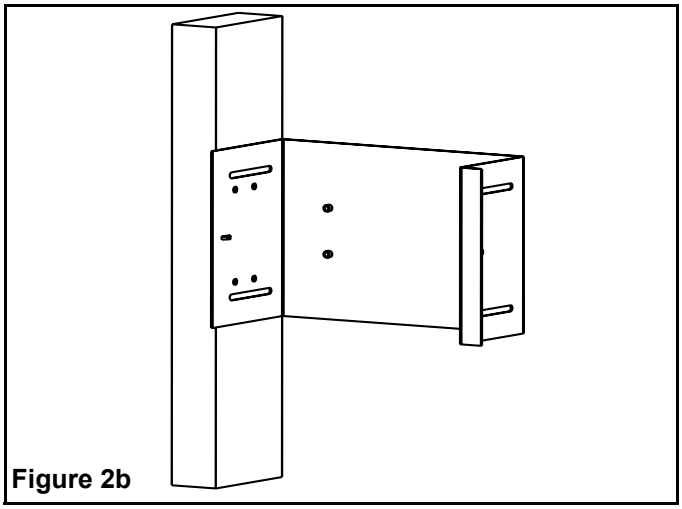


Figure 2a


Figure 2b

"U" Bracket Installation in an open ceiling

CAUTION: This unit equipment has a typical weight of 6.5 kg (14.5 lbs). It can only be installed in an open ceiling that can support this weight, or an equivalent load pressure of minimum 33 lbs/sq.ft (160 kg/m2) between two joists.

1. Cut a rectangular opening (8-1/4 inch by 5-3/4 inch) next to the ceiling joist. The opening must have the short side along the joist. Use the "U" bracket to mark the dimensions on the ceiling (Figures 2a, b, c).
2. **CAUTION**: Install a chain or "pencil rod" wires (provided by others) to a joist above the rectangular opening.
3. Slide the "U" bracket in the opening: enter the flange side first then push the other side to the joist.
4. Fix the "U" bracket on the joist with appropriate fasteners (not supplied).
5. Check that the four mounting screws are turned 2-3 threads in the pem-studs.
6. Pass the chain and electrical cable(s) out through the opening.

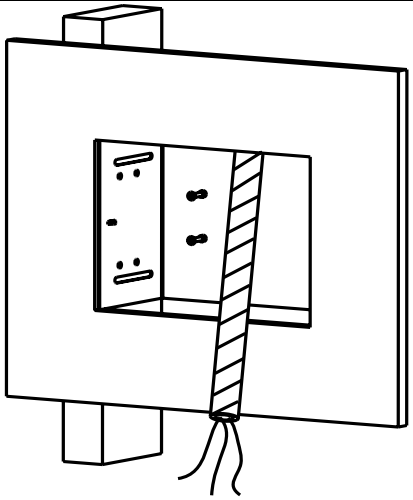


Figure 2c

Equipment preparation (Figure 3)

1. Remove the cover of the transformer box.
2. If the unit requires DC connection: remove the knockout and install a second conduit bushing (provided in the hardware kit).
3. Disengage the two hooks at the bottom of the housing.
4. For installation in open ceilings: bend slightly the flexible bracket connecting the two metal housings to align them roughly along the same axis.

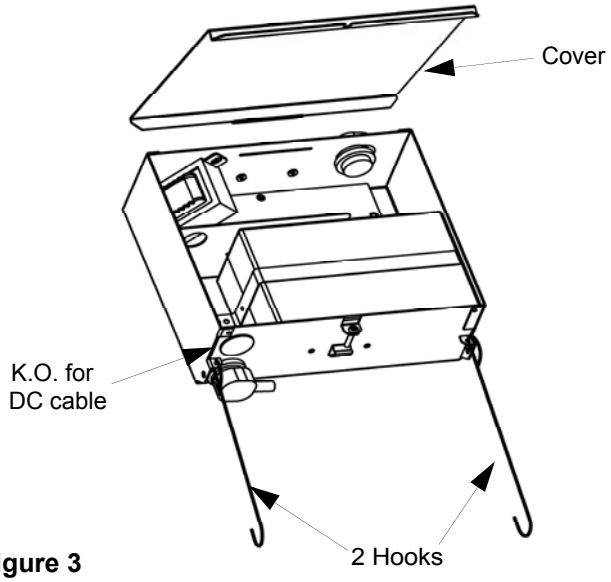


Figure 3

Equipment installation in the wall (Figures 4 and 5)

1. Suspend the unit upside-down from the "U" bracket using the metal hooks (see Figure 4). Do not hang the unit directly on the drywall edge as this can damage the drywall.
2. Pass the electrical cable(s) through the bushings into the unit housing.
3. Connect the GREEN wire from the charger module and the back box to the GROUND supply wire.
4. Connect the WHITE wire (labelled Neutral) to Neutral.
5. For 120VAC connect the BLACK wire (labelled 120VAC) from the unit to Line.
6. For 277VAC connect the ORANGE wire (labelled 277VAC) from the unit to Line.
7. For 347VAC connect the RED wire (labelled 347VAC) from the unit to Line.
8. If there are any remote heads to be connected to the unit, connect the RED wire (labelled L+) and the BLUE wire (labelled L-) to the load wires.
9. Make sure all unused wires are properly capped.
10. **CAUTION:** failure to cap the wires may cause an unsafe condition.
11. If the equipment includes a battery, connect the battery positive wire (labelled: "Connect battery positive terminal") to the battery or printed circuit board, as indicated by the second label.
12. Install the door on the housing and secure with the screw.

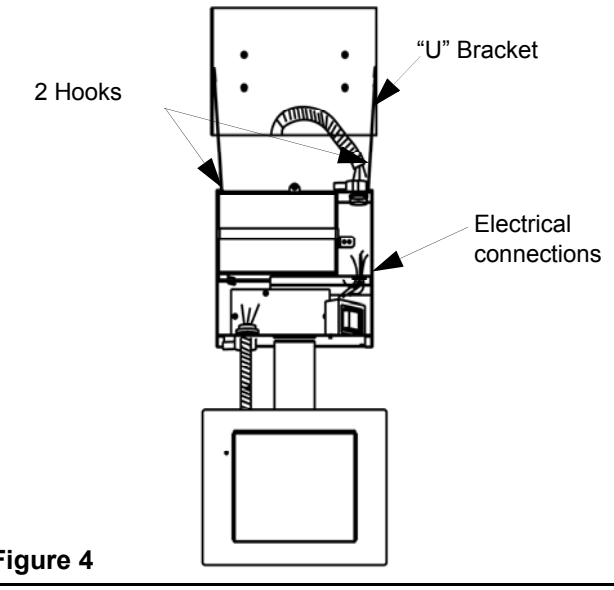


Figure 4

13. Hold the unit with one hand; disengage the two hooks and secure them to the unit housing.
14. Turn the unit to normal position, with the transformer box at the bottom.
15. Force the door of the lamp module half-open to hold the unit and locate the four key holes in its housing (see Figure 5).
16. Push the electrical cable and the unit into the wall, and engage the key holes of the lamp module onto the four screws of the "U" bracket. Slide the lamp module so that the heads of the screws are in the slotted end of the key holes (see Figure 6).
17. Align the unit frame then tighten the four screws until the trim is flush with the drywall surface. For easy access to the screws, the door can be rotated one full turn of 360 degrees.
18. Orient the two lamps in their swivels and check that they are plugged into the sockets.
19. Close the door and make sure it is flush with the trim.

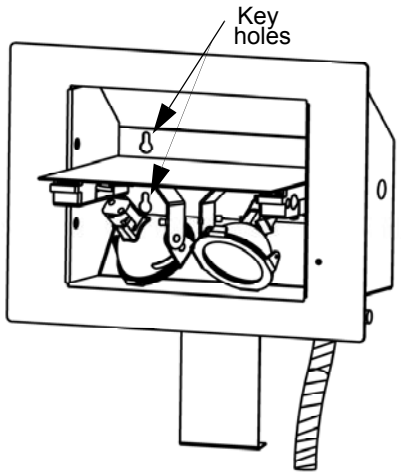


Figure 5

Equipment installation in an open ceiling

1. Suspend the unit upside-down, from the "U" bracket using the metal hooks. Secure the unit with the chains or "pencil rod" wires. Continue by following the steps 2 to 19 above.



Figure 6a

Testing the Equipment

Self-powered equipment

1. Activate the AC power.
2. The recessed pilot light/test switch will light in green.
3. Allow 24 hours to fully charge the batteries.
4. Push the test button. The door will open and the lamps will illuminate for one minute, then the door will close. Orient the lamps to the desired position at this time. If more time is needed, push the test button again, for 5 to 10 seconds. This will ensure a test duration of three minutes.

AC-only equipment, powered from a remote AC generator

1. Activate the AC power generator. The equipment door will turn and open, then the lamps will illuminate. Orient the lamps to the desired position at this time.
2. Disable the AC generator. The lamps will turn off and the equipment door will turn and close.

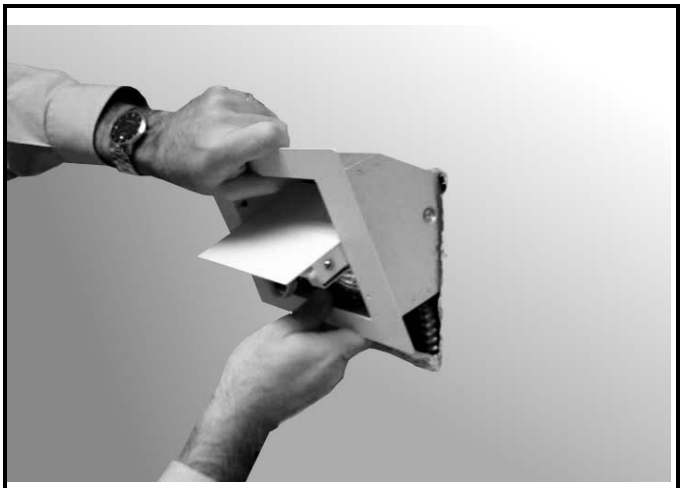


Figure 6b

Maintenance

The equipment requires no maintenance, but should be tested regularly in accordance with the local codes.

MINI Retract-Lite: Concealed Emergency Lighting

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions (Figure 1)

The emergency lighting unit comes with a U-shaped metal bracket, for rigid mounting on wall studs and ceiling joists covered by drywall. This bracket can be installed (retrofit) after the drywall is put in. For installation, the cable(s) for AC power supply (and DC remote) must be passed near a wall stud or ceiling joist.

“U” Bracket Installation in the wall (Figures 2a, b, c)

1. Cut a rectangular opening (8-1/4 inch by 5-3/4 inch) in the drywall next to the wall stud. The opening must have the short side along the stud. Use the "U" bracket to mark the dimensions on the drywall.
2. Pass the electrical cable(s) out through the hole.
3. Slide the “U” bracket in the hole: enter the flange side first then push the other side to the stud.
4. Fix the “U” bracket on the stud with appropriate fasteners (not supplied).
5. Check that the four mounting screws are turned 2-3 threads in the pem-studs.

IMPORTANT: If the electrical cables pass in the wall from the ceiling, make sure they are long enough to go out **at least 3 to 4 feet** through the rectangular hole. This will ensure the flexible cables will loop and access the bottom of the equipment about 1 ½ feet below the rectangular hole.

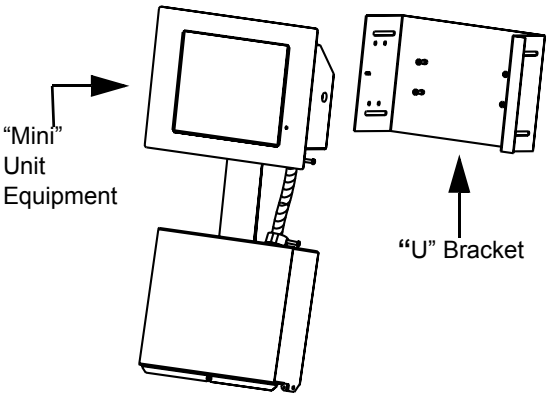


Figure 1

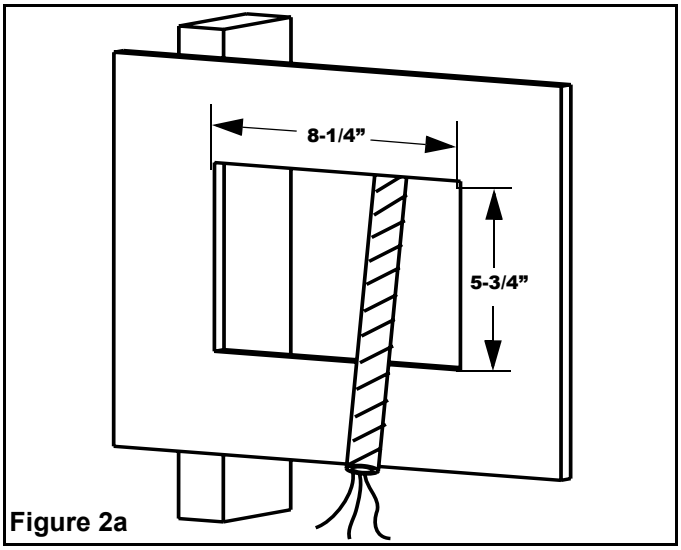
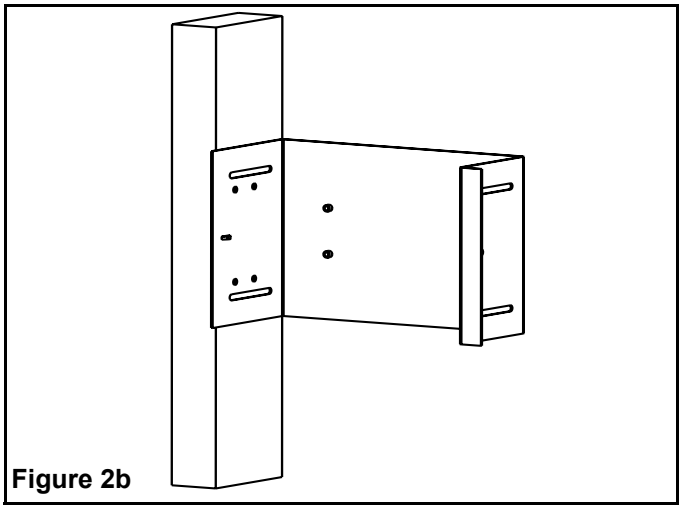


Figure 2a


Figure 2b

"U" Bracket Installation in an open ceiling

CAUTION: This unit equipment has a typical weight of 6.5 kg (14.5 lbs). It can only be installed in an open ceiling that can support this weight, or an equivalent load pressure of minimum 33 lbs/sq.ft (160 kg/m2) between two joists.

1. Cut a rectangular opening (8-1/4 inch by 5-3/4 inch) next to the ceiling joist. The opening must have the short side along the joist. Use the "U" bracket to mark the dimensions on the ceiling (Figures 2a, b, c).
2. **CAUTION**: Install a chain or "pencil rod" wires (provided by others) to a joist above the rectangular opening.
3. Slide the "U" bracket in the opening: enter the flange side first then push the other side to the joist.
4. Fix the "U" bracket on the joist with appropriate fasteners (not supplied).
5. Check that the four mounting screws are turned 2-3 threads in the pem-studs.
6. Pass the chain and electrical cable(s) out through the opening.

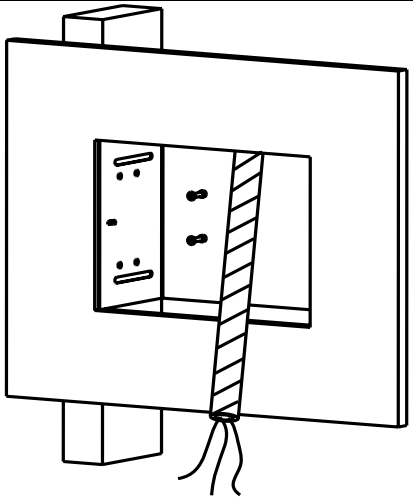


Figure 2c

Equipment preparation (Figure 3)

1. Remove the cover of the transformer box.
2. If the unit requires DC connection: remove the knockout and install a second conduit bushing (provided in the hardware kit).
3. Disengage the two hooks at the bottom of the housing.
4. For installation in open ceilings: bend slightly the flexible bracket connecting the two metal housings to align them roughly along the same axis.

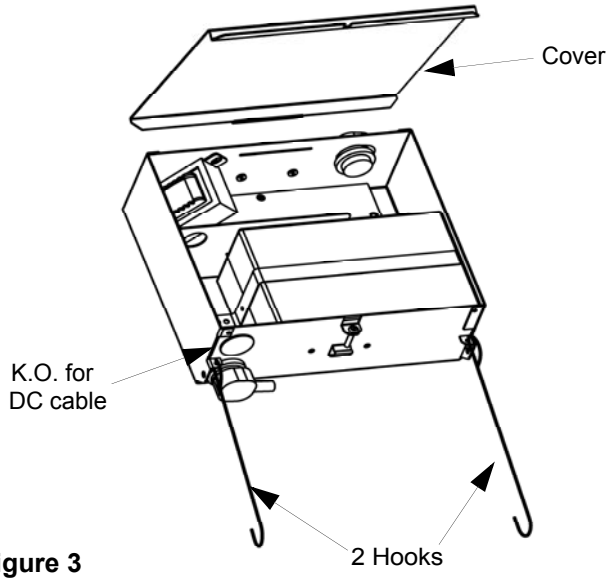


Figure 3

Equipment installation in the wall (Figures 4 and 5)

1. Suspend the unit upside-down from the "U" bracket using the metal hooks (see Figure 4). Do not hang the unit directly on the drywall edge as this can damage the drywall.
2. Pass the electrical cable(s) through the bushings into the unit housing.
3. Connect the GREEN wire from the charger module and the back box to the GROUND supply wire.
4. Connect the WHITE wire (labelled Neutral) to Neutral.
5. For 120VAC connect the BLACK wire (labelled 120VAC) from the unit to Line.
6. For 277VAC connect the ORANGE wire (labelled 277VAC) from the unit to Line.
7. For 347VAC connect the RED wire (labelled 347VAC) from the unit to Line.
8. If there are any remote heads to be connected to the unit, connect the RED wire (labelled L+) and the BLUE wire (labelled L-) to the load wires.
9. Make sure all unused wires are properly capped.
10. **CAUTION:** failure to cap the wires may cause an unsafe condition.
11. If the equipment includes a battery, connect the battery positive wire (labelled: "Connect battery positive terminal") to the battery or printed circuit board, as indicated by the second label.
12. Install the door on the housing and secure with the screw.

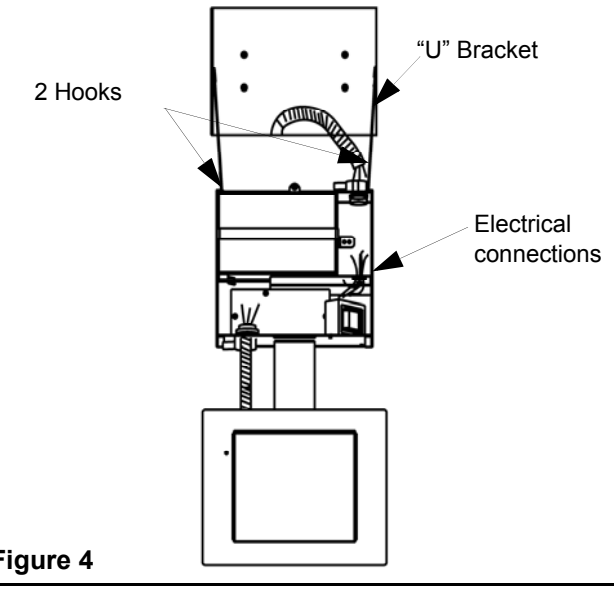


Figure 4

13. Hold the unit with one hand; disengage the two hooks and secure them to the unit housing.
14. Turn the unit to normal position, with the transformer box at the bottom.
15. Force the door of the lamp module half-open to hold the unit and locate the four key holes in its housing (see Figure 5).
16. Push the electrical cable and the unit into the wall, and engage the key holes of the lamp module onto the four screws of the "U" bracket. Slide the lamp module so that the heads of the screws are in the slotted end of the key holes (see Figure 6).
17. Align the unit frame then tighten the four screws until the trim is flush with the drywall surface. For easy access to the screws, the door can be rotated one full turn of 360 degrees.
18. Orient the two lamps in their swivels and check that they are plugged into the sockets.
19. Close the door and make sure it is flush with the trim.

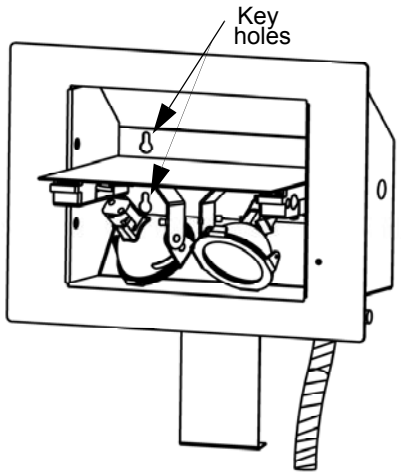


Figure 5

Equipment installation in an open ceiling

1. Suspend the unit upside-down, from the "U" bracket using the metal hooks. Secure the unit with the chains or "pencil rod" wires. Continue by following the steps 2 to 19 above.



Figure 6a

Testing the Equipment

Self-powered equipment

1. Activate the AC power.
2. The recessed pilot light/test switch will light in green.
3. Allow 24 hours to fully charge the batteries.
4. Push the test button. The door will open and the lamps will illuminate for one minute, then the door will close. Orient the lamps to the desired position at this time. If more time is needed, push the test button again, for 5 to 10 seconds. This will ensure a test duration of three minutes.

AC-only equipment, powered from a remote AC generator

1. Activate the AC power generator. The equipment door will turn and open, then the lamps will illuminate. Orient the lamps to the desired position at this time.
2. Disable the AC generator. The lamps will turn off and the equipment door will turn and close.

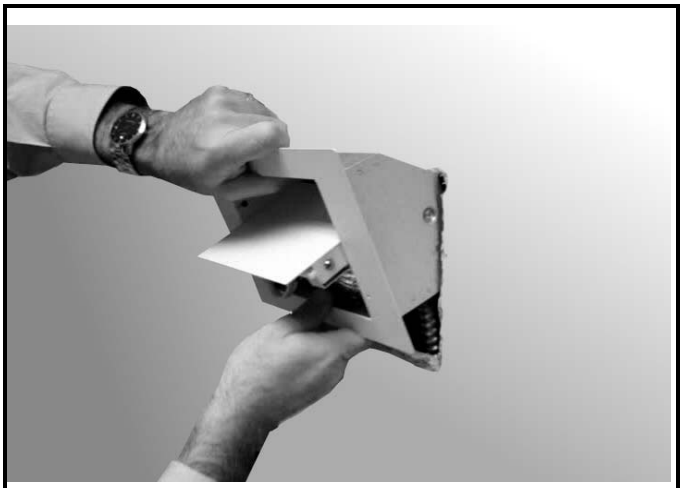


Figure 6b

Maintenance

The equipment requires no maintenance, but should be tested regularly in accordance with the local codes.

Lux-Ray LED - Emergency lighting

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Use caution when handling batteries. Avoid possible shorting.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off the building emergency circuit and the breaker of the AC circuit for normal lighting.
2. Remove the back plate from the package.
3. Open the inside cover by turning it. Identify the wires by using the labels attached to them.
4. Choose the proper mounting below and continue to step 5.

Junction box mounting (Figure 1)

Knockout the desired holes in the back plate. Make the electrical connections as shown in point 5. Route the wire connectors through the large knockout and mount the back plate to the junction box.

Conduit entry mounting (Figure 2)

Remove plug on the back plate and knock out the desired holes in the back plate to secure the unit on the wall. Install the conduit and supply wires. For wet location: install a liquid tight fitting with teflon tape. Use wire nuts provided with the unit. Bigger wire nuts might interfere with internal components.

5. Electrical connections

Depending on the model of equipment selected, the electrical connections may require one or two independent power supply circuits, as described further on.

a. Battery-operated (self-powered) and AC-only units: connect the wire input marked “emergency lighting” to the unswitched AC line. Install the ground wire on the back plate. Connect the neutral (white) wire. For 120Vac connect black wire; for 277Vac connect orange wire.
Cap the unused wire with a wire connector.

b. Units for normal lighting: connect the wire input marked “normal lighting” to the AC line. Identify the wires by color as above. **Cap the unused wire with a wire connector.**

c. DC-remote units: connect the wire input "6-12 VDC" to the DC remote wires. The building emergency circuit must provide 6-volt or 12-volt maximum. Connect red wire to the positive and blue wire to the negative of the DC emergency line.

d. Units with dual-mode lighting: normal and emergency self-powered: follow instructions a-b.

e. Units with dual-mode lighting: normal and emergency DC-remote: follow instructions b-c.

f. Units with dual AC circuit: both primary and secondary circuits must have the same voltage value: 120/120Vac or 277/277Vac. Follow instructions a and b.

DO NOT cap together the unused wires.

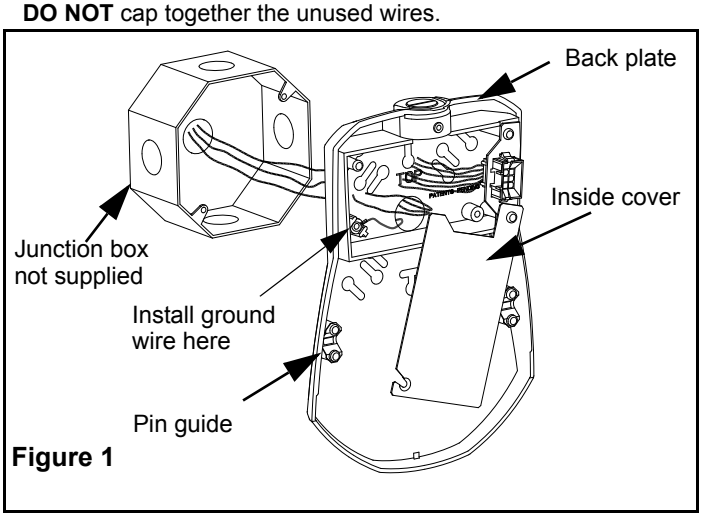


Figure 1

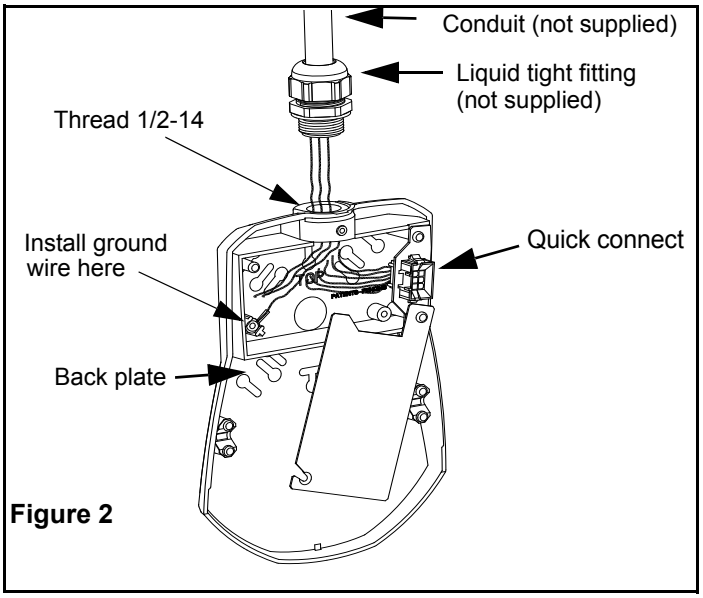


Figure 2

6. Close the inside cover and tighten the screw.
7. Remove the unit housing from the package. Units with DC-remote power: go to step 8 (see figure 3).
   a. Units with battery back-up: plug the battery connector in the slot. The connector is polarized, do not force-fit . Correct installation has the positive red wire at the left (see figure 3).
   b. Units with dual AC circuit: connect the orange wire labeled “VOLTAGE SELECTOR” to one of the two wires labeled AC VOLTAGE (black: 120V; orange: 277V). Cap the unused wire with a wire connector.
8. Hook the security wire to the backplate and tighten the screw (see figure 3).
9. Align the unit housing over the back plate and press until it snaps in place (see figure 4).
10. Energize the circuits. Units with battery back-up will have the test button illuminated.

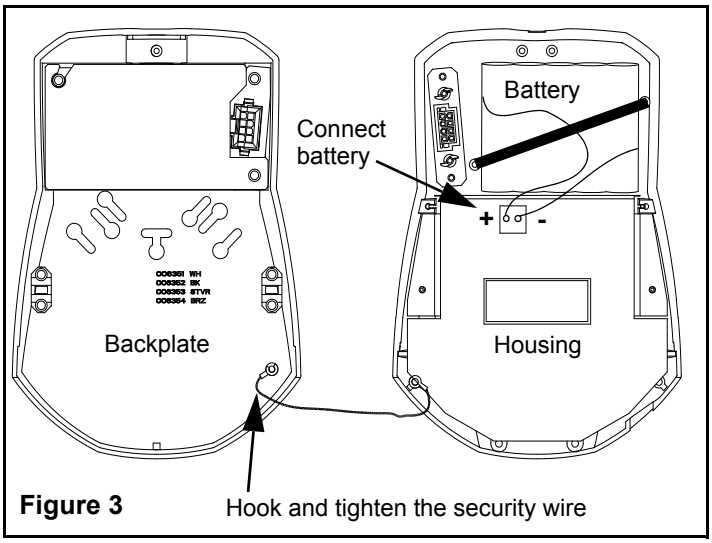


Figure 3

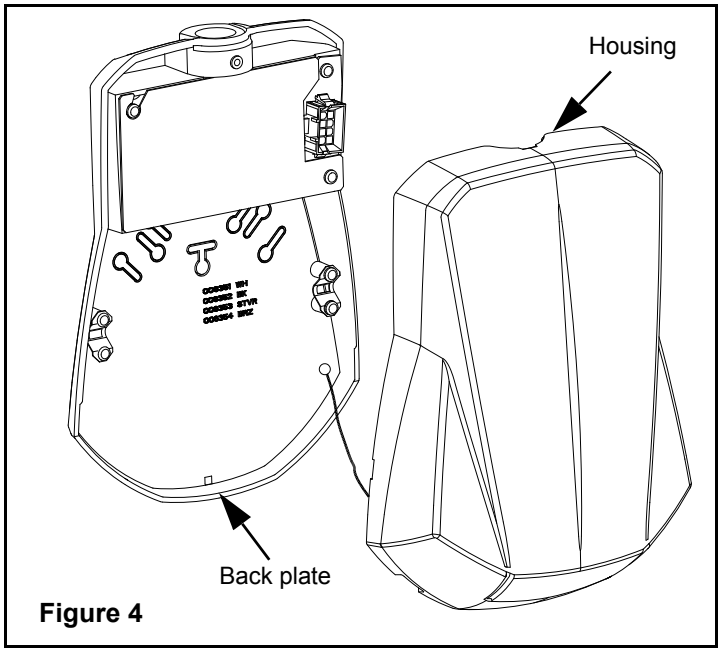


Figure 4

Testing the emergency lights

Allow the unit to charge for 24 hours before testing. Press the test button. The unit will light in emergency mode for one minute. To abandon the test press the test button again.

Testing the normal lighting

Turn the AC power on: the unit will light.
Units equipped with photo-switch: mask the small circular window with the finger: the unit will light. Uncover the window: when exposed to ambient light the unit will turn off.

Maintenance

None required.
WARNING: Hold the housing in your hand and open the unit with a flat head screwdriver. When replacing the housing assembly **ALWAYS hook and tighten the security wire.**

Disconnect the battery if the emergency power supply is disabled for two months or more.

Self-diagnostics / self-test (battery units)

1. Once supplied with power the unit will automatically initiate self-diagnostic routines and a self-test calendar as follows:
   a. Verifies battery connection, battery failure, charger board failure and lamps failure.
   b. Executes one-minute monthly self-test.
   c. Executes a 30-minute self-test every 6th month.
   d. Executes a 90-minute self-test every 12th month.

2. The LED pilot light is bi-color and indicates the following status:
   a. Green color: AC-on / self-test
   b. Red color: Service alert (see figure 5)

3. Transfer time delay (TD option)

This function acts when the AC power was restored: it keeps the emergency lights "on" for a period of: 5, 10 or 15 minutes (factory-set). If the battery depletes before the end of the time delay, the lamps turn off and the unit goes in stand-by mode.

○ green	Steady	AC On
○ green	Blinking	Testing Mode
○ red	Steady on	Battery Disconnect
○ red	One Blink	Battery Failure
○ ○ red	Two Blinks	Charger Failure
○○○ red	Three Blinks	Lamp Failure

Figure 5

Lux-Ray LED - Emergency lighting

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. All unused wires must be insulated to prevent shorting.
3. Do not let power supply cords touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Use caution when handling batteries. Avoid possible shorting.
6. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
8. Do not use this equipment for other than intended use.
9. Unit to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

Installation Instructions

IMPORTANT: Install fixture/lamp type no higher than the maximum mounting heights as stipulated in the “Lamp Mounting Height Cross-reference Table” (P/N 750.1924). Refer to “Technical Infomation” section of our website.

1. Turn off the building emergency circuit and the breaker of the AC circuit for normal lighting.
2. Remove the back plate from the package.
3. Open the inside cover by turning it. Identify the wires by using the labels attached to them.
4. Choose the proper mounting below and continue to step 5.

Junction box mounting (Figure 1)
Knockout the desired holes in the back plate. Make the electrical connections as shown in point 5. Route the wire connectors through the large knockout and mount the back plate to the junction box.

Conduit entry mounting (Figure 2)
Remove plug on the back plate and knock out the desired holes in the back plate to secure the unit on the wall. Install the conduit and supply wires. For wet location: install a liquidtight™ fitting with teflon tape. Use wire nuts provided with the unit. Bigger wire nuts might interfere with internal components.

5. Electrical connections
Depending on the model of equipment selected, the electrical connections may require one or two independent power supply circuits, as described further on.

a. Battery-operated (self-powered) and AC-only units: connect the wire input marked “emergency lighting” to the un-switched AC line. Install the ground wire on the back plate. Connect the neutral (white) wire. For 120Vac connect black wire; for 277Vac connect orange wire.
b. Battery unit for cold weather (option: -CW) has separate wire inputs for the battery charger and the heating circuit. Connect the ground wires. Connect together the white wires (neutral). Connect together the line voltage wires: either black (120V) or orange (277V) wires. **Cap the unused wires separately with wire connectors.**
c. Units for normal lighting: connect the wire input marked “normal lighting” to the AC line. Identify the wires by color as above.
d. DC-remote units: connect the wire input "6-12 VDC" to the DC remote wires. The building emergency circuit must provide 6-volt or 12-volt maximum. Connect red wire to the positive and blue wire to the negative of the DC emergency line.
e. Units with dual-mode lighting: normal and emergency self-powered: follow instructions a-b.
f. Units with dual-mode lighting: normal and emergency DC-remote: follow instructions b-c.
g. Units with dual AC circuit: both primary and secondary circuits must have the same voltage value: 120/120Vac or 277/277Vac. Follow instructions a-b.

DO NOT cap together the unused wires.

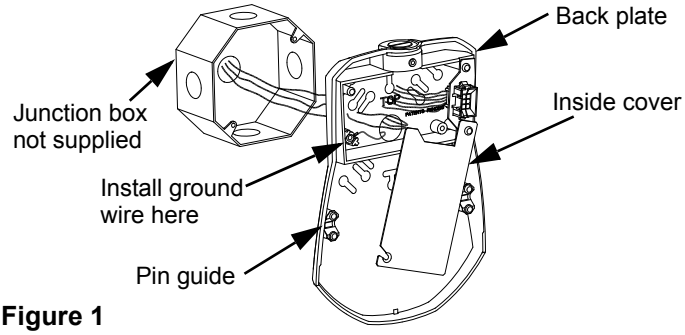


Figure 1

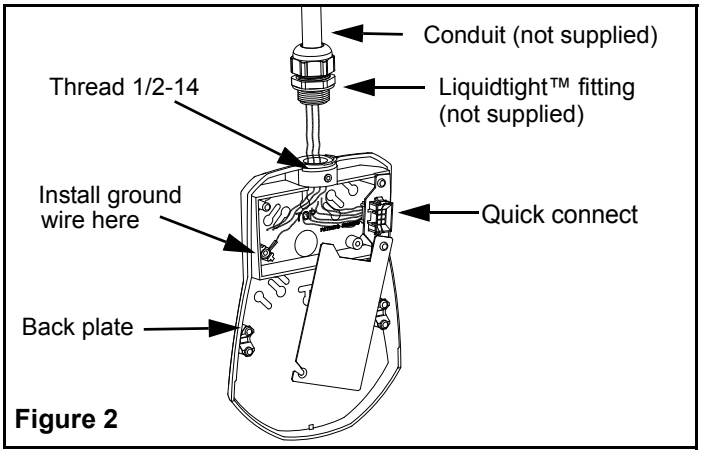


Figure 2

6. Close the inside cover and tighten the screw.
7. Remove the unit housing from the package. Units with DC-remote power: go to step 8 (see figure 3).
   a. Units with battery back-up: plug the battery connector in the slot. The connector is polarized, do not force-fit . Correct installation has the positive red wire at the left (see figure 3).
   b. Units with dual AC circuit: connect the orange wire labeled “VOLTAGE SELECTOR” to one of the two wires labeled AC VOLTAGE (black: 120V; orange: 277V).
8. Hook the security wire to the backplate and tighten the screw (see figure 3).
9. Align the unit housing over the back plate and press until it snaps in place (see figure 4).
10. Energize the circuits. Units with battery back-up will have the test button illuminated.

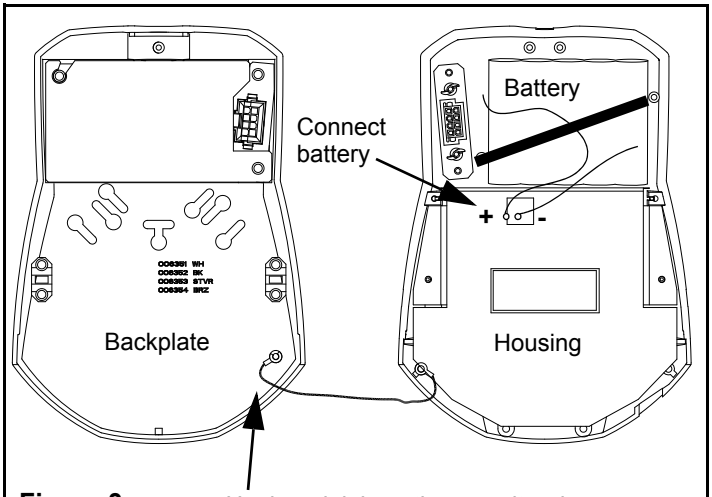


Figure 3

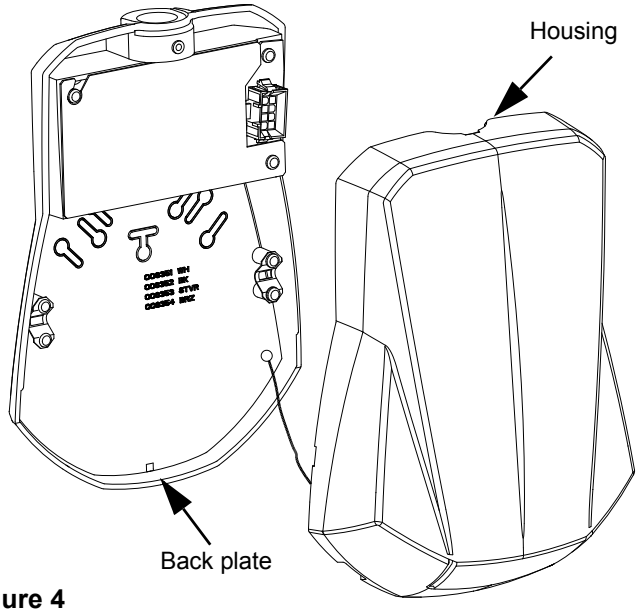


Figure 4

Testing the emergency lights

Allow the unit to charge for 24 hours before testing. Press the test button. The unit will light in emergency mode for one minute. To abandon the test press the test button again.

Testing the normal lighting

Turn the AC power on: the unit will light.
Units equipped with photo-switch: mask the small circular window with the finger: the unit will light. Uncover the window: when exposed to ambient light the unit will turn off.

Maintenance

None required.
WARNING: Hold the housing in your hand and open the unit with a flat head screwdriver. When replacing the housing assembly **ALWAYS hook and tighten the security wire.**

Disconnect the battery if the emergency power supply is disabled for two months or more.

Self-diagnostics / self-test (battery units)

1. Once supplied with power the unit will automatically initiate self-diagnostic routines and a self-test calendar as follows:
   a. Verifies battery connection, battery failure, charger board failure and lamps failure.
   b. Executes one-minute monthly self-test.
   c. Executes a 30-minute self-test every 6th month.
   d. Executes a 90-minute self-test every 12th month.

2. The LED pilot light is bi-color and indicates the following status:
   a. Green color: AC-on / self-test
   b. Red color: Service alert (see figure 5)

3. Transfer time delay (TD option)

This function acts when the AC power was restored: it keeps the emergency lights "on" for a period of: 5, 10 or 15 minutes (factory-set). If the battery depletes before the end of the time delay, the lamps turn off and the unit goes in stand-by mode.

O green	Steady	AC on
O green	Blinking	Testing Mode
O red	Steady on	Battery Disconnect
O red	One Blink	Battery Failure
O O red	Two Blinks	Charger Failure
O O O red	Three Blinks	Lamp Failure

Figure 5

Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

EC/IL/JS/LS/TS Series

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. All unused wires must be insulated to prevent shorting.
3. Do not use outdoors.
4. Do not let power supply cords touch hot surfaces.
5. Do not mount near gas or electric heaters.
6. Use caution when handling batteries. Avoid possible shorting.
7. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
10. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
11. Do not use this equipment for other than intended use.
12. Unit to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

Installation Instructions

IMPORTANT: Install fixture/lamp type combination no higher than the maximum mounting heights as stipulated in the “Lamp Mounting Height Cross-reference Table” (P/N 750.1924). Refer to “Technical Information” section of our website.

1. TURN OFF AC POWER.
2. Route AC circuit wires to electrical box and leave 12’’ of wire length.
3. Securely mount unit in place. Connect AC supply wiring to unit as follows:

For 120 VAC operation: Black to 120 VAC, White to neutral *
For 277 VAC operation: Orange to 277 VAC, White to neutral *
NOTE: Secure AC wires via wire clip after making connections.

IMPORTANT: Wiring connections need to be done away from PCBA and in designated area as shown in figure 1.

4. Extend DC wiring for remote fixtures, (if required), to unit. Wiring must comply with NEC articles 700 and 720. Do not exceed rated wattage of unit.
5. When ready to energize AC, plug polarized battery connector into circuit board. Lamps will not light at this time.
6. Energize AC. Pilot lamp and high charge LED will illuminate.
7. For conduit installation on the JS series, use 7/8’’ knockout located on the top of the enclosure.

Testing

(See separate booklet for units with AD option)
Allow one minute for unit to stabilize before testing. To test, depress test switch. Pilot lights will go out and emergency lamps will come on. When test switch is release, emergency lamps will go off and both pilot lights will come on. Allow a minimum of 24 hours charge time after installation or power failure for initial full load testing.

Maintenance

None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code, or local codes.

Important notice

This equipment is furnished with a low battery disconnect circuit in the emergency mode. If the building is to be unoccupied for an extended period of time and all the power is to be disconnected, the internal batteries must be unplugged from the circuit board to prevent damage. Do not allow the battery wires to short circuit.

WARNING: **Risk of serious injury.**
To prevent injury from falling battery, carefully hold batteries in place when removing and re-installing the securement bracket.
Take special care for ceiling mount configuration.

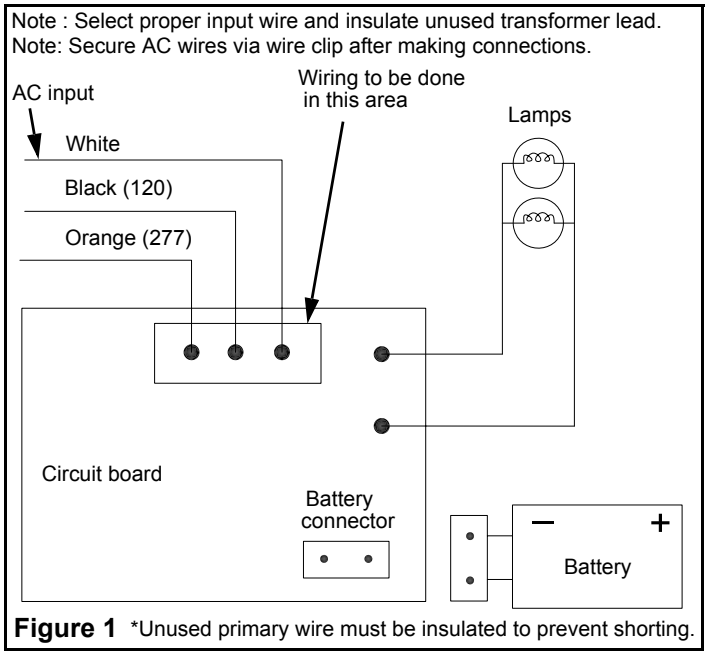


Figure 1 *Unused primary wire must be insulated to prevent shorting.

Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

EMILC SERIES

Mini Inverter Low Capacity Power Systems

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed, including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

⚠ CAUTION

THIS UNIT PROVIDES MORE THAN ONE POWER SUPPLY OUTPUT SOURCE. TO REDUCE THE RISK OF ELECTRICAL SHOCK WHEN SERVICING, DISCONNECT BOTH NORMAL AND EMERGENCY SOURCES BY TURNING OFF THE A.C. BRANCH CIRCUIT AND BY DISCONNECTING THE BATTERY.

1. DO NOT USE OUTDOORS.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Do not use this equipment for other than its intended use.
5. The **EMILC** should be mounted securely and in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.
6. The use of accessory equipment and replacement parts not recommended by manufacturer may cause an unsafe condition and void the warranty.
7. The AC voltage rating of this equipment is specified on the product label. Do not connect the **EMILC** equipment to any other voltage.
8. The **EMILC** uses sealed valve regulated lead acid batteries. Batteries can be punctured if not handled properly, therefore use caution when servicing batteries. In the event battery acid comes in contact with eyes or skin, flush with fresh water and consult a physician immediately.
9. The installation and use of this product must comply with all national, federal, state, municipal, or local codes that apply.
10. The **EMILC** contains potentially hazardous voltages. Installation, maintenance and service work should be performed by qualified and trained personnel.
11. Electricians and end-users need to ensure product system compatibility before final installation.
12. Units to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

Please read this manual thoroughly before operating the EMILC Inverter System.

Pb

THIS UNIT CONTAINS A RECHARGEABLE VALVE-REGULATED LEAD ACID BATTERY. PLEASE RECYCLE OR DISPOSE OF PROPERLY.

Table of Contents

Description *Page*

Section 100

System Installation Instructions

101. Specifications....3
102. Receiving, Moving and Storing Systems and Batteries....4
102.1 Shipping Damage....4
102.2 Temporary Storage of Units and Batteries....4
103. Installation Requirements....4
103.1 Operating Environment....4
103.2 High Altitude Operation....4
104. Cabinet Mounting....5
104.1 Tools Required....5
104.2 Mounting Hardware....5
104.3 Knockout Locations....5
104.4 Cabinet Mounting - Surface (-S) Models....5
104.5 Cabinet Mounting - Ceiling T-Grid (-T) Models)....5
105. AC Connections....5
105.1 AC Wiring Preparations....6
105.2 AC Input Voltage Selector Plug Installation....6
105.3 AC Input/output Wiring Connections to Terminal Block....7
106. Battery Information....7
106.1 Tools....8
106.2 Battery installation and Connection....8
106.3 Battery Voltage Check....8
107. Final Installation Checklist....8
108. System Start-Up Procedure....9
109. System Test....9

Section 200

Maintenance

200.1 Safe Shut Down Procedure....9
200.2 Routine System Maintenance....9
200.3 Manual Routine Inverter Tests....10
200.4 Routine Battery Inspection and Maintenance....10
200.5 Battery Replacement Procedure....10
200.6 Battery Disposal....10

Warranty 10

Section 300

Troubleshooting Guide....11

Section 100 System Installation Instructions

101. Specifications

Input

- Input voltage: Universal 120 or 277Vac.
- Input frequency: 60Hz ±2%
- Input surge protection: Meets UL 924

Output

- Output voltage: Universal 120 or 277Vac, 60Hz.
- Output regulation: (static) ±5% based on a 0% - 100% resistive load
- Minimum loading: none required
- Output distortion: Less than 3% THD linear load
- Load power factor: .44 lead to .44 lag
- Output frequency: ±0.3 Hz during emergency
- Time to transfer to inverter after a utility power failure: <1 second

Battery

- Battery type: Maintenance free sealed Lead Calcium
- Battery charger: Fully automatic dual-mode with temperature compensation
- Recharge time: Meets UL requirements (96 Hours)
- Battery protection: Automatic low-battery voltage disconnect and reverse polarity protection.
- Battery voltage: 12Vdc (all models)
- Runtimes: 90 minutes standard.
- Operating temperature : Lead Calcium models: 20ºC to 30ºC (68ºF to 86ºF)
- Relative humidity: 95% non-condensing

Note: *Lead Calcium battery performance rated at 25°C (77°F) for load.*

Table 1: (Physical Specifications)

System Model Number	Housing Mounting Style	Housing Size	Number of Installed Batteries	Housing Dimensions			System Weight*	
				Length	Height	Depth	(Lbs.)	(Kg)
EMILC32-S	Surface	Small	1	14-3/4” (37.5cm)	7-3/8” (18.7cm)	3-1/8” (7.9cm)	14	6.4
EMILC55-S	Surface	Large	1	14-3/4” (37.5cm)	7-3/8” (18.7cm)	4-3/4” (11.1cm)	18	8.2
EMILC32-T	T-Grid Ceiling Mount	--	1	23-7/8” (60.6cm)	6-1/4” (15.8)	4.0” (10.2cm)	15	6.8
EMILC55-T	T-Grid Ceiling Mount	--	1	23-7/8” (60.6cm)	6-1/4” (15.8)	4.0” (10.2cm)	19	8.6

Table 2: (Electrical Specifications)

System Model Number	Input/Output Voltage (60Hz.)	Capacity (90 Min) Watts/VA	Battery type	Power Consum. (Max)	Battery Voltage (Vdc)	DC Input Current (Adc)	Input Current		Thermal Output In BTUs		Temp. Range (°C)
							120Vac (Max.)	244Vac (Max.)	Standby	Emergency	
EMILC32	120/277	32/32	Lead-Calcium	9W	12	3.4	0.34A	0.15A	7	32	20 to 30
EMILC55	120/277	55/55	Lead-Calcium	9W	12	5.7	0.54A	0.23A	7	47	20 to 30

102. Receiving, Moving and Storing Systems and Batteries

102.1 Shipping Damage

EMILC inverter system batteries are shipped along with the unit within a single shipping carton. Batteries for most units are not shipped within the housing with the exception of Plenum Rated Ceiling Mount (T-Grid) models.

Carefully inspect all cartons upon receipt for evidence of shipping damage.

Notify carrier immediately of leaking or damaged cartons for possible concealed damage.

102.2 Temporary Storage of Units and Batteries

For temporary storage of **EMILC** inverter systems and batteries prior to installation, select a clean, cool, dry location with normal ventilation for human habitation and level floors.

Storage Temperature:

Store all batteries at 0° to +40° C (32° to +104° F). Batteries will have a longer shelf life if stored at 15° C (60° F). The **EMILC** electronics and battery cabinets may be stored at -20° to +60° C (-4° to +140° F).

IMPORTANT:

Lengthy storage of batteries will cause irreversible damage to the cells.

Failure to connect **EMILC** inverter system batteries to an energized charging circuit within 90 days from the date of shipment will void the battery warranty.

DANGER: ***Explosive - Can Cause Blindness Or Other Severe Injuries***

Every type of battery can produce hydrogen gas, even sealed, maintenance-free batteries. The gas is vented through the vent caps and into the air. Do not allow smoking, sparks, or flames in battery storage location because hydrogen is concentrated under the vent cap of each cell of the battery. Hydrogen is highly explosive, and is hard to detect because it is colorless, odorless, and lighter than air.

103. Installation Requirements

103.1 Operating Environment

Install the **EMILC** inverter system in a clean, cool, dry place with normal ventilation for human habitation and in such a location to hamper vandalism but allow easy access for testing and maintenance.

Operating Temperature:

EMILC inverter Systems with Lead Calcium batteries are UL Listed for 20° to 30° C (+ 68° to +86° F) operation.

Battery performance and service life is maximized if the operating temperature is maintained at 25° C (77° F).

Temperature Effect On Lead Calcium Battery Performance:

Lead Calcium batteries will be less efficient at temperatures below 20° C (68° F), and high temperatures will reduce battery life. Typically, at 35° C (95° F), battery life will be half of what it would be at normal temperature of 25° C (77° F). At 45° C (113° F), battery life will be one-fourth of normal.

Ventilation:

The air around the unit must be clean, dust-free, and free of corrosive chemicals or other contaminants. Do not place the **EMILC** inverter system or batteries in a sealed room or container.

CAUTION:

Never Install Batteries in A Sealed Room Or Enclosure.

103.2 High Altitude Operation:

The maximum operating temperature drops 1° Celsius per 300 meters (2° F per 1000 feet) above sea level. Maximum elevation is 3000 meters (10,000 feet).

104. Cabinet Mounting

104.1 Tools Required

The following tools are required to install the system:

Socket Set, Phillips Screwdriver, Diagonal Wire Cutters, Long Nose Pliers, Electrical Tape, Digital Volt-Ohm Meter, Safety Glasses with Side Shields, Small Punch (knockout removal), Hammer, Electric Drill, Wood or Masonry Bits, Level.

104.2 Mounting Hardware

Mounting hardware is not provided. Care should be taken when selecting mounting hardware to assure that it is the proper type for the application and sized to safely support the systems full weight when installed assuring safe and secure attachment of system to wall surface or building structures. For ease of installation, the factory recommends that the head size of mounting screws or bolts be small enough to pass through the keyhole knockouts provided for mounting. This will allow the unit to be hung on partially installed mounting hardware and facilitate easy cabinet removal if ever necessary.

104.3 Knockout Locations

All models provide knockouts on the top and right-hand side of the unit.

Additional entry points, if required can be added using a metal punch. Do not drill into the cabinet as metal filings can cause short circuits and damage the equipment.

NOTE: Consider unit knockout locations prior to mounting unit. Allow room for easy routing of conduit to entry point.

104.4 Surface Mount (-S) Models:

1. Remove cover and any packing material inside unit housing that may have been used for shipping purposes.
2. Remove the appropriate knockouts, 7/8”diameter, on the top and/or right-hand side of the unit housing to facilitate conduit attachment. Also remove keyhole knockouts in the upper corners on the back of the housing.
3. Secure housing to mounting surface through both keyhole knockouts provided using mounting hardware (not supplied) sized appropriately to securely support the unit weight.



104.5 Ceiling T-Grid Mount (-T) Models:

1. Remove cover and any packing material inside unit housing that may have been used for shipping purposes.
2. Remove the appropriate knockout(s), 7/8” diameter, located on either side of unit housing to facilitate conduit attachment.

IMPORTANT: Take care to remove only the knockouts required for utility connection. Removal of knockouts if unused and left open will void the plenum rating of the unit.

3. Mount the unit securely in place between T-Grid members.

NOTICE: Safety chain or cable, rated 50 pound minimum working load, 250 pound minimum breaking strength is required to hang the unit in a T-Grid system. Failure to correctly install unit will cause an unsafe condition!



105. AC Connections

CAUTION:

a. All **EMILC** inverter system units contain hazardous AC and DC voltages. Because of these voltages, a qualified electrician must install the **EMILC** inverter system, AC line service, and batteries. The electrician must install the AC line service according to local, state and NEC codes and must be familiar with batteries and battery installation.

b. Before installing, maintaining, or servicing the unit, always remove or shut off all sources of AC power to the **EMILC** inverter system. Disconnect the unit battery leads to make sure the unit will not supply output voltage. Turn the AC line input circuit breaker **OFF** at the service panel.

c. Whenever AC and/or DC voltage is applied, there will be AC voltage inside the **EMILC** inverter system unit; the unit can supply power from AC line or from its batteries. To avoid equipment damage or personal injury, always assume that there may be voltage inside the **EMILC** inverter system.

d. Remove rings, watches, and other jewelry before installing the AC wiring. Always wear protective clothing and eye protection and use insulated tools when working near batteries. Whenever servicing an energized unit with the inside panel open, electric shock is possible; follow all local safety codes. ***TEST BEFORE TOUCHING!***

e. To reduce the risk of fire or electric shock, install the **EMILC** inverter system and the batteries in a temperature-controlled and humidity-controlled indoor area free of conductive contaminants. See **Section 103** for operating environment specifications.

105.1 AC Wiring Preparations

1. Remove the system's front cover.
2. Make sure the **EMILC** inverter system input and output voltages are correct for the particular application. Remember that the **EMILC** system provides single-phase power only.
3. The input circuit breaker in the input service panel provides the means for disconnecting AC to the **EMILC** inverter system. Only authorized persons shall be able to disconnect AC to the unit. (See N**EC 700-20 and 700-21**.)

CAUTION:

To prevent electrical shock or equipment damage, for all units, make sure the EMILC Battery is disconnected and the AC input circuit breaker at the service panel is OFF before making AC connections to the EMILC inverter system.

4. If not previously done, remove cabinet knockouts for AC Input and AC Output as described in **Sections 104-4, 104.5 or 104.6** depending on mounting method

CAUTION:

Do not drill the cabinet; drill filings may damage the unit and prevent it from operating. If larger knockouts are needed, use a chassis punch to enlarge the appropriate knockout. Do not add additional or unnecessary knockouts.

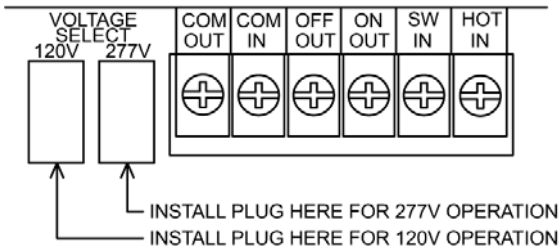
5. Install the input and output conduits.
6. Run the AC Input service conductors and AC Output conductors through separate conduits. **EMILC** inverter system emergency output circuits shall be installed in dedicated conduit systems and not shared with other electrical circuits as described in **NEC 700-9(b)**.

EMILC models can be configured for either 120Vac or 277Vac input connections as well as various modes of output operation as described in this section. Refer to the appropriate wiring diagrams to properly connect the utility AC power, fixtures and external switching device (where applicable). Perform all wiring procedures in accordance with applicable codes.

105.2 AC Input Voltage Selector Plug Installation

EMILC inverter systems may be operated from either 120Vac or 277Vac power sources. Determine the actual AC input line voltage and install the provided Voltage Selector Plug in the position next to the system terminal block that matches the line voltage potential as shown in the illustration below.

VOLTAGE SELECT DETAIL



CAUTION:

Failure to install the Voltage Selector Plug will prevent system operation. Installing the Voltage Selector Plug in the position that does not match the actual AC input line voltage will damage the unit, void the warranty and may cause a dangerous or unsafe condition.

105.3 AC Input/Output Wiring Connections to Terminal Block

Depending on how the fixture load is to be operated, wire the system as described below.

Normally-On Operation - Connected fixture(s) remain illuminated in AC and emergency modes.
See **Wiring Diagram 1**.

Normally-Off Operation - Connected fixture(s) illuminate only upon loss of utility AC power.
See **Wiring Diagram 2**.

Normally-On and Normally-Off Operation - A combination of the operating modes described above.
See **Wiring Diagram 3**.

Switched Load Operation - Single Circuit - Connected fixture(s) can be externally switched and will illuminate upon loss of utility AC power regardless of external switch position.
See **Wiring Diagram 4**.

Diagram 1. NORMALLY ON LOADS

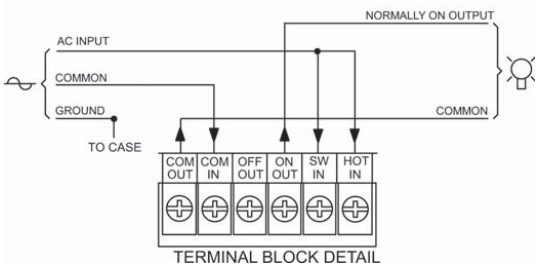


Diagram 2. NORMALLY OFF LOADS

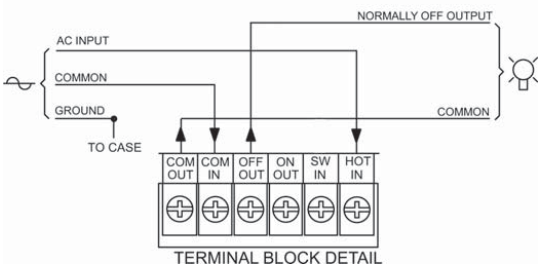


Diagram 3. NORMALLY ON & OFF LOADS

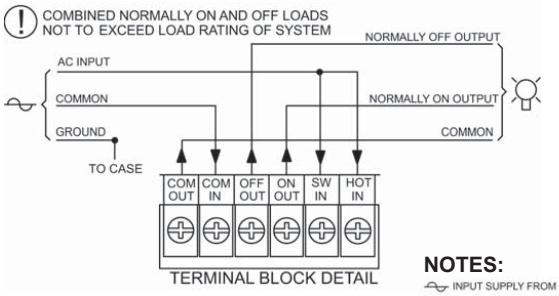
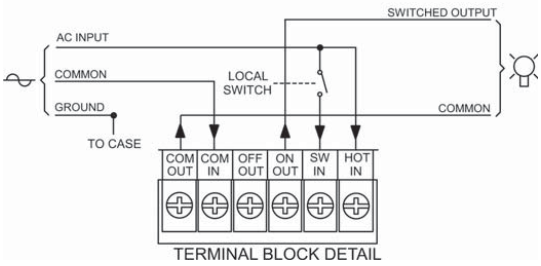


Diagram 4. SWITCHED LOADS



NOTES:

INPUT SUPPLY FROM UNSWITCHED UTILITY RATED 20 AMPS MAXIMUM.

OUTPUT(S) TO LIGHTING LOADS

106. Battery Information

⚠ Important Safety Precautions

The installer must take these precautions:

1. Wear protective clothing, eye-wear, rubber gloves and boots. Batteries contain corrosive acids or *caustic alkalis and toxic materials and can rupture or leak if mistreated. Remove rings and metal wristwatches or other metal objects and jewelry. Don't carry metal objects in pockets where the objects can fall onto the batteries or into the* ***EMILC*** *inverter system.*
2. Tools must have insulated handles *so that they will not short battery terminals. Do not allow a tool to short a battery terminal to another battery terminal or to the cabinet at any time. Do not lay tools or metal parts on top of the batteries, and do not lay any objects where they could fall onto the batteries or into the cabinet.*
3. Install the batteries as described *in this manual. When connecting cables, never allow a cable to short across a battery's terminals or to the cabinet.*
4. *Keep the cable away from any sharp metal edges.*
5. Install the battery leads so they cannot be pinched by the ***EMILC*** *inverter system cover/door.*
6. Where conductor*s may be exposed to physical damage, protect conductors in accordance with* ***NEC*** *requirements.*
7. Full voltage and *current are always present at the battery terminals. The batteries used in this system can produce dangerous voltages, extremely high currents, and possible risk of electric shock. Batteries may cause severe injury if the terminals are shorted together or to ground (earth).*
   Be extremely careful to avoid electric shock and burns caused by contacting battery terminals or shorting terminals during battery installation. Do not touch uninsulated battery terminals.
8. A qualified electrician *who is familiar with battery systems and required precautions must install and service the batteries. Any battery used with this unit shall comply with the applicable requirements for batteries in the standard for emergency lighting and power equipment, UL 924. Cabinets are designed to be used with, and batteries must be replaced by identical cells or a Manufacturer approved equivalent. If using substitute batteries not supplied by the Manufacturer, the unit's UL listing will be void, and the equipment may fail to perform properly. The installation must conform to national and local codes as well. Keep unauthorized personnel away from batteries.*

106.1 Tools

The following tools are required to install the system batteries:
Long Nose Pliers, Digital Volt-Ohm Meter, Safety Glasses

⚠ CAUTION:
Always use insulated tools for battery installation.

106.2 Battery Installation and Connection

Lead-Calcium Battery Models: EMILC-32 and **EMILC-55** are supplied with a single 12Vdc Lead Calcium battery. To install the unit battery, place the battery within the system housing and connect the black battery negative fly lead to the battery's black (B-) terminal. Connect the red battery positive fly lead to the battery's red (B+) terminal.

106.3 Battery Voltage Check

Using a digital volt-ohm meter, check for correct nominal battery voltage between DC Input NEG and POS wires. Voltage reading should be ±10% of system's nominal 12Vdc operating voltage.

107. Final Installation Checklist

⚠ IMPORTANT: Before proceeding to the System Start-Up Procedure (Section 108) complete the Final Installation Checklist below.

1. Ensure the **EMILC** cabinet(s) is securely fastened to a wall or other structure.
2. Ensure that the input circuit breaker in the building service panel serving as the AC disconnect to the **EMILC** system is in the **OFF** position.
3. Check for proper ground connections in the **EMILC** unit cabinet.
4. Check for any loose wiring connections in the **EMILC** unit cabinet.
5. Check that correct nominal battery voltage (12 Vdc) is present in the **EMILC** unit between the battery's **NEG** and **POS** terminals.
6. Verify AC Input Voltage Selector Plug is installed and in the proper position to accept the AC input line voltage.

⚠ CAUTION:
Failure to install the Voltage Selector Plug will prevent system operation. Installing the Voltage Selector Plug in the position that does not match the AC input line voltage will damage the unit, void the warranty and may cause a dangerous or unsafe condition.

108. System Start-Up Procedure

IMPORTANT: The EMILC inverter system is a sophisticated electronic backup power supply. Care must be taken to follow the steps below in their exact sequence. Failure to do so may result in possible equipment failure.

CAUTION:
Familiarize yourself with the shut down procedure in Section 200.1 before proceeding with the EMILC system Start Up.

1. Apply utility AC power to the system by turning the branch circuit breaker in the main power panel to the ON position.
2. Observe the LED Status indicators and verify the following:
   a. ***AC ON*** *indicator (red LED) is illuminated (indicates AC utility power is available to unit).*
   b. ***CHG ON*** *indicator (green LED) is illuminated (indicates battery is connected and charger is operational).*
3. Verify **Normally-On** fixtures or switched fixtures (where applicable) are illuminated (local fixture switch must be in **ON** position).

109. System Test

Momentarily push **TEST** switch and verify the following:

a. ***INV ON status indicator (yellow) illuminates (indicates inverter is operational).***
b. Normally-On, Normally-Off and Switched fixtures are illuminated (where applicable).

200. Maintenance

200.1 Safe Shut Down Procedure

CAUTION:
To avoid possible equipment damage or personal injury, assume that there is AC voltage present inside the EMILC inverter system unit any time AC input power or DC battery voltage is applied. The inverter is capable of providing output voltage from the batteries even when there is no AC input line voltage. When AC input voltage is present, the unit can provide output voltage even when the batteries are disconnected.
Do not touch components inside the unit. DC voltage is always present at the batteries and battery cables.

Final Shut Down Procedure

1. Open the unit's front access panel.
2. Disconnect the unit battery leads to make sure the unit will not supply output voltage.
3. Place the **AC Input circuit breaker** at the service panel in the **OFF** position.

CAUTION:
HAZARDOUS ENERGY IS STORED IN CAPACITORS INSIDE THE EMILC UNIT. AFTER TURNING OFF SWITCHES, ALLOW 5 MINUTES FOR CAPACITORS TO DISCHARGE BEFORE ATTEMPTING ANY SERVICE PROCEDURES.

4. If the service technician does not need to access the inside of the unit, keep the unit's front cover/door closed.
5. If the unit will be shut off for an extended period of time, recharge battery every 60 to 90 days.

CAUTION:
The battery will be damaged and the warranty voided if not routinely recharged.
NOTE: To turn power back on, follow the "System Start-up Procedure" outlined in Section 108. Be sure to complete all of the steps to assure the unit will operate properly.

200.2 Routine System Maintenance

The **EMILC** inverter system unit is designed to provide years of trouble-free operation. The unit does require some routine attention to assure peak performance. The Manufacturer recommends a Preventative Maintenance check be performed by a qualified service technician at least every six months. The technician must observe important safety precautions while performing the following recommended tasks:

- ***Inspect and clean the unit interiors;***
- ***Inspect all batteries for leaks, case swelling or terminal corrosion;***
- ***Perform an emergency operation test to check operation of all critical connected loads***

200.3 Manual Routine Inverter Tests

NFPA101 requires that Emergency Lighting Equipment be tested on a monthly basis for a period of at least 5 seconds, and a minimum of 90 minutes once a year. We strongly recommend these guidelines be followed to ensure system readiness, and to prolong battery life. The **EMILC** system was designed with a front panel test switch to facilitate monthly testing. Simply depress the button and hold to test the inverter at anytime. Once released, the **EMILC** will revert back to standby operation. For annual 90-minute discharge or other prolonged tests, simply turn off the AC Input breaker at the service panel.

200.4 Routine Battery Inspection and Maintenance

Sealed Lead-Calcium Batteries

Maintenance-free cells are the most common type of battery used today in standby equipment. By design it is as maintenance free as a battery can be. It is recommended, however, that some simple steps be taken to increase system life and maximize reliability:

a. A quarterly visual check of the battery should be conducted to look for deformities in the battery case, electrolyte leakage and/or terminal corrosion. Any batteries with these conditions are defective and should be replaced. Any corroded terminals found, regardless how slight, are to be cleaned at once to prevent system failure.

b. Once a year, all battery connections should be checked for tightness and cleaned and re-tightened as necessary.

200.5 Battery Replacement Procedure

⚠ WARNING:

Always use the same quantity and type of battery as replacements.

Substituting batteries not supplied by the Manufacturer will void the UL listing of the system and may cause equipment failure. To ensure the superior performance of your **EMILC** inverter system and to maintain proper charger operation, replace spent batteries only with those having the same part number, voltage and ampere-hour rating as the original batteries.

Follow the proper shut down procedure as described in **Section 200.1**.

Disconnect the battery Positive red (B+) and Negative black (B-) connectors.

Remove the battery from the cabinet.

Install new battery following the instructions outlined in **Section 106.2**.

200.6 Battery Disposal

⚠ *WARNINGS:*

• Do not dispose of batteries in a fire, the batteries could explode.

• Do not open or mutilate batteries.

• Released electrolyte is highly toxic and harmful to the skin and eyes.

⚠ *CAUTION:*

Batteries contain lead. Many state and local governments have regulations about used battery disposal. Please dispose of the batteries properly.

WARRANTY

When operated under normal conditions, Emergi-Lite® inverter products will provide years of dependable service. This unit is backed by a 3-7 year warranty. The unit is covered by a complete 3-year warranty against defects in material or workmanship, and a 7-year pro-rata battery warranty.

300 TROUBLESHOOTING GUIDE

The following steps will help verify the operational status of the **EMILC** series. Servicing of the **EMILC** series should only be performed by qualified personnel. Always follow all cautions and safeguards when working with electrical equipment.

EMILC Troubleshooting

1. Open the unit's front access panel.
2. Disconnect the unit battery leads to make sure the unit will not supply output voltage.
3. Place the **AC Input circuit breaker** at the service panel in the **OFF** position.
4. Disconnect the load wires connected at the normally on and normally off outputs.

CAUTION:

HAZARDOUS ENERGY IS STORED IN CAPACITORS INSIDE THE EMILC UNIT. AFTER TURNING OFF SWITCHES, ALLOW 5 MINUTES FOR CAPACITORS TO DISCHARGE BEFORE ATTEMPTING ANY SERVICE PROCEDURES.

5. Verify that all three LED lights (**Yellow**, **Red**, and **Green**) are off.
6. Check the battery voltage. If the battery is charged, the voltage should be **>12.5VDC**. If discharged, it may be as low as 12VDC. If the battery voltage is too low, the output may not energize.
7. Check the position of the Voltage Selector Plug next to the system terminal block. Make sure it matches the line voltage.
8. Connect the black battery negative fly lead to the battery's black (B-) terminal. Connect the red battery positive fly lead to the battery's red (B+) terminal.
9. Apply utility AC power to the system by turning the branch circuit breaker in the breaker panel to the ON position.
10. Observe the LED Status indicators and verify the following:
    a. ***AC ON*** *indicator (red LED) is illuminated (indicates AC utility power is available to unit).*
    b. ***CHG ON*** *indicator (green LED) is illuminated (indicates battery is connected and charger is operational).*
11. Check the battery voltage. If the batteries are sufficiently charged, the measured battery float voltage should be between 13.5 and 13.8 VDC. This indicates that the **EMILC** is properly charging the battery.
12. Momentarily push the **TEST** switch and verify the following:
    a. ***INV ON status indicator (yellow) illuminates (indicates inverter is operational).***
    b. Depending on how the fixture load is to be operated, output voltage (120V or 277V depending on the position of the Voltage Selector Plug) will be present at the Normally-On and Normally-Off outputs. This will confirm that the **EMILC** is properly inverting the DC output of the battery.

The steps above would indicate that the **EMILC** is working properly. Follow the steps below to determine if there is a problem with the load.

Load Troubleshooting

1. With the load wires disconnected, check with a voltmeter the voltage across them to make sure there is no backfeed voltage of any type. In some instances, the circuit has been accidently tapped 'downstream' of the inverter.
2. Disconnect the unit battery leads to make sure the unit will not supply output voltage.
3. Disconnect the primary AC circuit from the **EMILC** and connect the load wires directly to the primary AC circuit. This will bypass the **EMILC**.
4. Turn the upstream branch circuit breaker back to the ON position.
5. Confirm that all emergency lights come on. Check the amperage on the circuit. The amperage should not exceed the output current rating of the unit. The output current rating of the unit is obtained by dividing the VA rating by the voltage.
6. If less than the rated value, reconnect the load and primary AC circuit to the **EMILC**. Make sure all power sources are turned off prior to wiring. Reconnect the battery leads. Apply utility AC power to the system by turning the branch circuit breaker in the breaker panel to the ON position. Test the **EMILC** by pressing the Test Switch. All lights on the circuit should be lit and the yellow LED ("INV ON") should turn on. The Green ('CHG') LED should turn off.
7. The red LED (**AC ON)** indicates AC utility power is available to unit. The green LED (**CHG ON)** indicates battery is connected and charger is operational. The yellow LED (INV ON) indicates the inverter is operating and will be lit when the TEST switch is pressed or during a power outage.

If problems persist, contact **Emergi-Lite** Customer Service for further review of the application.

For service or installation information contact.

Technical Support:

Tel. : 1-888-552-6467 • Fax: 1-800-316-4515

www.emergi-lite.com

All information and specifications contained in these instructions are subject to change due to engineer design, errors and omissions.

© 2014 Thomas & Betts Limited. All rights reserved.

Installation instructions

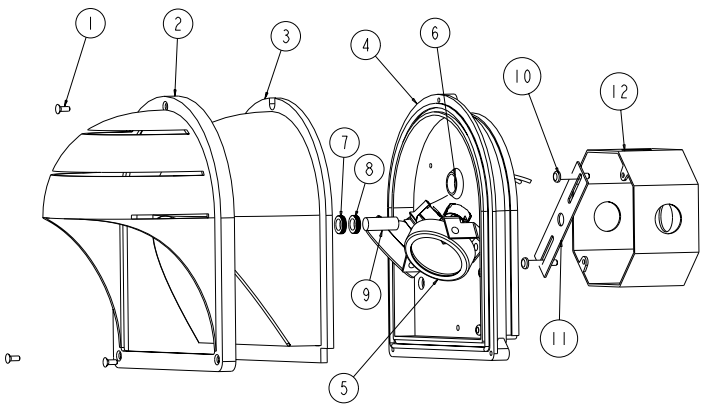
1. Fasten the mounting braket to the junction box using the two screws provided. The threaded nipple should be facing the outward direction.
2. Make the proper connections. The fixture is made for 6 or 12 VDC (see lamp voltage on marking). Connect the lamp wires to de DC supply wires.
3. Place the fixture against the mounting surface allowing the threaded nipple to pass through the fixture back plate. Secure with the lock nut and the cap nut provided.
4. Install the light bulb(s) Caution. Refer to the relamping label located near the lamp holder or the recommended maximum wattage. Do not exceed recommended wattage.
5. Secure the lens and decorative cover to the fixture with the screws provided.
6. Turn on DC power and check the operation of your lighting fixture.

Adjusting the lamps

The head can be adjusted in two ways: by rotating it, and by tilting it.

Rotation: To rotate the heads, hold it and turn it either sides.

Tilt: To tilt the head, hold it and tilt upwards or downwards.



Part List

1. Cover screws (3)
2. Decorative cover
3. Lens
4. Back plate
5. Lamp ass'y (2)
6. Wire way grommet
7. Cap nut
8. Lock nut
9. Threaded nipple
10. Junction box screws (2)
11. Mounting bracket
12. Jonction Box (not provided)

Figure 1

EMERGI-LITE

Literay™ – Installation instructions

Installation instructions

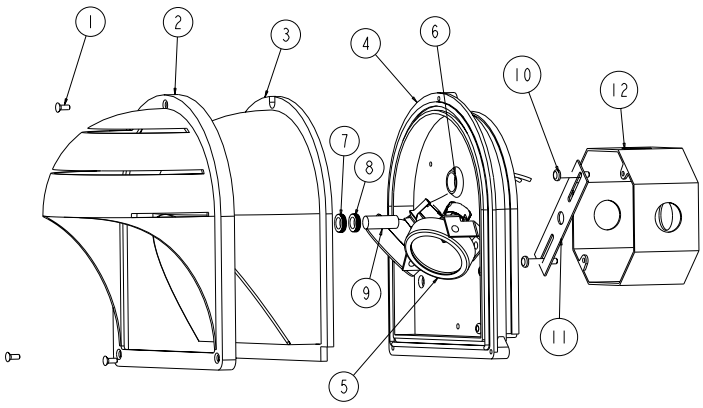
1. Fasten the mounting braket to the junction box using the two screws provided. The threaded nipple should be facing the outward direction.
2. Make the proper connections. The fixture is made for 6 or 12 VDC (see lamp voltage on marking). Connect the lamp wires to de DC supply wires.
3. Place the fixture against the mounting surface allowing the threaded nipple to pass through the fixture back plate. Secure with the lock nut and the cap nut provided.
4. Install the light bulb(s) Caution. Refer to the relamping label located near the lamp holder or the recommended maximum wattage. Do not exceed recommended wattage.
5. Secure the lens and decorative cover to the fixture with the screws provided.
6. Turn on DC power and check the operation of your lighting fixture.

Adjusting the lamps

The head can be adjusted in two ways: by rotating it, and by tilting it.

Rotation: To rotate the heads, hold it and turn it either sides.

Tilt: To tilt the head, hold it and tilt upwards or downwards.



Part List

1. Cover screws (3)
2. Decorative cover
3. Lens
4. Back plate
5. Lamp ass'y (2)
6. Wire way grommet
7. Cap nut
8. Lock nut
9. Threaded nipple
10. Junction box screws (2)
11. Mounting bracket
12. Jonction Box (not provided)

Figure 1

Emergi-Lite Tel: (888) 552-6467 ext. 547 or 255 Fax: (888) 867-1565 www.emergi-lite.com 09/05 750.1198 Rev. A

1/1

6,12, or 24 Volt, High Wattage Emergency Light

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Use caution when handling batteries. Avoid possible shorting.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
8. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
9. Do not use this equipment for other than intended use.
10. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation

1. TURN OFF AC POWER.
2. Route AC circuit wires to electrical box and leave 12" of wire length.
3. Securely mount unit in place. Connect AC supply wiring to unit as follows:
   For 120 VAC operation : — Black to 120 VAC, White to neutral *
   For 277 VAC operation : — Orange to 277 VAC, White to neutral *
   * NOTE : BE SURE TO INSULATE UNUSED WIRE.
4. Extend DC wiring for remote fixtures, (if required), to unit. Wiring must comply with NEC articles 700 and 720. Do not exceed rated wattage of unit.
5. When ready to energize AC, plug polarized battery connector into circuit board. Lamps will not light at this time.
6. Energize AC. Pilot lamp and high charge LED will illuminate.

Testing

(See separate booklet for units with AD option)
Allow one minute for unit to stabilize before testing. To test, depress test switch. Pilot lights will go out and emergency lamps will come on. When test switch is release, emergency lamps will go off and both pilot lights will come on. Allow a minimum of 24 hours charge time after installation or power failure for initial full load testing.

Maintenance

Wet Battery:
Periodically inspect fluid levels on all cells. If refilling is required, use distilled water only, refill to designated upper line.

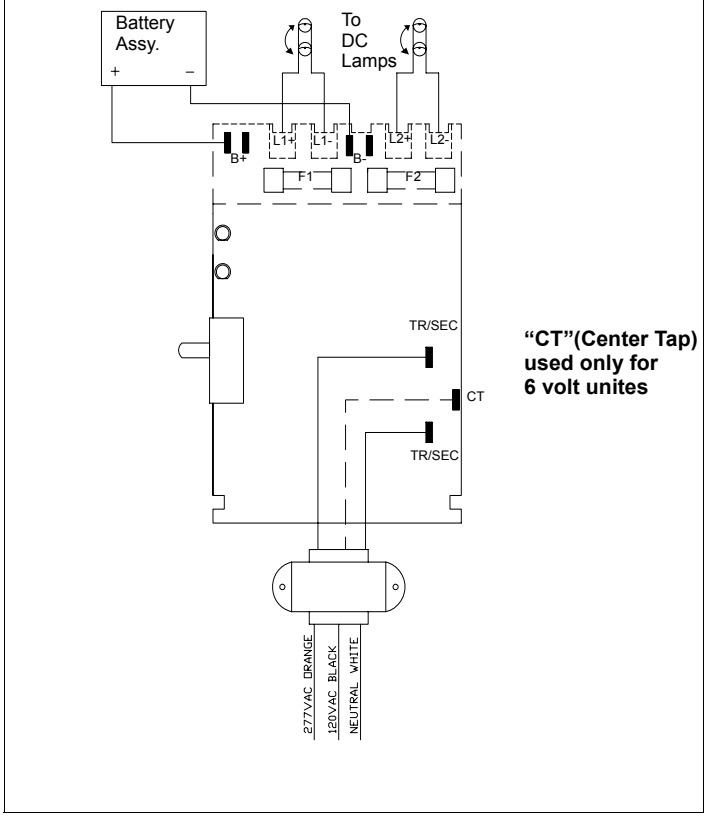
IMPORTANT NOTE:
If unit is installed in an area of high temperatures, increase periodic inspection intervals, as higher watter usage will result.
(Observe safety precaution when handling corrosive batteries.)

Dry battery:
None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code, or local codes.

Important notice

This equipment is furnished with a low battery disconnect circuit in the emergency mode. If the building is to be unoccupied for an extended period of time and all the power is to be disconnected, the internal batteries must be unplugged from the circuit board to prevent damage. Do not allow the battery wires to short circuit.

Battery terminals are mounted on the component side of the circuit board. Make sure to separate lamp load evenly on both circuits.



"CT"(Center Tap) used only for 6 volt unites

KS Series – Emergency Lighting Unit

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not let power supply cords touch hot surfaces.
2. Do not mount near gas or electric heaters.
3. Use caution when handling batteries. Avoid possible shorting.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
7. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
8. Do not use this equipment for other than intended use.
9. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Route AC circuit wires from electrical box and leave 12” of wire length.
   Note — A weather tight fitting for cord connection is supplied, however, if conduit entry is desired, weather tight conduit fittings such as RACO 3400 Series or other UL recognized equivalent must be used.
   Caution — Be sure to drill hole for conduit fitting in marked location below vent or where it will not interfere with circuit board or battery.
3. Remove four screws on door. Open door and lift door from hinges.
4. For units above 54W: Remove batteries for ease of installation.
5. Remove the two screws securing the battery bracket and retain.
6. Remove the battery bracket and retain.
7. Remove the battery assembly.
8. Disconnect two lamp connectors. For units with AD option, disconnect the ribbon cable from display board in door.

Note — Select proper input wire and insulate unused transformer lead.

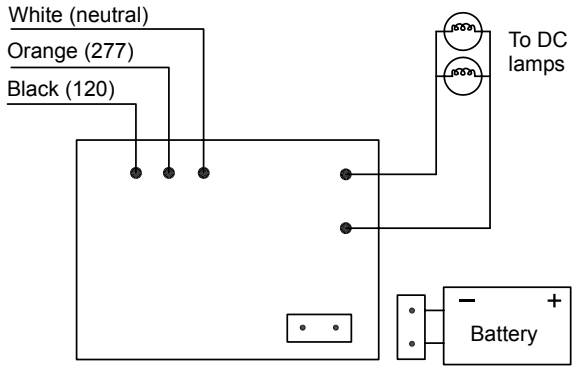


Figure 1

9. Securely mount unit in place. Connect AC supply wiring to unit as follows:
   120 VAC — Black to 120 VAC, white to neutral.
   277 VAC — Orange to 277 VAC, white to neutral.
   Be sure to insulate unused wire.
10. Route supply wires through the white nylon “P” clip adjacent to the circuit board to avoid possible contact with the hot components.
11. Extend DC wiring for remote fixtures to unit, (if required), using a weather tight fitting. Wiring must comply with NEC articles 700 and 720. Do not exceed rated wattage of unit.
12. For units above 54W: Install the battery assembly. Secure battery assembly with bracket and two screws.
13. Re-connect two lamp connectors. For units with AD option, connect the ribbon cable to display board.
    Note — Make sure you insert the ribbon connector properly. The connector should go in easily, if not, try reversing the connector.
14. Re-install door on hinges (do not screw to housing).
15. Connect battery to circuit board using polarized connector. Lamps will not light at this time.
16. Secure door with four screws.
17. Energize AC. Pilot lamp and high charge LED will illuminate. Allow unit to charge for 24 hours before initial full duration testing.

Testing

For units with AD option, see separate booklet.

To test: depress test switch, pilot lamp will extinguish, DC lamps will illuminate. Release switch and DC lamps will extinguish.

Maintenance

None required, however, equipment should be tested in accordance with local codes and Life Safety Code, NFPA 101. This equipment is furnished with a low battery disconnect circuit in the emergency mode. However, if the AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected. Do not allow battery wires to short circuit.

EC/IL/JS/LS/TS Series

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. All unused wires must be insulated to prevent shorting.
3. Do not use outdoors.
4. Do not let power supply cords touch hot surfaces.
5. Do not mount near gas or electric heaters.
6. Use caution when handling batteries. Avoid possible shorting.
7. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
10. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
11. Do not use this equipment for other than intended use.
12. Unit to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

Installation Instructions

IMPORTANT: Install fixture/lamp type combination no higher than the maximum mounting heights as stipulated in the “Lamp Mounting Height Cross-reference Table” (P/N 750.1924). Refer to “Technical Information” section of our website.

1. TURN OFF AC POWER.
2. Route AC circuit wires to electrical box and leave 12’’ of wire length.
3. Securely mount unit in place. Connect AC supply wiring to unit as follows:

For 120 VAC operation: Black to 120 VAC, White to neutral *
For 277 VAC operation: Orange to 277 VAC, White to neutral *
NOTE: Secure AC wires via wire clip after making connections.

IMPORTANT: Wiring connections need to be done away from PCBA and in designated area as shown in figure 1.

4. Extend DC wiring for remote fixtures, (if required), to unit. Wiring must comply with NEC articles 700 and 720. Do not exceed rated wattage of unit.
5. When ready to energize AC, plug polarized battery connector into circuit board. Lamps will not light at this time.
6. Energize AC. Pilot lamp and high charge LED will illuminate.
7. For conduit installation on the JS series, use 7/8’’ knockout located on the top of the enclosure.

Testing

(See separate booklet for units with AD option)
Allow one minute for unit to stabilize before testing. To test, depress test switch. Pilot lights will go out and emergency lamps will come on. When test switch is release, emergency lamps will go off and both pilot lights will come on. Allow a minimum of 24 hours charge time after installation or power failure for initial full load testing.

Maintenance

None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code, or local codes.

Important notice

This equipment is furnished with a low battery disconnect circuit in the emergency mode. If the building is to be unoccupied for an extended period of time and all the power is to be disconnected, the internal batteries must be unplugged from the circuit board to prevent damage. Do not allow the battery wires to short circuit.

WARNING: **Risk of serious injury.**
To prevent injury from falling battery, carefully hold batteries in place when removing and re-installing the securement bracket.
Take special care for ceiling mount configuration.

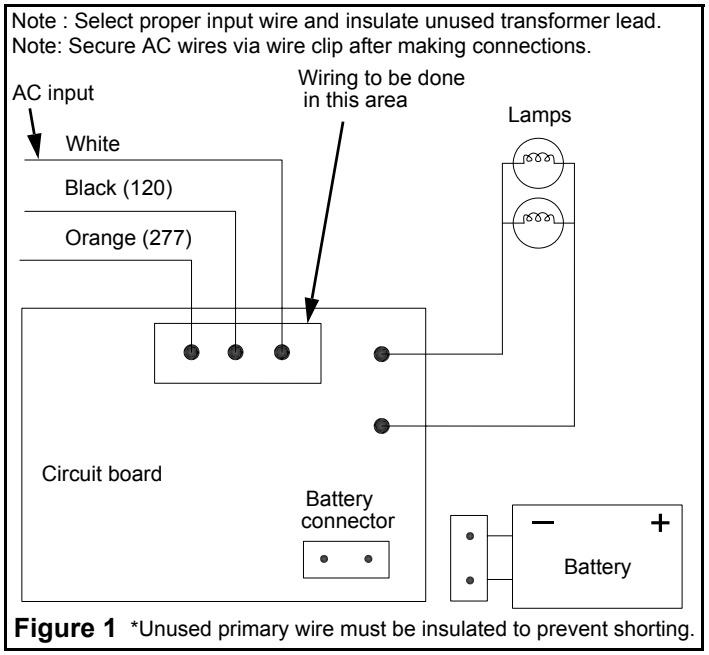


Figure 1 *Unused primary wire must be insulated to prevent shorting.

Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

EC/IL/JS/LS/TS Series

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. All unused wires must be insulated to prevent shorting.
3. Do not use outdoors.
4. Do not let power supply cords touch hot surfaces.
5. Do not mount near gas or electric heaters.
6. Use caution when handling batteries. Avoid possible shorting.
7. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
10. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
11. Do not use this equipment for other than intended use.
12. Unit to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

Installation Instructions

IMPORTANT: Install fixture/lamp type combination no higher than the maximum mounting heights as stipulated in the “Lamp Mounting Height Cross-reference Table” (P/N 750.1924). Refer to “Technical Information” section of our website.

1. TURN OFF AC POWER.
2. Route AC circuit wires to electrical box and leave 12’’ of wire length.
3. Securely mount unit in place. Connect AC supply wiring to unit as follows:

For 120 VAC operation: Black to 120 VAC, White to neutral *
For 277 VAC operation: Orange to 277 VAC, White to neutral *
NOTE: Secure AC wires via wire clip after making connections.

IMPORTANT: Wiring connections need to be done away from PCBA and in designated area as shown in figure 1.

4. Extend DC wiring for remote fixtures, (if required), to unit. Wiring must comply with NEC articles 700 and 720. Do not exceed rated wattage of unit.
5. When ready to energize AC, plug polarized battery connector into circuit board. Lamps will not light at this time.
6. Energize AC. Pilot lamp and high charge LED will illuminate.
7. For conduit installation on the JS series, use 7/8’’ knockout located on the top of the enclosure.

Testing

(See separate booklet for units with AD option)
Allow one minute for unit to stabilize before testing. To test, depress test switch. Pilot lights will go out and emergency lamps will come on. When test switch is release, emergency lamps will go off and both pilot lights will come on. Allow a minimum of 24 hours charge time after installation or power failure for initial full load testing.

Maintenance

None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code, or local codes.

Important notice

This equipment is furnished with a low battery disconnect circuit in the emergency mode. If the building is to be unoccupied for an extended period of time and all the power is to be disconnected, the internal batteries must be unplugged from the circuit board to prevent damage. Do not allow the battery wires to short circuit.

WARNING: **Risk of serious injury.**
To prevent injury from falling battery, carefully hold batteries in place when removing and re-installing the securement bracket.
Take special care for ceiling mount configuration.

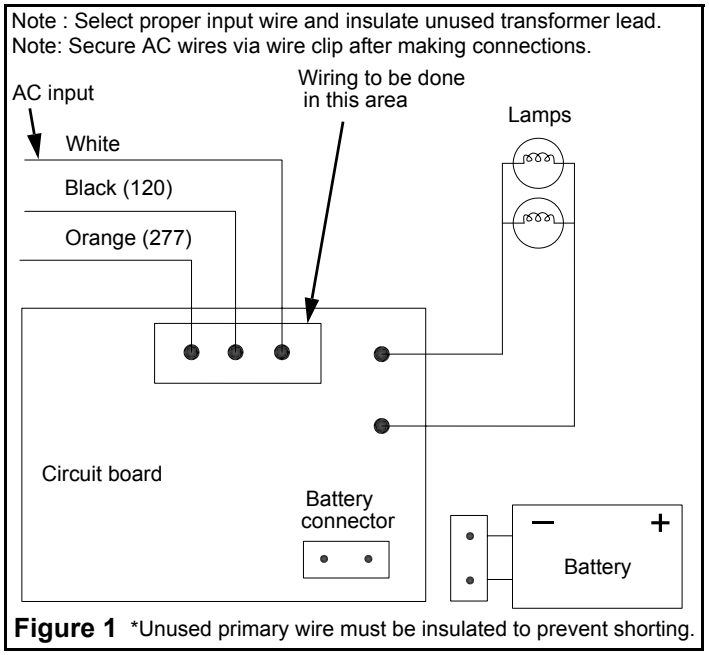


Figure 1 *Unused primary wire must be insulated to prevent shorting.

Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

HZM Series

This equipment is rated for Class 1, Division 2, Groups A, B, C and D

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not let power supply cords touch hot surfaces.
2. Do not mount near gas or electric heaters.
3. Use caution when handling batteries. Avoid possible shorting.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
7. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
8. Do not use this equipment for other than intended use.
9. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

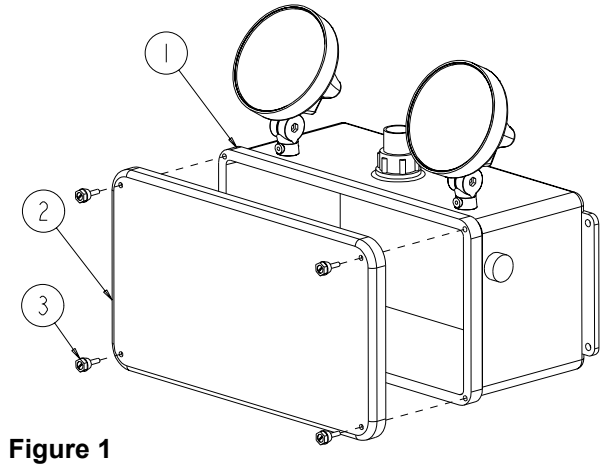


Figure 1

Part List

1. Housing
2. Door
3. Screw (4)

Installation Instructions

1. The unit is to be installed with wiring methods in accordance with the requirements of NEC Article, 500 and 501.
2. Turn off AC power.
3. Route AC circuit wires to electrical box and leave 12” of wire length.
4. Remove four screw on door. Open door by lifting it away from housing.
5. Securely mount unit in place. Connect AC supply wiring to unit as follows (see fig. 2):
   For 120 VAC operation — Black to 120 VAC, white to neutral. Insulate unused wire.
   For 277 VAC operation — Orange to 277 VAC, white to neutral. Insulate unused wire.
6. Extend DC wiring for remote fixtures (if required) to unit. Wiring must comply with NEC articles 700, 720 and 501-4. Do not exceed rated wattage of unit, integral and remote lampheads combined.
7. Connect two white lamp wires to black wires from circuit board with wirenuts provided (see fig. 2). Note: lamp wires are not polarized.

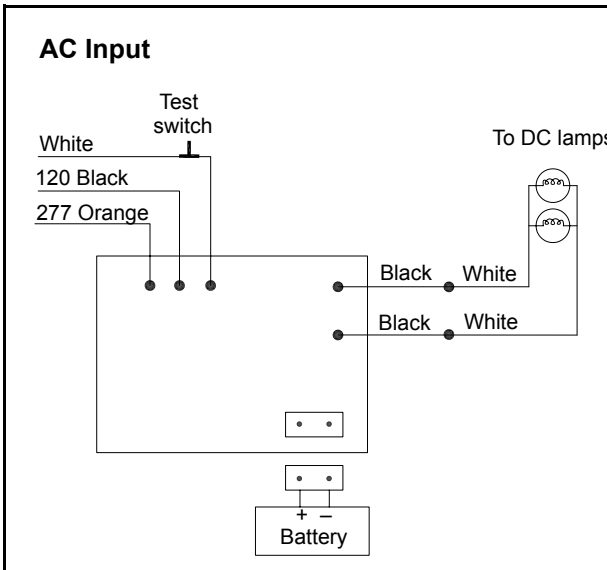


Figure 2

8. When ready to energize AC, connect batteries by plugging the red leads into the positive terminals and the blue leads into the negative terminals. Lamps will not light at this time.
9. Energize AC. Allow unit to charge for 24 hours before initial testing.

Heater and thermostat control (option)

This option is used in areas where temperature may drop below 0°C. The thermostat will activate the heating pad at 0°C and will cut at 16°C. The heating pad is rated at 50 watts. Contact factory for temperature limitations.

Testing

To test: depress test switch, DC lamps will illuminate. Release switch and DC lamps will extinguish.

Maintenance

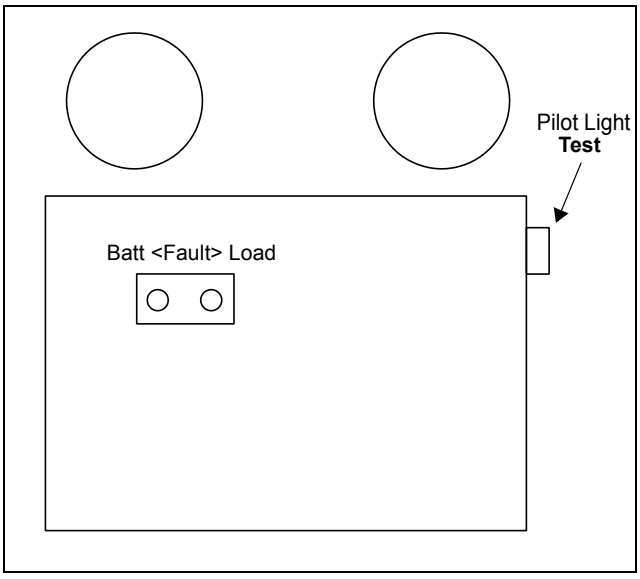
None required. Unit should be tested in accordance with local codes and Life Safety Code, NFPA101. This equipment is furnished with a low battery disconnect circuit in the emergency mode. However, if the AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected. Do not allow battery wires to short circuit.

Diagnostics

STATUS	BATTERY FAULT	LOAD FAULT	PILOT LIGHT
Normal	Off	Off	On
Battery Disconnect	On	Off	Flash
* Battery Failure	On	Off	Flash
Load Disconnect	Off	On	Flash
Overload	Off	On	Flash

***Note 1 —** Battery failure when the battery voltage is below 80% of nominal 6V or 12V.

Note 2 — This feature is not a complete self-test / self diagnostic circuit as described by UL924.



HP Series Remote Heads

Installation instructions

WARNING:
Risk of Electrical Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Do not mount near gas or electric heaters.
3. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
4. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
5. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off unswitched AC power.

Wall or Ceiling mount

a. Remove the cover from the back box (See figure 1). Select the entry point on the back box for the conduit (top or side) and remove one of the plastic bushings.
b. Install the unit to the wall or ceiling with 4 screws (not included).

Mounting on a vertical pole (option)

a. The universal mounting bracket is an accessory ordered separately (See figure 2).
b. The bracket can be installed using steel banding for routing around the pole. Standard banding (not provided) must be maximum 3/4-in in width. The bracket can also be mounted on a Superstrut® metal framing (1 5/8-in channel series) using 1/4-in bolts (not provided). Holes are placed at 9-in apart horizontally.
c. Install the bracket, observing the indicator: TOP.
d. Screw the unit onto the bracket with the 4 screws, washers and nuts included in the bracket kit.

2. Install a water-tight hub (listed for Nema-4X) on the conduit, pass the hub through the back box hole and fasten the nut to secure a water-tight entry. If necessary, seal with silicone or equivalent caulking (not provided) to prevent water from leaking into the cabinet.

WARNING: FAILURE TO ENSURE A WATER-TIGHT INSTALLATION OF THE CONDUIT AND HUB(S) WILL VOID THE MANUFACTURER WARRANTY.

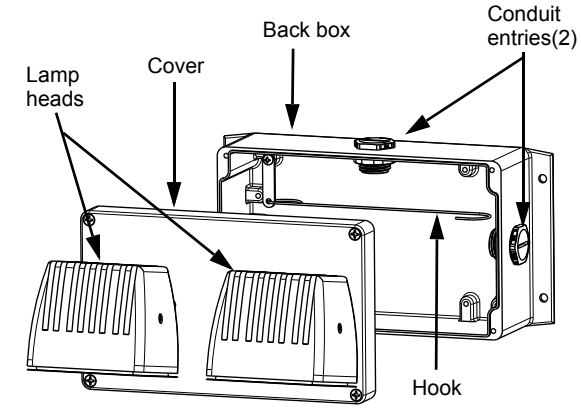


Figure 1

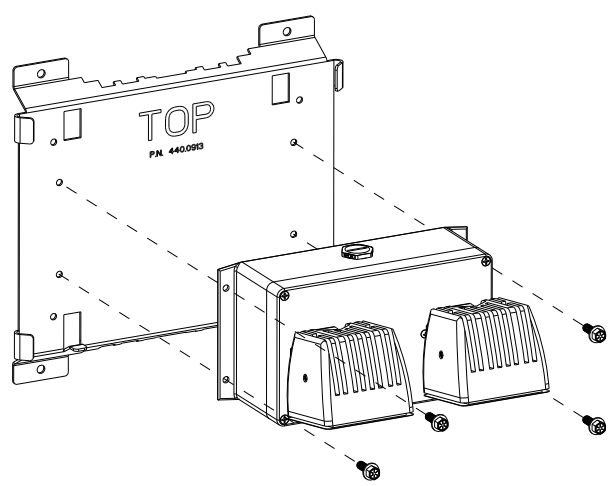


Figure 2

Maximum mounting height as per UL924 standards.

LED Lamp wattage	Maximum mounting height
6 - Watts	30 Feet
10 - Watts	50 Feet
15 - Watts	60 Feet

3. For daisy-chain (input/output) wiring: remove the second plastic bushing and repeat step 2 above to install the output wire conduit.
4. To ease wiring installation, a hook has been provided to hang the cover temporarily.
5. Respecting the proper polarity {red (+) and black (-)}, connect the lamp wires to the emergency circuit using wire nuts.
6. Verify that the rubber gasket is well aligned in the groove of the aluminum cover.
7. Using the captive screws re-install the cover ensuring that the lamp head(s) are pointing in the downward direction.

WARNING: SCREWS MUST BE TORQUED TO AT LEAST 12INLB TO ENSURE A WATER-TIGHT SEAL BETWEEN THE COVER AND HOUSING.

8. Adjust the lamp head assemblies:
   - Rotation: hold the lamp assembly and turn it to either side.
   - Tilting: hold the lamp assembly and tilt it up or down.

If the lamp heads become loose: tighten the screws located on each side of the lamp heads and the plastic nut located at the base of the bracket (See figure 3). **Warranty:** For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

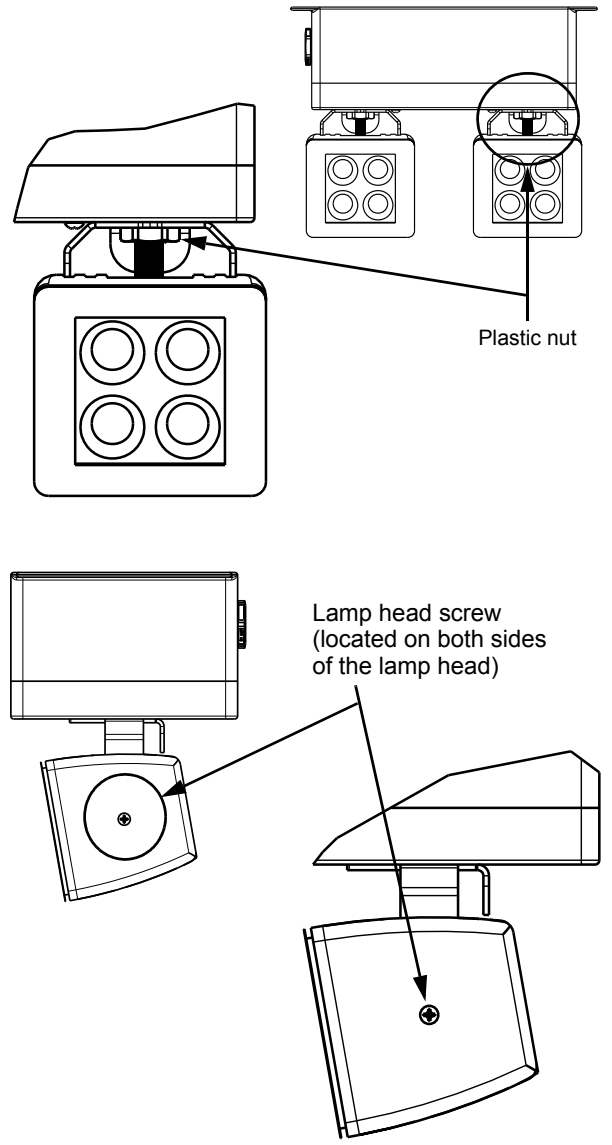


Figure 3

HP Series Industrial Battery Unit

Installation instructions

WARNING:
Risk of Electrical Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Servicing of this equipment should be performed by qualified service personnel.
2. All unused wires must be insulated to prevent shorting.
3. Turn off electrical power before and during installation and maintenance.
4. Keep tightly closed when in operation.
5. Use caution when handling batteries. Battery acid can cause burns to the skin and eyes. If acid is spilled on the skin or eyes, flush acid with fresh water and contact a physician immediatly. Avoid possible shorting.
6. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
8. Do not use this equipment for other than intended use.
9. Unit to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off unswitched AC power.

Wall mount

a. Open the cover (See figure 1). Select the entry point for the AC conduit (top or side) and remove one of the plastic bushings. For units with remote emergency lighting: remove the second bushing to install the conduit for DC wires.

b. Install the unit on the wall with 4 screws (not included). .

Mounting on a vertical pole (option)

a. The universal mounting bracket is an accessory ordered separately (See figure 2).

b. The bracket can be installed using steel banding for routing around the pole. Standard banding (not provided) must be maximum 3/4-in in width. The bracket can also be mounted on a Superstrut® metal framing (1 5/8-in channel series) using 1/4-in bolts (not provided). Holes are placed at 9-in apart horizontally.

c. Install the bracket, observing the indicator: TOP.

d. Slide the unit into the tabs located on both sides of the unit until it sits on the bottom lip of the bracket (See figure 2).

e. Screw the unit onto the bracket with the 4 screws, washers and nuts included in the bracket kit.

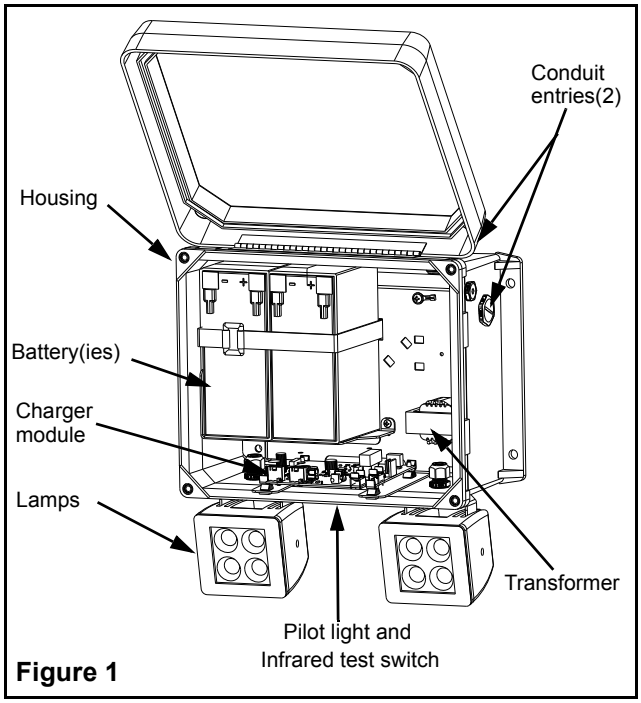


Figure 1

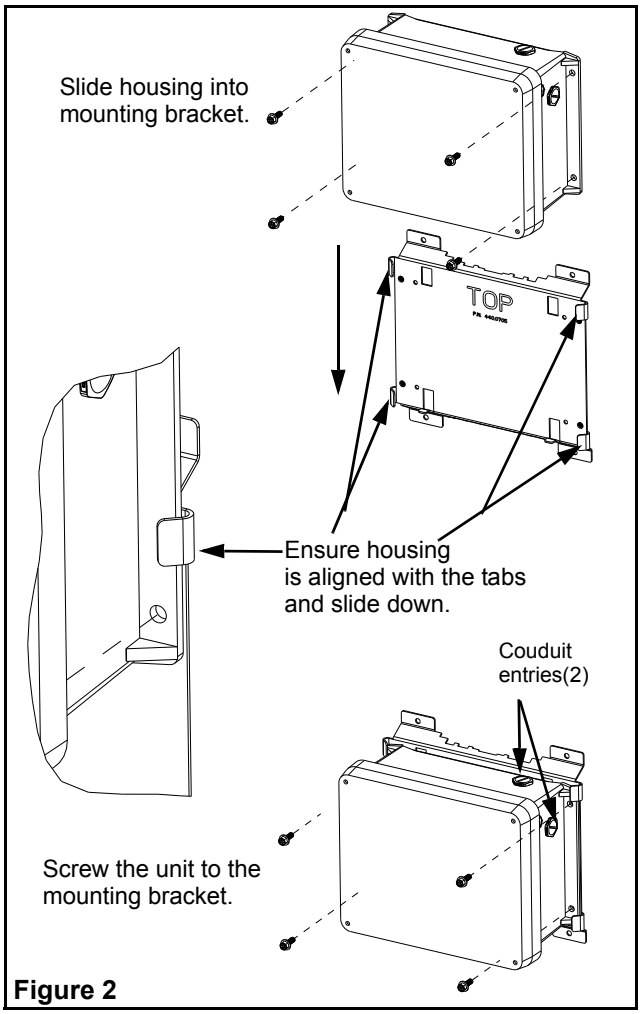


Figure 2

2. Install a water-tight hub (listed for Nema-4X) on the conduit, pass the hub through the cabinet hole and fasten the nut to secure a water-tight entry. If necessary, seal with silicone or equivalent caulking (not provided) to prevent water from leaking into the cabinet.
3. Units with remote emergency lighting: repeat the steps above to install the hub for the DC conduit.

WARNING: FAILURE TO ENSURE A WATER-TIGHT INSTALLATION OF THE CONDUIT AND HUB(S) WILL VOID THE MANUFACTURER WARRANTY.

4. Connect AC wires from building utility: install the ground wire**.**

a. Standard unit: connect the transformer primary wires to the utility: white wire to neutral; black (120Vac) or orange (277Vac) to line voltage (See figure 3).

Remote emergency lighting (option): connect the remote DC wires to the terminals of lamp circuit (Figure 3).

WARNING: LED EMERGENCY LIGHTS HAVE POLARIZED WIRES: OBSERVE POLARITY L+ AND L– FOR LOAD CONNECTION.

b. RFI (option): Connect output line (black) from RFI filter to the transformer primary: black (120Vac) or orange (277Vac). Connect RFI filter module to the utility: white wire to neutral, black wire (120/277Vac) to line (See figure 4).

5. Insulate the unused transformer wire with the wire nut.

Option cold-weather: An electric heater and a thermostat are used to control the ambient temperature inside the equipment.

Connections for 120Vac line voltage (Figure 5):

a. Install three red clips (provided) one on the yellow wire (heater), and white and black wires (transformer)
b. Connect **white** wire (heater) to clip of **yellow** wire (heater)
c. Connect **red** wire (heater) to clip of **white** wire (transformer)
d. Connect **red** wire (thermostat) to clip of **black** wire (transformer).

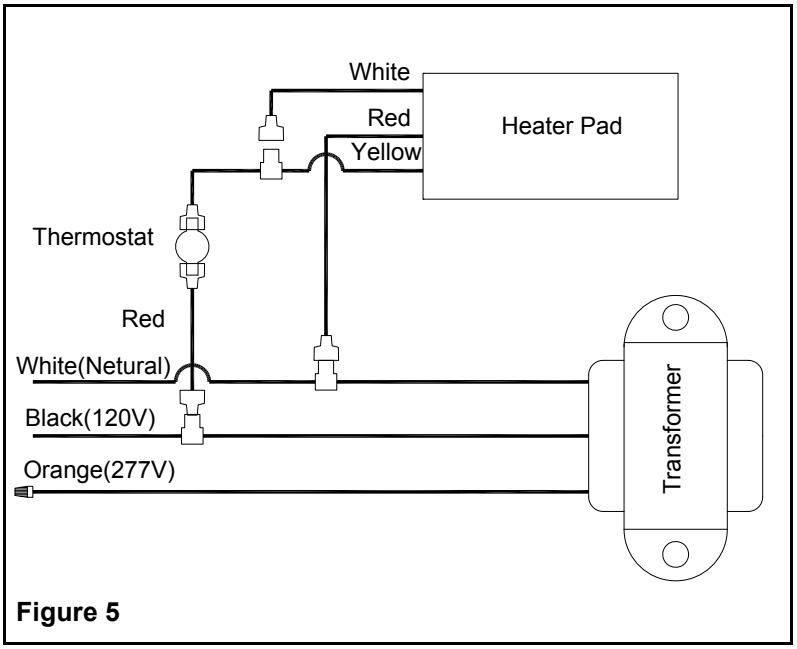


Figure 5

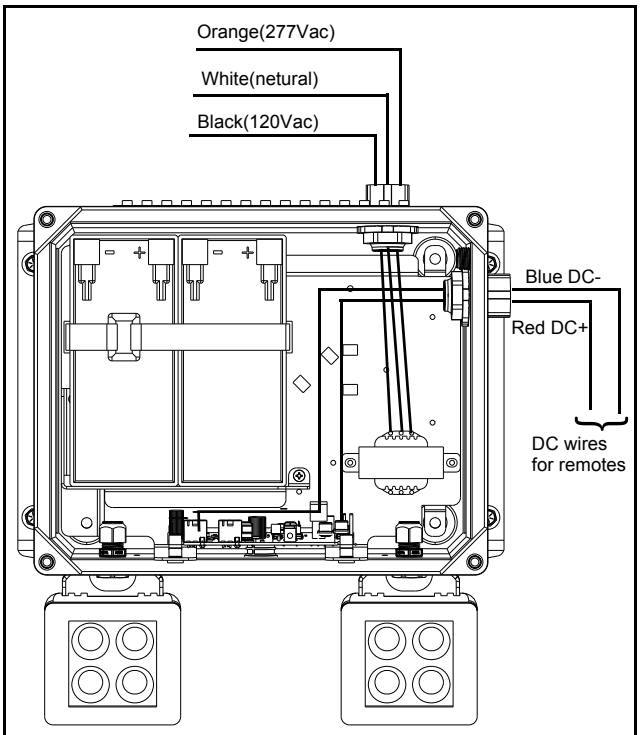


Figure 3

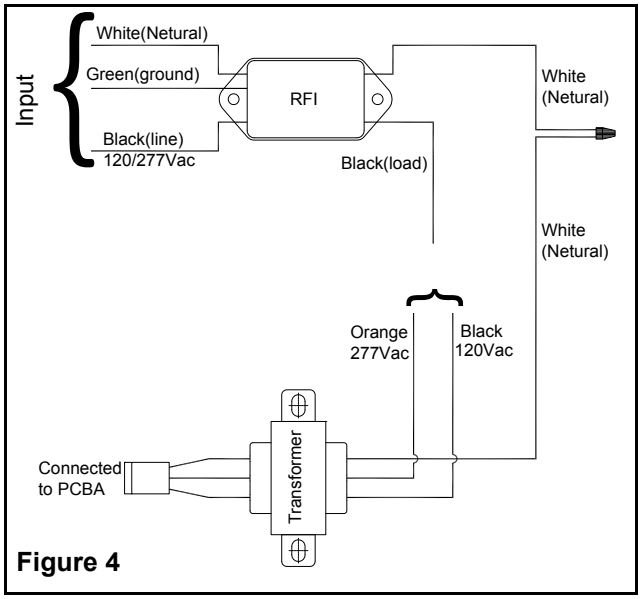


Figure 4

Maximum mounting height as per UL924 standards.

LED Lamp wattage	Maximum mounting height
6 - Watts	30 Feet
10 - Watts	50 Feet
15 - Watts	60 Feet

Connections for 277Vac line voltage (Figure 6):

a. Install three red clips (provided) one on the red wire (heater), and white and orange wires (transformer)
b. Self-connect **red** wire (heater) on its own clip (electrical cap)
c. Connect **white** wire (heater) to clip of **white** wire (transformer)
d. Connect **red** wire (thermostat) to clip of **orange** wire (transformer).

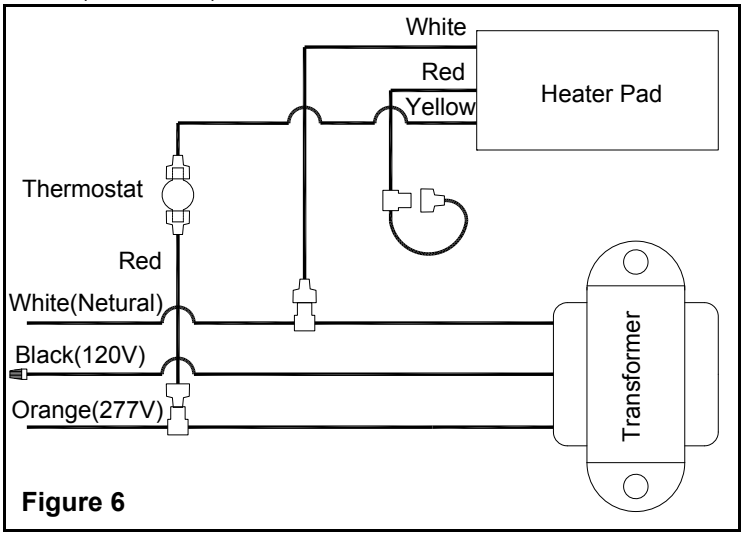


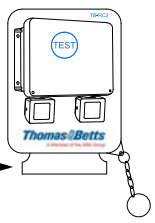
Figure 6

NEXUS (option): refer to page 4 for electrical connections and commissioning

6. Install the batteries - if shipped separately - and connect the battery wires to the charger board. Each battery has its own cable and must be connected to the charger.
7. Tighten the batteries and cables with the flexible Velcro strap.
8. Close the cover and tighten the screws.
9. Turn on AC power.

Manual Testing

The equipment comes standard with a one-key infrared remote control.
Before starting manual testing remove plastic tab from battery compartment on remote control.
To initiate a test: orient the remote control towards the pilot light of the unit and press the TEST button.



10. Test function (power on, stand-by): press the TEST button, the unit will start a one-minute test. Pressing the button again will abort the test in progress.
11. Load disconnect: this option can be used during a power failure to save battery power during daylight hours. Press the TEST button, the emergency lights will turn off. By pressing the test button again the emergency lights will turn back on.
12. On-charger manual test: the unit also has a test button installed on the charger module located on the bottom of the unit (See figure 7). This is useful during maintenance, with the unit door open. The button performs the same functions as the remote control.

Automatic self-test and diagnostic (Option)

13. Self-test: Once power is supplied to the unit it will automatically initiate a routine self-test calendar as follows:
    a. Verifies battery connection, battery failure, charger board failure and lamps failure
    b. Executes one-minute monthly self-test
    c. Executes a 30-minute self-test every 6th month
    d. Executes a 90-minute self-test every 12th month
14. Diagnostic: The unit is equipped with a bi-color LED pilot light and indicates the following status:
    a. Green color: AC-on / self-test
    b. Red color: Service alarm

A diagnostic label is placed on the unit cover.

O	Green	Steady	AC On
O	Green	Blinking	Testing Mode
O	Red	Steady On	Battery disconnect or Lamp disconnect
O	Red	One Blink	Battery Failure
OO	Red	Two Blinks	Charger Failure
OOO	Red	Three Blinks	Lamp Failure
OOOO	Red	Four Blinks	Heater Failure

Transfer time delay (Option)

This feature works when the AC power is restored: it keeps the emergency lights "on" for a period of: 5, 10 or 15 minutes (factory set). If the battery depletes before the end of the time delay, the lamps turn off and the unit goes in stand-by mode.

The Time Delay feature can be enabled or disabled in the field with the following procedure (See figure 7):

a. Make sure that the battery and the AC main power are both disconnected.
b. Disconnect the jumper JP4 to activate the Time Delay
c. Continue with the standard installation

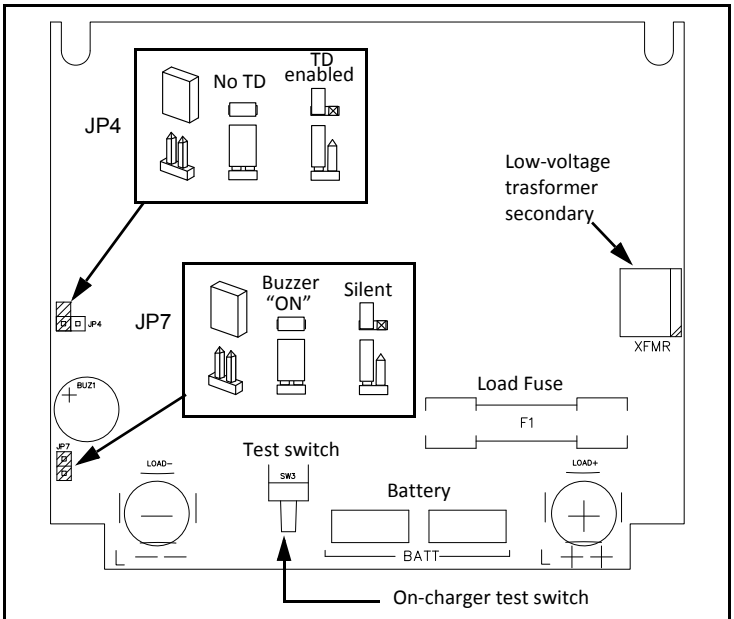


Figure 7 Charger module

Audible service alarm (Option)

This function acts in case of a Service alarm by generating a beep every two seconds.
During a service alarm the beep can be silenced by pressing the remote control test switch.
The audible service alarm can also be permanently disabled in the field by disconnecting the jumper JP7 (See figure 7).

NEXUS (Option)

a. NEXUS wireless (-NEXRF): the equipment has the antenna installed inside the housing (Figure 8).

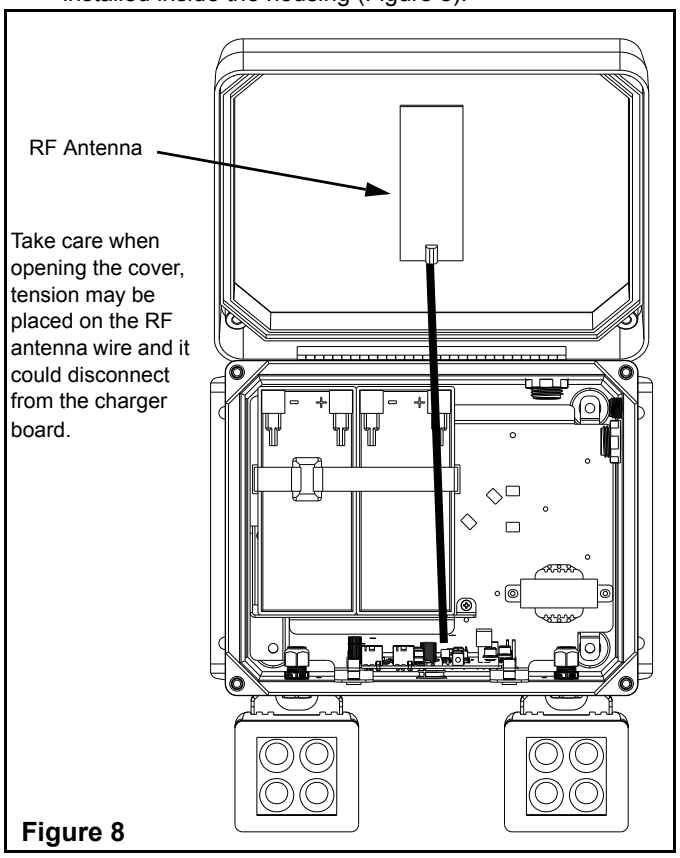


Figure 8

b. NEXUS wired (-NEX): Install a water-tight hub (listed for Nema-4X) on the conduit and pass the hub through the cabinet hole fastening the nut to ensure a water-tight entry. If necessary, seal with silicone or equivalent caulking (not provided) to prevent water leaking into the cabinet. Route the Nexus data cables into the unit through the conduit and hub and strip 1in(25mm) of the double insulation (see detail in figure 9). The two cables are identical and both contain 2 wires of different colors: color A and color B. Gather the color A wire from each cable, and connect them to the same pole on the terminal block. Gather the color B wire from each cable, and connect them to the other pole on the terminal block. The result must be 2 wires of the same color in each pole on the terminal block (see details in figure 9).

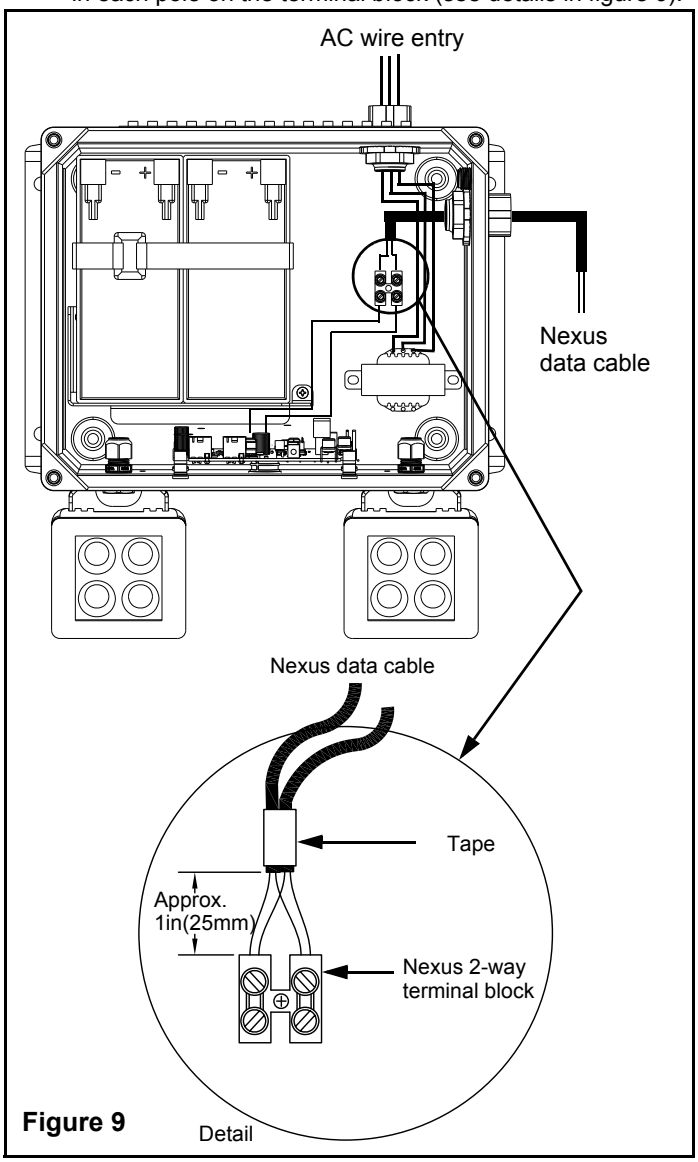


Figure 9

Status LED

LABEL		INDICATOR ACTIVITY	MEANING
●	AC ON	Steady green	AC on
-●	IN TEST	Blinking green	Testing in progress
●	BATTERY / LAMP DISCONNECT	Steady red	Battery disconnected and/or load disconnected
-●	BATTERY FAILURE	1 red blink, then a 5-second pause	Battery failure
●-●	CHARGER FAILURE	2 red blinks, then a 4-second pause	Charger failure
●-●-●	LAMP FAILURE	3 red blinks, then a 3-second pause	Lamp failure (combo & battery units only)
●-●-●-●	HEATER FAILURE	4 red blinks, then a 2-second pause	Heater Failure
○	SERVER FAILURE	Steady yellow	Server failure
-○	BLINK MODE	Blinking yellow	Wink mode
-●-○	NOT COMMISSIONED	Alternating yellow and green blinks	Unit not commissioned

⚠ WARNING:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference.
2. this device must accept any interference received, including interference that may cause undesired operation.

Maintenance

None required. If the AC power to the unit is to be disconnected for two months more: the battery must be disconnected.

Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

Class I Division 2 – Groups A, B, C & D

Hazardous locations remote lighting fixture, Models EF11 or EF11D

These are UL listed for use with Emergi-Lite emergency lighting units HZM Series.

Installation Instructions

1. Use a conduit to bring the DC supply wires into the electrical box. Leave 6" of wire length in the junction box.
2. Fix the junction box to the wall or ceiling (screws not provided).
3. All the conduit holes have been sealed with a plug except one. Use the conduit hole that is left open to insert the conduit. To ensure that 3 ½ threads are readily engaged, we added some thick petroleum grease to each plug's threads. If you need to use another conduit hole, remove the plug, re-install it in another hole left open, if applicable, adding thick grease to the threads. Make sure every conduit hole is sealed properly with a plug or a conduit.
4. Make the proper connections. The fixture is made for 6 or 12 VDC (see lamp voltage on marking – H7553 6V 12W & H7557 6V 12W sealed beam lamps only). Connect the white wires to the DC supply wires.
5. Place the gasket on top of the junction box, and then the lamp-cover-assembly. Use the two cover screws to fix in place (see fig. 1).
6. All wiring must be to NEC 501-4 (b) wiring methods.

To replace a lamp head

To replace the head(s), you need to change the lamp-cover-assembly.

1. Remove the 2 screws holding the junction box cover.
2. Replace the old lamp-cover-assembly by the new one. Fix with the cover screws.

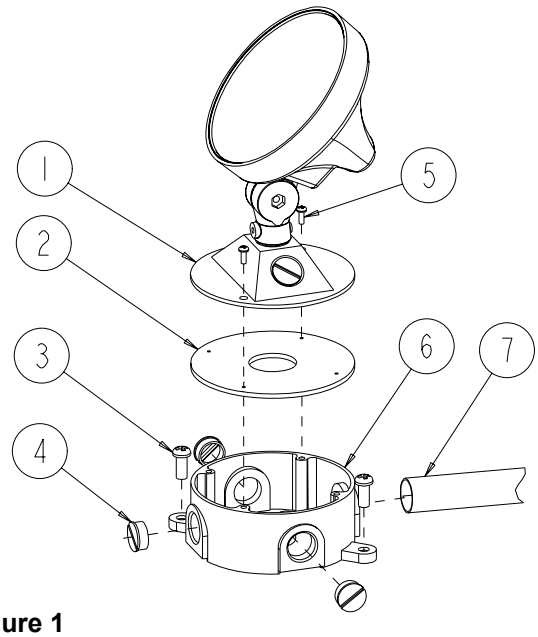


Figure 1

Part List

1. Lamp-cover-assembly
2. Gasket
3. Junction box screw (2, not provided)
4. Plug (4)
5. Cover screw (2)
6. Junction box
7. Conduit (not provided)

Recessed Emergency Light

Installation Instructions

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

1. **READ AND FOLLOW ALL SAFETY INSTRUCTIONS**
2. Do not use outdoors.
3. Do not let power supply cord touch hot surfaces.
4. Do not mount near gas or electric heaters.
5. Use caution when handling batteries. Battery acid can cause burn to skin and eyes. If acid is spilled on skin or eyes, flush acid with fresh water and contact a physician immediately.
6. Equipment should be mounted in locations and at heights to prevent tampering by unauthorized personnel.
7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
8. CAUTION: If halogen cycle lamp(s), symbol (H_) are used in this equipment to avoid shattering: do not operate lamp in excess of rated voltage. Protect lamp against abrasion, scratches, and liquids when lamp is operating, dispose of lamp with care.
9. Halogen cycle lamps operate at high temperatures. do not store flammable materials near lamp.
10. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

TESTING

Press and hold the test switch, the emergency lamp will illuminate. Release test switch, the emergency lamp will extinguish and pilot lights will be illuminated. Prior to initial full load testing, unit should be on for 24 hours to allow the battery sufficient time to reach full charge.

CAUTION

This equipment is supplied with a "state of the art" low end battery voltage disconnect circuit to prevent over discharge of the battery. When the battery voltage reaches a pre-set low level, the emergency lamp will automatically be disconnected from the battery.

IMPORTANT NOTICE

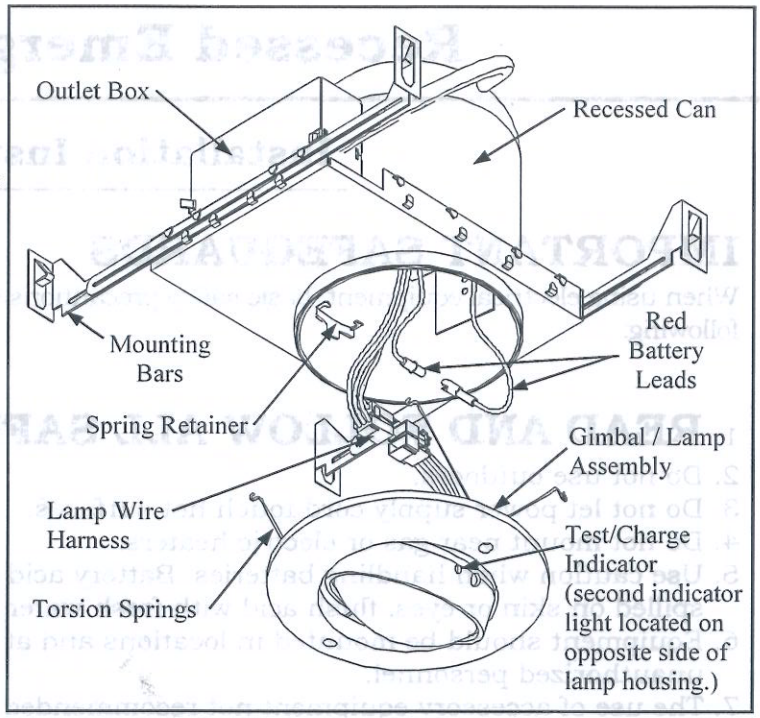
If the AC Supply to this unit is to be disconnected for 2 months or more, the battery must be disconnected.

MAINTENANCE

None required. The unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code, State or local codes.

ALL SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL

INSTALLATION



1. Turn off A.C. power before installation or servicing.
2. Carefully remove unit from carton. Place Gimbal / Lamp assembly aside. Assemble Mounting bars to Recessed can assembly and install in ceiling . (See below "Installing Fixture in Ceiling")
3. Run wires into Outlet Box using knockouts. Leave 6 - 8 inches of wire in Outlet Box .
   NOTE: Circuit must be from a 24 hour, unswitched 120V or 277V line.
4. Remove AC wire harness in Outlet Box and connect stripped ends to AC power as follows:
   Connect Black lead to 120 volt connection, or Orange lead for 277 volt connection.
   NOTE: Insulate the unused black or orange lead. Connect green (ground) lead and white (neutral) lead to AC service wires. Then replace Outlet Box Door.
5. Connect Red Battery Lead by joining the two piece connector inside the recessed can.
6. Connect lamp wire harness to mating connector . Install Gimbal/Lamp Assembly in Recessed Can. Carefully Compress Torsion Springs and release in spring retainer. Once the two torsion spring assemblies are in place push the Gimbal assembly into the recessed can.
7. The Indicator Lights will be lit when AC circuit is energized. To test the unit, simulate a power outage by pressing and holding the Test Button. Indicator Lights will turn off and the emergency light will turn on.

INSTALLING FIXTURE IN CEILING

Joist type ceilings (Fig. 1): Extend bar hangers to fit between joists. Position fixture temporarily by hammering **nail-in tabs** into joists, then secure permanently with nails. Hangers should be level with bottom of joists. Suspended (T-bar) Ceilings (Fig. 2): Extend bar hangers one inch past T-bars, then rest fixture on T-bars. Properly secure the fixture to ceiling joists with wire (not included).

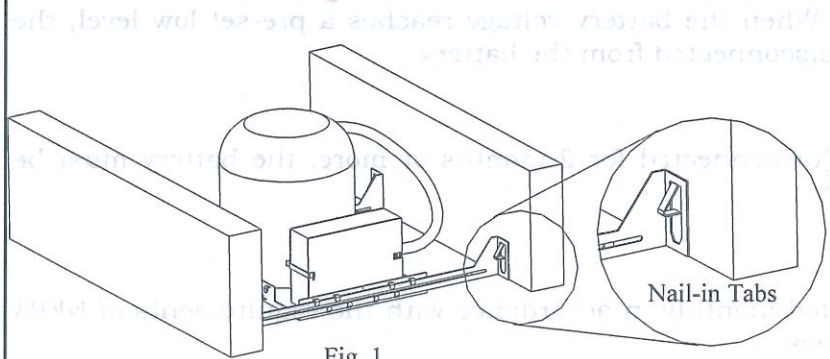


Fig. 1

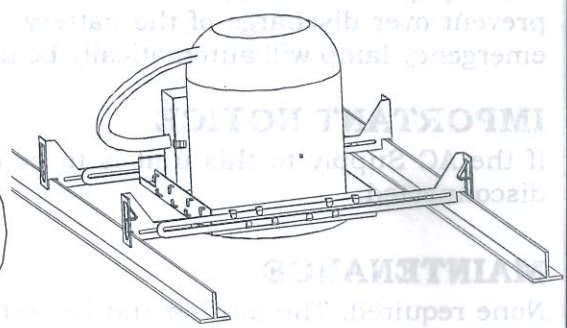


Fig. 2

ALL SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL

FLUORESCENT EMERGENCY BALLAST

3000 LUMENS
(AC OUTPUT, TIME DELAY)
INSTALLATION INSTRUCTIONS

When using this lighting device
safety precautions should be followed at all times

PLEASE READ CAREFULLY AND FOLLOW ALL INSTRUCTIONS FOR YOUR OWN SAFETY

1. Prior to installation, battery connector must be open to prevent high voltage from being present on out put leads (red & yellow). It must be connected only after installation is complete and A.C. Power is supplied to the unit.
2. This unit can operate commonly used linear and compact fluorescent lamps. Please refer to the "lamps list" label on the ballast for specific lamp information.
3. Please ensure the electricity connections conform to the National Electrical Code and local regulations if applicable.
4. To avoid electric shock, please disconnect normal and emergency power supplies, and battery connector of the emergency ballast before servicing.
5. This device is designed for factory or field installation in either the ballast channel, or on top of the fixture, except air handling heated air outlets, sealed and gasketed fixtures, wet or hazardous location fixtures. Do not install this device near gas or electric heaters.
6. AC power source of 120 VAC or 277 VAC is required.
7. The battery is sealed, no-maintenance, and is not replaceable in the field. Please contact manufacturer for information on service. Do not attempt to service the battery please.
8. Do not use accessory equipment that is not recommended by manufacturer. Failure to do so may cause unsafe conditions. Servicing should only be performed by qualified service personnel.
9. Do not use the product for other than it's intended purpose.

CAUTION: Verify that all replacement lamp types marked on the installed luminaire are also identified as suitable for use with this inverter/ charger pack.

PLEASE SAVE THESE INSTRUCTIONS

INSTALLATION INSTRUCTIONS

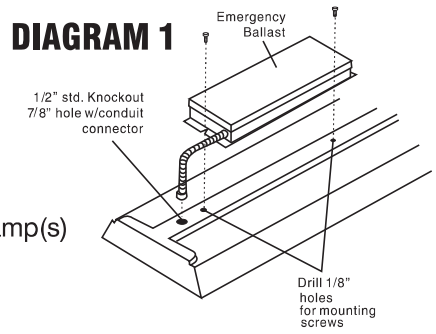
CAUTION: Before installing, make certain the A.C. Power is off and the EMERGENCY BALLAST'S unit connector is disconnected.

1. MOUNTING THE EMERGENCY BALLAST(BATTERY PACK)

Mount the **EMERGENCY BALLAST** on the back of the fixture as shown in diagram 1.

When battery packs are remote mounted, the remote distance can not exceed 1/2 of the distance from ballast to lamp specified by the A.C. ballast manufacturer. For example, if the A.C. ballast manufacturer recommends no more than 25' remote distance, then the battery pack's remote mounting distance should not exceed 12 1/2'. Under no circumstances should the battery pack exceed a distance of 50' from the lamp(s).

DIAGRAM 1



2. WIRING

Refer to the wiring diagrams on the back page for the appropriate wiring of lamp(s) and ballast. Install in accordance with the National Electrical Code and local regulations. For additional wiring diagrams consult Customer Service.

3. INSTALLING THE LED COMBO TEST SWITCH(LCTS)

Recessed Troffer Fixture - Select a convenient location with proper clearance in the ballast cover and drill or punch a 7/8" hole(1/2" knockout). Insert the 7/8" bushing into the hole. Push the plastic tube through the bushing. Route the leads of the **LCTS** through the plastic tube. Connect the wires from the unit to the **LCTS**(VIOLET to VIOLET, BROWN to BROWN). Push the entire assembly back into the tube until the lens collar rests against the plastic tube. The plastic tube should be adjusted so that the **LCTS** is within 1/4"of the fixture lens. The **LCTS** must be visible after installation. Refer to *Illustration 1*.

Strip Fixture - Select a convenient location on the fixture so the **LCTS** can be seen after installation. Allow for proper clearance inside the fixture and drill or punch a 1/2" hole. Remove the nut from the **LCTS**. Push the **LCTS** housing into the 1/2" hole and secure with the nut. Connect the wires from the **LCTS** (VIOLET to VIOLET, BROWN to BROWN). Refer to *Illustration2*.

Illustration 1

TROFFER STYLE FIXTURE

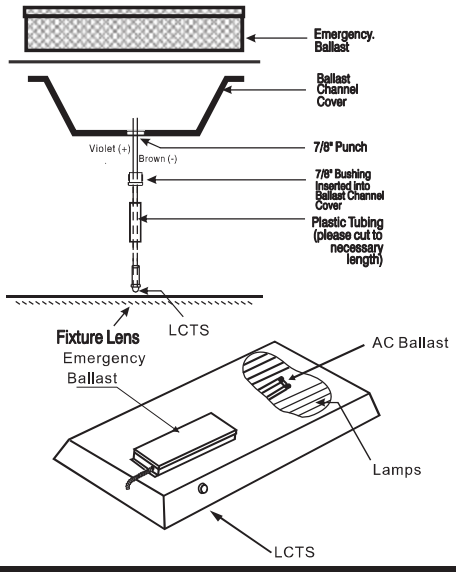
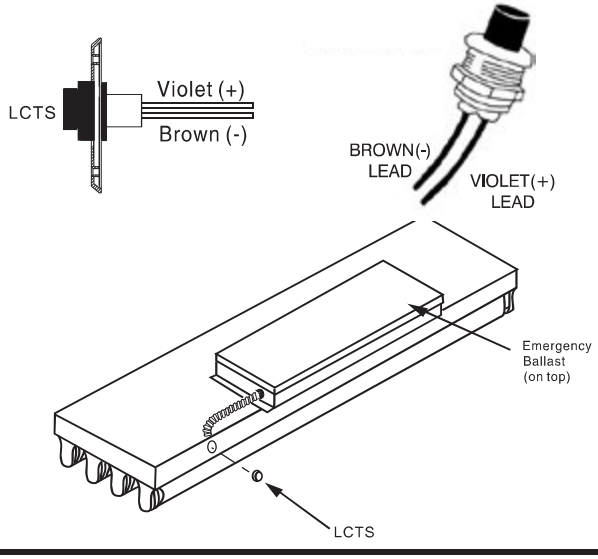


Illustration 2

STRIP STYLE FIXTURE



4. WIRING THE A.C. INPUT

A. The **EMERGENCY BALLAST** and A.C. ballast ***must*** be on the same branch circuit

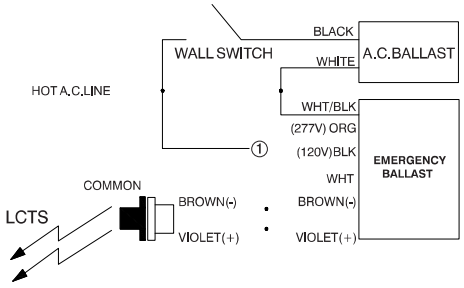
B. The **EMERGENCY BALLAST** requires an ***unswitched*** A.C. power source of either 120 or 277 volts. Select the proper voltage lead and cap the unused lead.

C. When the **EMERGENCY BALLAST** is used with a switched fixture, A.C. Input to the **EMERGENCY BALLAST** must be connected ahead of the fixture switch. Refer to *Illustration 3* for switched and unswitched fixture wiring diagrams.

5. BALLAST WIRING BLOCK DIAGRAM

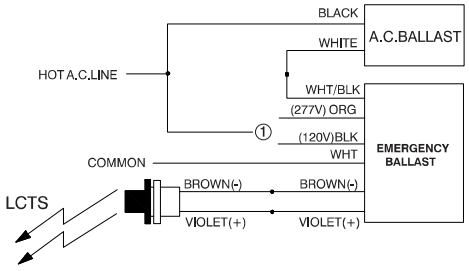
Illustration 3

Switched Fixture



① Select proper voltage lead.Cap unused lead.

Unswitched Fixture



① Select proper voltage lead.Cap unused lead.

6. LABELS

Attach the appropriate labels adjacent to the **LCTS.** Annotate Re-lamping label for lamp type and wattage. The 'Caution' and the 'Re-lamping' labels must be on the fixture in a readily visible location to anyone attempting to service the fixture.

7. COMPLETING INSTALLATION

When the installation is complete, switch the A.C. power ON and join the **EMERGENCY BALLAST' S** unit connector.

OPERATION

Normal Mode - A.C. power is present. The A.C. ballast operates the fluorescent lamp(s) as intended. The **LCTS** will be lit providing a visual indication that the **EMERGENCY BALLAST** is in the standby charging mode.

Emergency Mode - A.C. power fails. The **EMERGENCY BALLAST** senses the A.C. power failure and automatically switches to the *Emergency Mode*. One or two lamps illuminate at reduced output, for a minimum of 90 minutes. When A.C. Power is restored, the **EMERGENCY BALLAST** switches the system back to the *Normal Mode* and resumes battery charging.

TESTING & MAINTENANCE

Pressing the red lens on the LCTS turns off the light on it, interrupts power to the designated A.C. ballast and forces the unit into emergency mode. The emergency lamp (s) is (are) now lit by the **EMERGENCY BALLAST**. On releasing the lens, fixture returns to normal mode after a momentary delay. To simulate a "BLACK OUT" use the circuit breaker to turn off the AC power.

Initial Testing - Allow the unit to charge for approximately 1 hour, then press the **LCTS** to conduct a short discharge test. Allow a 24 hour charge before conducting a 1½ hour test.

This **EMERGENCY BALLAST** is a maintenance free unit, however, periodic inspection and testing is required. NFPA 101, Life Safety Code, outlines the following schedule:

Monthly - Insure that the **LCTS** is illuminated. Conduct a 30 second discharge test by depressing the **LCTS**. One lamp should operate at reduced output.

Annually - Insure that the **LCTS** is illuminated. Conduct a full 1½ hour discharge test. The unit should operate as intended for the duration of the test.

"Written records of testing shall be kept by the owner for inspection by the authority having jurisdiction."

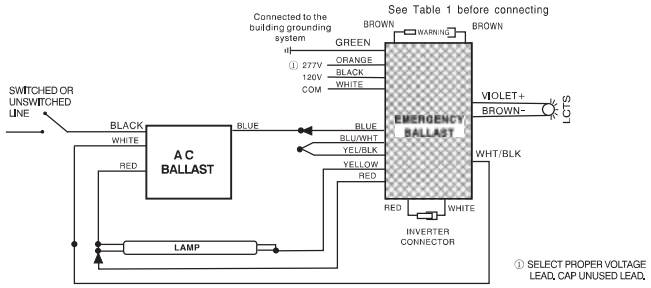
SERVICING SHOULD BE PERFORMED BY QUALIFIED PERSONNEL

WIRING DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

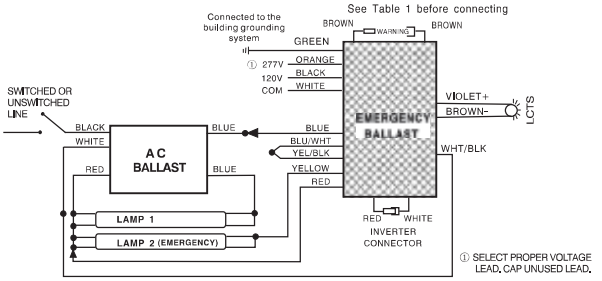
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

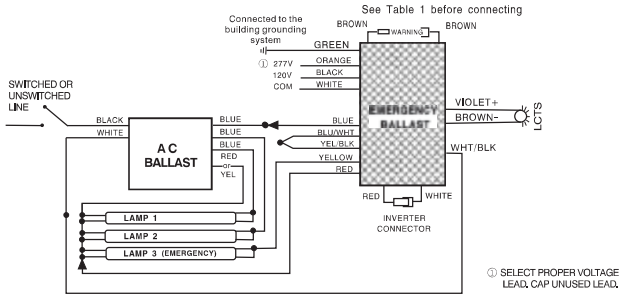
E. ONE (1) LAMP INSTANT START BALLAST



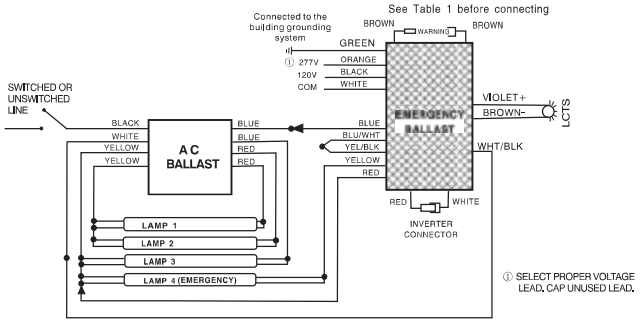
F. TWO (2) LAMP INSTANT START BALLAST



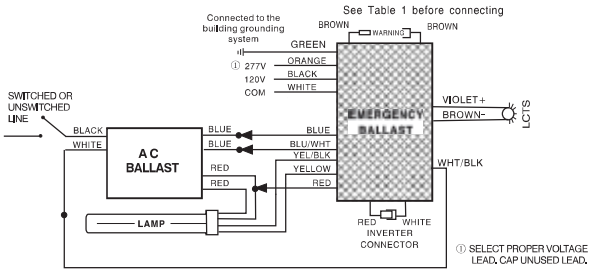
G. THREE (3) LAMP INSTANT START BALLAST



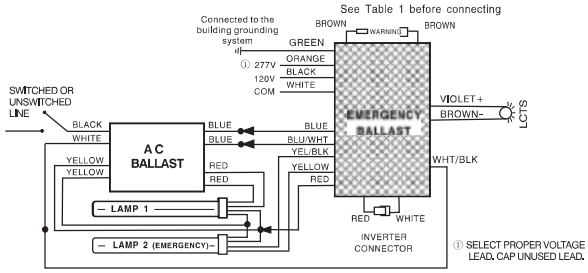
H. FOUR (4) LAMP INSTANT START BALLAST



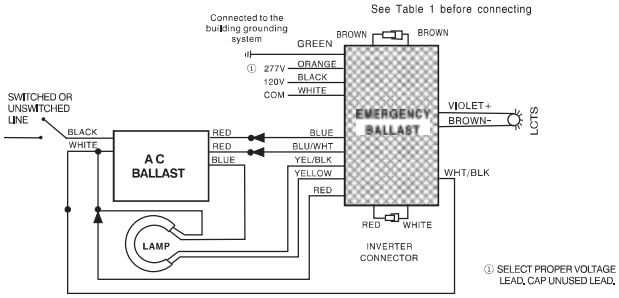
I. ONE (1) 4-PIN COMPACT LAMP RAPID START BALLAST



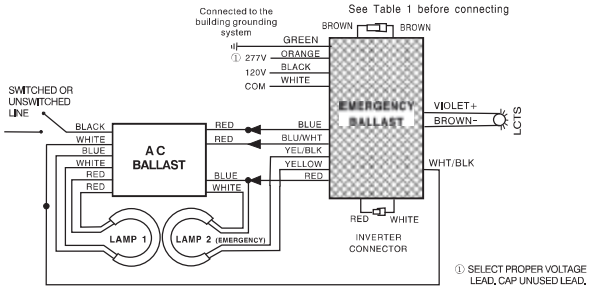
J. TWO (2) 4-PIN COMPACT LAMP RAPID START BALLAST



K. ONE (1) LAMP CIRCLINE RAPID START BALLAST



L. TWO (2) LAMP CIRCLINE RAPID START BALLAST



NOTE : USE PROPER TAP TO CAP UNUSED LEAD

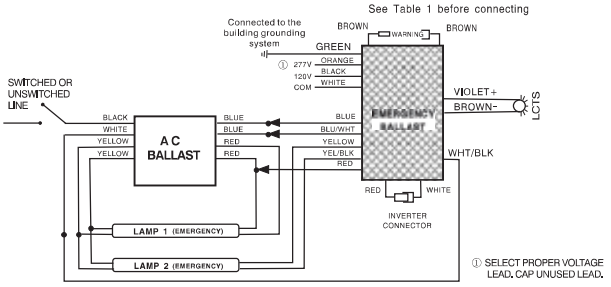
WIRING DIAGRAMS FOR 2-LAMP EMERGENCY OPERATION

EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

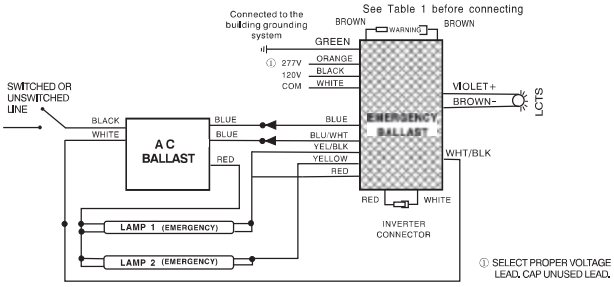
TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

Two-lamp emergency operation is not possible with all ballasts.
Consult the factory for any ballast other than those shown below.

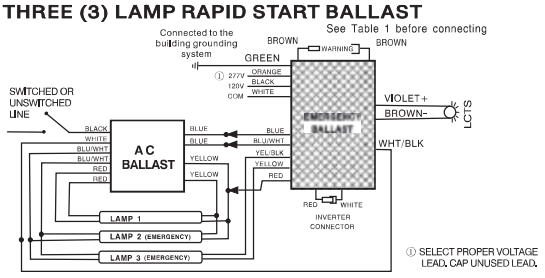
M. TWO (2) LAMP RAPID START BALLAST



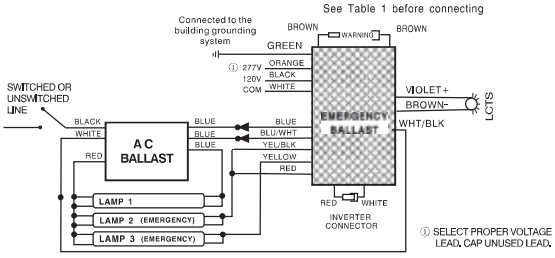
N. TWO (2) LAMP INSTANT START BALLAST



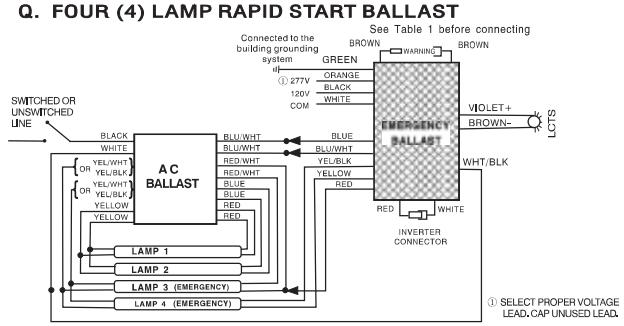
O. THREE (3) LAMP RAPID START BALLAST



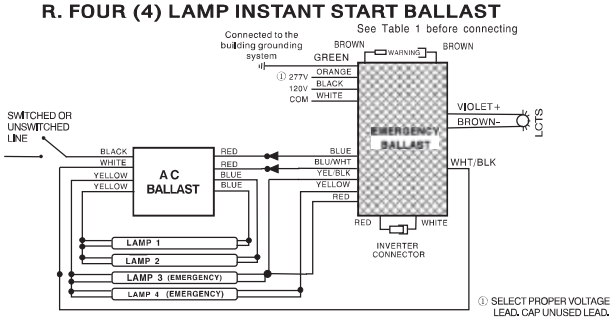
P. THREE (3) LAMP INSTANT START BALLAST



Q. FOUR (4) LAMP RAPID START BALLAST

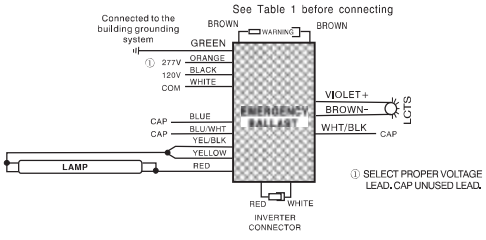


R. FOUR (4) LAMP INSTANT START BALLAST

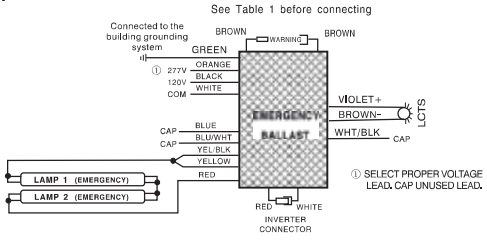


WIRING DIAGRAMS for EMERGENCY-ONLY fixtures

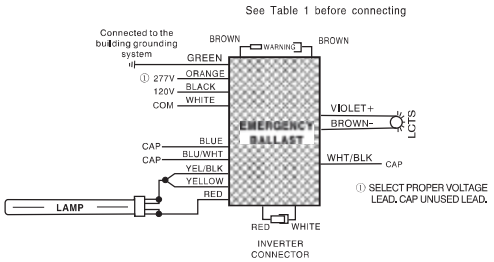
S. ONE (1) LAMP WITHOUT AC BALLAST



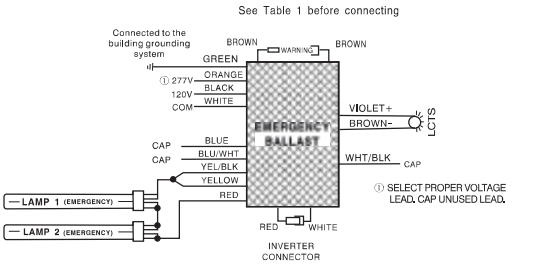
T. TWO (2) LAMPS WITHOUT AC BALLAST



U. ONE (1) 4-PIN COMPACT LAMP WITHOUT AC BALLAST



V. TWO (2) 4-PIN COMPACT LAMPS WITHOUT AC BALLAST



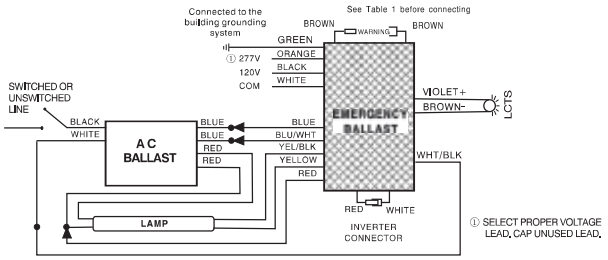
NOTE : USE PROPER TAP TO CAP UNUSED LEAD

WIRING DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

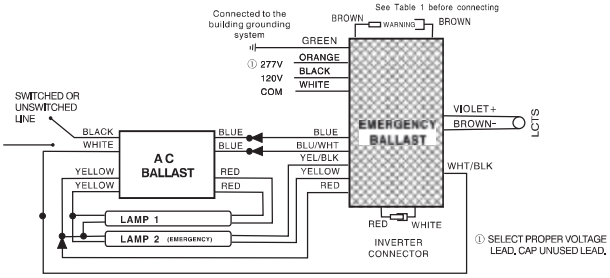
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

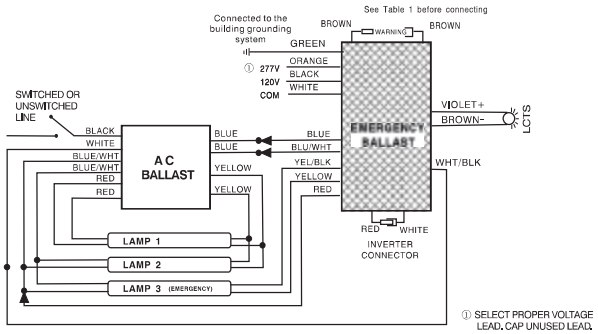
A. ONE (1) LAMP RAPID START BALLAST



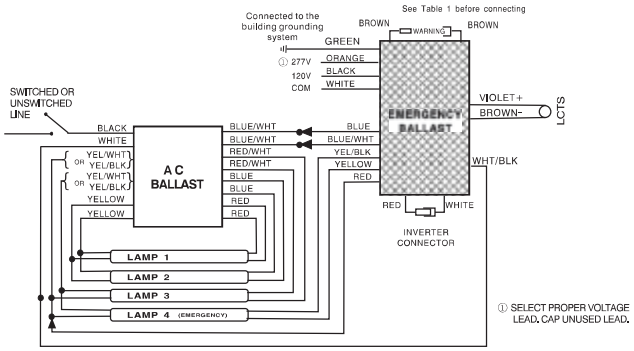
B. TWO (2) LAMP RAPID START BALLAST



C. THREE (3) LAMP RAPID START BALLAST



D. FOUR (4) LAMP RAPID START BALLAST



NOTE : USE PROPER TAP TO CAP UNUSED LEAD

WIRING DIAGRAMS:

The following diagrams are typical schematics only. May be used with other ballasts. Consult the factory for other wiring diagrams. Emergency Ballast and AC Ballast must be fed from the SAME BRANCH CIRCUIT.

TABLE 1 (FOR BROWN CONNECTOR)

LAMP DIAMETER	BASE TYPE	WATTAGE (LENGTH)	NO.OF LAMPS (EMERGENCY MODE)	BROWN CONNECTOR
T5 (for Emergency-only operation)	SINGLE OR BIPIN	8,14,21W (1'-2'-3')	1/2	CLOSE
T5 (for Emergency-only operation)	SINGLE OR BIPIN	28W (4')	1	CLOSE
T5 (for Emergency-only operation)	SINGLE OR BIPIN	28W (4')	2	OPEN
T5 HO (for Emergency-only operation)	SINGLE OR BIPIN	39W (3')	1	CLOSE
T5 HO (for Emergency-only operation)	SINGLE OR BIPIN	39W (3')	2	OPEN
T5 HO (for Emergency-only operation)	SINGLE OR BIPIN	54W (4')	1	CLOSE
T5 HO (for Emergency-only operation)	SINGLE OR BIPIN	54W (4')	2	OPEN
T8	SINGLE OR BIPIN	17,25,32W (2'-3'-4')	1/2	CLOSE
T8	SINGLE OR BIPIN	40W (4'/5')	1	CLOSE
T8	SINGLE OR BIPIN	40W (4'/5')	2	OPEN
T12	SINGLE OR BIPIN	20,34,40W (2'-4'-4')	1/2	CLOSE
T12	SINGLE OR BIPIN	110W (8')	1	CLOSE
T12	SINGLE OR BIPIN	215W (8')	1	OPEN
COMPACT	G24q-1(4pin) G24q-2(4pin) G24q-3(4pin)	13,18,26W	1/2	CLOSE
LONG COMPACT	2G11(4pin)	18,24,36W	1/2	CLOSE
LONG COMPACT	2G11(4pin)	40W	1	CLOSE
LONG COMPACT	2G11(4pin)	40W	2	OPEN
LONG COMPACT	2G11(4pin)	50W	1	CLOSE
LONG COMPACT	2G11(4pin)	50W	2	OPEN
CIRCULAR T9	4-pin	20,32,40W	1/2	CLOSE
U-bend T8	Bi-pin	32W	1/2	CLOSE
U-bend T12	Bi-pin	34W	1/2	CLOSE

FLUORESCENT EMERGENCY BALLAST

750 LUMENS
4-PIN COMPACT FLUORESCENT LAMPS
INSTALLATION INSTRUCTIONS

When using this lighting device
safety precautions should be followed at all times

PLEASE READ CAREFULLY AND FOLLOW ALL INSTRUCTIONS FOR YOUR OWN SAFETY

1. Prior to installation, battery connector must be open to prevent high voltage from being present on out put leads (red & yellow). It must be connected only after installation is complete and A.C. Power is supplied to the unit.
2. This unit can operate commonly used linear and compact fluorescent lamps. Please refer to the “lamps list” label on the ballast for specific lamp information.
3. Please ensure the electricity connections conform to the National Electrical Code and local regulations if applicable.
4. To avoid electric shock, please disconnect normal and emergency power supplies, and battery connector of the emergency ballast before servicing.
5. This device is designed for factory or field installation in either the ballast channel, or on top of the fixture, except air handling heated air outlets, sealed and gasketed fixtures, wet or hazardous location fixtures. Do not install this device near gas or electric heaters.
6. AC power source of 120 VAC or 277 VAC is required.
7. The battery is sealed, no-maintenance, and is not replaceable in the field. Please contact manufacturer for information on service. Do not attempt to service the battery.
8. Do not use accessory equipment that is not recommended by manufacturer. Failure to do so may cause unsafe conditions. Servicing should only be performed by qualified service personnel.
9. Do not use the product for other than it’s intended purpose.

CAUTION: Verify that all replacement lamp types marked on the installed luminaire are also identified as suitable for use with this inverter/ charger pack.

PLEASE SAVE THESE INSTRUCTIONS

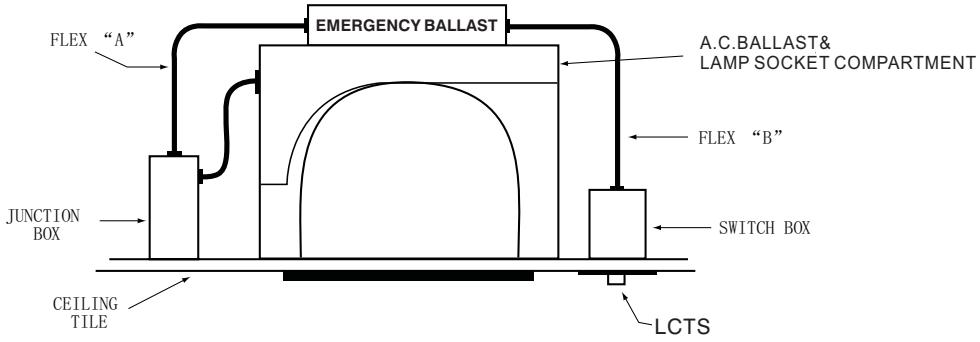
INSTALLATION INSTRUCTIONS

CAUTION: Before installing, make certain the A.C. power is off and the EMERGENCY BALLAST' S unit connector is disconnected.

1. MOUNTING THE EMERGENCY BALLAST(BATTERY PACK)

When used with ceiling mounted downlight fixtures, the **EMERGENCY BALLAST** should be mounted on the fixture above the ceiling. The flex conduit marked " A" should be wired into the ballast/lamp compartment or to an electrical junction box on the fixture which allows access to the ballast/lamp connection. Refer to *Illustration 1* for typical mounting.

Illustration 1 **Downlight Fixture**



When battery packs are remote mounted, the remote distance cannot exceed 1/2 of the distance from ballast to lamp(s) specified by the A.C. ballast manufacturer. Under no circumstances should the battery pack exceed a distance 10' from the lamp.

2. INSTALLING THE LED COMBO TEST SWITCH(LCTS)

Cut the single gang switch box into the ceiling tile adjacent to the fixture within reach of the **EMERGENCY BALLAST** flex marked "B". After mounting the switch box, connect flex "B" to the box and route all leads inside the box. Refer to *Illustration 1* for typical mounting.

3. WIRING

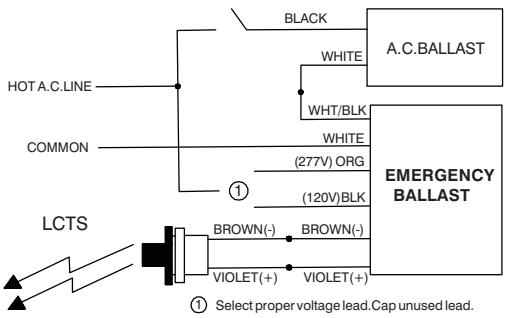
A. The **EMERGENCY BALLAST** and A.C. Ballast ***must*** be on the same branch circuit.

B. This **EMERGENCY BALLAST** requires an ***unswitched*** A.C. Power source of either 120 or 277 volts; therefore, when used with switched fixtures, input to the **EMERGENCY BALLAST** must be wired ahead of the switch. Refer to Illustration 2 for switched and unswitched fixture wiring diagrams.

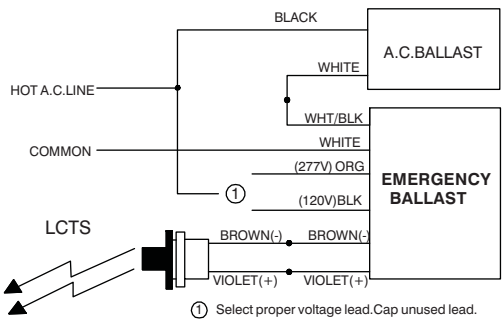
C. Refer to the wiring diagrams on the back page for proper wiring. For wiring diagrams of ballasts not shown, consult our customer service.

Illustration 2

Switched Fixture



Unswitched Fixture



4. LABELS

Attach the appropriate labels adjacent to the **LCTS**. Annotate Re-lamping label for lamp type and wattage. The 'Caution' and the 'Re-lamping' labels must be on the fixture in a readily visible location to anyone attempting to service the fixture.

INSURE WIRING IS IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND LOCAL REGULATIONS.

5. COMPLETING INSTALLATION

When the installation is complete, switch the A.C. power ON and join the **EMERGENCY BALLAST' S** unit connector.

OPERATION

General-This unit is primarly designed to be used with compact fluorescent lamp downlight fixtures. It will wire in conjunction with the existing A.C. Ballast(s) and lamp(s) to provide the emergency function. It can also be wired for emergency only operation.

Normal Mode - A.C. power is present. The A.C. ballast operates the fluorescent lamp(s) as intended. The **LCTS** will be lit providing a visual indication that the **EMERGENCY BALLAST** is in the standby charging mode.

Emergency Mode - The A.C. power fails. The **EMERGENCY BALLAST** senses the A.C. power failure and automatically switches to the *Emergency Mode*. One or two lamps illuminate, at reduced output, for a minimum of 90 minutes. When the A.C. Power is restored, the **EMERGENCY BALLAST** switches the system back to the *Normal Mode* and resumes battery charging.

TESTING & MAINTENANCE

Pressing the red lens on the **LCTS** turns off the light on the **LCTS** and forces the unit into emergency mode. This interrupts power to the emergency lamps only. The emergency lamp is now being lit by the **EMERGENCY BALLAST** unit and will be less bright than the other lamps in the system. To simulate a "BLACK OUT" use the circuit breaker to turn off A.C. Power.

Initial Testing - Allow the unit to charge for approximately 1 hour, then press the **LCTS** to conduct a short discharge test. Allow a 24 hour charge before conducting a 1½ hour test.

This **EMERGENCY BALLAST** is a maintenance free unit, however, periodic inspection and testing is required. NFPA 101, Life Safety Code, outlines the following schedule:

Monthly - Insure that the **LCTS** is illuminated. Conduct a 30 second discharge test by depressing the **LCTS**. One or two lamps should operate at reduced output.

Annually - Insure that the **LCTS** is illuminated. Conduct a full 1½ hour discharge test. The unit should operate as intended for the duration of the test.

WIRING DIAGRAMS FOR 2 - LAMP EMERGENCY OPERATION

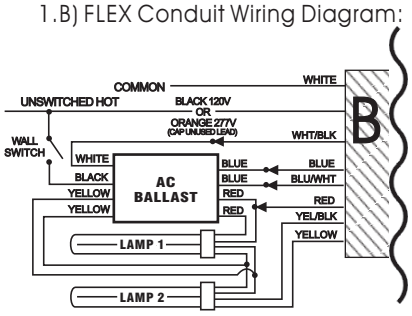
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

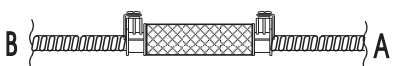
TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

Two lamp emergency operation

A. TWO (2) FOUR PIN COMPACT LAMP RAPID START BALLAST

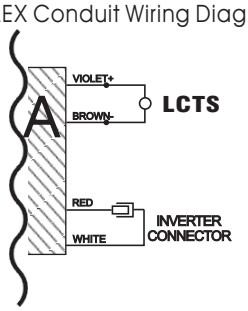
1.B) FLEX Conduit Wiring Diagram:





EMERGENCY
BALLAST

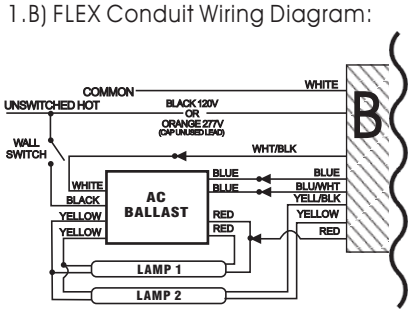
2.A) FLEX Conduit Wiring Diagram:

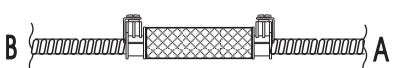


TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

B. TWO (2) LAMP RAPID START BALLAST

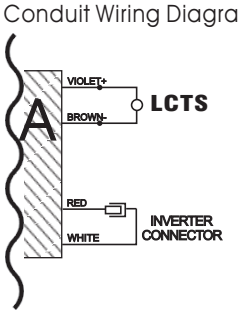
1.B) FLEX Conduit Wiring Diagram:





EMERGENCY
BALLAST

2.A) FLEX Conduit Wiring Diagram:



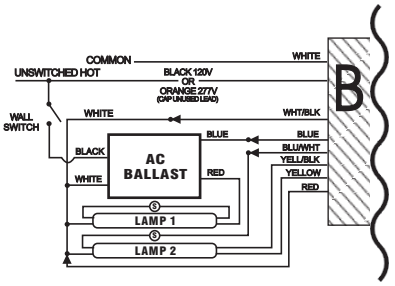
WIRE DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

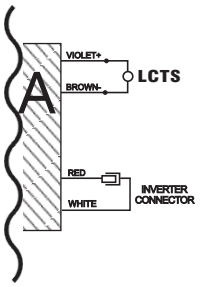
C. TWO (2) LAMP PREHEAT BALLAST (Lamp 2 operates in emergency mode)

1.B) FLEX Conduit Wiring Diagram:



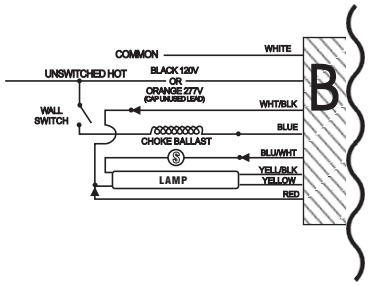


2.A) FLEX Conduit Wiring Diagram:



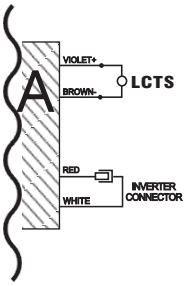
D. ONE (1) LAMP CHOKE BALLAST

1.B) FLEX Conduit Wiring Diagram:



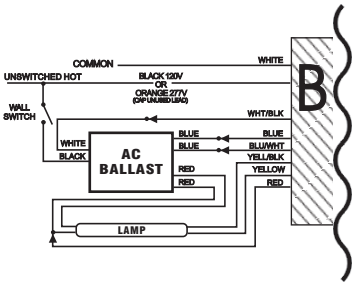


2.A) FLEX Conduit Wiring Diagram:



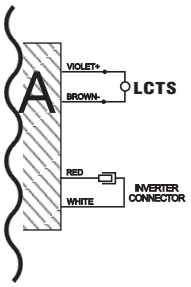
E. ONE (1) LAMP RAPID START BALLAST

1.B) FLEX Conduit Wiring Diagram:



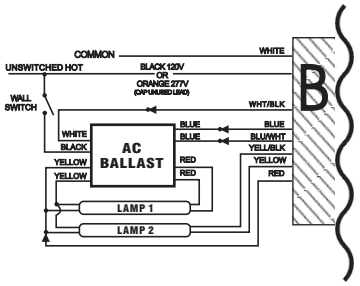


2.A) FLEX Conduit Wiring Diagram:



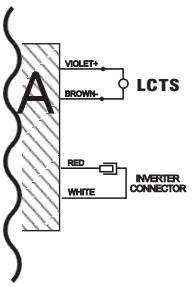
F. TWO (2) LAMP RAPID START BALLAST (Lamp 2 operates in emergency mode)

1.B) FLEX Conduit Wiring Diagram:





2.A) FLEX Conduit Wiring Diagram:



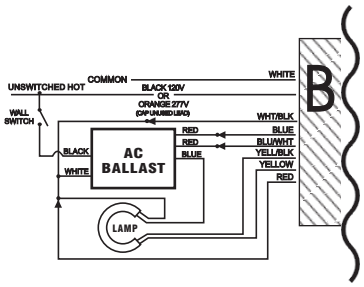
WIRE DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

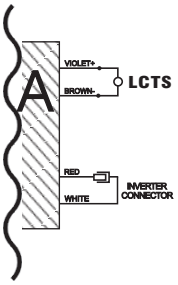
G. ONE (1) LAMP CIRCLINE RAPID START BALLAST

1.B) FLEX Conduit Wiring Diagram:



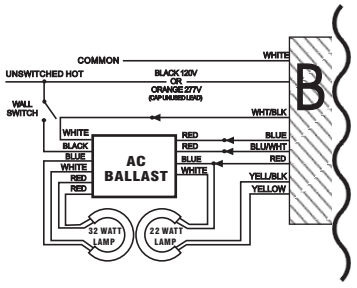


2.A) FLEX Conduit Wiring Diagram:



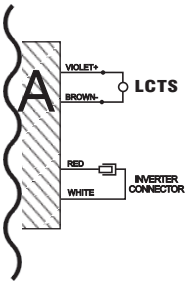
H. TWO (2) LAMP CIRCLINE RAPID START BALLAST (22 watt lamp operates in emergency mode)

1.B) FLEX Conduit Wiring Diagram:



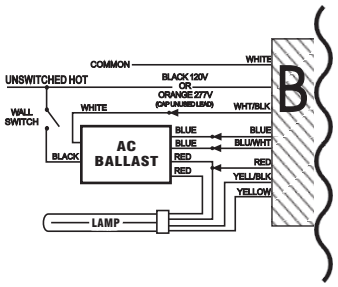


2.A) FLEX Conduit Wiring Diagram:



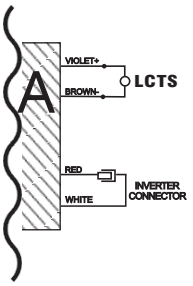
I. ONE (1) FOUR PIN COMPACT LAMP RAPID START BALLAST

1.B) FLEX Conduit Wiring Diagram:



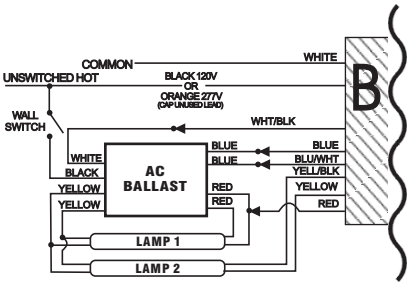


2.A) FLEX Conduit Wiring Diagram:



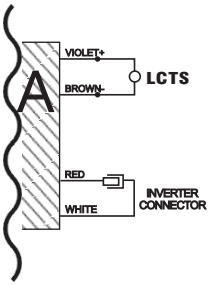
J. TWO (2) LAMP RAPID START BALLAST

1.B) FLEX Conduit Wiring Diagram:





2.A) FLEX Conduit Wiring Diagram:



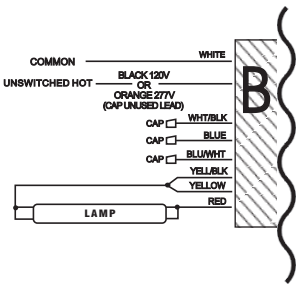
WIRE DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

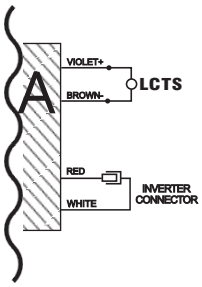
K. ONE (1) LAMP WITHOUT AC BALLAST

1.B) FLEX Conduit Wiring Diagram:



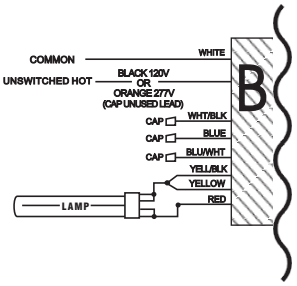


2.A) FLEX Conduit Wiring Diagram:



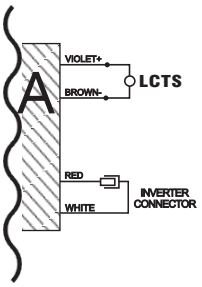
L. ONE (1) FOUR PIN COMPACT LAMP WITHOUT AC BALLAST

1.B) FLEX Conduit Wiring Diagram:





2.A) FLEX Conduit Wiring Diagram:



EMERGI-LITE®
TEL：（888）935-3605 FAX：（888）867-1565

INSTALLATION INSTRUCTIONS
FPDL/U
EMERGILITE BRAND

When using this lighting device
the safety precautions should be followed at all time

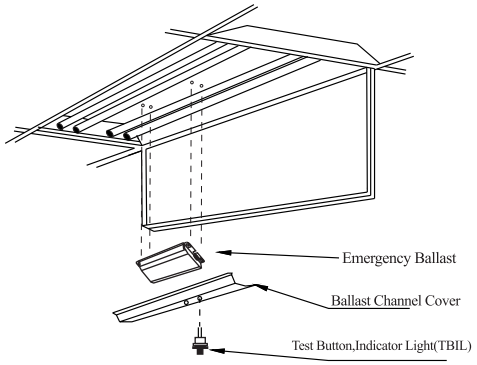
PLEASE READ CAREFULLY AND FOLLOW ALL INSTRUCTIONS FOR YOUR OWN SAFETY

1. This device is designed for indoor use. Do not use outdoors.
2. Prior to installation, battery connector must be open to prevent high voltage from being present on out put leads (red & yellow).
3. This product is for use with 14 W through 54W(2'-4')T5 and T8 single pin or bipin for one lamp,Instant Start and Rapid Start,14W through 39W(2'-4')T5 and T8 single pin or bipin for two lamp, Instant Start and Rapid Start,18 W through 50 W (4-pin) long compact Rapid Start, or 32 W (4-pin) compact, 24Wthrough 32W U-Bend FBT8 fluorescent lamps from Philips,Osram and GE or equivalent manufacture.
4. Please ensure the electrical connections conform to the National Electrical Code and local regulations if applicable.
5. To avoid electric shock, please disconnect normal and emergency power supplies, and battery connector of the emergency ballast before servicing.
6. This device is designed for factory or field installation in either the ballast channel, or on top of the indoor fixture, except air handling heated air outlets, wet or hazardous location fixtures. Do not install this device near gas or electric heaters.
7. AC power source of 120VAC or 277VAC is required.
8. The battery is sealed, non-maintenance, and is not replaceable in the field. Please contact manufacturer for information on service. Do not attempt to service the battery please.
9. Do not use accessory equipment that is not recommended by manufacturer. Failure to do so may cause unsafe conditions. Servicing should only be performed by qualified service personnel.
10. Do not use the product for other purpose that the product is NOT designed for.

PLEASE SAVE THESE INSTRUCTIONS

INSTALL INSTRUCTION

DIAGRAM 1



NOTE: All the branch circuit wiring has to be ready as well as an unswitched source of power before the fixture is installed. Both AC and Emergency Ballasts must be Fed From the same branch circuit.

CAUTION Battery connector has to be opened to prevent high voltage on output leads (Red and Yellow). Wait until all the installation process is completed and AC is supplying power to the emergency ballast before joining the battery connector.

1. AC power has to be off before installation.

2. Choose the right wiring diagram to connect the emergency ballast to AC ballast and lamp.

3. Please ensure the electrical connections conform to the National Electrical Code and local regulations if applicable.

4. Follow the diagram 1&2 to install the emergency ballast in the ballast channel.

5. Wall switch has to be connected properly (Check diagram 3), Match the violet and brown leads to connect the **TBIL** to the emergency ballast (Check diagram 4). The **TBIL** would be on after the fixture is installed properly.

6.Please search in readily visible location and stick the label with "CAUTION: This Unit Has More Than One Power Supply Connection Point. To Reduce The Risk Of Electric Shock, Disconnect Both The Branch Circuit-Breakers Or Fuses And Emergency Power Supplies Before Servicing."

7. Do not join the inverter connector until the fixture is completely installed and AC power is supplied to the emergency ballast.

8. The battery needs to be charged for one hour in order to have short-term testing on the emergency function. Before having a long-term emergency function testing, the battery in emergency ballast has to be charged for 24 hours.

DIAGRAM 2

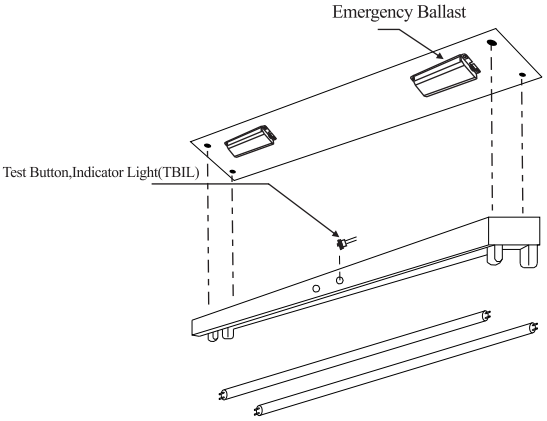
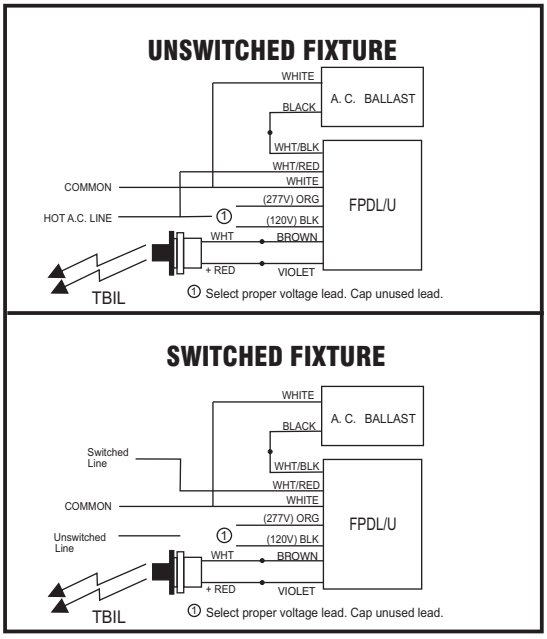


DIAGRAM 3



NOTE: MARK AN APPROPRIATE LABEL ON INDICATOR LIGHT AND TEST SWITCH AFTER INSTALLATION.

DIAGRAM 4

Illustration 1

Recessed Troffer Fixture

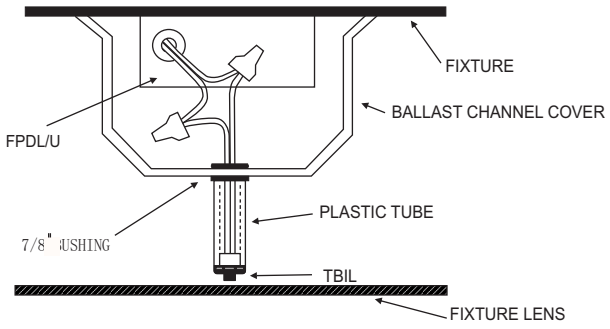
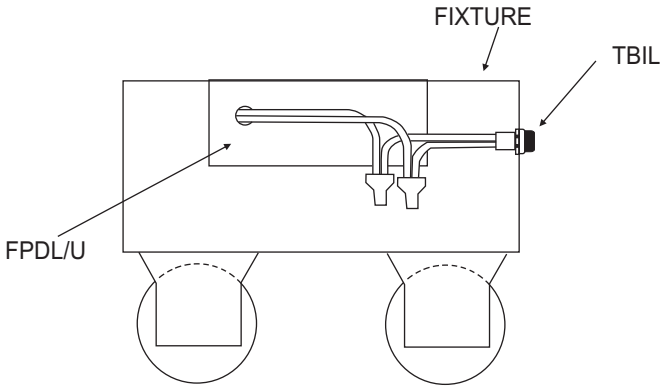


Illustration 2

Strip Fixture



OBSERVE PROPER POLARITY

OPERATION

THE CHARGING INDICATOR LIGHT WOULD BE ON TO INDICATE THE BATTERY IS BEING CHARGED WHEN AC POWER IS APPLIED.

THIS EMERGENCY BALLAST WOULD FUNCTION AND OPERATE ONE OR TWO LAMPS AT LEAST 90 MINUTES WHEN THE AC POWER IS FAILED.

THE EMERGENCY BALLAST WILL OPERATE 14WATT TO 54WATT LAMPS AT LEAST 90MINUTES.

MAINTENANCE

NOTE: SERVICES SHOULD ONLY PERFORMED BY QUALIFIED PERSONNEL.

THE EMERGENCY BALLAST SHOULD BE CHECKED PERIODICALLY TO CONFIRM FUNCTIONING AND THE FOLLOWING SCHEDULE IS RECOMMENDED.

1) INSPECT THE CHARGING INDICATOR EVERY MONTH AND CONFIRM THAT IS ILLUMINATED.

2) PUSH THE TEST SWITCH FOR 30 SECONDS TO ENSURE THE EMERGENCY BALLAST IS FUNCTIONING. PERFORM THIS TEST EVERY 30 DAYS.

NOTE: MARK AN APPROPRIATE LABEL ON INDICATOR LIGHT AND TEST SWITCH AFTER INSTALLATION.

3) PERFORMING A LONG-TERM TEST (90 MINUTE BATTERY DISCHARGE) ONCE IN EVERY YEAR. ONE OR TWO LAMPS SHOULD BE OPERATED FOR NO LESS THAN 90 MINUTES.

TABLE 1 (FOR BROWN CONNETOR)

LAMP DIAMETER	T5 ,T8			LONG COMPACT			COMPACT	U-Bend FBT8	
BASE TYPE	SINGLE OR BIPIN			4 PIN(2G11)			4-PIN	4 PIN	
POWER (LENGTH)	14W-39W		40W-54W	18W-39W		40W-50W	32W	24-32W	
NUMBER OF LAMPS EMER.	1	2	1	1	2	1	1	1	2
BROWN CONNECTOR	CLOSE	OPEN	CLOSE	CLOSE	OPEN	CLOSE	CLOSE	CLOSE	OPEN

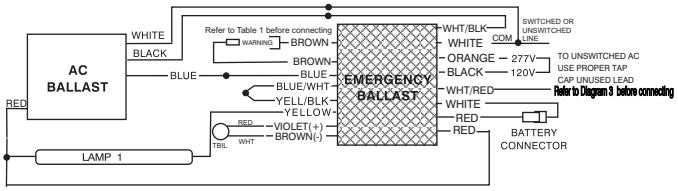
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

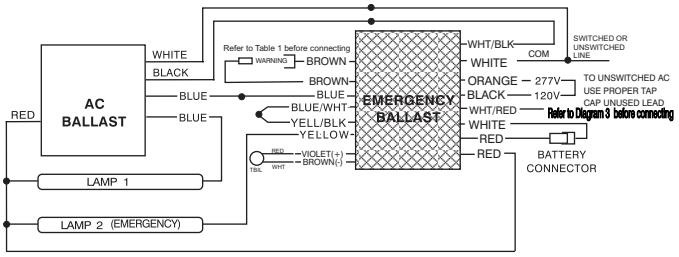
WIRING DIAGRAM

For One Lamp Emergency Operation(14-54W)

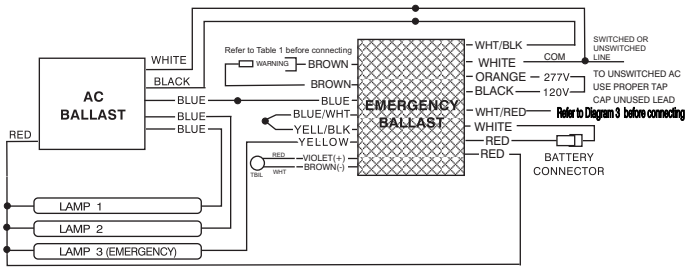
A. ONE (1) LAMP INSTANT START BALLAST



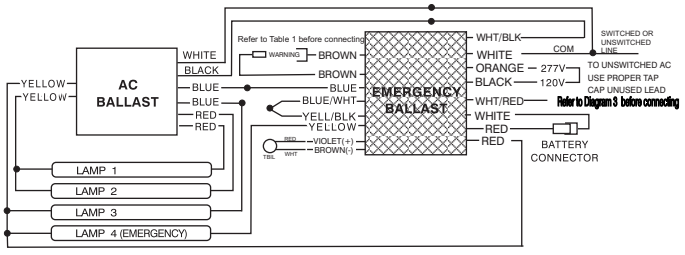
B. TWO (2) LAMP INSTANT START BALLAST



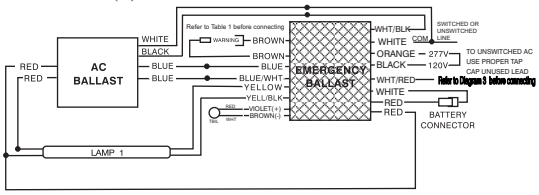
C. THREE (3) LAMP INSTANT START BALLAST



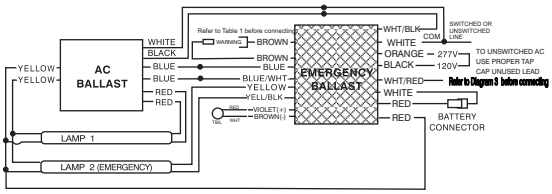
D. FOUR (4) LAMP INSTANT START BALLAST



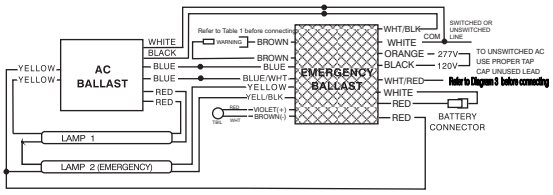
E. ONE (1) LAMP RAPID START BALLAST



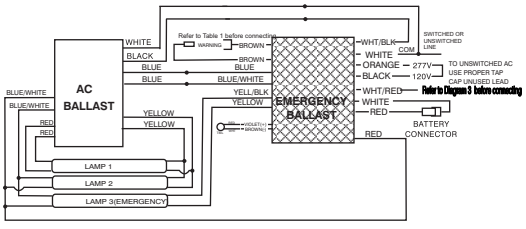
F. TWO (2) LAMP RAPID START BALLAST



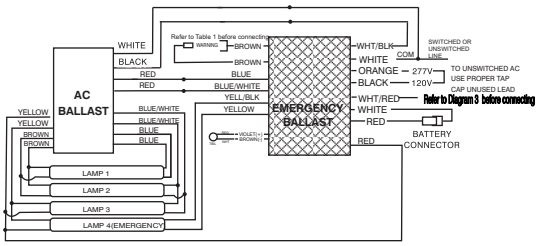
G. TWO (2) LAMP RAPID START BALLAST



H.THREE (3) LAMP RAPID START BALLAST



I.FOUR (4) LAMP RAPID START BALLAST



NOTE: Use the proper input voltage lead, cap unused lead

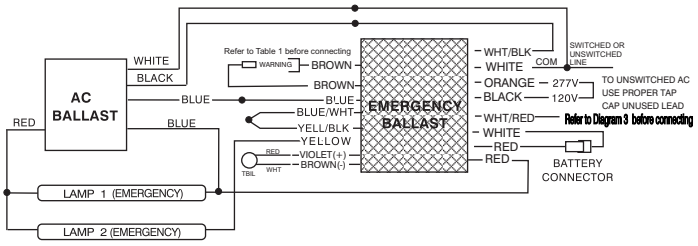
EMERGENCY BALLAST AND AC BALLAST MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER BALLASTS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

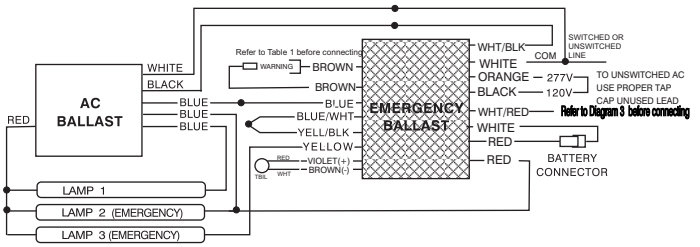
WIRING DIAGRAM

For Two Lamps Emergency Operation (14-54W)

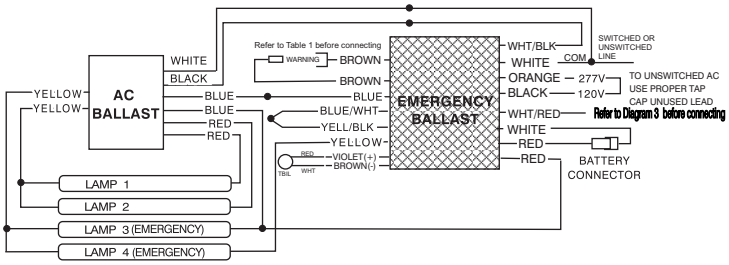
A. TWO (2) LAMP INSTANT START BALLAST



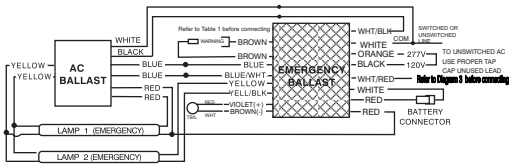
B. THREE (3) LAMP INSTANT START BALLAST



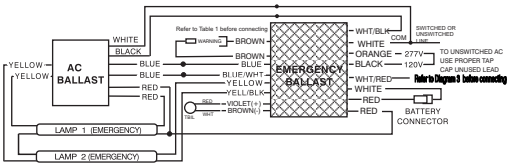
C. FOUR (4) LAMP INSTANT START BALLAST



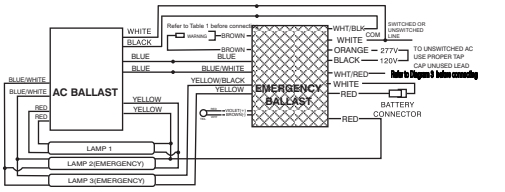
D. TWO (2)LAMP RAPID START BALLAST



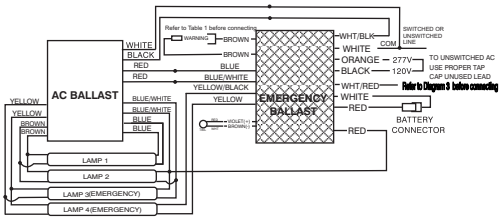
E. TWO (2)LAMP RAPID START BALLAST



F.THREE (3) LAMP RAPID START BALLAST

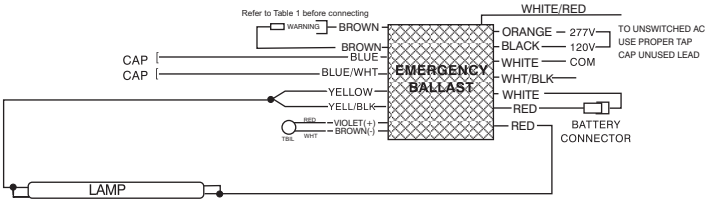


G.FOUR (4) LAMP RAPID START BALLAST

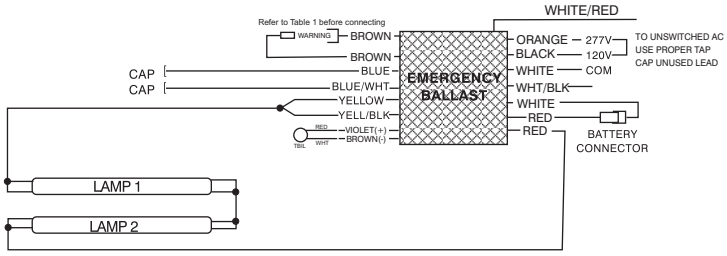


Emergency only Operation

A. ONE (1) LAMP WITHOUT AC BALLAST (14-54W)



B. TWO (2) LAMP WITHOUT BALLAST (14-54W)



Explosion Proof EXC, EFEP & EFXP Series

Equipment rated for Hazardous Locations

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:.

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Use caution when handling batteries. Avoid possible shorting.
4. Do not mount near gas or electric heaters.
5. Use caution when handling batteries. Avoid possible shorting.
6. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition. (**CAUTION:** If optional Halogen cycle lamp(s),(h-), are used in this equipment, to avoid shattering: Do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating. Dispose of lamp with care.)
8. Do not use this equipment for other than intended use.
9. Replace the lamps only with original parts as described on the equipment labels.
10. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

NOTE : All plugs, couplings and elbows must be Listed for the hazardous atmosphere in which the unit is installed and wiring must be in accordance with the requirements of NEC Article 500.

Installation Instructions

NOTE : Assembly of the EXC Series varies with additional options purchased (Refer to fig. 1).

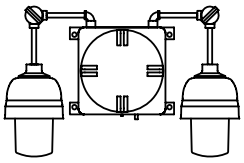
1. Turn off AC power

Housing

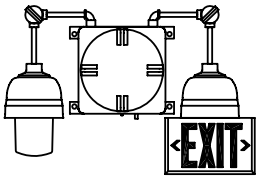
2. Remove spin-off gasketed coved (see fig. 2). Mount unit securely into place positioning the red test switch assembly to the bottom.
   NOTE: The following step is for the EXC Series with one of two fixtures. If one option is an EXIT fixture, then there will be 1 white lead, 2 black leads and 2 orangeleads.
3. Route AC unswitched supply through conduit hole on top of the unit. Connect the Neutral to White wire, 120 VAC to the Black wire(s) or 277 VAC to the Orange wire(s). Insulate unused lead(s).

Lighting Fixture(s)

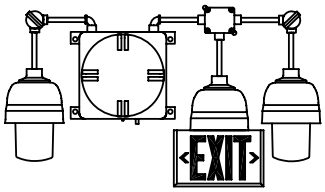
4. Disconnect swivel elbow by removing the screw (see fig. 3). Route lamp wires through the 90-degree elbow on top of housing. Connect swivel elbow with 6" conduit to the 90-degree elbow. Do not lengthen this conduit unless a seal is fitted within 18" of the housing. Permanently secure and tighten all fittings after properly positioning. Re-assemble swivel elbow.
5. Connect wiring for lamp fixture inside housing where labeled "Remote Heads".



EXC Series with 2 Lamp Fixtures



EXC Series with Lamp and EXIT Fixtures



EXC Series with 2 Lamps and EXIT Fixtures

Figure 1

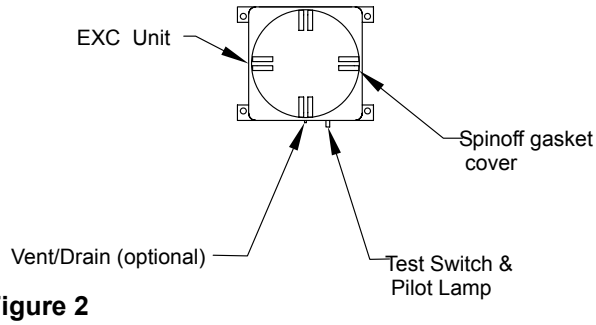


Figure 2

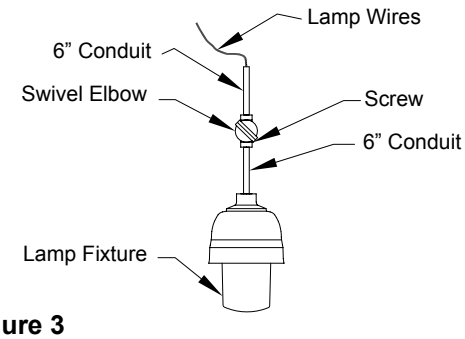


Figure 3

Exit Fixture

6. Disconnect swivel elbow by removing the screw (see fig. 4). Route EXIT fixture wires through the 90-degree elbow on top of housing. Connect swivel elbow with 6" conduit to the 90-degree elbow. Do not lengthen this conduit unless a seal-off is fitted within 18" of the housing. Permanently secure and tighten all fitting after properly positioning. Re-assemble swivel elbow.
7. Connect wiring for lamp fixture inside housing where labeled "Exit Heads". NOTE: The following step is for the EXC Series with a third fixture from the bottom of the housing.

Junction box

8. Remove junction box cover (see fig. 5). Remove conduit plugs from inside.
9. Connect junction box with 6" conduit into conduit hole in housing. Permanently secure and tighten all fittings after properly positioning. Securely mount junction box utilizing mounting feet.
10. Route EXIT fixture wires through the junction box into the housing of the unit. Connect and tighten 6" conduit from EXIT fixture to junction box conduit hole. Do not lengthen this conduit unless a seal-off is fitted within labeled 18" of the housing. Connect EXIT fixture wires inside housing where labelled "Exit Head".
11. Route AC unswitched wires through a conduit hole in junction box. Connect the Neutral to White wire, 120 VAC to the Black wire(s) or 277 VAC to the Orange wire(s) within the junction box. Insulate unused lead(s). Replace junction box cover and EXC cover. (Threads should be lubricated by graphite grease). Install plug(s) in unused conduit hole(s).

Remote Fixtures with Junction box

12. Remove junction box cover (see fig. 6). Remove conduit plugs form inside.
13. Connect junction box and fixture to remote EXC unit with appropriate conduit, ensuring that a seal-off is installed within 18" of the EXC unit.
14. Connect the remaining fixture(s) by threading the wires into the junction box and screwing in the 6" conduit. This conduit may be lengthened but should be supported in accordance with NEC Article 500.
15. Connect the fixture supply leads to the wires in the EXC unit labeled "Remote Heads".
16. Replace junction box cover and EXC cover. (Threads should be lubricated by graphite grease). Screw plug(s) into any unused conduit hole(s).

Energizing EXC Unit

17. Energize AC supply. AC pilot will illuminate. Automatic charger will charge and maintain battery for standby mode. EXIT fixture , if provided will be illuminated.

Testing

Operate test switch. The fixture(s) will illuminate. If an EXIT fixture, is supplied it will remain illuminated. Release test switch, fixture(s) will extinguish, EXIT fixture, and pilot light will be illuminated.

Maintenance

None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code or local codes.

Important notice

If the AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected. Prior to initial full load testing, unit should be on for 24 hours to allow battery sufficient time to recharge.

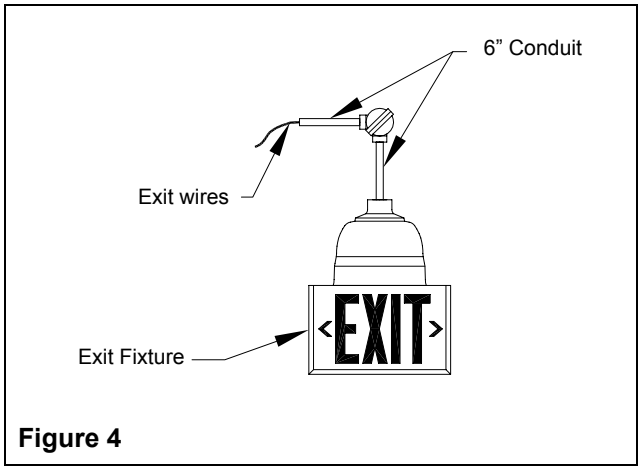


Figure 4

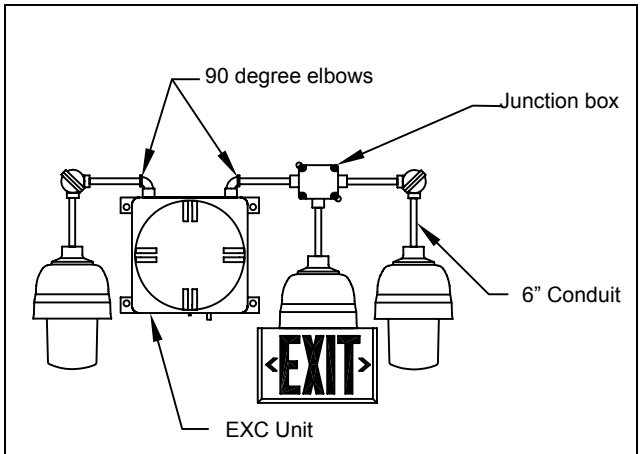


Figure 5

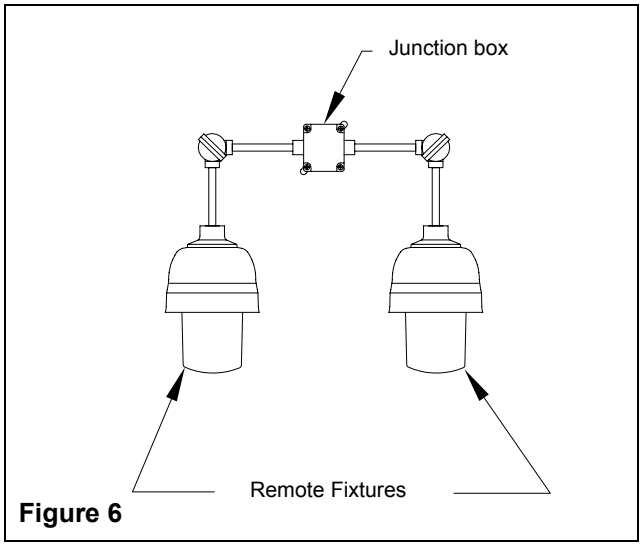


Figure 6

Emergency EXIT Combination Unit

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. All unused wires must be insulated to prevent shorting.
3. All electrical connections must be in accordance with local codes, ordinances and the National Electric code.
4. Do not use outdoors.
5. Do not let power supply cords touch hot surfaces.
6. Do not mount near gas or electric heaters.
7. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Do not use this equipment for other than intended use.
10. Use caution when handling batteries. Battery acid can cause burns to the skin and eyes. If acid is spilled on the skin or eyes, flush acid with fresh water and contact a physician immediately. Avoid possible shorting.
11. Allow battery to charge for 24 hours before first use.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Using a flat head screwdriver, insert the blade into the two slots and pry off the front cover.
3. Follow the proper mounting procedure below.

Wall Mount

a. Remove the center and appropriate knockouts in the back plate to mount to the junction box.
b. Feed wires through the center hole of the back plate.
c. Mount the unit securely to the junction box using the junction box screws.
d. For electrical connections see section 4 below.

Ceiling Mount

a. Attach the spider plate to the junction box using the junction box screws.
b. If the unit is a double face, remove the back plate and install the second face plate provided.
c. Remove the mounting hole cover from the top of the unit.
d. Feed unit wires through canopy hole.
e. Install canopy into the housing at a 20 degree angle and twist. Quick snap is now locked firmly.

4. Make the proper connections (see figure 2):
   a. For 120Vac, connect the black wire (120Vac) and white wire (neutral) to the building utility.
   b. For 277Vac, connect the red wire (277Vac) and white wire (neutral) to the building utility.
   c. Feed excess wires back into the junction box and secure the canopy to the spider plate so that the canopy is tight against the wall.
5. Remove the appropriate chevron(s) by pushing lightly from the inside of the face plate below the chevron and pry the chevron off.

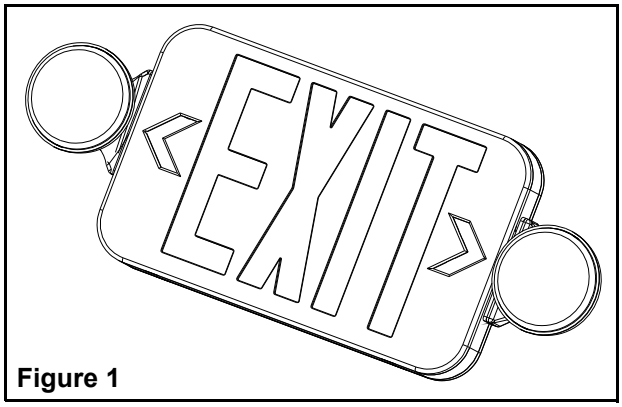
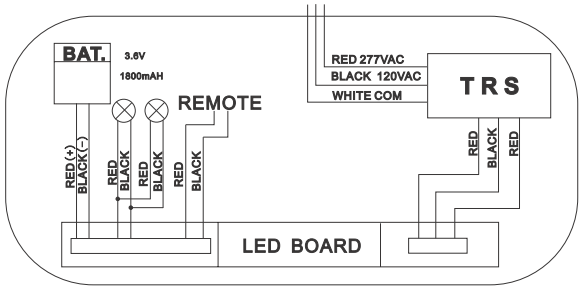


Figure 1



IMPORTANT:	When relamping, only use lamps specified in this unit. Using other lamp types may result in transformer damage or an unsafe condition

Figure 2

6. Connect the remote heads to the red and black wires indicated using wire nuts (see figure 2).
7. Attach battery connector to PCBA and reinstall the front panel.
8. Restore power and press the test button. Lamp heads will turn on.
9. Adjust the lamp head direction as needed.

Unit testing

Manual test without automatic testing and diagnostics

Allow the unit to charge for 24 hours before testing.
Press the test switch, the emergency lamps will illuminate. When the switch is released, the lamps will turn OFF.

Automatic Testing and diagnostics

Once the unit is properly installed according to the installation instruction sheet and AC power supplied it will come ON. The dual color LED indicator
will also come ON and the self-diagnostic test function will automatically initiate. The LED indicator points out the current unit status. A STEADY GREEN on the LED indicates a normal service; BLINKING GREEN indicates that the unit is in testing mode; GREEN/RED FLASHING indicates that the battery is charging; RED (in different combinations) would indicate a fault or a service alert. Refer to the Fault Indication table below for more details. The indicator would be OFF when the unit is in emergency mode.

Self-Diagnostic

For self-diagnostic units without remote lamps: connect the terminal as shown in figure 3a.

For self-diagnostic units with remote lamps: connect the terminal as shown in figure 3b.

The self-diagnostic function is factory preset without any allowable field adjustment.The automatic self-diagnostic feature serves the following tests

a. On-line real time monitoring of battery and lamps (both local and remote): identifies battery charging, disconnection and failure along with local and remote lamp failures.
b. Self-testing and a 15-minute discharge once in every 30 days, after AC power has been supplied for a minimum of 24hrs.
c. Self-testing and a 90-minute discharge once in every year, after AC power has been supplied for a minimum of 24hrs.

FAULT INDICATION TABLE	
Fault Description	LED Indication
Battery disconnection	Steady Red
Battery recharge failure	Flashing Red
Battery failure	Red blinking (2 times)
LED failure (EXIT only)	Red blinking (3 times)
Local lamp failure (Emergency lights only)	Red blinking (4 times)
Remote lamp failure (Emergency lights only)	Red blinking (5 times)

Manual testing for self-diagnostic units

The unit also provides for manual testing by pushing the test button in a specific pattern.The different patterns and the resulting tests are
listed in the table below.

Action	Reaction & LED indication
Push test button once (within 2 seconds)	30-second test: Flashing green
Push test button twice (within 2 seconds)	15-minute test: Green blinking twice
Push test button three times (within 2 seconds)	90-minute test: Green blinking three times

Maintenance

None required. Replace the batteries as needed according to ambient conditions. Equipment must be tested regularly in accordance with local codes.

Self-diagnostic units without remote lamps

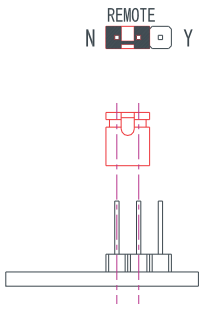


Figure 3a

Self-diagnostic units with remote lamps

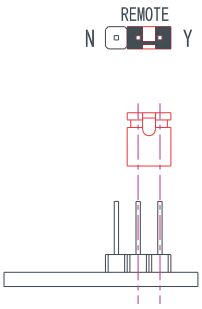


Figure 3b

INSTALLATION & OPERATION INSTRUCTIONS

IMPORTANT SAFEGUARDS

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

2. Review the diagrams thoroughly before beginning. If you feel you do not have electrical wiring experience, refer to a do-it-yourself wiring handbook or have your fixture installed by a qualified licensed electrician.
3. All electrical connections must be in accordance with local codes, ordinances, and the National Electric Code. If you are unfamiliar with methods of installing electrical wiring, secure the services of a qualified licensed electrician.
4. Before starting the installation, disconnect the power by turning off the circuit breaker or by removing the appropriate fuse at the fuse box. Turning the power off using the light switch is not sufficient to prevent electrical shock.
5. Do not use outdoors.
6. Do not let power supply cords touch hot surfaces.
7. Do not mount near gas or electric heaters.
8. Use caution when servicing batteries. Battery acid can cause bums to skin and eyes. If acid is spilled on skin or in eyes, flush acid with fresh water and contact a physician immediately.
9. Equipment should be mounted in location and at heights where it will not readily be subject to tampering by unauthorized personnel.
10. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
11. Do not use this equipment for other than intended use.
12. All servicing should be performed by qualified personnel only.
13. Allow battery to charge for 24 hours before first use.

UNITS WITH HALOGEN LAMPS ONLY

Caution: Halogen cycle lamp(s) are used in this equipment. To avoid shattering: Do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.

UNITS WITH HALOGEN LAMPS ONLY

- Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
- Do not use this equipment for other than its intended use.

SAVE THESE INSTRUCTIONS

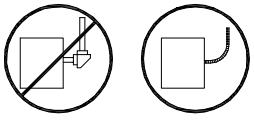
UNPACK THE FIXTURE

Check the contents of the box. You should receive:

1 - Plastic housing	2 - EXIT panel
1 - Back panel	1 - Mounting plate
1 - Canopy	1 - Hardware package

NOTE: First turn off electricity.

Use Flexible Conduit Only



Wall Mounting (See Fig.10)

1. Remove EXIT panel with screwdriver, (See Fig .1)
2. Remove 3/8" hole plug from the center of back plate . Drill ϕ1/4" holes into oblong knock outs on the back plate that correspond to junction box holes to be used.
3. Assemble back plate with the plastic housing .
4. Feed excess wire into junction box and secure back plate to junction box.
5. Connect battery wire to battery. Refer (Fig. 2) to take out and to insert battery to plastic housing. (If remote capability is required, refer to "FOR REMOTE CAPABILITY" in below)
6. Snap in Arrows on EXIT panel as required and storing unused arrows in a safe place.
7. Snap EXIT panel to housing.

Ceiling Mounting (See Fig.11)

1. Remove EXIT panel with screwdriver, (See Fig.1)
2. Attach crossbar (8) to junction box using junction box screws.
3. Attach sign to canopy by inserting canopy into sign at an angle, then twist to secure. (See Fig.3)
4. Push excess wire into junction box and align holes in canopy with those in the crossbar. Using screws and washers supplied, tighten canopy to crossbar so that canopy is securely fastened and tight against ceiling.
5. Connect battery wire to battery. Refer Fig. 2 to take out and to insert battery to plastic housing. (If remote capability is required, refer to "FOR REMOTE CAPABILITY" in below)
6. Snap in Arrows on EXIT panel as required and storing unused arrows in a safe place.
7. Snap EXIT panel to housing.

Side Mounting (See Fig.12)

1. Remove EXIT panel with screwdriver, (See Fig.1)
2. Attach crossbar to junction box using junction box screws.
3. Attach sign to canopy by inserting canopy into sign at an angle, then twist to secure. (See Fig.3)
4. Push excess wire into junction box and align holes in canopy with those in the crossbar. Using screws and washers supplied, tighten canopy to crossbar so that canopy is securely fastened and tight against wall.
5. Connect battery wire to battery. Refer Fig. 2 to take out and to insert battery to plastic housing. (If remote capability is required, refer to "FOR REMOTE CAPABILITY" in below)
6. Snap in Arrows on EXIT panel as required and storing unused arrows in a safe place.
7. Snap EXIT panel to housing.

ELECTRICAL CONNECTIONS

Make the proper supply lead connections. If using 120VAC, connect the black and white leads to the building utility. If using 277VAC, connect the orange and white leads to the building utility. Cap off unused wires. In all cases, use standard wire nuts in connection to leads. (See Fig.4)

FOR REMOTE CAPABILITY

1. In order to use additional remote head (6V 12W Max), Prepare additional battery and extra wire for remote capability if one battery was assembled. And Make the proper head connection with remote head wires (not supplied) at junction box using extra head wires in the sign.(See Fig. 5)
2. Connect additional 6V 4.5Ah battery (not supplied) to extra battery connector on the supplied battery, (See Fig. 6) Then place supplied battery at right battery case an additional battery at left battery case. (See Fig. 7). To take out and to insert battery, refer to Fig. 2
3. Extra wire for remote capability is not supplied for one battery assembled by manufacturer.
4. Extra wires for remote capability is supplied for two batteries assembled by manufacturer.

INSTALLATION INSTRUCTIONS

Fig. 1 Opening Exit panel

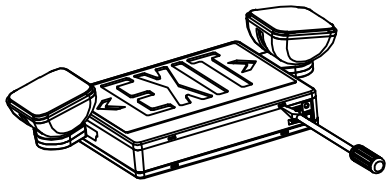
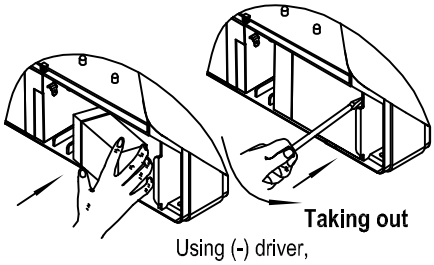


Fig. 2 Inserting/Taking out battery



Taking out

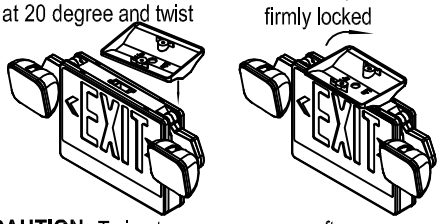
Using (-) driver,
taking out from the bottom

Inserting

Fig. 3 Assembling canopy to housing

Insert canopy into housing at 20 degree and twist

Quick snap is now firmly locked



CAUTION: Trying to remove canopy after it is locked in place may cause damage

Fig. 4 Wiring

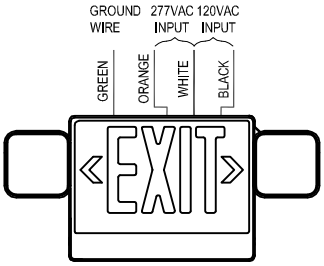
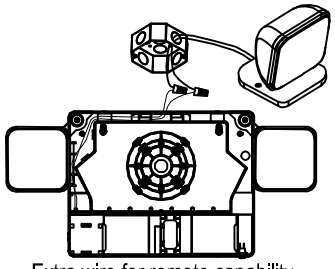
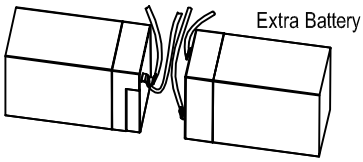


Fig. 5 Wiring for remote capability



Extra wire for remote capability
(Not provided for one battery)

Fig. 6 Connecting additional battery for remote capability



Connect additional battery wire
using extra battery terminal

Fig. 7 Position for battery for remote capability

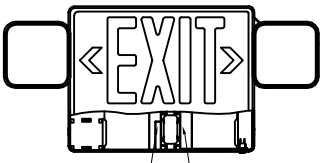
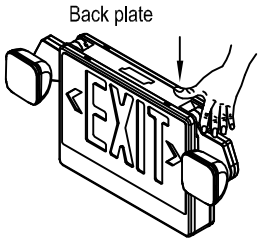
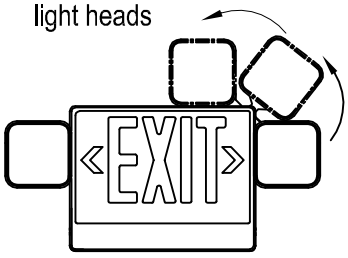


Fig. 8 Opening back plate



Using Finger press plastic housing

Fig. 9 Adjust position of emergency light heads



You can adjust position of light heads to
get the best position of emergency lighting

Fig.10 WALL MOUNTING

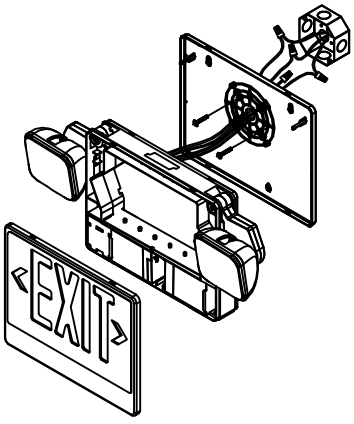


Fig.11 CEILING MOUNTING

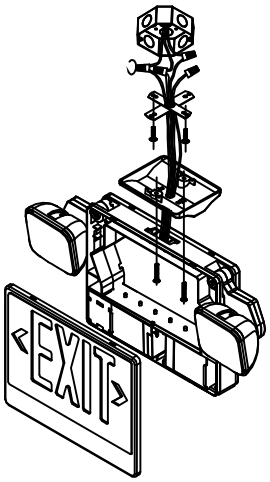
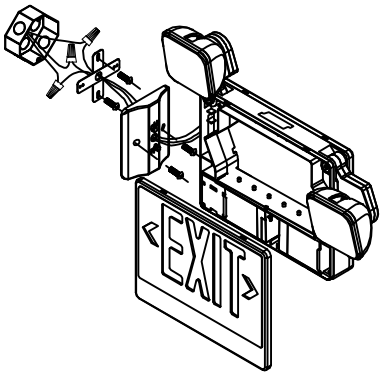


Fig.12 SIDE MOUNTING



ELX LED Exit Series

AC and Self-Powered models

WARNING:
Risk of Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. Disconnect power at fuse or circuit breaker before installing or servicing.
3. All electrical connections must be in accordance with local codes, ordinances and the National Electric code.
4. Do not use outdoors.
5. Do not let power supply cords touch hot surfaces.
6. Do not mount near gas or electric heaters.
7. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Do not use this equipment for other than intended use.
10. Allow battery to charge for 24 hours before first use.

SAVE THESE INSTRUCTIONS

Installation Instructions

1. Turn off AC power.
2. Using a flat head screwdriver, insert the blade into the slots and gently pry off the front cover (see figure 4).
3. Follow the proper mounting procedure below.

Wall Mount (see figure 1)

a. With the front cover open, remove the center and appropriate knockouts in the back plate to mount to the junction box.
b. Route AC supply leads throught the center hole for the back plate.
c. Mount the unit securely to the junction box using the junction box screws.
d. For electrical connections see section 4 below.

Ceiling or End mount

a. Attach crossbar to junction box, set the longer blade of the crossbar to touch the junction box.
b. Remove the mounting hole cover from the top or side of the unit depending on your mounting configuration (see figures 2 and 3)
c. Install canopy according to mounting configuration (see figures 2,3 and 5).

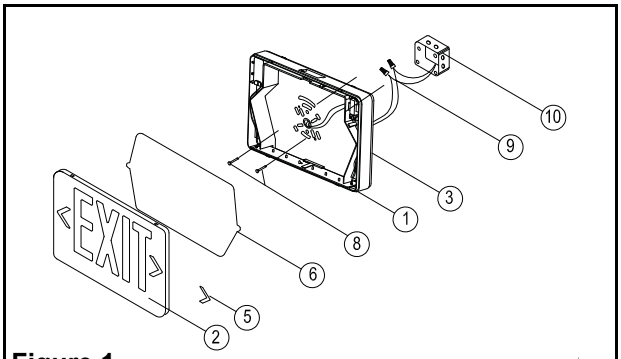


Figure 1

Parts List

1. Housing
2. EXIT panel
3. Back plate
4. Mounting hole cover
5. Chevron
6. Red or green diffuser
7. Canpoy
8. Canopy screws
9. Wire nuts
10. Junction box (not supplied)
11. Crossbar
12. Crossbar screws (not provided)

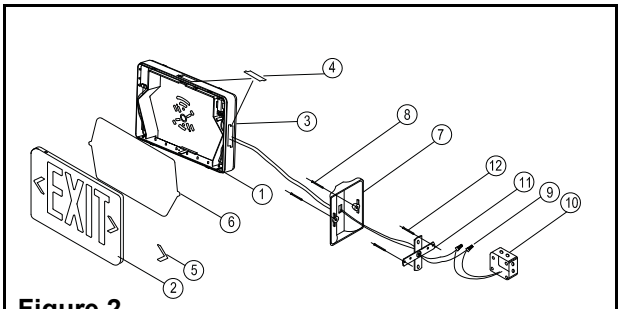


Figure 2

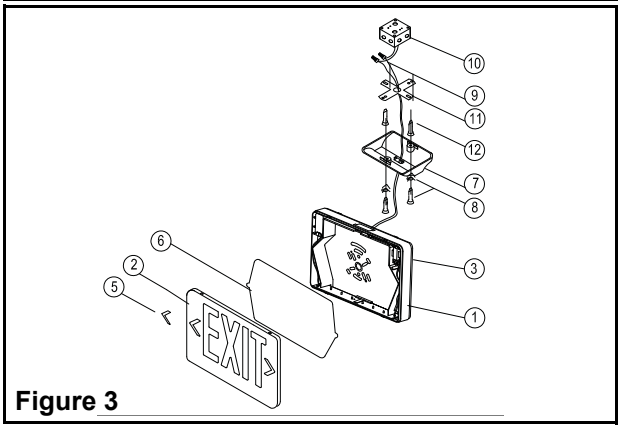


Figure 3

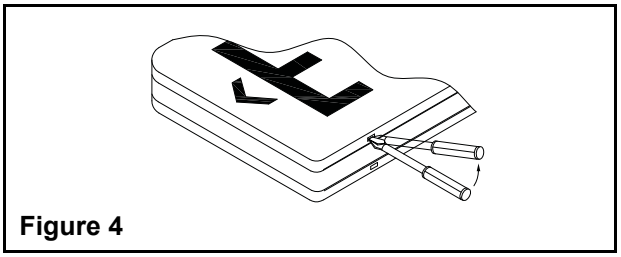


Figure 4

d. Route AC supply leads throught the top or side hole of housing. Note: to avoid shadowing secure wires into wire guides located on the sides of the housing.

4. Make the proper connections (see figure 6):
   a. For 120VAC, connect the black wire (120VAC) and white (neutral) to the building utility.
   b. For 277VAC, connect the orange wire (277VAC) and white (neutral) to the building utility.

CAUTION! Risk of electrical shock. Cap unused wires. In all cases, use suitable wire nuts rated for the applicable voltage to connect to wires.

   c. Feed wires back into the junction box and secure the canopy to the crossbar so that the canopy is tight against the wall or ceiling.
5. Snap chevrons to the EXIT panel if required.
6. For self-powered units attach battery connectors togeather.
7. Reinstall the front panel.

Self-Powered Models

For test procedures refer to addendum for self-dianostics and self-testing option.

Maintenance

None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected, Self-Powered Models only. Equipment must be tested regularly in accordance with local codes.

Insert canopy into housing at 20 degree angle and twist. Quick snap is now locked firmly.

Caution: Trying to remove the canopy after it is locked into place may cause damage.

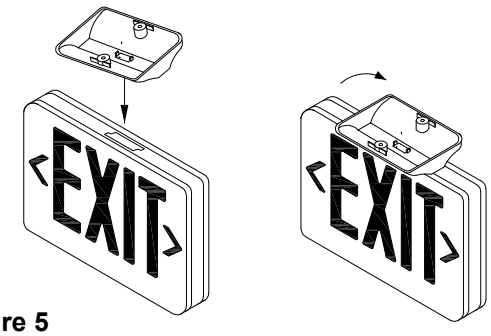


Figure 5

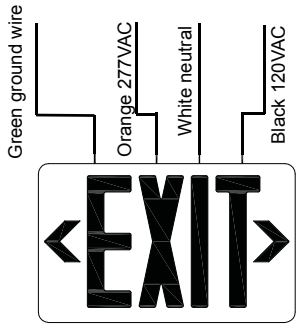
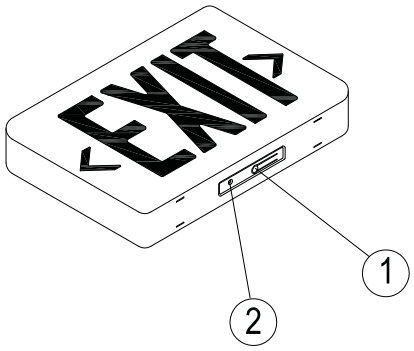
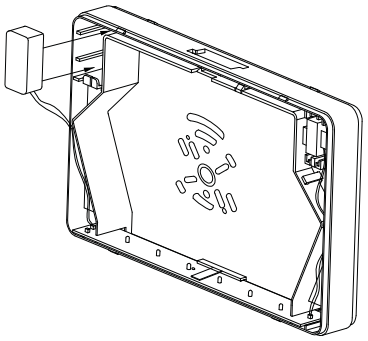


Figure 6



1) Manual battery test switch
2) Red LED (indicates normal operation

Figure 7



Note: battery is shipped disconnected
Connect battery before closing unit

Figure 8

ELXN400R-2MRS
Self-powered LED Exit Sign and Halogen Light Unit Combo

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. DO NOT USE OUTDOORS.
2. DO NOT MOUNT NEAR GAS OR ELECTRIC HEATERS.
3. DO NOT LET POWER CORDS TOUCH HOT SURFACES.
4. USE CAUTION WHEN SERVICING BATTERIES. AVOID POSSIBLE SHORTING.
5. EQUIPMENT SHOULD BE MOUNTED IN LOCATIONS AND AT HEIGHTS WHERE IT WILL NOT READILY BE SUBJECTED TO TAMPERING BY UNAUTHORIZED PERSONNEL.
6. THE USE OF ACCESSORY EQUIPMENT NOT RECOMMENDED BY THE MANUFACTURER MAY CAUSE AN UNSAFE CONDITION.
7. DO NOT USE THIS EQUIPMENT FOR OTHER THAN INTENDED USE.
8. BEFORE WIRING TO AC SERVICE, TURN OFF AC POWER AT FUSE OR CIRCUIT BREAKER.
9. DISCONNECT AC POWER AND UNPLUG BATTERY BEFORE SERVICING.
10. WHEN RELAMPING, ONLY USE LAMPS SPECIFIED IN THE FIXTURE.
11. BATTERY IN THIS UNIT MAY NOT BE FULLY CHARGED. AFTER THE AC SERVICE IS HOOKED UP TO UNIT, LET THE BATTERY CHARGE UP FOR AT LEAST 24 HRS BEFORE PERFORMING ANY TESTS.

SAVE THESE INSTRUCTIONS

Installation Instructions

BACK MOUNTING - See Figure 1

1. Remove 3/8" hole plug from the center of light head back plate. Remove oblong knock outs on back plate that correspond to junction box holes to be used.
2. Feed AC supply leads through center hole and make the proper connections. If using 120VAC, connect the black and white leads to the building utility. If using 277VAC, connect the orange and white leads to the building utility. Cap off unused wire. Be sure to snap battery connector together.
3. Feed excess wire into junction box and secure back plate to junction box.
4. Snap in arrows on EXIT door as required. Then snap EXIT door to housing, top first and then bottom.

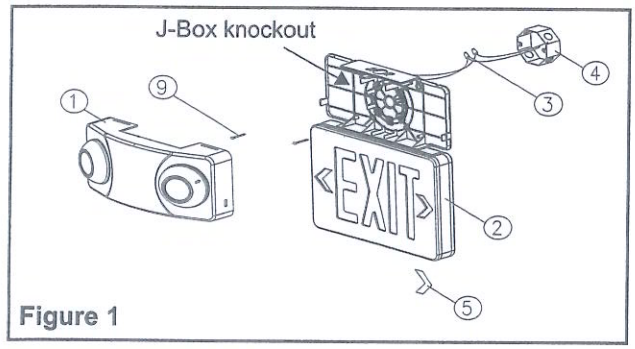


Figure 1

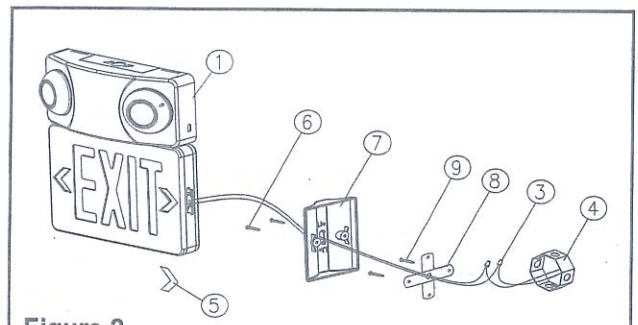


Figure 2

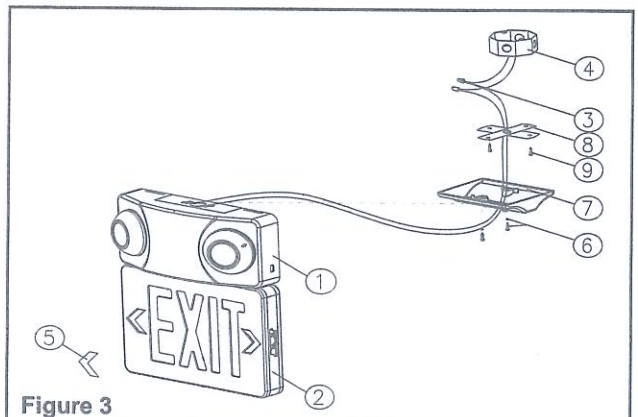
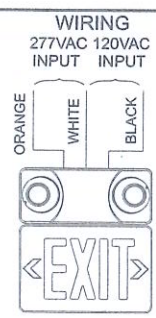


Figure 3



Part List

1. Light head housing
2. EXIT housing
3. Wire nuts
4. Juction box (Building Utility)
5. Snap-in directional arrow
6. Canopy screws
7. Canopy
8. Crossbar
9. Crossbar screws (not provided)
10. Holding wire

SIDE MOUNTING - See Figure 2

1. Attach crossbar to junction box. Set the crossbar so that the longer blade is touching the junction box.
2. Open light head housing, then feed AC supply leads through center hole at the bottom. Assemble light head housing.
3. Feed AC supply leads through side hole, being sure to secure wire into wire guides molded at the edges of the sign.
4. Attach sign to canopy (7) by inserting canopy into sign at an angle, then twist to secure.
5. Make the proper supply lead connections. If using 120VAC, connect the black and white leads to the building utility. If using 277VAC, connect orange and white leads to the building utility. Cap off unused wire. Be sure to snap battery connector together.
6. Push excess wire into junction box and align holes in canopy with those in crossbar. Using screws and washers supplied, tighten canopy to crossbar so that canopy is securely fastened and tight against wall.
7. Snap in arrows to EXIT door as required. Snap supplied cover into ceiling mounting hole. Then snap EXIT door to housing, top first and then bottom.

CEILING MOUNTING - See Figure 3

1. Attach crossbar to junction box. Set the crossbar so that the longer blade is touching the junction box.
2. Feed AC supply leads through top hole, being sure to secure wire into wire guides molded at the edges of the sign.
3. Attach sign to canopy by inserting canopy into sign at an angle, then twist to secure.
4. Make the proper supply lead connections. If using 120VAC, connect the black and white leads to the building utility. If using 277VAC, connect orange and white leads to the building utility. Cap off unused wire. Be sure to snap battery connector together.
5. Push excess wire into junction box and align holes in canopy with those in crossbar. Using screws and washers supplied, tighten canopy to crossbar so that canopy is securely fastened and tight against ceiling.
6. Snap in arrows to EXIT door as required. Snap supplied cover to side mounting hole. Then snap EXIT door to housing, top first and then bottom.

MANUAL TESTING

1. Manual testing can be initiated by pushing on the test switch (1) (Figure 6)
2. Battery in this unit may not be fully charged. After AC serives is hooked up to unit, let the battery charge up for at least 24 hrs before performing any tests.

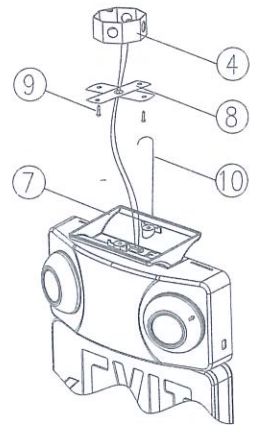


Figure 4

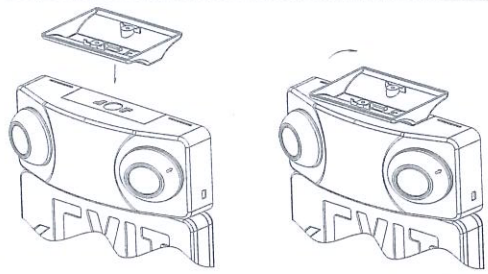
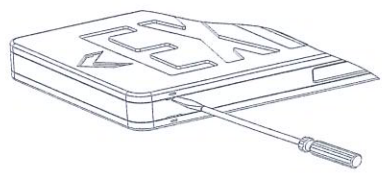


Figure 5

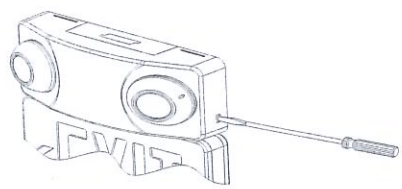
Opening EXIT door

When opening EXIT door, insert screwdriver into the slots at the bottom and carefully push in and down.



Opening light head housing

When opening light head, insert screwdrives into the slot on the side and carefully push in and down.



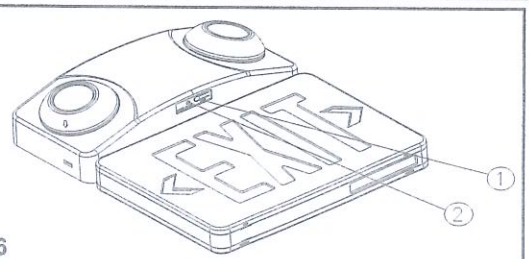


Figure 6

Thomas&Betts

EXL-990SU

IMPORTANT SAFEGUARDS

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

2. Review the diagrams thoroughly before beginning. If you feel you do not have electrical wiring experience, refer to a do-it-yourself wiring handbook or have your fixture installed by a qualified licensed electrician.
3. All electrical connections must be in accordance with local codes, ordinances, and the National Electric Code. If you are unfamiliar with methods of installing electrical wiring, secure the services of a qualified licensed electrician.
4. Before starting the installation, disconnect the power by turning off the circuit breaker or by removing the appropriate fuse at the fuse box. Turning the power off using the light switch is not sufficient to prevent electrical shock.
5. Do not use outdoors.
6. Do not let power supply cords touch hot surfaces.
7. Do not mount near gas or electric heaters.
8. Use caution when servicing batteries. Battery acid can cause burns to skin and eyes. If acid is spilled on skin or in eyes, flush acid with fresh water and contact a physician immediately.
9. Equipment should be mounted in location and at heights where it will not readily be subject to tampering by unauthorized personnel.
10. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
11. Do not use this equipment for other than intended use.
12. All servicing should be performed by qualified personnel only.
13. Allow battery to charge for 24 hours before first use.

UNPACK THE FIXTURE

Check the contents of the box. You should receive:

1- Mounting plate
1- Fixture
2- Light heads assembly
1- Hardware package

NOTE: First turn off electricity.

Wall Mounting

1. Remove mounting plate from fixture by prying with screwdriver. (see Fig.1)
2. Insert screwdriver to make appropriate keyhole slots open on mounting plate.
3. Pass white (neutral) and either black 120V or orange 277V hot, wire leads through center hole of mounting plate, make electrical connections in junction box, see electrical connection below. You may use hanging hook to hang fixture while making connection. Cap off unused hot lead.
4. Mount mounting plate to junction box with screw provided 8#32 X 1" long.
5. Connect red lead to battery positive terminal.(see Fig. 2)
6. Snap on fixture to mounting plate.
7. Restore power and press test button. Battery powered bulbs will come on. AC light will turn off.

Ceiling Mounting

1. Remove mounting plate from fixture by prying with screwdriver.(see Fig. 3)
2. Open top cover and knockout on the top of fixture.
3. Secure the mounting plate to tube with nut.
4. Pass white (neutral) and either black 120V or orange 277V hot, wire leads through center hole of mounting plate. make electrical connections in junction box, see electrical connection below. You may use hanging hook to hang fixture while making connection. Cap off unused hot lead
5. Connect red lead to battery positive terminal.(see Fig. 4)
6. Snap on fixture to mounting plate.
7. Restore power and press test button. Battery powered bulb will come on. AC light will turn off.

ELECTRICAL CONNECTIONS

Connect white wire lead from fixture to white (neutral) wire supply feed from circuit. Connect black 120V or orange 277V, (depending on supply voltage), wire lead from fixture to black (hot) wire from supply circuit. Use U.L. Listed wire connectors suitable for the size, type, and number of conductors. No loose strands or loose wires should be present. Secure wire connectors with U.L. listed electrical tape.

Relamping

1. Insert screwdriver into the slot between lens and light head body and then push gently to remove lens.
2. Install bulb

CAUTION: DO NOT EXCEED RECOMMENDED MAXIMUM WATTAGE.(6V 5.4W)

SAVE THESE INSTRUCTIONS

ALL SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL

Thomas & Betts Tel: (888) 552-6467 ext. 255 or 547 Fax: (800) 316-4515

CEILING MOUNTING

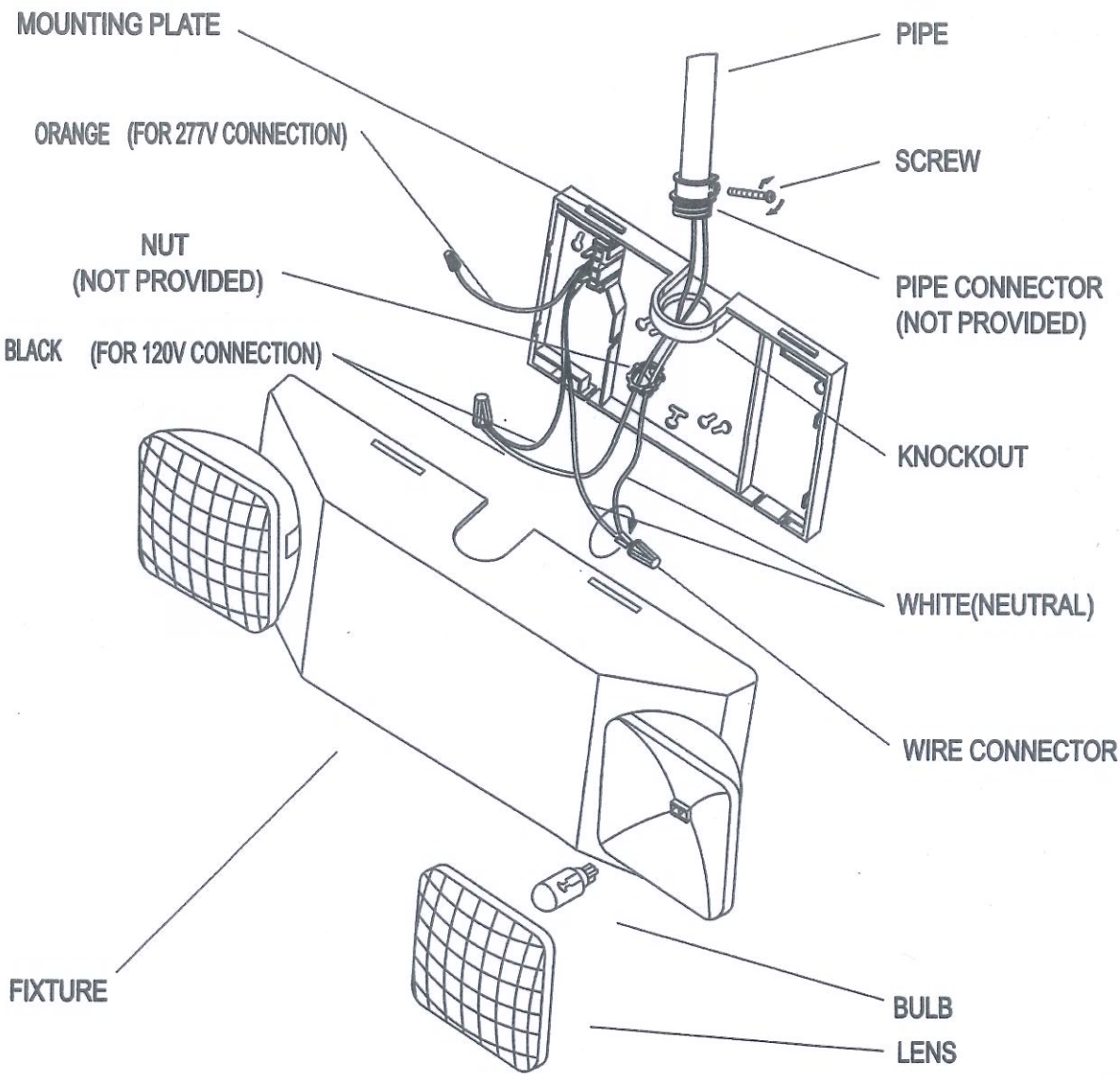


Fig.B

Fig.3 REMOVE MOUNTING PLATE

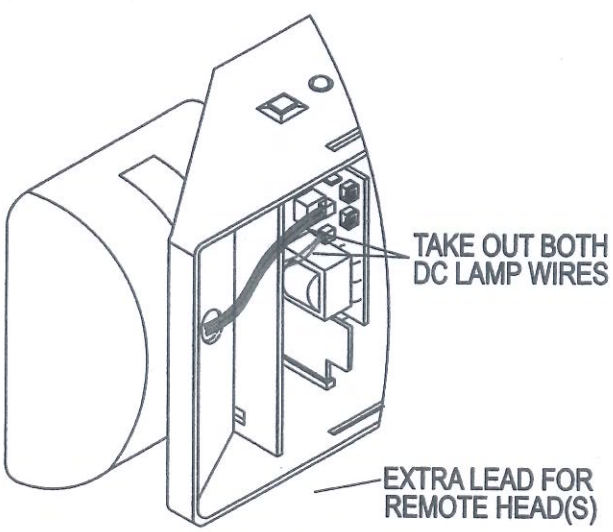
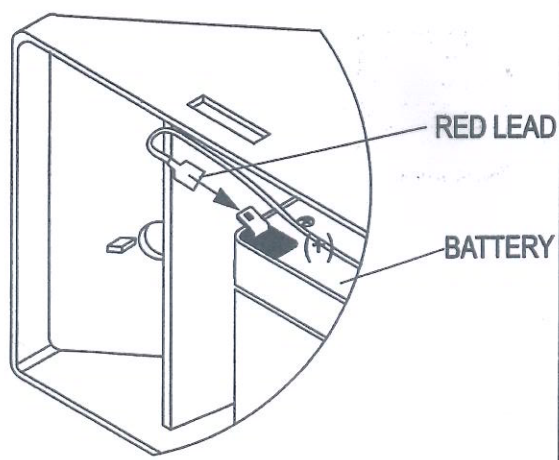


Fig.4



WALL MOUNTING

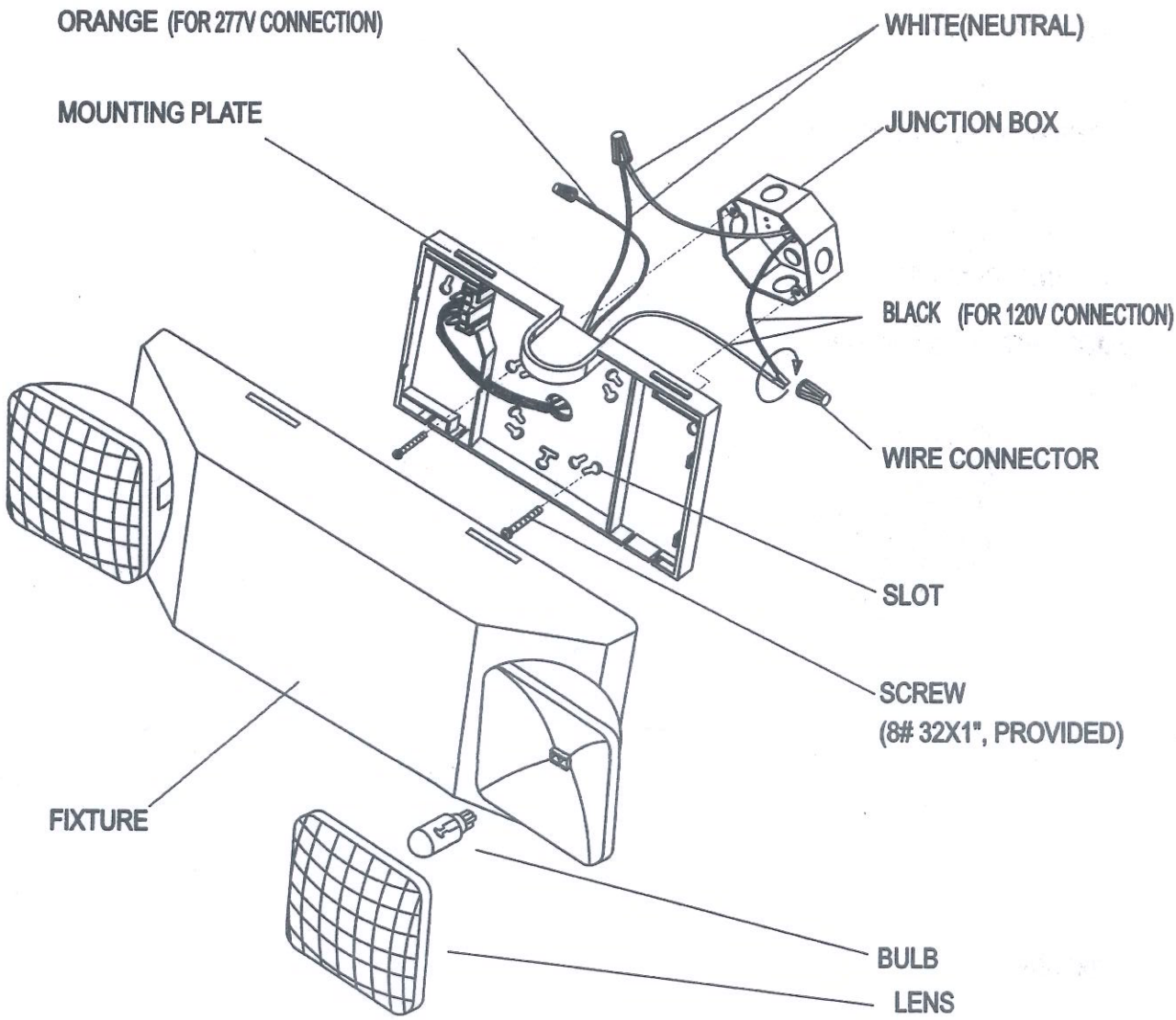


Fig.A

Fig.1 REMOVE MOUNTING PLATE

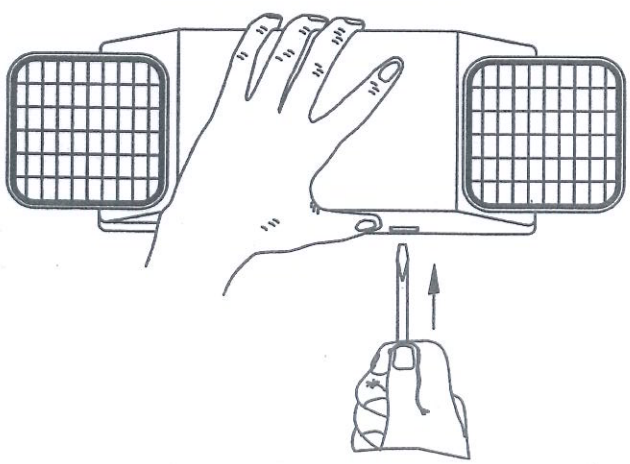
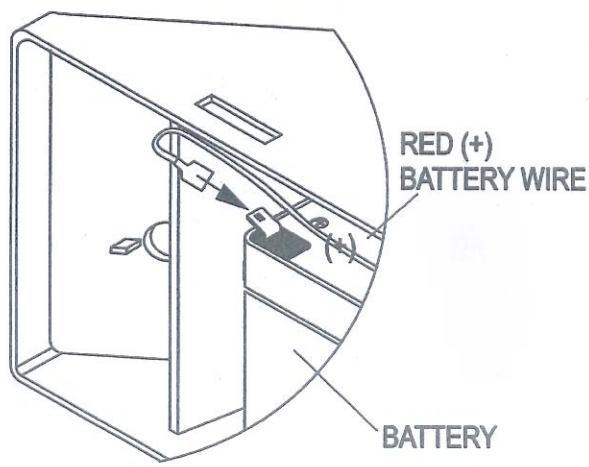


Fig.2 CONNECT BATTERY WIRE (+)



EL-2MRS
Self-powered Halogen Light Unit

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. DO NOT USE OUTDOORS.
2. DO NOT MOUNT NEAR GAS OR ELECTRIC HEATERS.
3. DO NOT LET POWER CORDS TOUCH HOT SURFACES.
4. USE CAUTION WHEN SERVICING BATTERIES. AVOID POSSIBLE SHORTING.
5. EQUIPMENT SHOULD BE MOUNTED IN LOCATIONS AND AT HEIGHTS WHERE IT WILL NOT READILY BE SUBJECTED TO TAMPERING BY UNAUTHORIZED PERSONNEL.
6. THE USE OF ACCESSORY EQUIPMENT NOT RECOMMENDED BY THE MANUFACTURER MAY CAUSE AN UNSAFE CONDITION.
7. DO NOT USE THIS EQUIPMENT FOR OTHER THAN INTENDED USE.
8. BEFORE WIRING TO AC SERVICE, TURN OFF AC POWER AT FUSE OR CIRCUIT BREAKER.
9. DISCONNECT AC POWER AND UNPLUG BATTERY BEFORE SERVICING.
10. WHEN RELAMPING, ONLY USE LAMPS SPECIFIED IN THE FIXTURE.
11. BATTERY IN THIS UNIT MAY NOT BE FULLY CHARGED. AFTER THE AC SERVICE IS HOOKED UP TO UNIT, LET THE BATTERY CHARGE UP FOR AT LEAST 24 HRS BEFORE PERFORMING ANY TESTS.

SAVE THESE INSTRUCTIONS

Installation Instructions

JUNCTION BOX MOUNTING

1.Remove 3/8" hole plug in the center of back plate and place it into the hole on top of the housing (see Fig. 1). Remove oblong knock outs on back plate that correspond to junction box holes to be used.

2.Feed AC supply leads through center hole and make the proper connections. If using 120VAC, connect the black and white leads to the building utility. If using 277VAC, connect the orange and white leads to the building utility. Cap off unused wire. Be sure to snap battery connector together.

3.Feed excess wire into junction box and secure back plate to junction box.

4.Snap light head housing, top first and then bottom.

CONDUIT MOUNTING

1.Secure back plate to wall surface. Feed AC wires through the hole on the top flange of the back plate and make conduit connection. Make AC power connections as in 2 above.

2.Snap light head housing, top first and then bottom.

MANUAL TESTING

1. Manual testing can be initiated by pushing on the test switch (1) (Figure 2)
2. Battery in this unit may not be fully charged. After AC serives is hooked up to unit, let the battery charge up for at least 24 hrs before performing any tests.

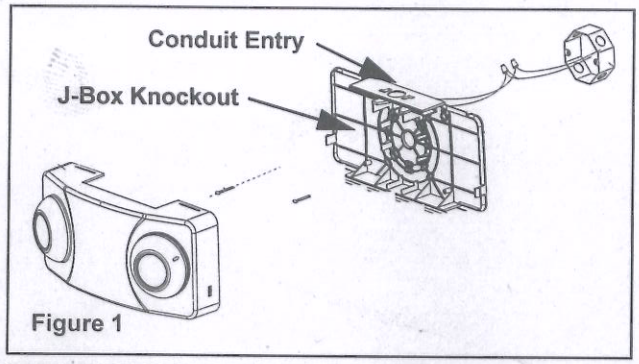


Figure 1

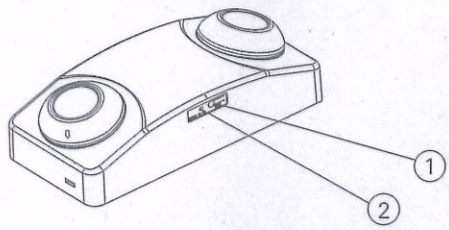


Figure 2

1)Manual battery test switch
2)Red LED (indicates normal operation)

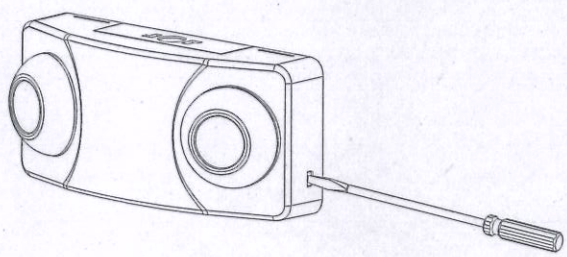


Figure 3

OPENING LIGHT HEAD HOUSING
When opening light head, insert screwdriver into the slot on the side and carefully push in and down.

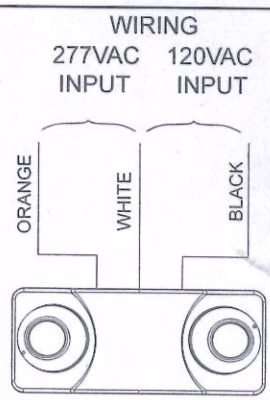
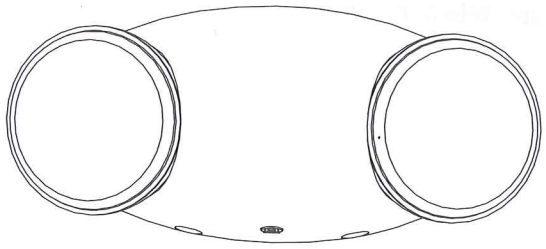


Figure 4

EMERGI-LITE®
TEL: (888) 935-3605 FAX: (888) 867-1565

Instructions for Emergency Lighting Fixture

IMPORTANT



Small Battery in this unit may not be full charged After electricity is connected to unit . Leave the battery on charge for at least 24 hours Then normal operation of this unit should take effect . To check, press the " TEST " button . The lights should turn on.

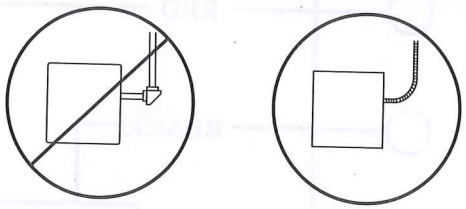
IMPORTANT SAFEGUARDS

When using electrical equipment,basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1.Do not use outdoors.
2.Equipment should be mounted in locations at heights where it will not be subject to tampering by unauthorized personnel.
3.Do not mount near gas or electric heaters.
4.The use of accessory equipment is not recommended by the manufacturer may cause an unsafe condition.
5.Do not use this equipment for other than its intended use.
6.Servicing of this equipment should be performed by qualified personnel.
7.Disconnect AC power before servicing.

SAVE THESE INSTRUCTIONS



FLEXIBLE CONDUIT ONLY

INSTALLATION (J-BOX MOUNTING)

1. Feed fixture leads through main botton case and connect AC power supply (Fig A).
2. Connect wires through J-Box. Main bottom case on J-Box and secure with screws.
3. Connect battery only after continuous AC power can be provided to the unit (Fig. B).
4. Align snaps and push housing directly onto main bottom case (Fig. C). Apply continuous AC power and press "TEST" button to check light.

INSTALLATION (CONDUIT)

1. Secure main bottom case to wall surface . Route wires through hole in conduit flange and make conduit connection.
2. Connect battery only after continuous AC power can be provided to the unit (Fig. B).
3. Align snaps and push housing directly onto main bottom case (Fig. C). Apply continuous AC power and press "TEST" button to check light.

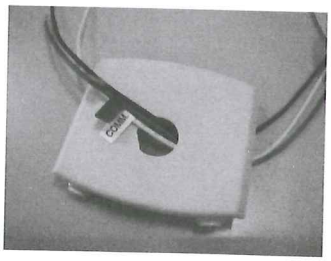
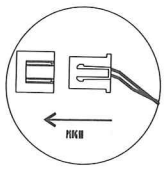


Fig.A (J-Box)



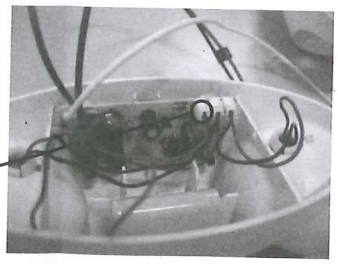


Fig.B

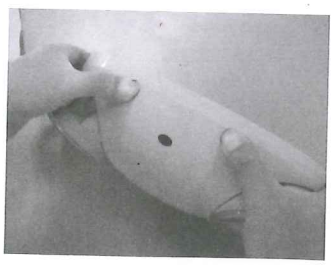


Fig.C

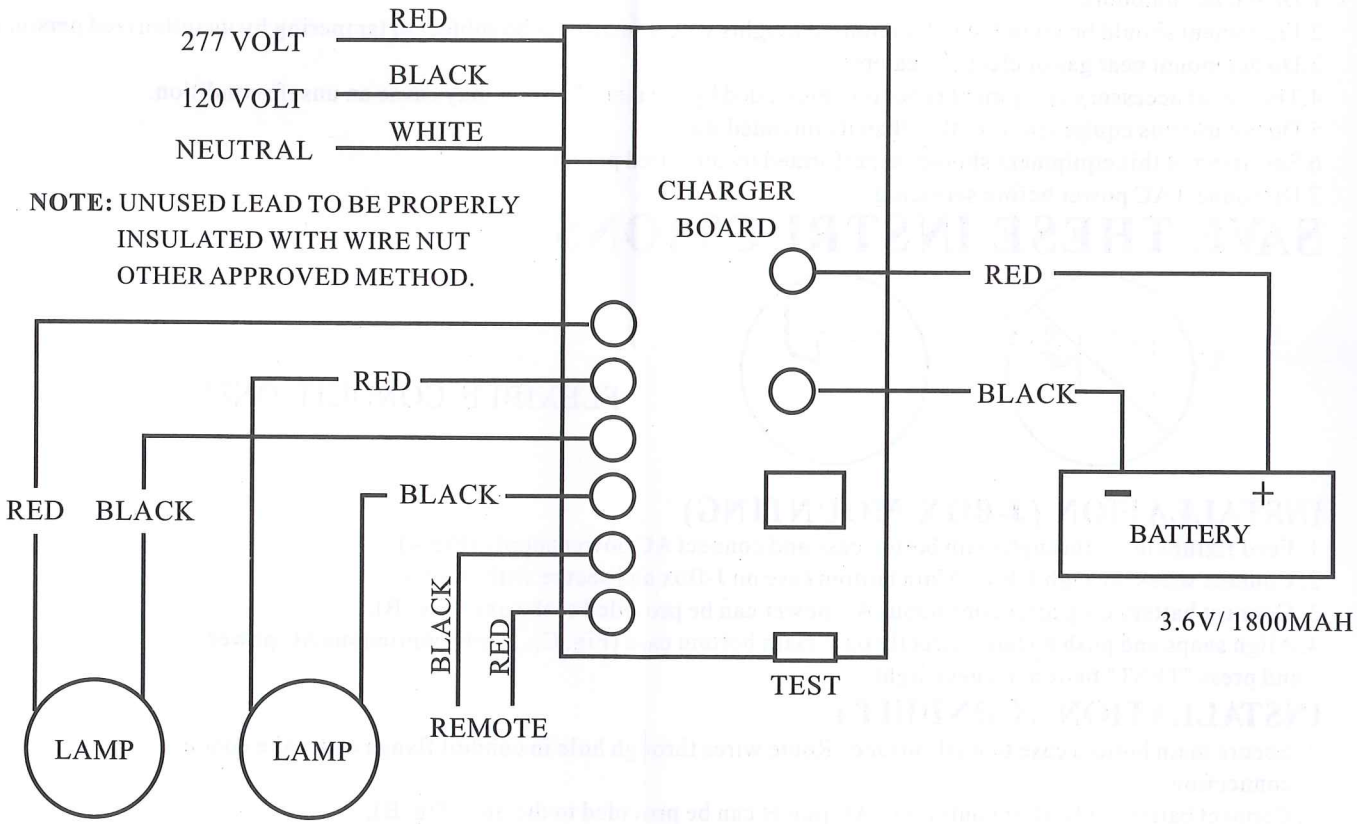
WARNING:

Unused wires must be capped using enclosed wire nuts.

OPERATION

1. During an electrical power failure, the lamps will automatically come on for a minimum of 90 minutes.
2. To test, depress the "TEST" switch. The emergency lamps will illuminate. When the switch is released, the lamps will go off.

WIRING DIAGRAM



Explosion Proof EXC, EFEP & EFXP Series

Equipment rated for Hazardous Locations

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:.

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Use caution when handling batteries. Avoid possible shorting.
4. Do not mount near gas or electric heaters.
5. Use caution when handling batteries. Avoid possible shorting.
6. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition. (**CAUTION:** If optional Halogen cycle lamp(s),(h-), are used in this equipment, to avoid shattering: Do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating. Dispose of lamp with care.)
8. Do not use this equipment for other than intended use.
9. Replace the lamps only with original parts as described on the equipment labels.
10. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

NOTE : All plugs, couplings and elbows must be Listed for the hazardous atmosphere in which the unit is installed and wiring must be in accordance with the requirements of NEC Article 500.

Installation Instructions

NOTE : Assembly of the EXC Series varies with additional options purchased (Refer to fig. 1).

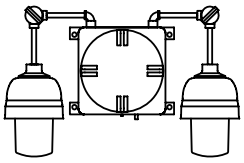
1. Turn off AC power

Housing

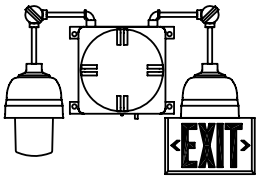
2. Remove spin-off gasketed coved (see fig. 2). Mount unit securely into place positioning the red test switch assembly to the bottom.
   NOTE: The following step is for the EXC Series with one of two fixtures. If one option is an EXIT fixture, then there will be 1 white lead, 2 black leads and 2 orangeleads.
3. Route AC unswitched supply through conduit hole on top of the unit. Connect the Neutral to White wire, 120 VAC to the Black wire(s) or 277 VAC to the Orange wire(s). Insulate unused lead(s).

Lighting Fixture(s)

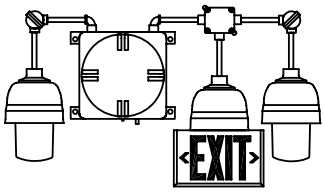
4. Disconnect swivel elbow by removing the screw (see fig. 3). Route lamp wires through the 90-degree elbow on top of housing. Connect swivel elbow with 6" conduit to the 90-degree elbow. Do not lengthen this conduit unless a seal is fitted within 18" of the housing. Permanently secure and tighten all fittings after properly positioning. Re-assemble swivel elbow.
5. Connect wiring for lamp fixture inside housing where labeled "Remote Heads".



EXC Series with 2 Lamp Fixtures



EXC Series with Lamp and EXIT Fixtures



EXC Series with 2 Lamps and EXIT Fixtures

Figure 1

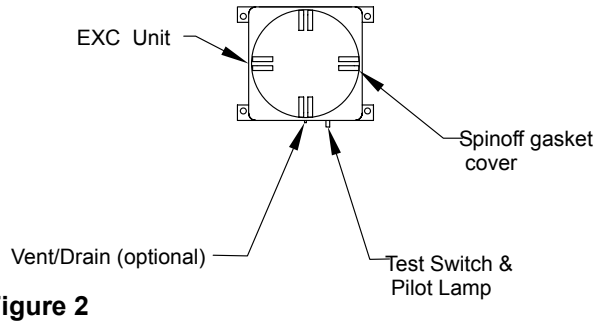


Figure 2

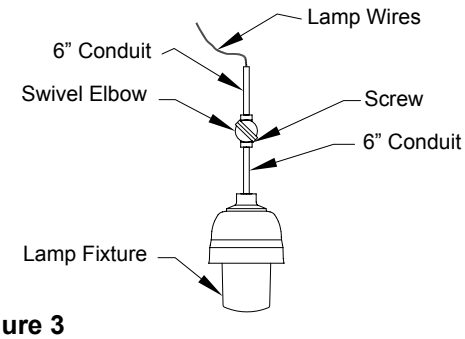


Figure 3

Exit Fixture

6. Disconnect swivel elbow by removing the screw (see fig. 4). Route EXIT fixture wires through the 90-degree elbow on top of housing. Connect swivel elbow with 6" conduit to the 90-degree elbow. Do not lengthen this conduit unless a seal-off is fitted within 18" of the housing. Permanently secure and tighten all fitting after properly positioning. Re-assemble swivel elbow.
7. Connect wiring for lamp fixture inside housing where labeled "Exit Heads". NOTE: The following step is for the EXC Series with a third fixture from the bottom of the housing.

Junction box

8. Remove junction box cover (see fig. 5). Remove conduit plugs from inside.
9. Connect junction box with 6" conduit into conduit hole in housing. Permanently secure and tighten all fittings after properly positioning. Securely mount junction box utilizing mounting feet.
10. Route EXIT fixture wires through the junction box into the housing of the unit. Connect and tighten 6" conduit from EXIT fixture to junction box conduit hole. Do not lengthen this conduit unless a seal-off is fitted within labeled 18" of the housing. Connect EXIT fixture wires inside housing where labelled "Exit Head".
11. Route AC unswitched wires through a conduit hole in junction box. Connect the Neutral to White wire, 120 VAC to the Black wire(s) or 277 VAC to the Orange wire(s) within the junction box. Insulate unused lead(s). Replace junction box cover and EXC cover. (Threads should be lubricated by graphite grease). Install plug(s) in unused conduit hole(s).

Remote Fixtures with Junction box

12. Remove junction box cover (see fig. 6). Remove conduit plugs form inside.
13. Connect junction box and fixture to remote EXC unit with appropriate conduit, ensuring that a seal-off is installed within 18" of the EXC unit.
14. Connect the remaining fixture(s) by threading the wires into the junction box and screwing in the 6" conduit. This conduit may be lengthened but should be supported in accordance with NEC Article 500.
15. Connect the fixture supply leads to the wires in the EXC unit labeled "Remote Heads".
16. Replace junction box cover and EXC cover. (Threads should be lubricated by graphite grease). Screw plug(s) into any unused conduit hole(s).

Energizing EXC Unit

17. Energize AC supply. AC pilot will illuminate. Automatic charger will charge and maintain battery for standby mode. EXIT fixture , if provided will be illuminated.

Testing

Operate test switch. The fixture(s) will illuminate. If an EXIT fixture, is supplied it will remain illuminated. Release test switch, fixture(s) will extinguish, EXIT fixture, and pilot light will be illuminated.

Maintenance

None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code or local codes.

Important notice

If the AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected. Prior to initial full load testing, unit should be on for 24 hours to allow battery sufficient time to recharge.

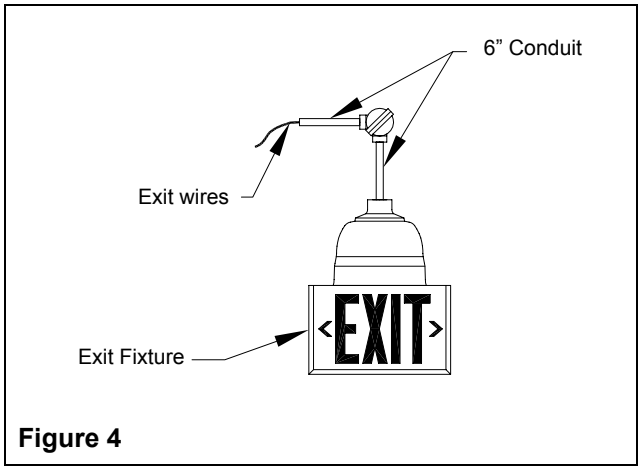


Figure 4

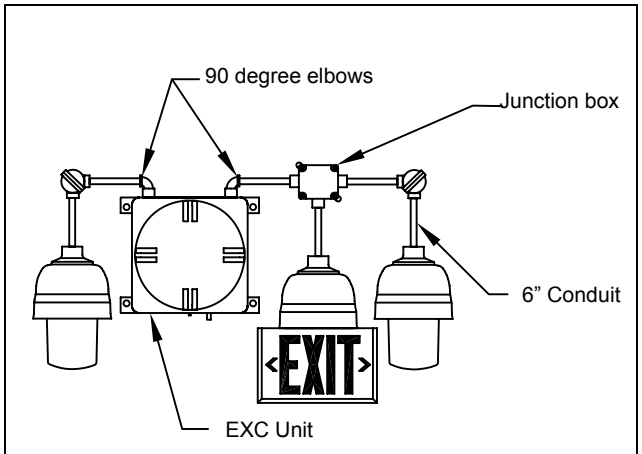


Figure 5

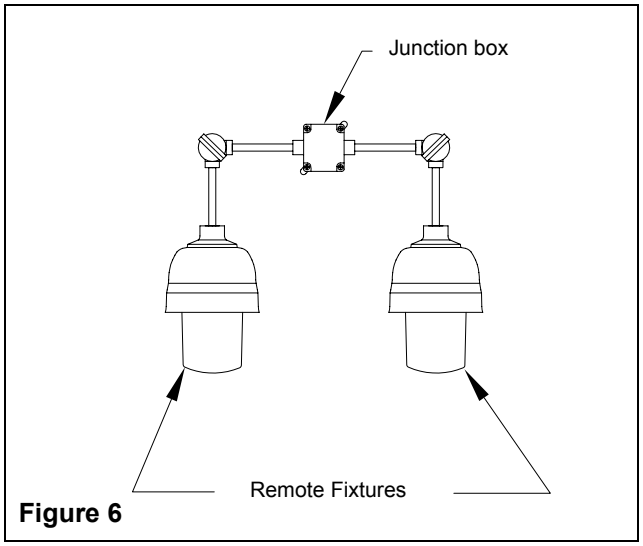


Figure 6

Explosion Proof EXC, EFEP & EFXP Series

Equipment rated for Hazardous Locations

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:.

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Use caution when handling batteries. Avoid possible shorting.
4. Do not mount near gas or electric heaters.
5. Use caution when handling batteries. Avoid possible shorting.
6. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition. (**CAUTION:** If optional Halogen cycle lamp(s),(h-), are used in this equipment, to avoid shattering: Do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating. Dispose of lamp with care.)
8. Do not use this equipment for other than intended use.
9. Replace the lamps only with original parts as described on the equipment labels.
10. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

NOTE : All plugs, couplings and elbows must be Listed for the hazardous atmosphere in which the unit is installed and wiring must be in accordance with the requirements of NEC Article 500.

Installation Instructions

NOTE : Assembly of the EXC Series varies with additional options purchased (Refer to fig. 1).

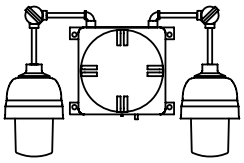
1. Turn off AC power

Housing

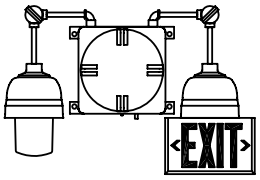
2. Remove spin-off gasketed coved (see fig. 2). Mount unit securely into place positioning the red test switch assembly to the bottom.
   NOTE: The following step is for the EXC Series with one of two fixtures. If one option is an EXIT fixture, then there will be 1 white lead, 2 black leads and 2 orangeleads.
3. Route AC unswitched supply through conduit hole on top of the unit. Connect the Neutral to White wire, 120 VAC to the Black wire(s) or 277 VAC to the Orange wire(s). Insulate unused lead(s).

Lighting Fixture(s)

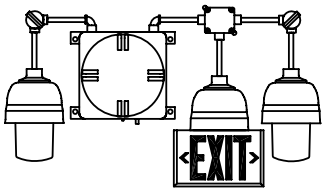
4. Disconnect swivel elbow by removing the screw (see fig. 3). Route lamp wires through the 90-degree elbow on top of housing. Connect swivel elbow with 6" conduit to the 90-degree elbow. Do not lengthen this conduit unless a seal is fitted within 18" of the housing. Permanently secure and tighten all fittings after properly positioning. Re-assemble swivel elbow.
5. Connect wiring for lamp fixture inside housing where labeled "Remote Heads".



EXC Series with 2 Lamp Fixtures



EXC Series with Lamp and EXIT Fixtures



EXC Series with 2 Lamps and EXIT Fixtures

Figure 1

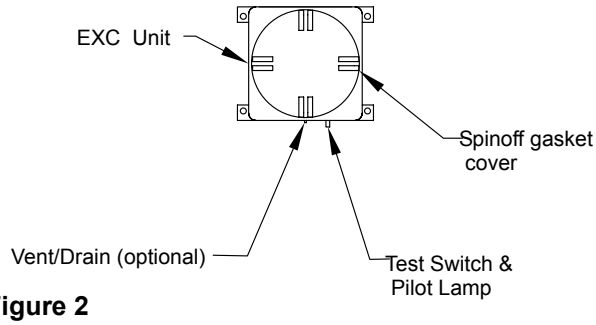


Figure 2

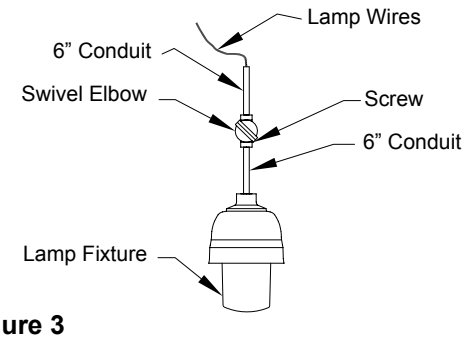


Figure 3

Exit Fixture

6. Disconnect swivel elbow by removing the screw (see fig. 4). Route EXIT fixture wires through the 90-degree elbow on top of housing. Connect swivel elbow with 6" conduit to the 90-degree elbow. Do not lengthen this conduit unless a seal-off is fitted within 18" of the housing. Permanently secure and tighten all fitting after properly positioning. Re-assemble swivel elbow.
7. Connect wiring for lamp fixture inside housing where labeled "Exit Heads". NOTE: The following step is for the EXC Series with a third fixture from the bottom of the housing.

Junction box

8. Remove junction box cover (see fig. 5). Remove conduit plugs from inside.
9. Connect junction box with 6" conduit into conduit hole in housing. Permanently secure and tighten all fittings after properly positioning. Securely mount junction box utilizing mounting feet.
10. Route EXIT fixture wires through the junction box into the housing of the unit. Connect and tighten 6" conduit from EXIT fixture to junction box conduit hole. Do not lengthen this conduit unless a seal-off is fitted within labeled 18" of the housing. Connect EXIT fixture wires inside housing where labelled "Exit Head".
11. Route AC unswitched wires through a conduit hole in junction box. Connect the Neutral to White wire, 120 VAC to the Black wire(s) or 277 VAC to the Orange wire(s) within the junction box. Insulate unused lead(s). Replace junction box cover and EXC cover. (Threads should be lubricated by graphite grease). Install plug(s) in unused conduit hole(s).

Remote Fixtures with Junction box

12. Remove junction box cover (see fig. 6). Remove conduit plugs form inside.
13. Connect junction box and fixture to remote EXC unit with appropriate conduit, ensuring that a seal-off is installed within 18" of the EXC unit.
14. Connect the remaining fixture(s) by threading the wires into the junction box and screwing in the 6" conduit. This conduit may be lengthened but should be supported in accordance with NEC Article 500.
15. Connect the fixture supply leads to the wires in the EXC unit labeled "Remote Heads".
16. Replace junction box cover and EXC cover. (Threads should be lubricated by graphite grease). Screw plug(s) into any unused conduit hole(s).

Energizing EXC Unit

17. Energize AC supply. AC pilot will illuminate. Automatic charger will charge and maintain battery for standby mode. EXIT fixture , if provided will be illuminated.

Testing

Operate test switch. The fixture(s) will illuminate. If an EXIT fixture, is supplied it will remain illuminated. Release test switch, fixture(s) will extinguish, EXIT fixture, and pilot light will be illuminated.

Maintenance

None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code or local codes.

Important notice

If the AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected. Prior to initial full load testing, unit should be on for 24 hours to allow battery sufficient time to recharge.

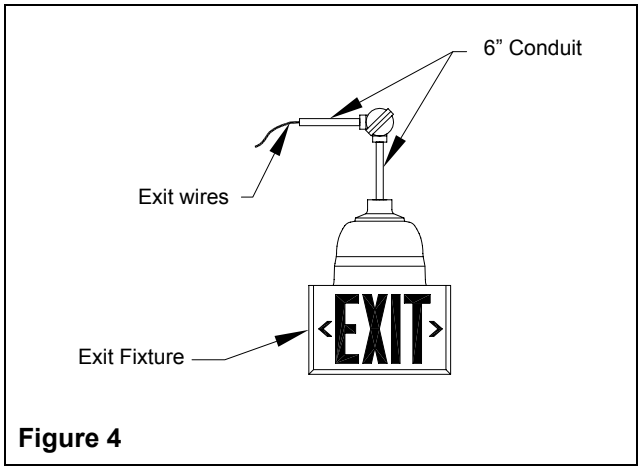


Figure 4

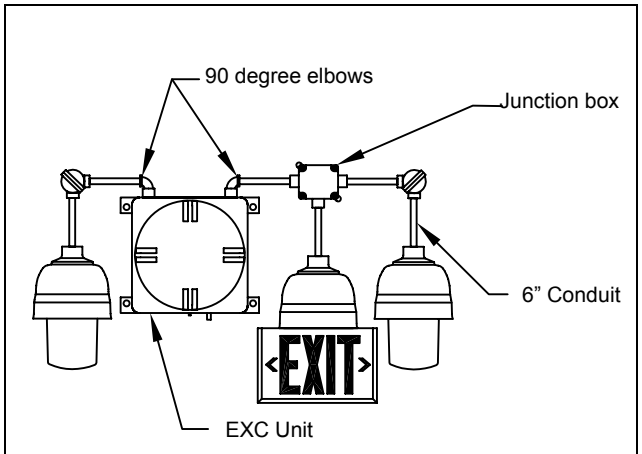


Figure 5

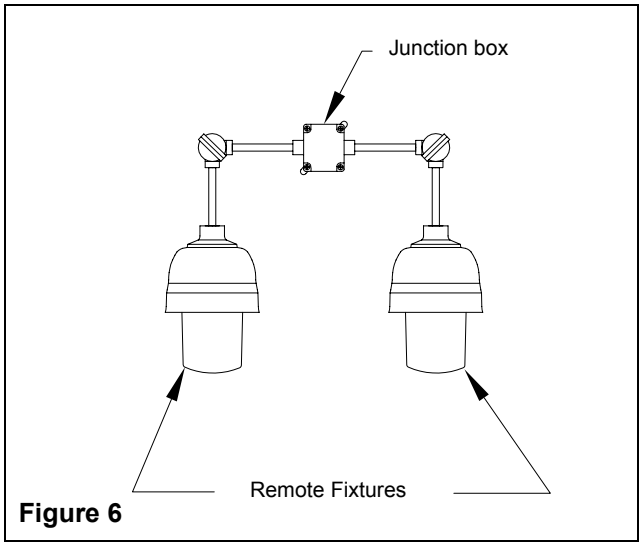


Figure 6

EC2 & ECX2 Series – Emergency Lighting Unit

Thermoplastic

Use flexible conduit only

WARNING:
Risk of Electrical Shock.
Disconnect Power before Installation.

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. All servicing should be performed by qualified service personnel.
2. All unused wires must be insulated to prevent shorting.
3. Do not use outdoors.
4. Do not let power supply cords touch hot surfaces.
5. Do not mount near gas or electric heaters.
6. Use caution when handling batteries.
7. Avoid possible shorting.
8. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
9. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
10. Do not use this equipment for other than intended use.
11. Unit to be installed only as per configuration described in this instruction manual.

SAVE THESE INSTRUCTIONS

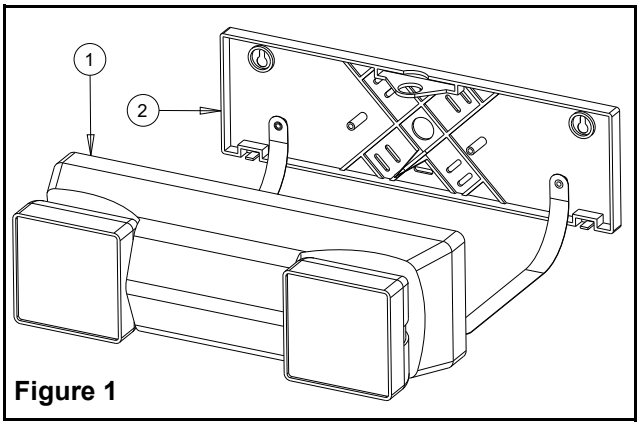


Figure 1

Parts List

1. Front Cover with Heads
2. Back plate

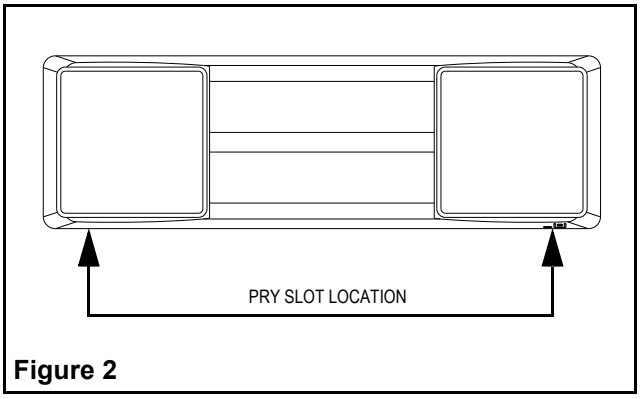


Figure 2

Installation Instructions

IMPORTANT: Install fixture/lamp type combination no higher than the maximum mounting heights as stipulated in the “Lamp Mounting Height Cross-reference Table” (P/N 750.1924). Refer to “Technical Information” section of our website.

1. Turn off AC power.
2. Route AC unswitched circuit of rated voltage into electrical box and leave 6” of wire length (for wall mounted units with an electrical box).
3. Remove back plate using a screwdriver in the pry slots located at the bottom of the unit (see fig. 2) .
4. Determine mounting location. Follow the proper mounting instruction (wall or surface mount) and continue to step 5.

Wall mounting (with a junction box)

a. Knock out proper hole pattern in back plate by placing two blocks of wood under the backplate (one on each side of the hole). Strike knockouts with a hammer and screwdriver.
b. Route AC and DC wires (if aplicable) through the large hole in the back plate.
c. Attach back plate to the junction box using the junction box screws (see fig. 3).

Surface mounting (without a junction box)

a. Remove conduit opening (see fig. 3).
b. Mount back plate to wall or ceiling using the keyhole slots in back plate.
c. Route AC and DC wires (if aplicable) through conduit opening.

5. Our unit accepts an input voltage of 120 VAC or 277 VAC (see fig. 4).
   120 VAC — Connect the black wire (120 VAC) and white (neutral) to the building utility. Insulate the orange wire.
   277 VAC — Connect the orange (277 VAC) and white (neutral) to the building utility. Insulate the black wire.
6. For units with remote capability (ECX-2 series). Extend the DC wiring from remote fixture (maximum 12 Watts of total remote load) to unit. Wiring must be comply with NEC Articles 700 and 720. Connect the remote load wires labelled “Connect to Remote”.
7. When ready to energize AC circuit, connect the battery.
8. For units with a junction box, push back excess wires through the large knockout in the back plate.
9. Re-install front cover onto back plate.
10. Energize AC. Red pilot indicator will illuminate.

Testing

Depress test switch (see fig. 5). DC lamps will illuminate. Release test switch and unit will return to normal standby operation. Allow unit to charge for 24 hours before initial full duration testing.

Maintenance

None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code, or local codes. If the AC supply to the unit is to be disconnected for two months or more, the battery must be disconnected.
Warranty: For the complete warranty information, please refer to the landing page of our website (http://www.emergi-lite.com/usa/).

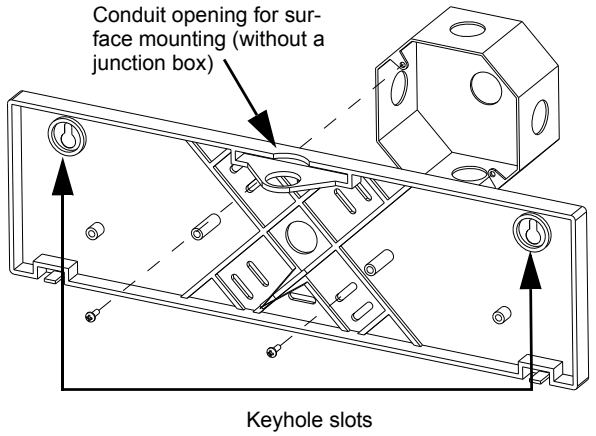


Figure 3

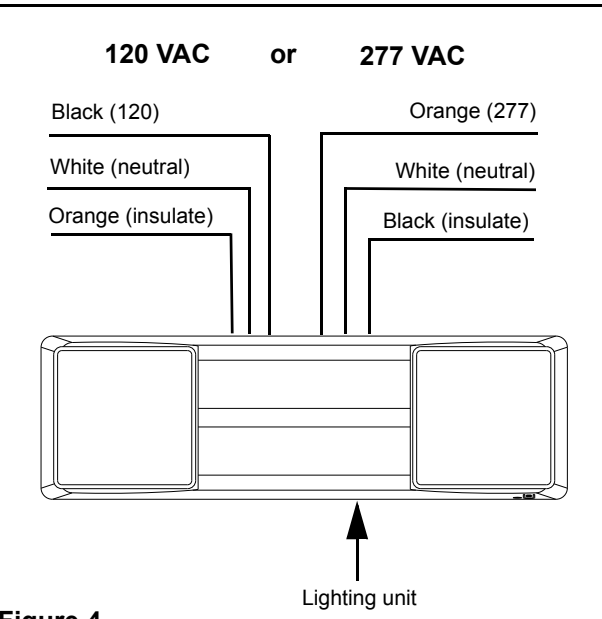


Figure 4

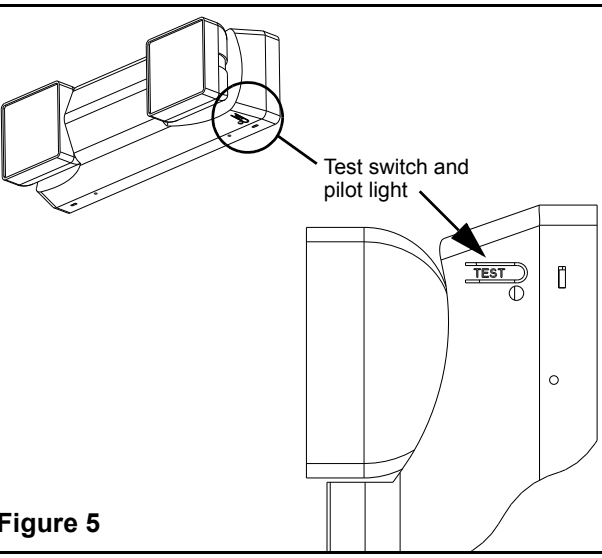


Figure 5

ESCORT Series

Installation instructions - Decorative emergency lighting unit

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Use caution when handling batteries. Avoid possible shorting.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Do not use this equipment for other than intended use.
8. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Unpack the fixture:

Check the contents of the box. You should recieve:
1 x Mounting plate
1 x Fixture
2 x Lens
1 x Hardware package

Note: First turn off electricity

WALL MOUNTING (see figure page 2)

1. Remove mounting plate from fixture by prying with screwdriver (See Fig. 1).
2. Remove appropriate key holes knock out on the mounting plate using a screwdriver.
3. Pass white (neutral) and either black (120Vac) or orange (277Vac) wire leads through center hole of mounting plate. Make electrical connections in the junction box. See electrical connections instructions on this page. You may use hanging hook to hang fixture while making connections.
4. Install the mounting plate on the junction box with the provided screws #8-32 x 1" long.
5. Connect red lead to battery positive terminal (See Fig. 2).
6. Snap fixture to mounting plate.
7. Restore power: AC ON indicator will turn on.
8. Press test button: battery powered bulb will light on while AC ON indicator will turn off.

SURFACE OR PENDANT MOUNTING

(see figure page 3)

1. Remove mounting plate from fixture by prying with screwdriver (See Fig. 1).
2. Remove the knockout located on top of the mounting plate.
3. **Surface mount:** Secure the mounting plate to the wall. Install the conduit (pipe) on the unit. **Pendant mount:** Secure mounting plate using conduit (pipe) and connector (not provided).
4. Pass white (neutral) and either black (120Vac) or orange (277Vac) wire leads through knockout of mounting plate. Make electrical connections in the unit. See electrical connections on this page. You may use hanging hook to hang fixture while making connections.
5. Connect red lead to battery positive terminal (See Fig. 2).
6. Snap fixture to mounting plate.
7. Restor power: AC ON indicator will turn on.
8. Press test button: battery powered bulb will light on while AC ON indicator will turn off.

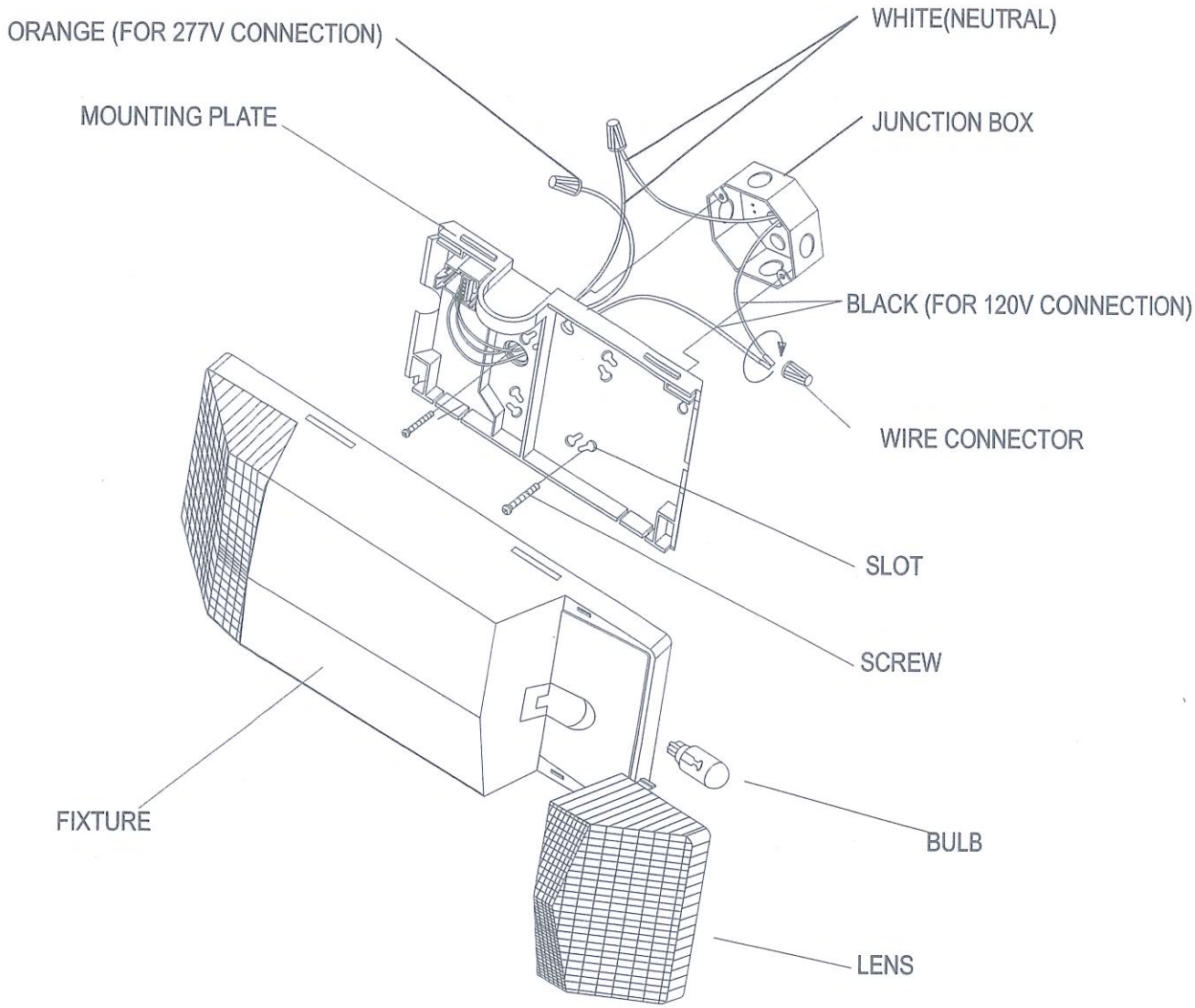
ELECTRICAL CONNECTIONS

Connect white wire lead from fixture to white wire (neutral) from building utility. Also connect black (120Vac) or orange (277Vac) wire to wire from building utility, depending on supplied voltage. Cap off unused wire. Use wire nuts provided with the unit.

RELAMPING

1. Stap off to remove lens.
2. Refer to the relamping information located near lamp holder for recommended maximum wattage. Do not exceed this wattage.
3. Install the bulb.
4. Reinstall the lens.

Wall mounting



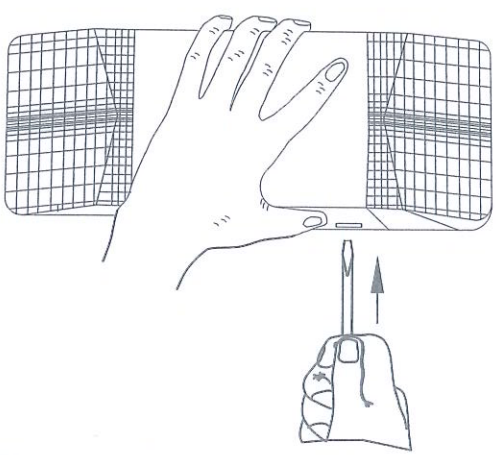


Figure 1

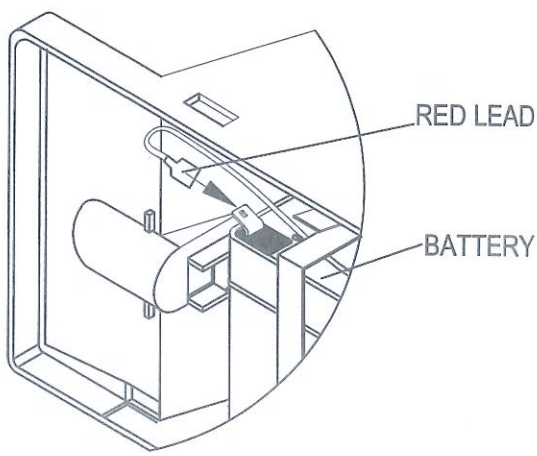
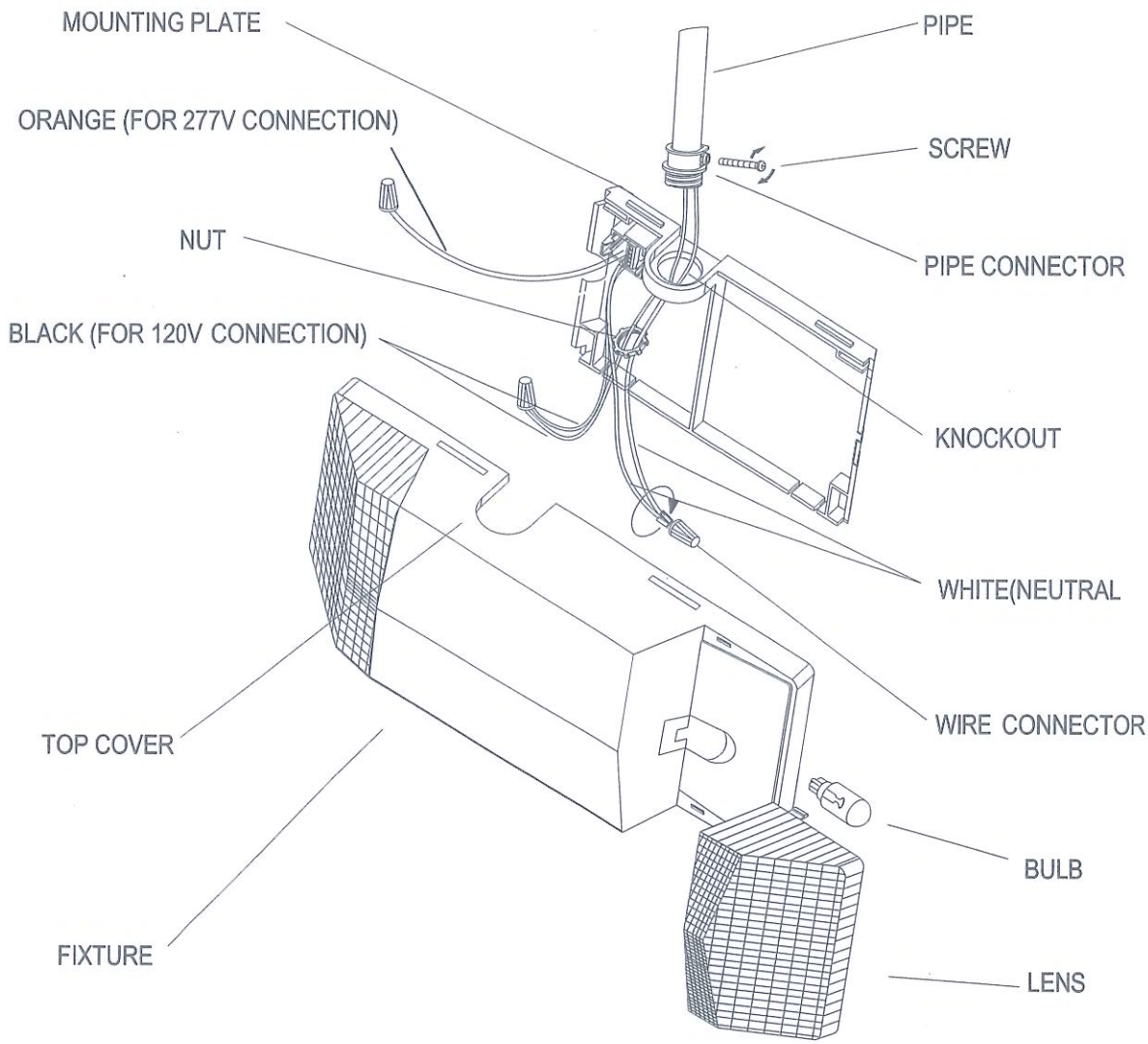


Figure 2

Surface or pendant mounting



PARTS DESCRIPTION

1) LENS
2) DC LAMP
3) HOUSING
4) LAMPHOLDER
5) PC BOARD
6) POWER CONNECTOR
7) BATTERY
8) BATTERY BRACKET
9) BACKPLATE

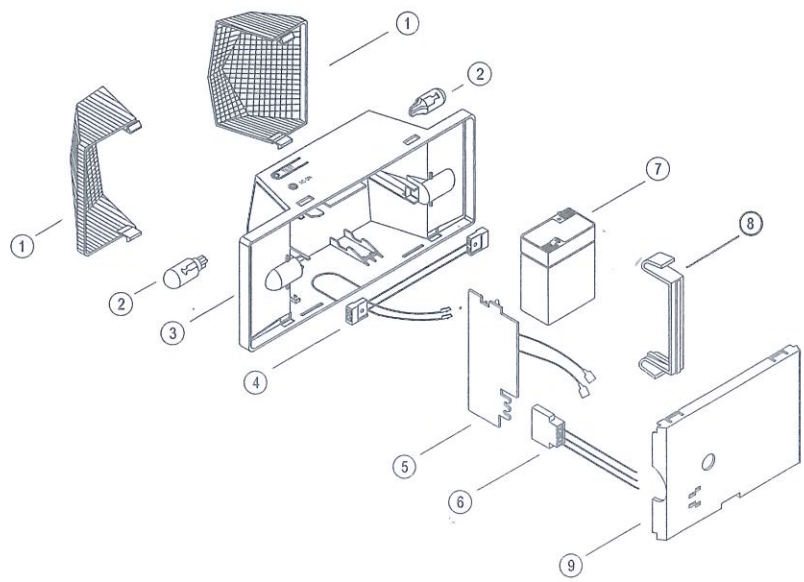


Figure 3

Installation instructions

Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp head.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the flat surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the lamp head into its final position.
5. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
6. Use the junction box screws to secure the canopy to the junction box.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).

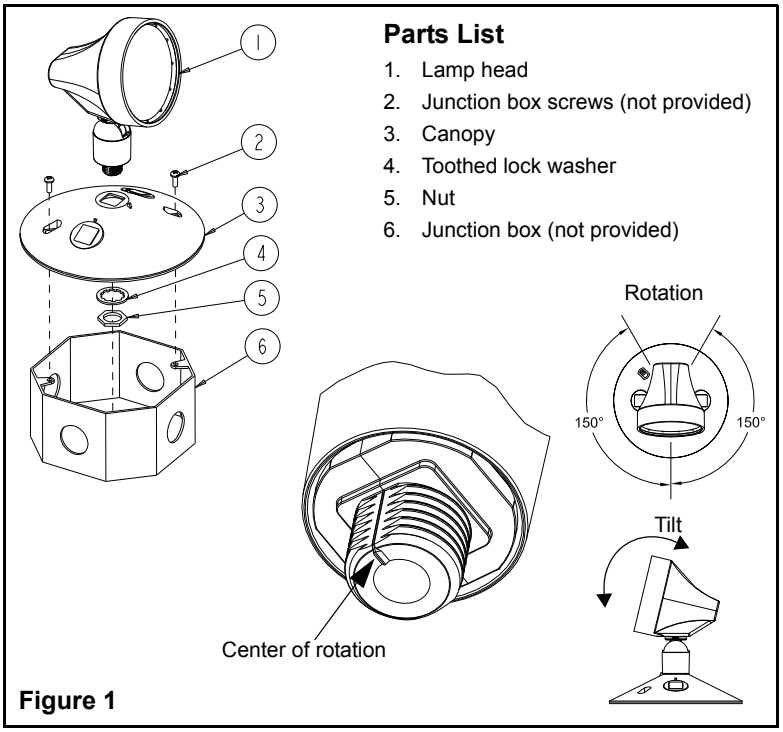


Figure 1

**** FIXTURE MODEL MAY BE DIFFERENT THAN SHOWN****

EMERGI-LITE

Remote heads – Installation instructions

Installation instructions

Note: Lamp heads may already be attached to the canopy.

1. Determine the final position for the lamp head.
2. Look for the mark on the threaded portion of the swivel to find the center of rotation for the lamp head.
3. Insert the flat surface from the swivel into the square hole on the canopy ensuring that the center of rotation is as close as possible to the final position. Secure the lamp head in place with the lock washer and nut provided.
4. Adjust the lamp head into its final position.
5. Make the proper connections. The fixture is designed for 6, 12 or 24 VDC (see the lamp voltage indicated on the inside surface of the canopy). Connect the lamp wires to the DC supply wires.
6. Use the junction box screws to secure the canopy to the junction box.

Adjust the lamp head:

Rotation: hold the lamp head and turn it to either side.
-Note: The lamp head can be rotated 150° to either side.
Tilting: hold the lamp head and tilt it up or down.

The lamp head uses a ratchet type mechanism that moves it in 10 degree increments (see fig. 1).

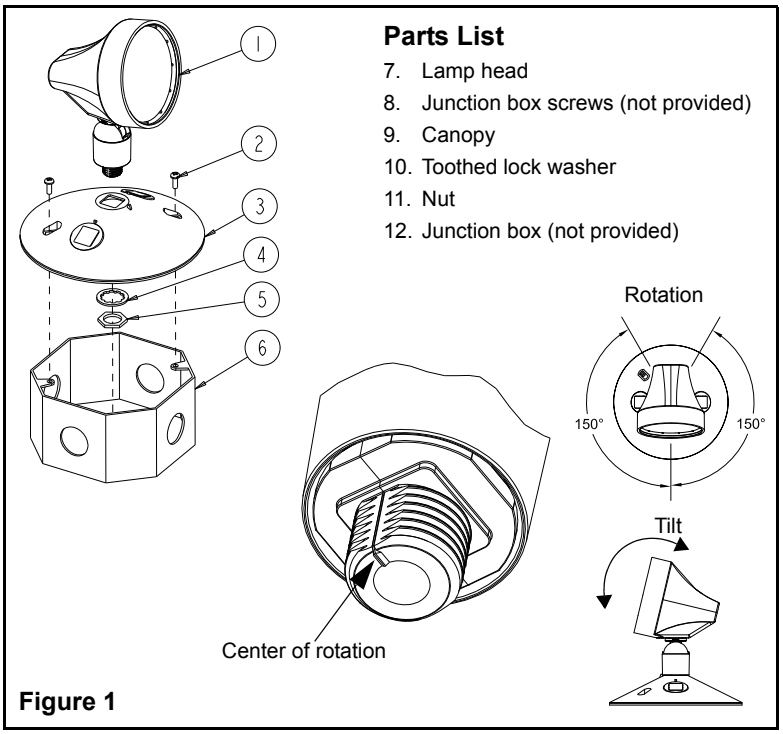


Figure 1

**** FIXTURE MODEL MAY BE DIFFERENT THAN SHOWN****

Emergi-Lite Tel: (888) 552-6467 Fax: (800) 316-4515 www.emergi-lite.com 07/16 750.1106 Rev. C

1/1

6,12, or 24 Volt, High Wattage Emergency Light

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Use caution when handling batteries. Avoid possible shorting.
5. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
6. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
7. Caution: If optional Halogen cycle lamp(s), symbol (H—), are used in this equipment, to avoid shattering: do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating, dispose of lamp with care.
8. Halogen cycle lamps operate at high temperatures. Do not store or place flammable materials near lamp.
9. Do not use this equipment for other than intended use.
10. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation

1. TURN OFF AC POWER.
2. Route AC circuit wires to electrical box and leave 12" of wire length.
3. Securely mount unit in place. Connect AC supply wiring to unit as follows:
   For 120 VAC operation : — Black to 120 VAC, White to neutral *
   For 277 VAC operation : — Orange to 277 VAC, White to neutral *
   * NOTE : BE SURE TO INSULATE UNUSED WIRE.
4. Extend DC wiring for remote fixtures, (if required), to unit. Wiring must comply with NEC articles 700 and 720. Do not exceed rated wattage of unit.
5. When ready to energize AC, plug polarized battery connector into circuit board. Lamps will not light at this time.
6. Energize AC. Pilot lamp and high charge LED will illuminate.

Testing

(See separate booklet for units with AD option)
Allow one minute for unit to stabilize before testing. To test, depress test switch. Pilot lights will go out and emergency lamps will come on. When test switch is release, emergency lamps will go off and both pilot lights will come on. Allow a minimum of 24 hours charge time after installation or power failure for initial full load testing.

Maintenance

Wet Battery:
Periodically inspect fluid levels on all cells. If refilling is required, use distilled water only, refill to designated upper line.

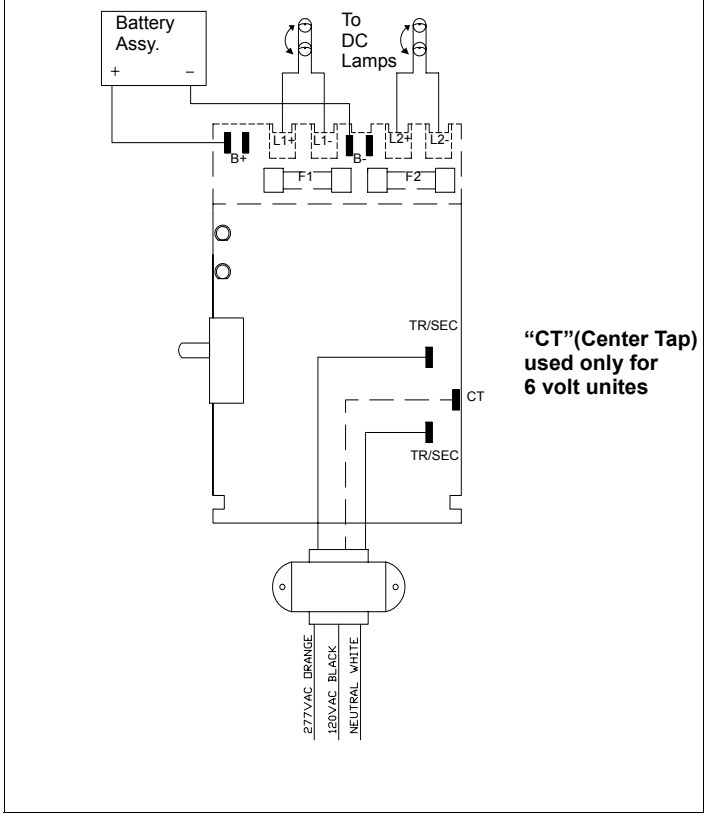
IMPORTANT NOTE:
If unit is installed in an area of high temperatures, increase periodic inspection intervals, as higher watter usage will result.
(Observe safety precaution when handling corrosive batteries.)

Dry battery:
None required. Unit should be tested monthly in accordance with the requirements of NFPA 101, Life Safety Code, or local codes.

Important notice

This equipment is furnished with a low battery disconnect circuit in the emergency mode. If the building is to be unoccupied for an extended period of time and all the power is to be disconnected, the internal batteries must be unplugged from the circuit board to prevent damage. Do not allow the battery wires to short circuit.

Battery terminals are mounted on the component side of the circuit board. Make sure to separate lamp load evenly on both circuits.



"CT"(Center Tap) used only for 6 volt unites

Limited Warranty

1.1 **EMERGI-LITE®** 6, 12 and 24 volt Emergency Lighting Unit Equipment (excluding lamps and fuses) and Exit Signs are fully warranted to be free of defects in material and workmanship under normal use for a period of three years from date of installation (see Paragraph 2.1). (For MR16 LED light source, see Paragraph 3.3)

1.2 **EMERGI-LITE®** 6, 12 and 24 volt Emergency Lighting Unit Equipment (excluding lamps and fuses) and Exit Signs listed below are fully warranted to be free of defects in material and workmanship under normal use for a period of five years from date of installation (see Paragraph 2.1). (For MR16 LED light source, see Paragraph 3.3)

SPEC GRADE ARCHITECTURAL	SPEC GRADE COMMERCIAL	SPEC GRADE INDUSTRIAL	REMOTE	DISTRIBUTOR SELECT
Lux-Ray™ LED Series	Premier™ Battery Series	Survive-All™ SVX Combo Series	Lux-Ray™ LED Series	Prestige™ Thin Series
Revelation™ Series	Premier™ Combo Series	Survive-All™ SVX Exit Series	Revelation™ Series	
Mini-Revelation Series	Premier™ Exit Series	Survive-All™ SVH Series	Mini-Revelation Series	
Prestige™ Series Edge-Lit	Preceptor™ Die-Cast Series	Survive-All™ SVXH Series	HP High Performance Series	
Prestige™ Series X40	Preceptor™ Recessed Series	Survive-All SVXHZ Series		
Prestige™ DX Series	Preceptor™ Remote Capacity Series	HP High Performance Series		
Prestige™ Floor Proximity Series				

1.3 **EMERGI-LITE®** 3.6 volt Emergency Lighting Unit Equipment (excluding lamps, and fuses) are fully warranted to be free of defects in material and workmanship under normal use for a period of three year from date of installation (see Paragraph 2.1).

1.4 **EMERGI-LITE®** 6, 12 and 24 volt Unit Equipment Batteries are warranted as follows (Warrant below includes the full warranty on entire unit as called out in Paragraph 1.1–1.3).

*** Maximum Storage life. Must Be Recharged If Not Placed in Service Or Battery Warranty Void**

BATTERY TYPE	LIFE EXPECTANCY	SHELF LIFE*	FULL WARRANTY	PRO RATA WARRANTY
Sealed Lead-Calcium	8 years	6 months	3 years	3 years
High Temperature Lead-Calcium	8 years	6 months	5 years	3 years
Sealed Nickel-Cadmium	10 years	1 year	5 years	5 years
Nickel-Metal Hydride	10 years	1 year	5 years	5 years

2.1 The full warranty period begins on the date of installation or 90 days from date of shipment, whichever date is earlier.

2.2 Should a defect appear in the equipment or batteries listed in Paragraphs 1.1–1.4 above within the specified full warranty period, **EMERGI-LITE®** will repair or replace equipment without charge (see Paragraph 3.3). Such repair or replacement shall be the purchaser's exclusive remedy.

2.3 The Pro Rata Warranty Period for batteries begins on the date the full warranty period ends.

2.4 A battery determined to be defective during the Pro Rata Warranty Period shall be repaired or replaced at a cost equal to the net price in effect at the time, reduced by the percentage obtained in multiplying 10% by the number of full years remaining in the total warranty period. Such repair or replacement at this adjusted price shall be the purchaser's exclusive remedy.

3.1 All warranties are subject to proper installation and maintenance in accordance with the instructions supplied.

3.2 Any material deemed defective must be returned, freight prepaid, to the factory for evaluation (see Paragraph 5.1–5.3). Any changes in circuitry or components by other than authorized **EMERGI-LITE®** personnel or its service companies will void the warranty.

3.3 All warranties are limited to the repair and/or replacement or parts or equipment, which, upon examination at our plant, are determined to be defective and in our judgement are subject to repair or replacement under warranty. Replacement of lamps and fuses is not included in the warranty except for MR16 LED lamps are warranted to be free of defects in material and workmanship under normal use for a period of five (5) years when purchased and used with **EMERGI-LITE®** Battery Units, Combination Units or Remotes. The full warranty period begins on the date of installation or ninety (90) days from the date of shipment, whichever date is earlier.

3.4 If new replacement parts are shipped before defective goods are received for evaluation, the replacement parts will be invoiced at the net price in effect at that time. These charges will be credited if, upon receipt and evaluation of goods, a defect is determined. Only replacement parts will be shipped under these circumstances, if field replacement is possible. **EMERGI-LITE®** FACTORY ONLY RESERVES THE RIGHT TO SHIP NEW UNIT EQUIPMENT FOR REPLACEMENT PURPOSES. Units returned after installation cannot be restored to 100% saleable condition.

4.1 In no event shall **EMERGI-LITE®** be liable for backcharges of any kind, including, without limitation, labor charges for field repair or late penalties.

4.2 This warranty does not cover damages caused by improper maintenance of installation or damage due to installation in areas with other than normal temperatures and environmental conditions per application specifications. **EMERGI-LITE®** assumes no responsibility for any damage to people, property, apparatus or otherwise resulting from improper installation or maintenance of its Emergency Lighting Unit Equipment.

4.3 This warranty does not cover damages caused by abuse, fire or Act of God.

4.4 In no event shall **EMERGI-LITE®** be liable for incidental or consequential damages.

4.5 The foregoing warranty is in lieu of all other warranties, expressed or implied, or merchantability, fitness for a particular purpose or any other thing. Except as stated in this warranty, **EMERGI-LITE®** shall not be liable for any defects in, or breach of any contract relating to, the quality of performance of **EMERGI-LITE®** Equipment under any theory of law including, without limitation, contract, negligence, strict liability or misrepresentation.

4.6 **EMERGI-LITE®** warranty coverage shall not apply to any equipment of another manufacturer used in conjunction with **EMERGI-LITE®** Equipment.

4.7 Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This written warranty gives you specific legal rights and you may also have other rights which vary from state to state.

5.1 No returned defective materials will be accepted without a Returned Goods Authorization issued in writing by an authorized **EMERGI-LITE®** employee.

5.2 Purchaser is responsible for secure packing of returned materials to provide best possible assurance against damage in shipment..

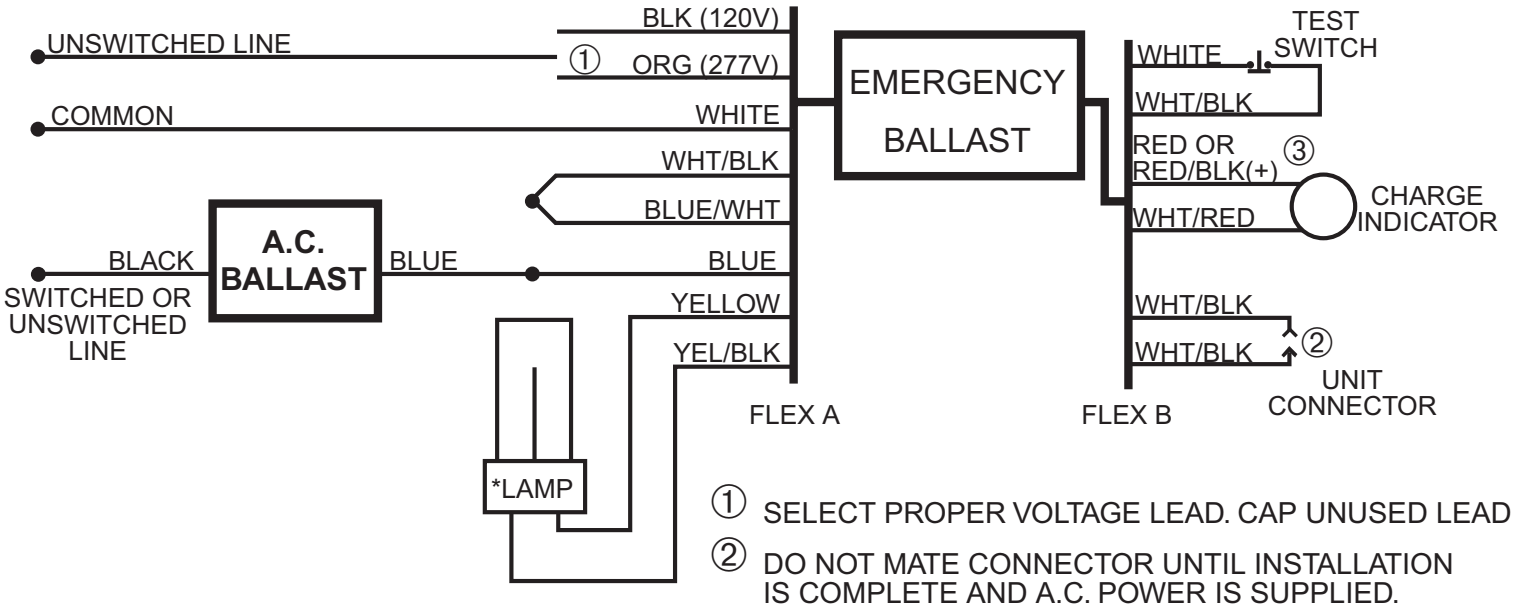
5.3 Defective batteries of any kind must not be returned to **EMERGI-LITE®** factory without strict adherence to special instructions for handling and shipping. WARNING Never ship a refillable wet battery in any type of emergency lighting equipment. Failure to adhere to this policy will void warranty.

5.4 Defective goods returned to the factory must be shipped prepaid. COLLECT RETURNED SHIPMENT WILL BE REFUSED. Freight charges to return repaired equipment or ship replacement equipment to the purchaser to be paid by **EMERGI-LITE®**. Factory will return repaired goods via same shipping method as received.

FAILURE TO COMPLY WITH ANY OF THE STIPULATIONS SET FORTH WILL VOID THE WARRANTY. ANY EXCEPTIONS TO THE FOREGOING WARRANTY MUST BE REQUESTED AND ACCEPTED IN WRITING PRIOR TO SHIPMENT. EMERGI-LITE® EQUIPMENT NOT LISTED IN PARAGRAPHS 1.1–1.4 IS WARRANTED AS DESCRIBED ON ITS INDIVIDUAL DATA SHEET WITH THE STIPULATIONS AS STATED IN PARAGRAPHS 2.1–5.4.

A1 A1

ONE LAMP MAGNETIC BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

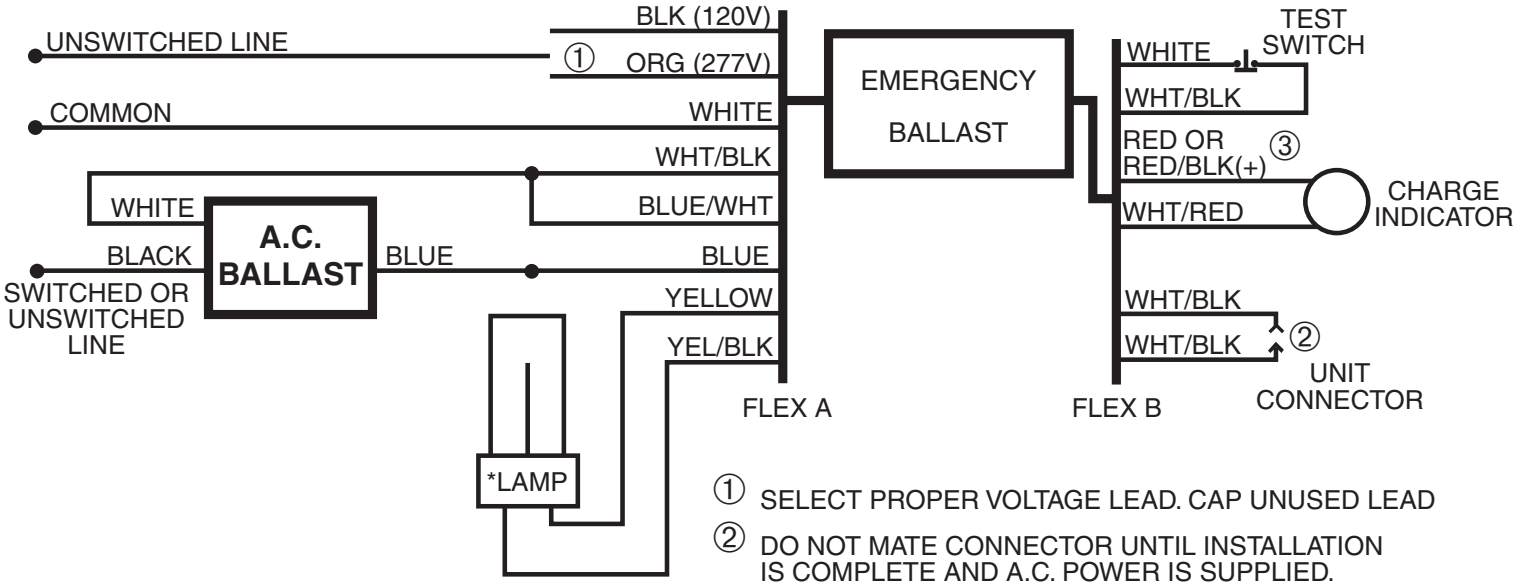
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

1LMB

NOTES

A2 A2

ONE LAMP HIGH POWER FACTOR MAGNETIC BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

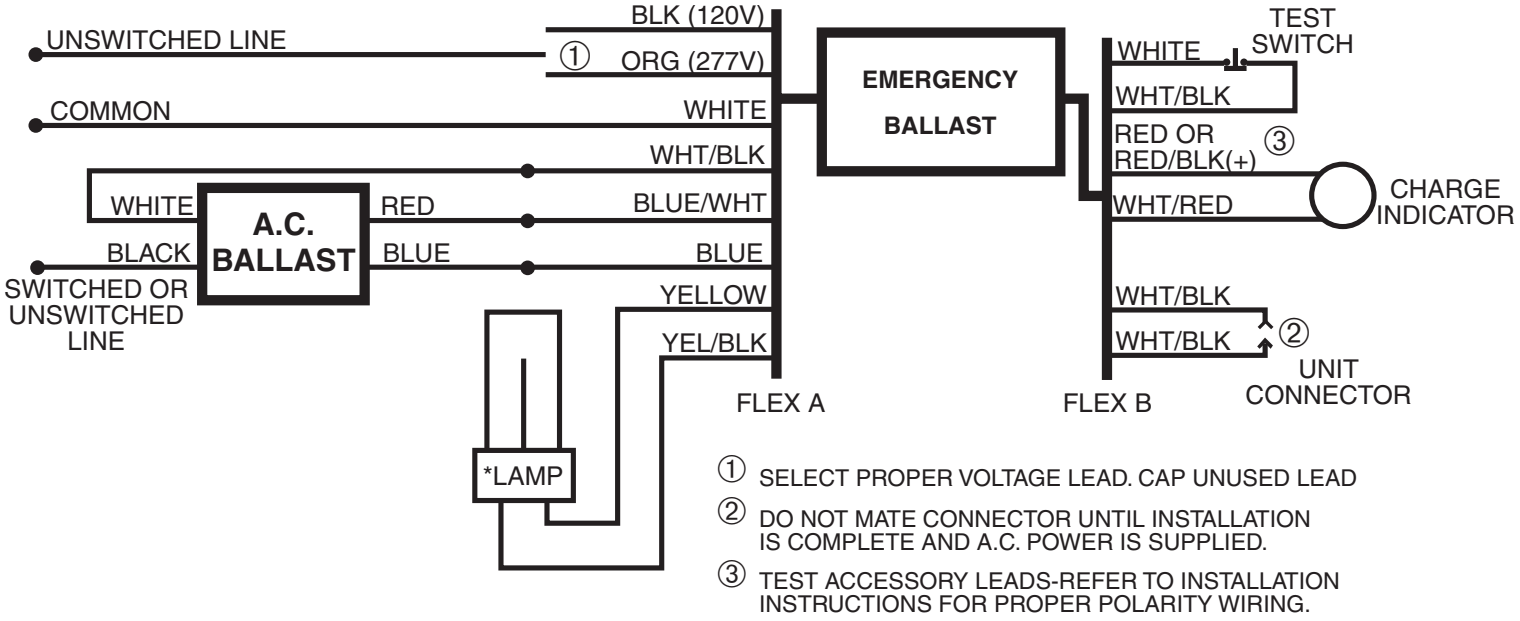
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

1LHPFMB

NOTES

A3 A3

ONE LAMP ELECTRONIC BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

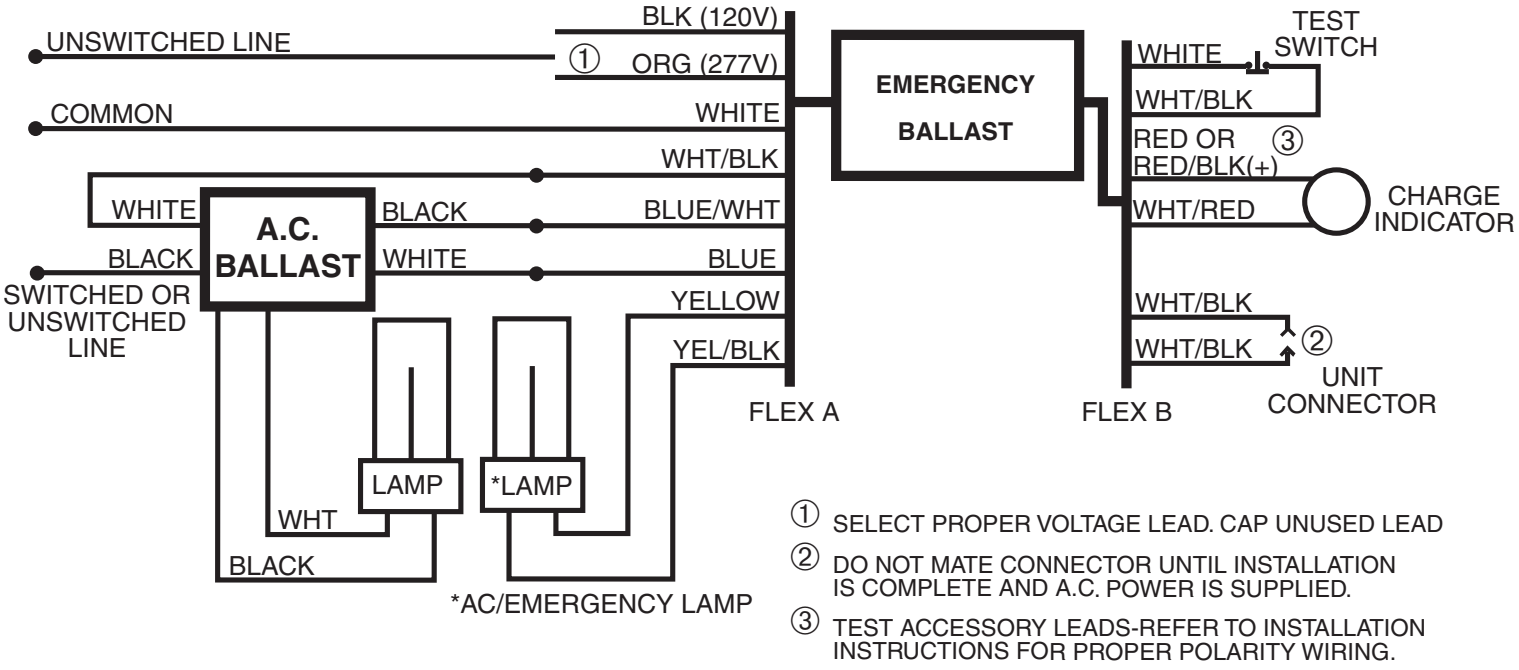
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

1LEB

NOTES

A4 A4

TWO LAMP ELECTRONIC BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

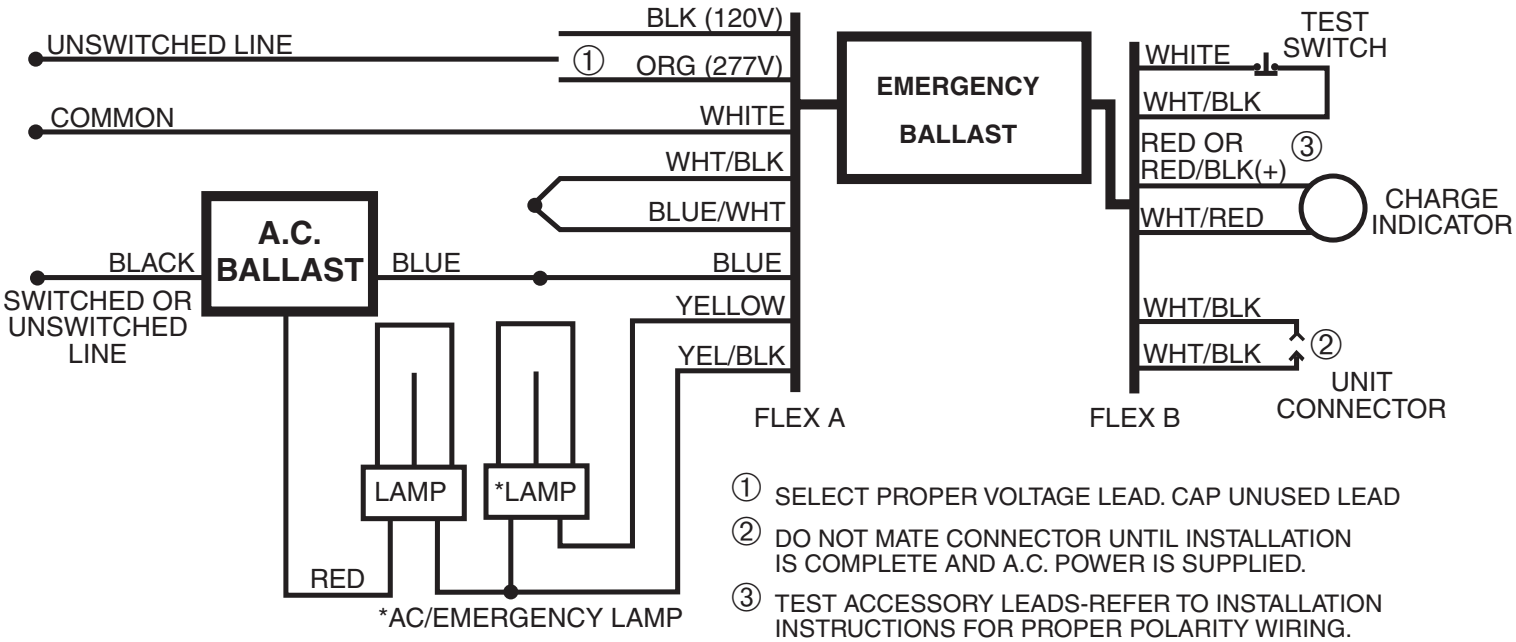
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LEB

NOTES

A5 A5

TWO LAMP PARALLEL MAGNETIC BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

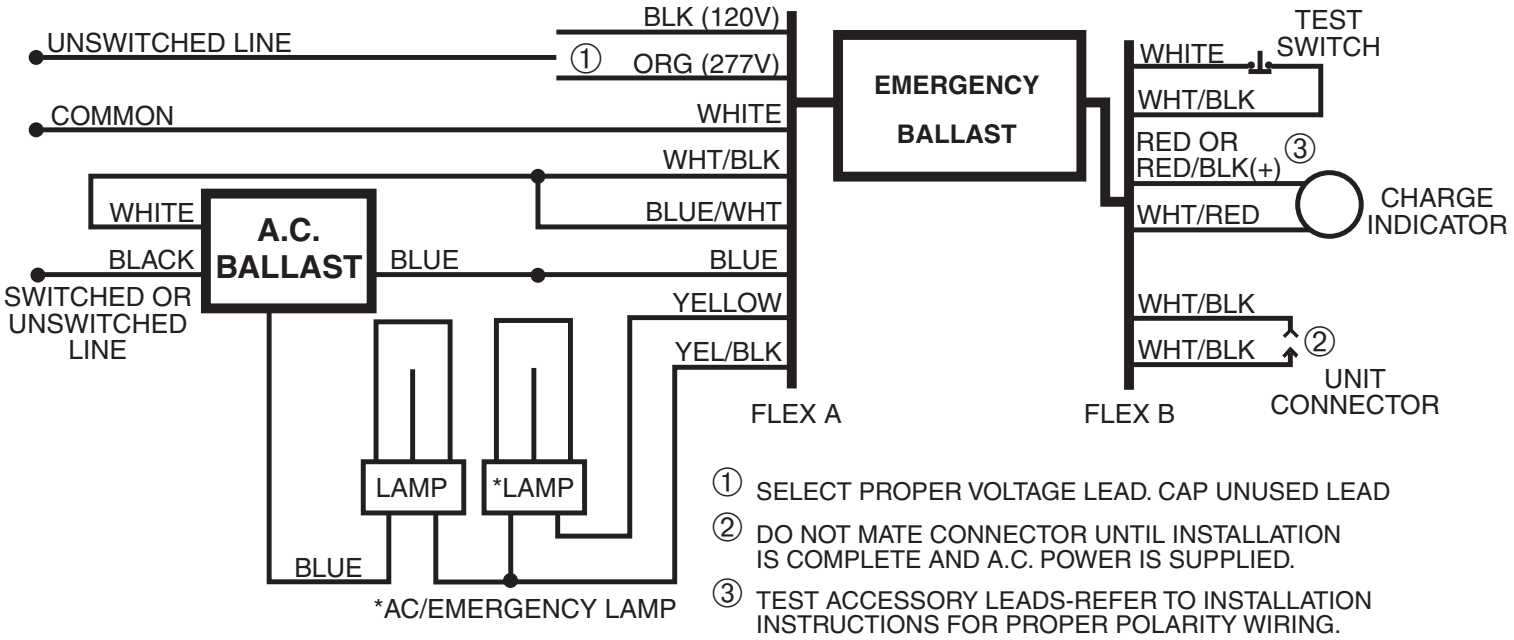
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LPMB

NOTES

A6 A6

TWO LAMP PARALLEL HIGH POWER FACTOR MAGNETIC BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

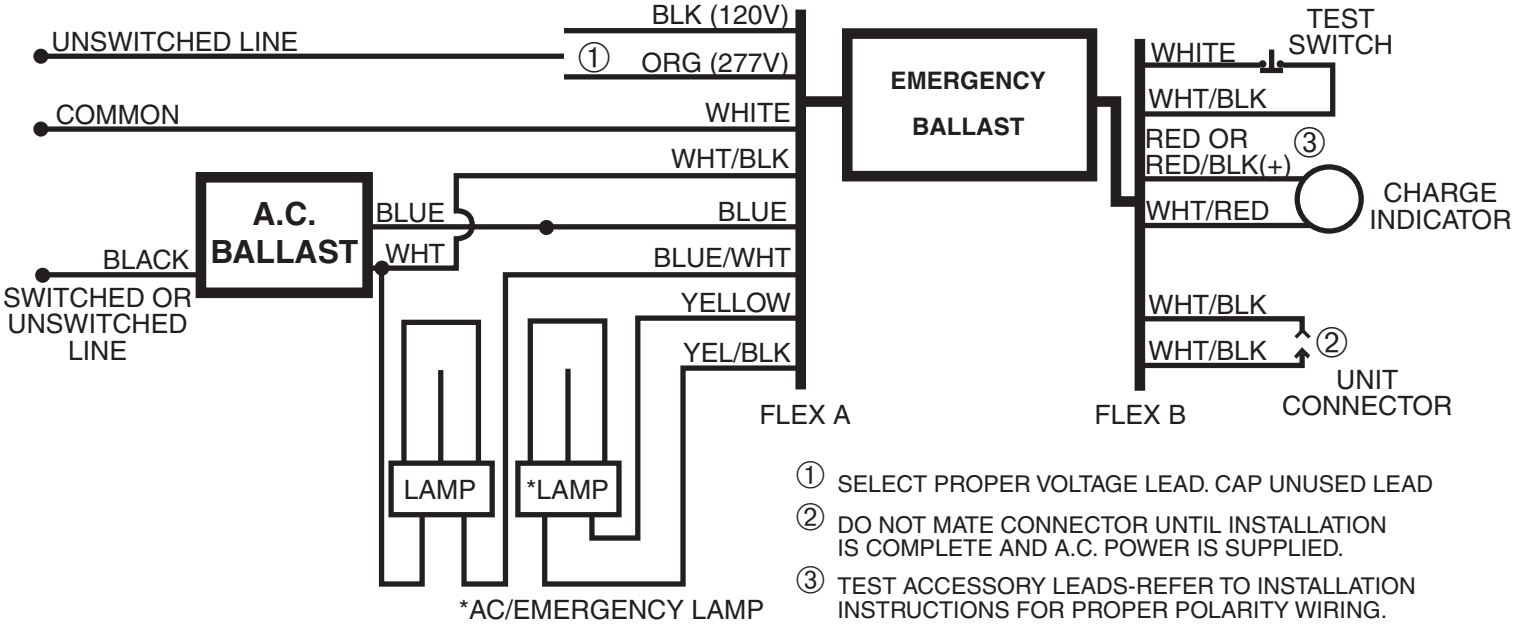
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LPHPFMB

NOTES

A7

TWO LAMP SERIES MAGNETIC BALLAST

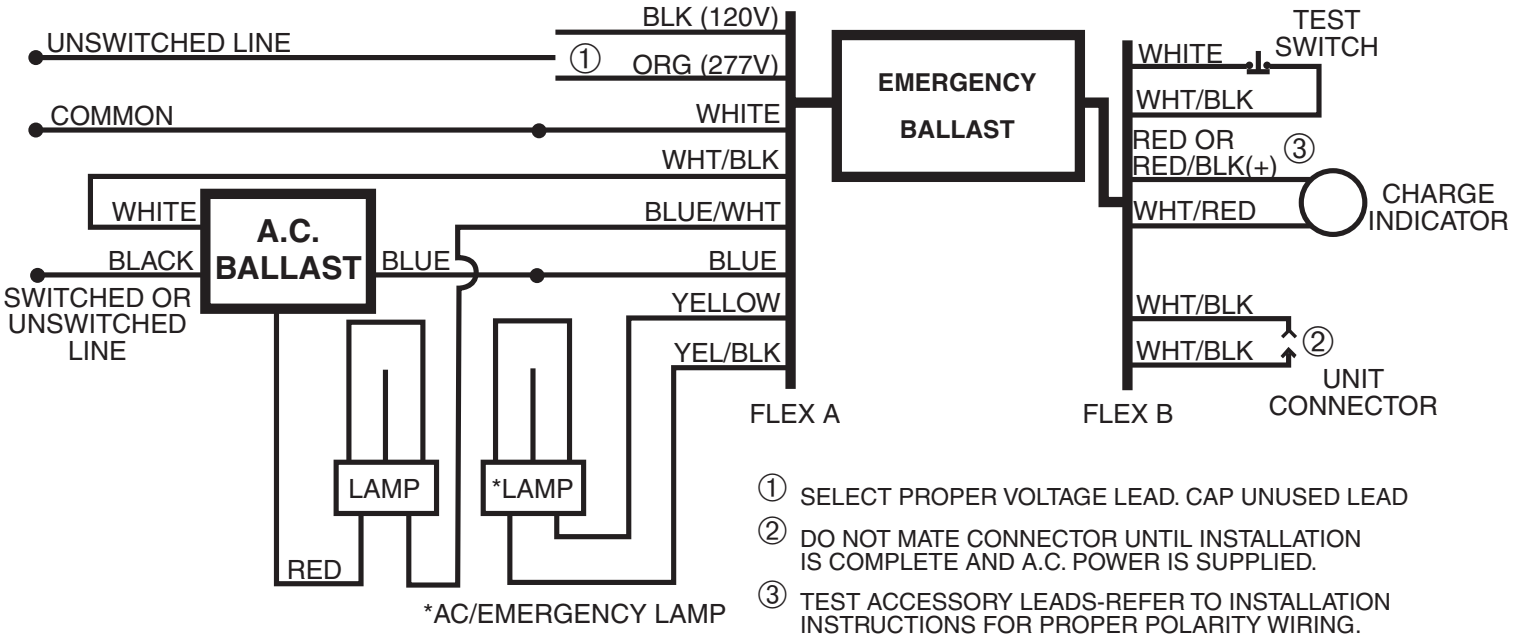


2LSMB

NOTES

A8 A8

TWO LAMP SERIES HIGH POWER FACTOR MAGNETIC BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

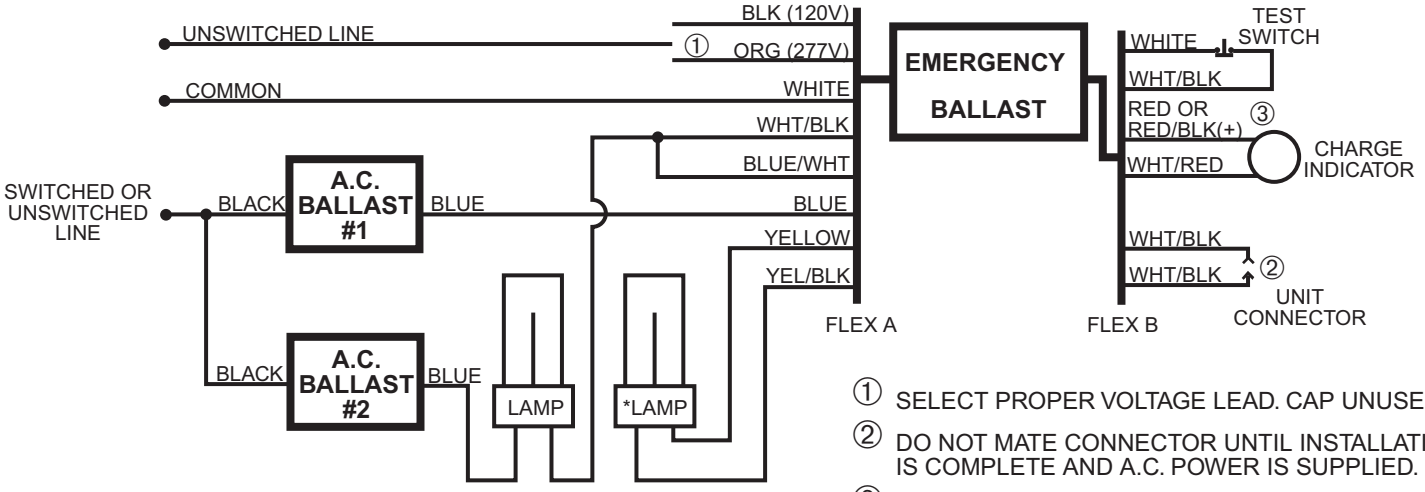
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LSHPFMB

NOTES

A9

TWO NORMAL POWER FACTOR MAGNETIC BALLASTS



*AC/EMERGENCY LAMP

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

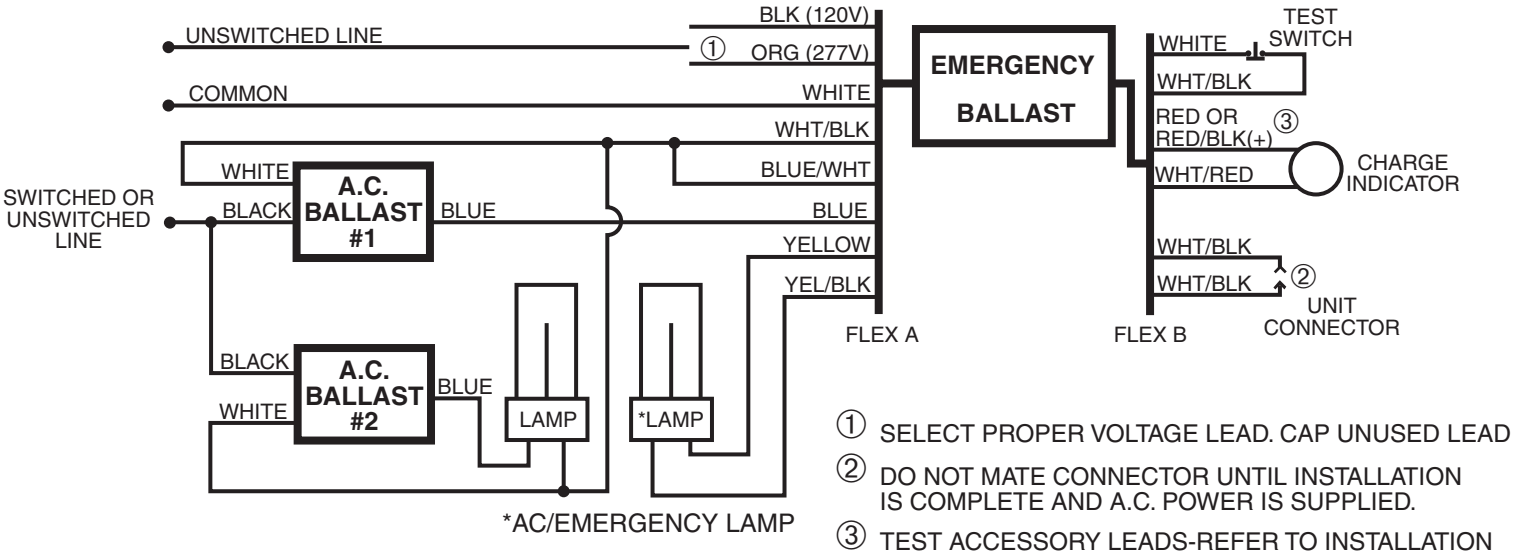
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2NPFMB

NOTES

A10 A10

TWO HIGH POWER FACTOR MAGNETIC BALLASTS



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

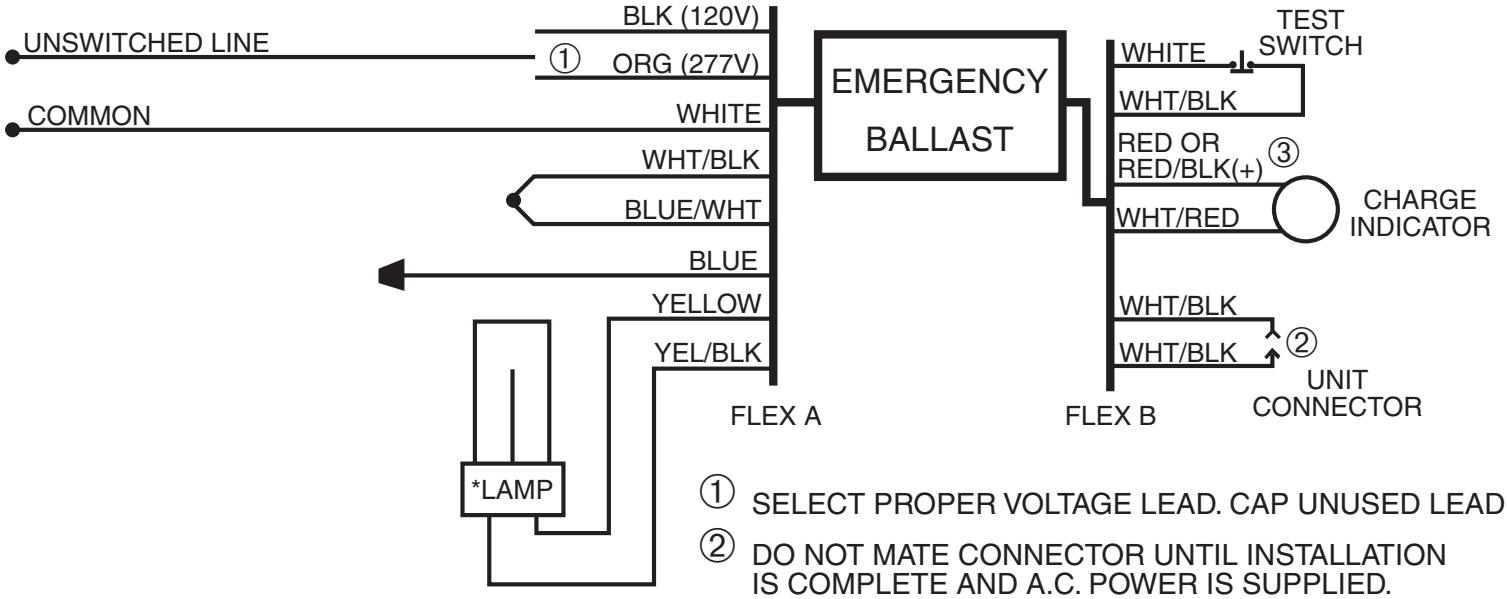
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2HPFMB

NOTES

A11 A11

EMERGENCY OPERATION ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

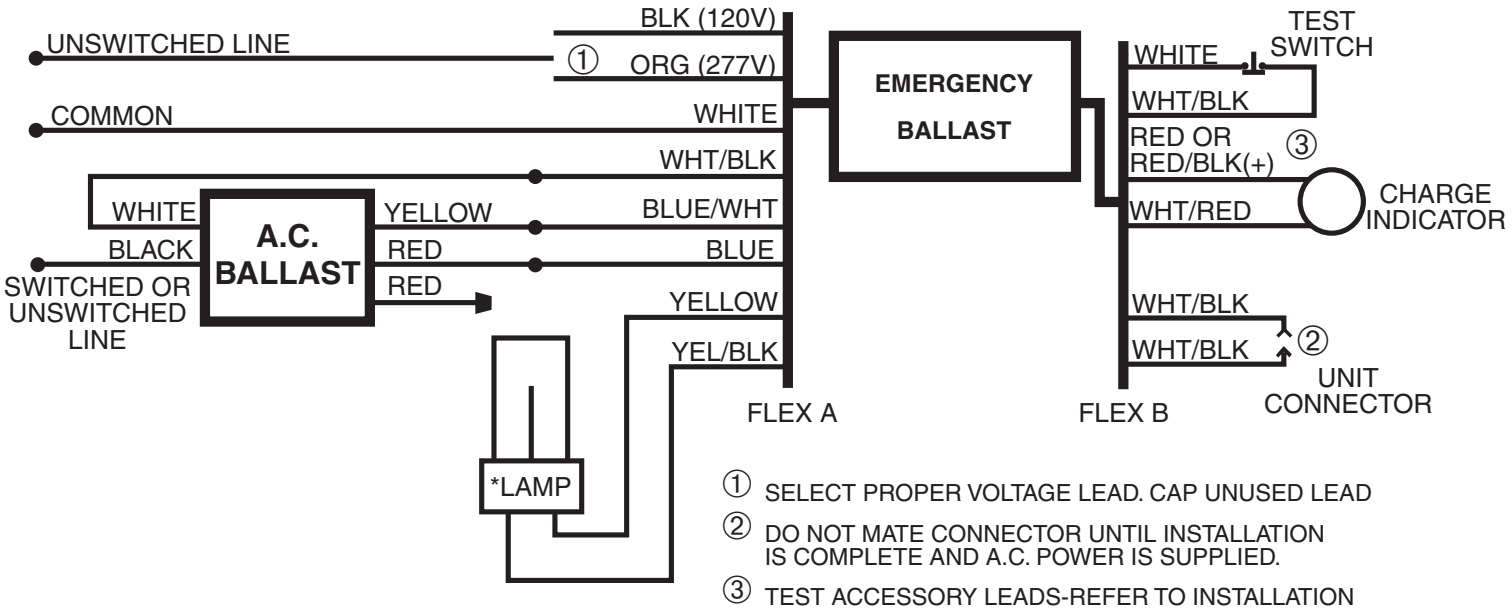
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

1LMB_EO

NOTES

A12 A12

ONE LAMP FULLHAM BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

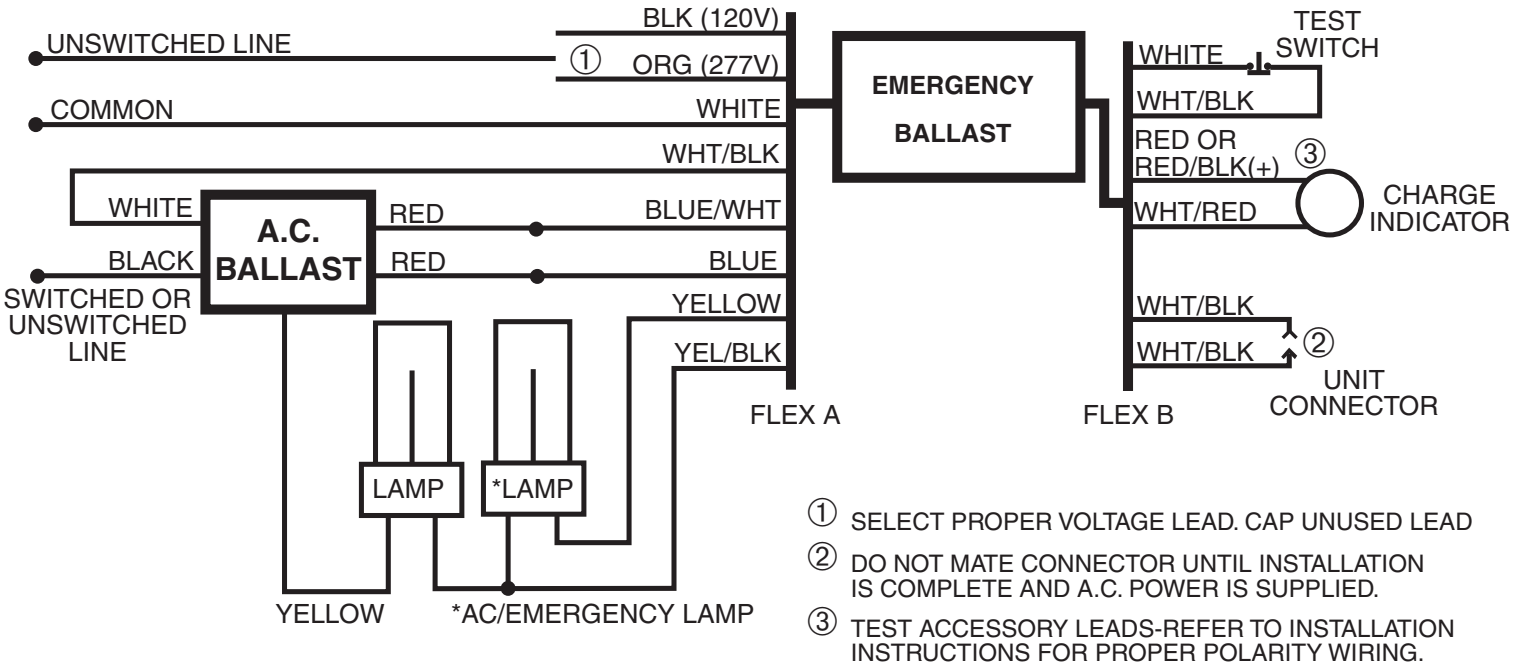
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

1LFB

NOTES

A13 A13

TWO LAMP FULLHAM BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

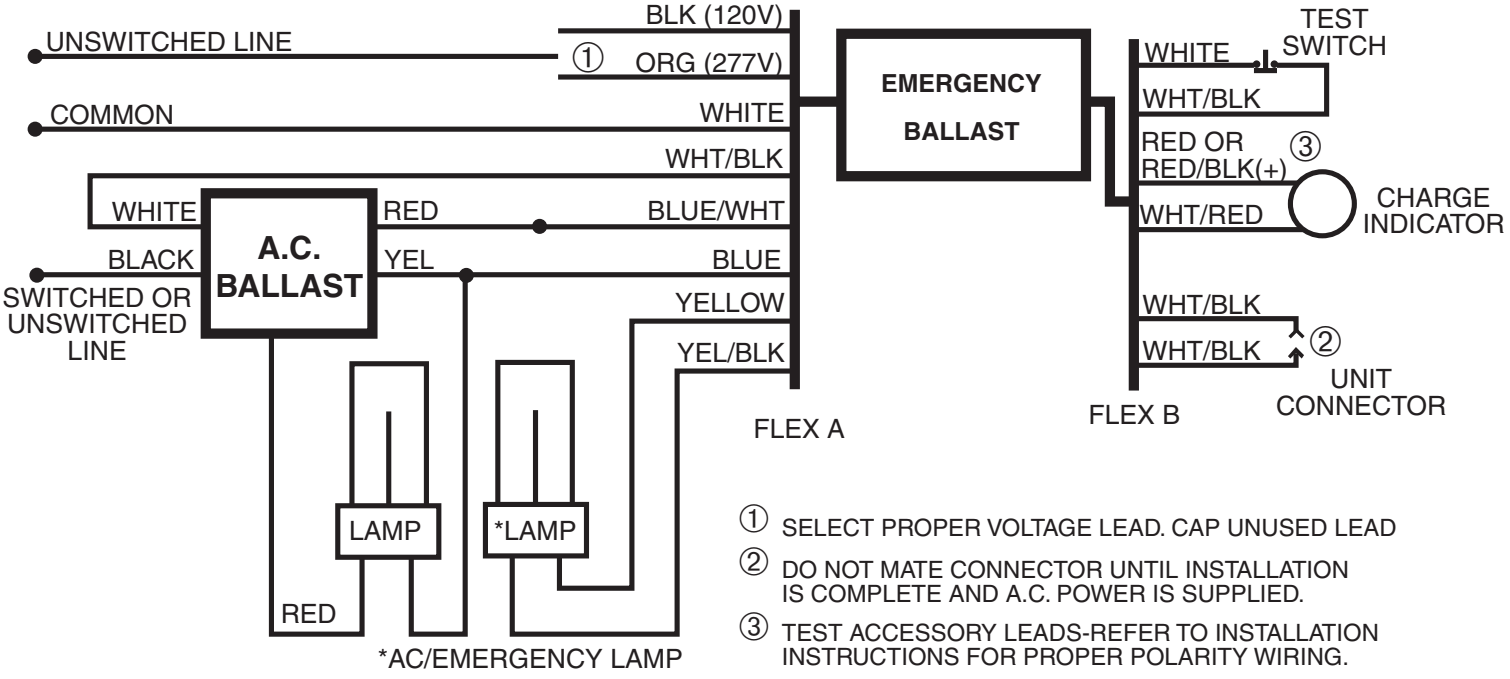
2LFB

NOTES

A14

A14

TWO LAMP FULLHAM BALLAST

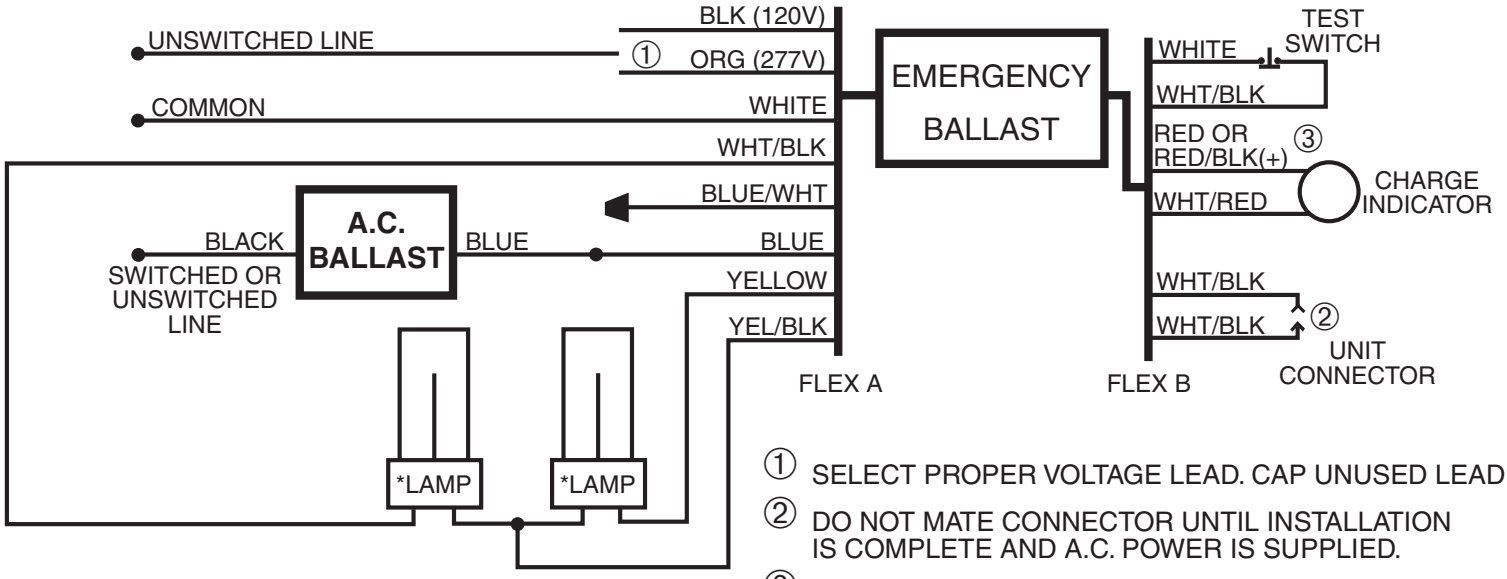


2LFB_2

NOTES

A15 A15

TWO LAMP MAGNETIC BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

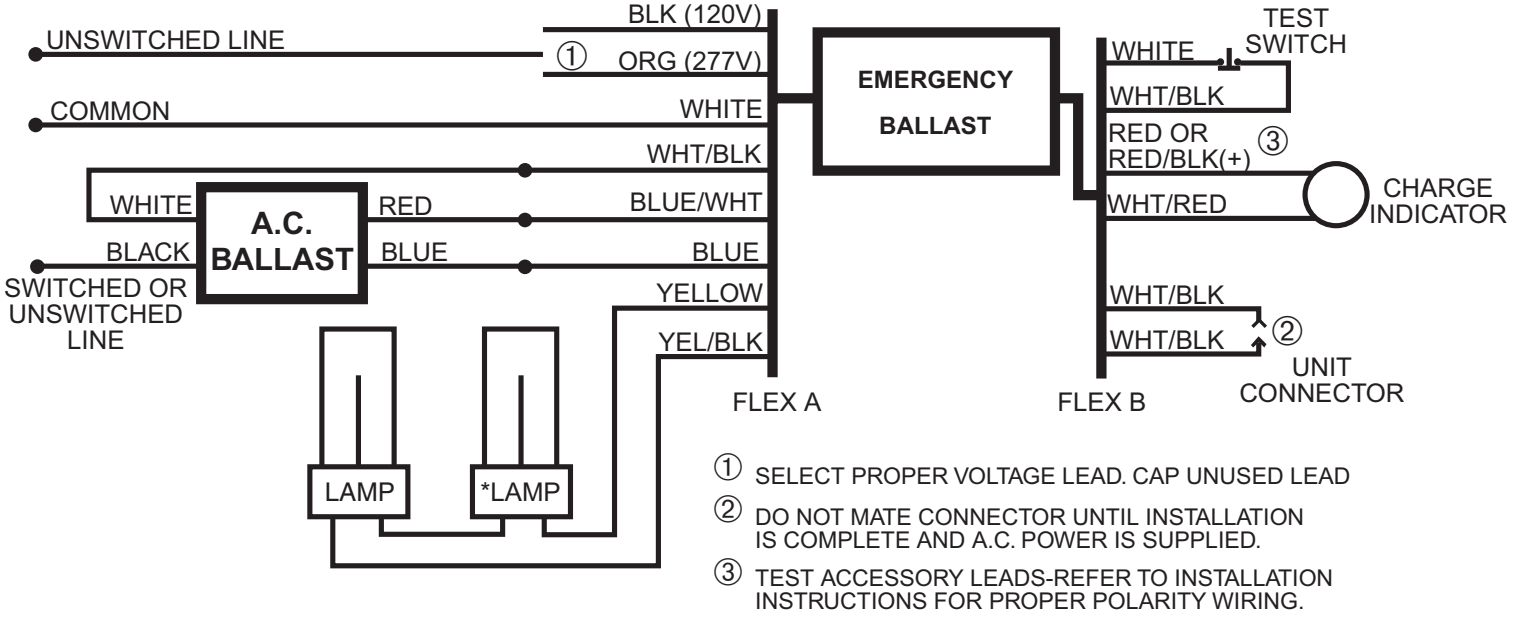
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LMB

NOTES

A16 A16

TWO LAMP PARALLEL ELECTRONIC BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

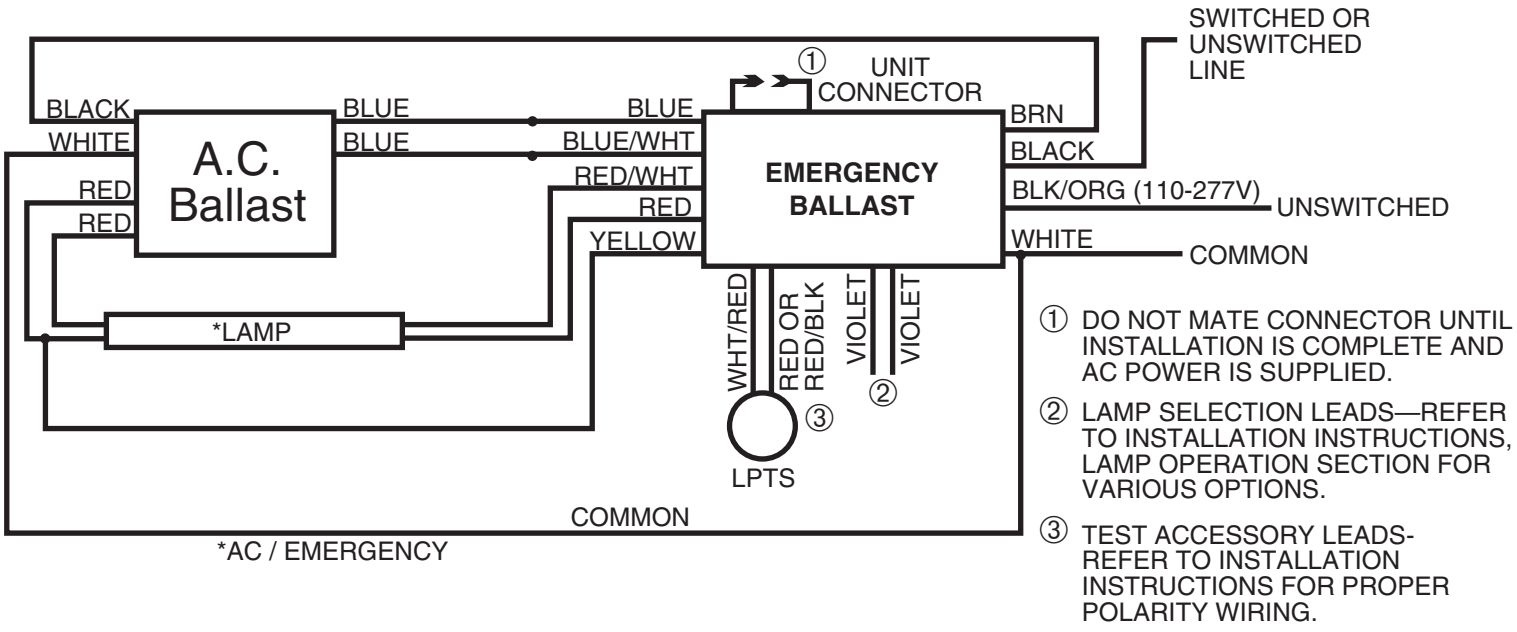
2LPEB

NOTES

AB1

AB1

ONE LAMP RAPID START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

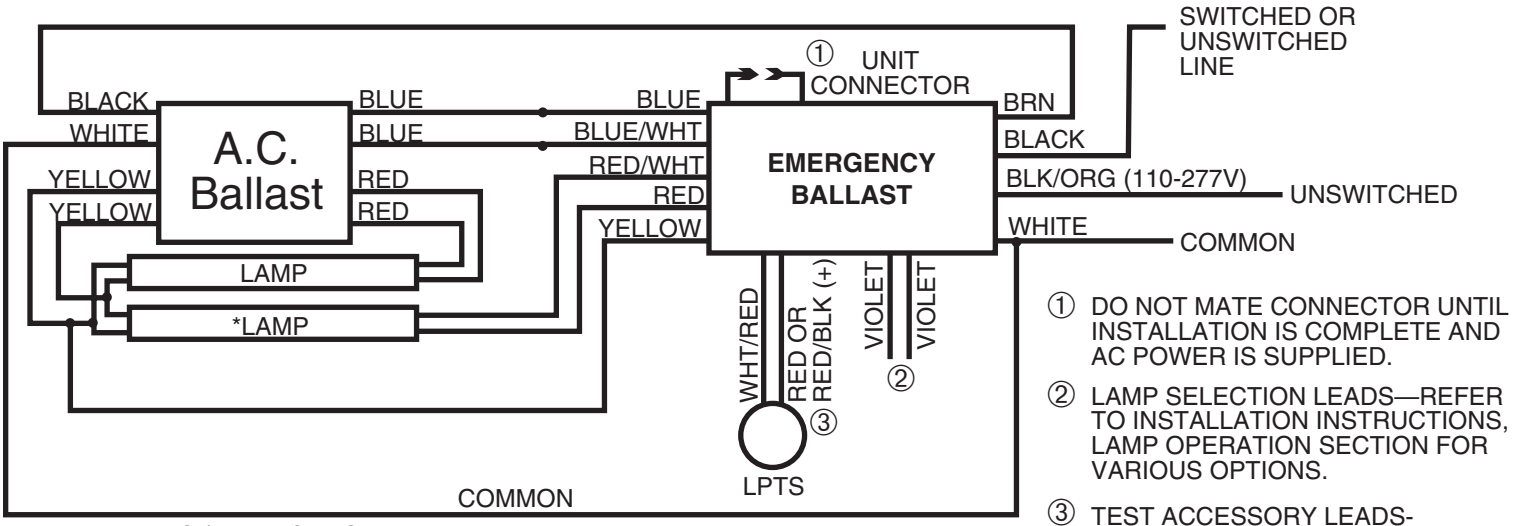
NISD80_1

NOTES

AB2

AB2

TWO LAMP RAPID START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

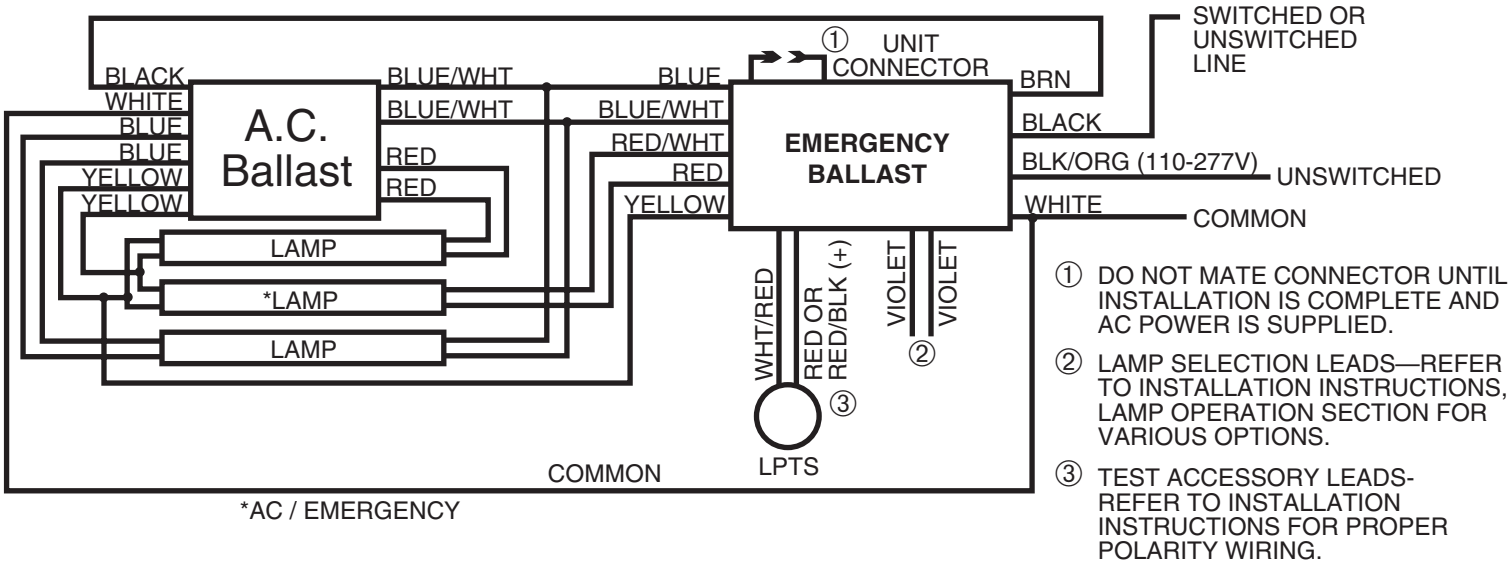
NISD80_2

NOTES

AB3

AB3

THREE LAMP RAPID START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

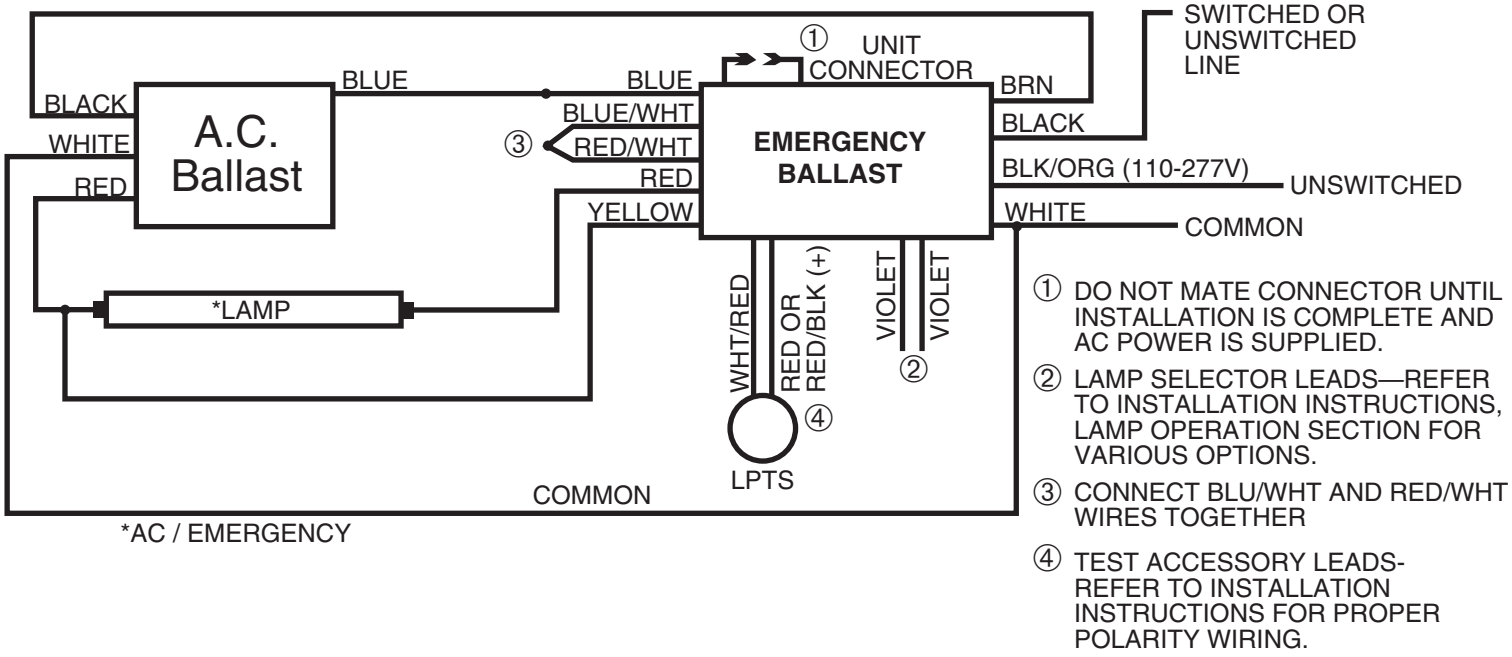
NISD80_3

NOTES

AB4

AB4

ONE LAMP INSTANT START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

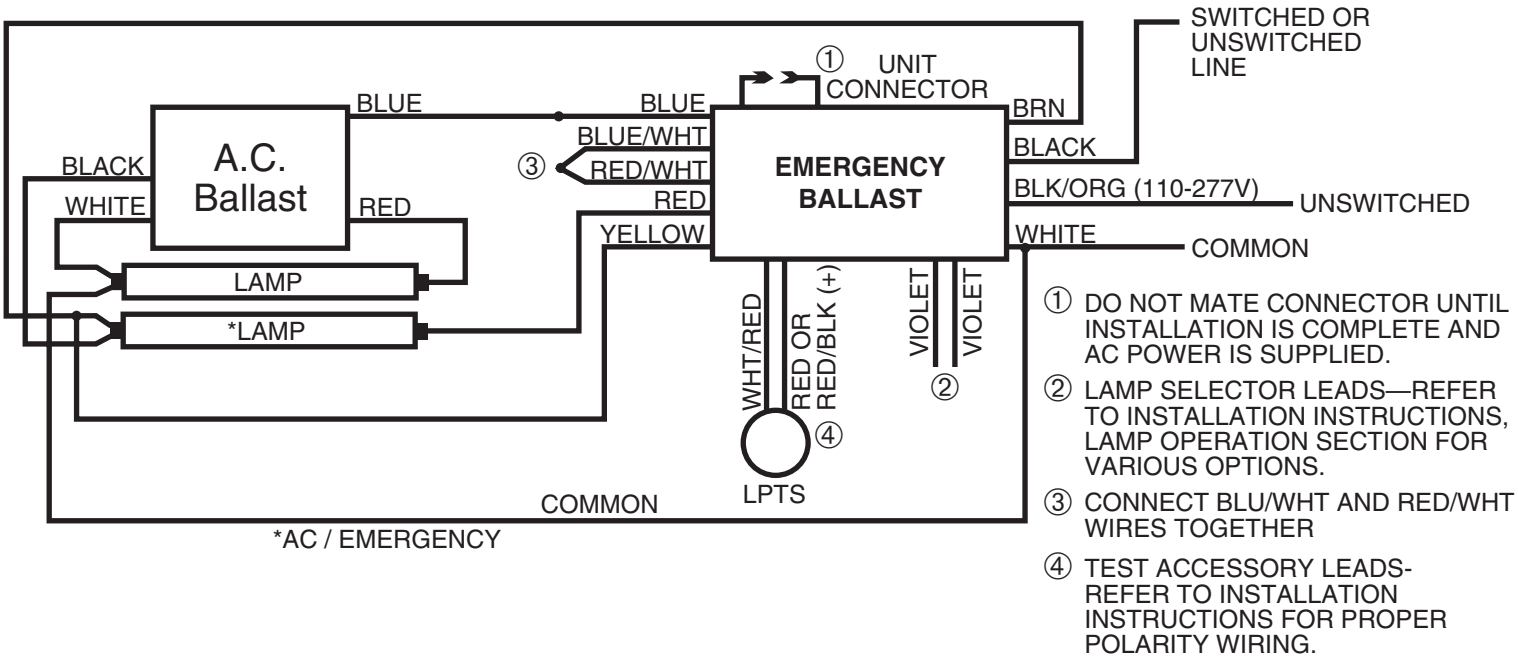
NISD80_4

NOTES

AB5

AB5

TWO LAMP INSTANT START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

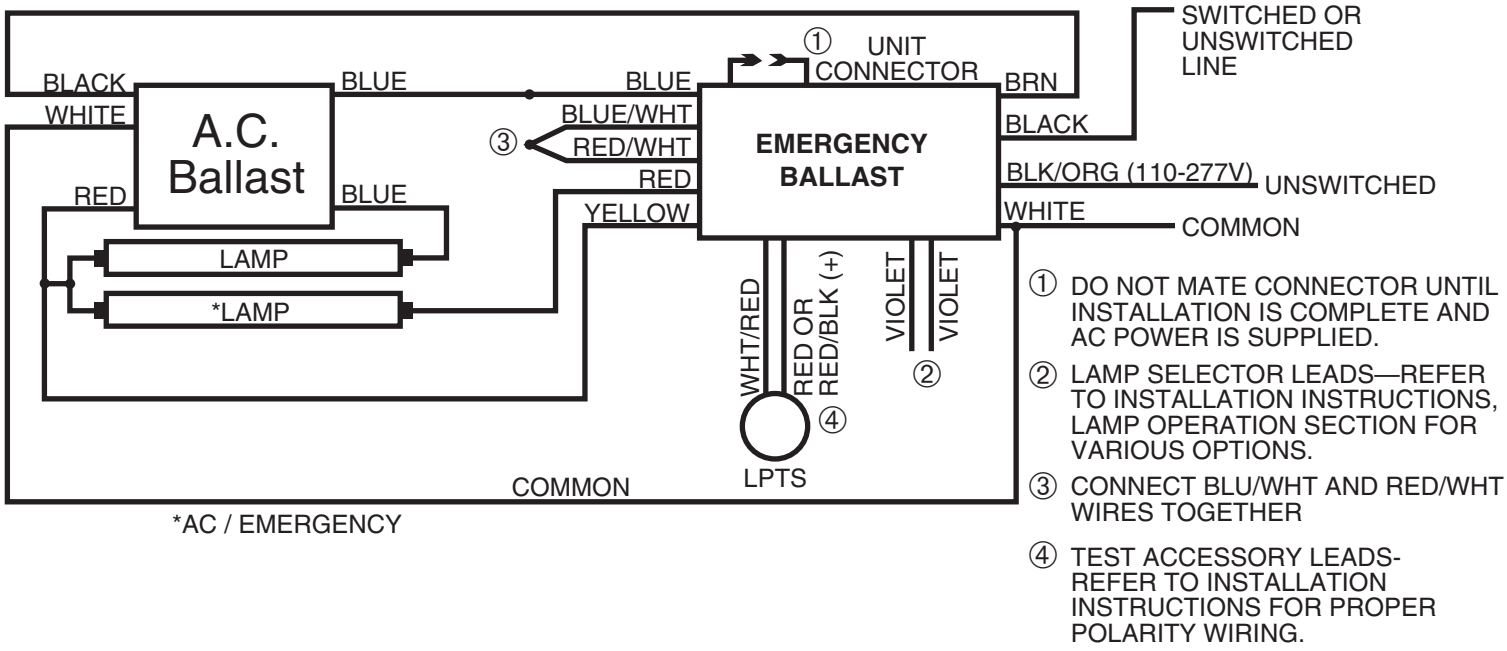
NISD80_5

NOTES

AB6

AB6

TWO LAMP INSTANT START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

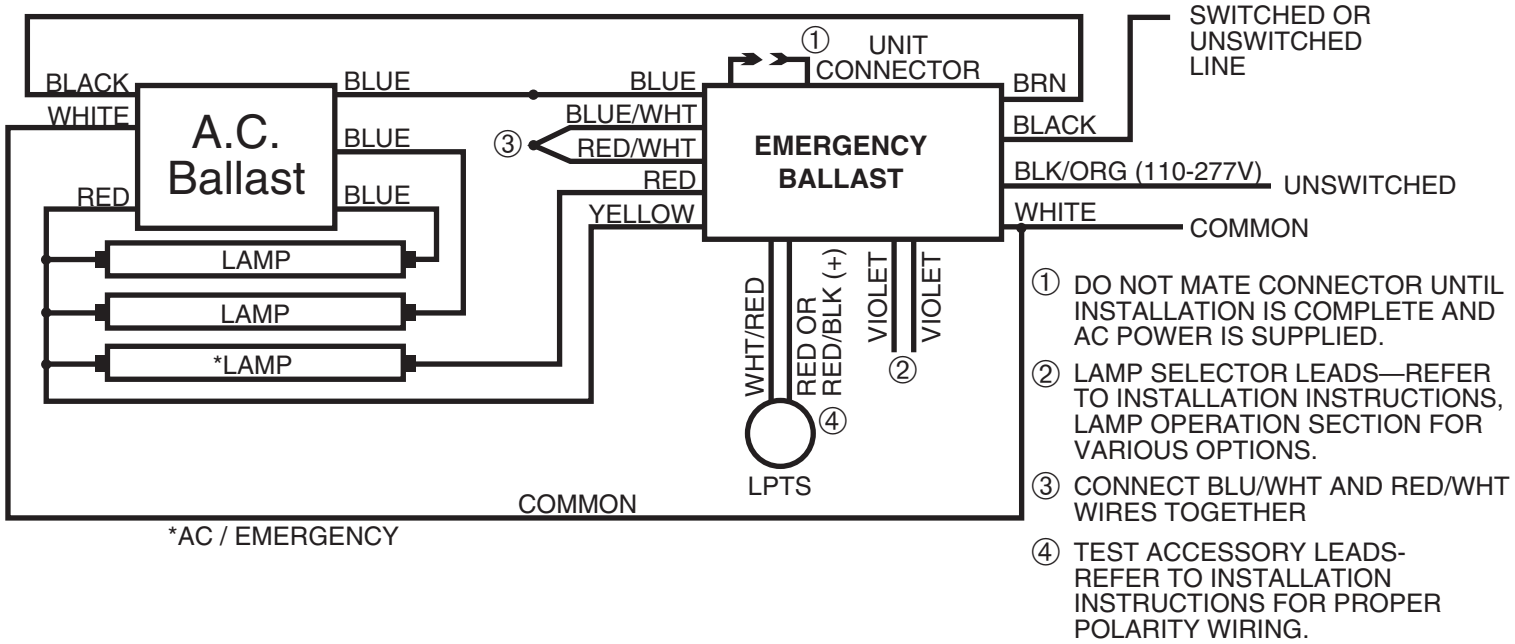
④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

NISD80_6

NOTES

AB7 AB7

THREE LAMP INSTANT START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

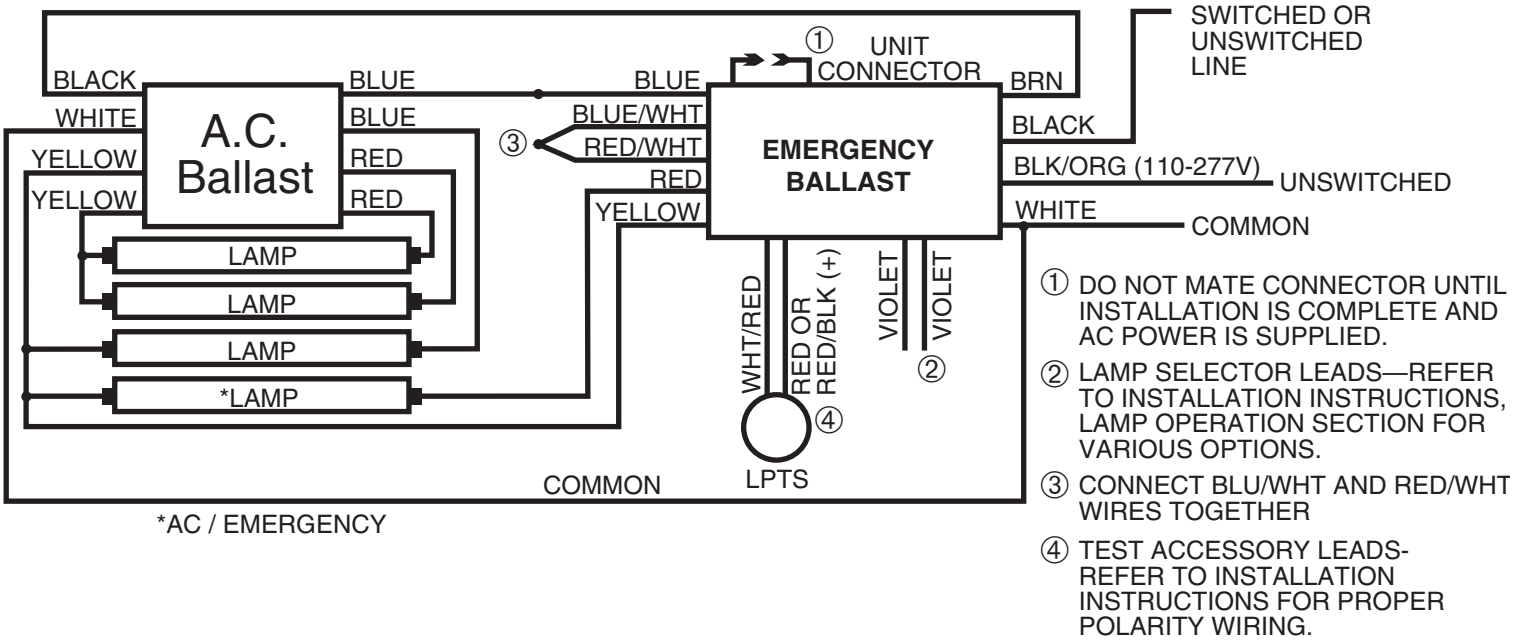
NISD80_7

NOTES

AB8

AB8

FOUR LAMP INSTANT START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

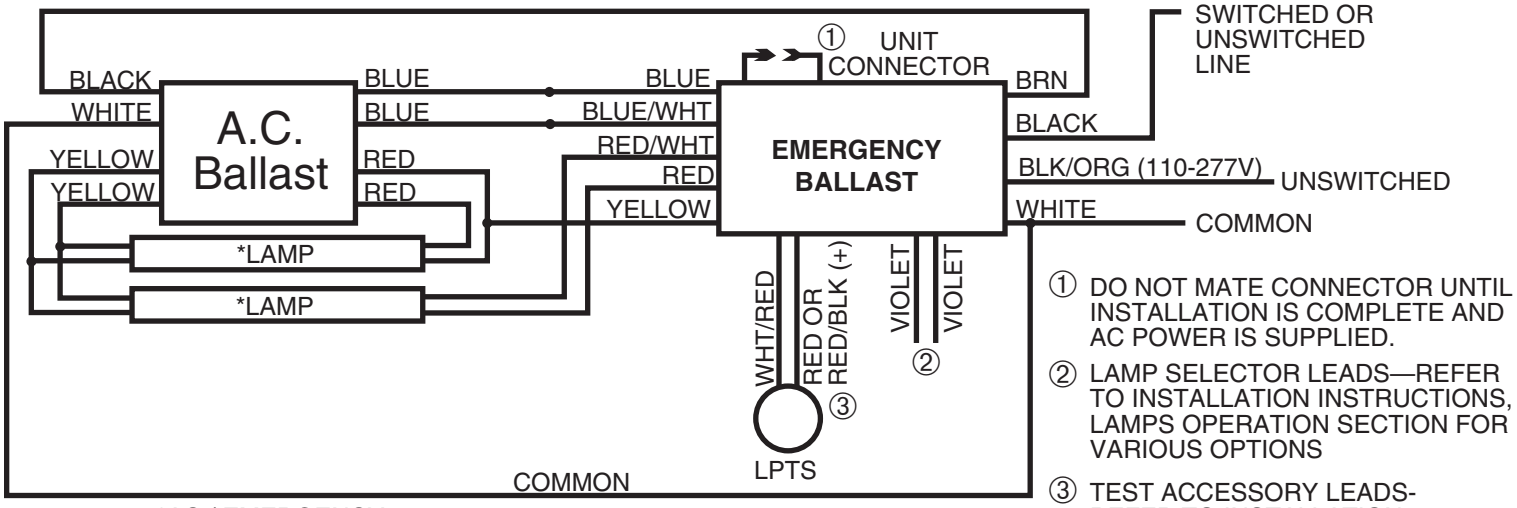
NISD80_8

NOTES

AB9

AB9

TWO LAMP RAPID START BALLAST W/ TWO LAMP EMERGENCY OPERATION



*AC / EMERGENCY

① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

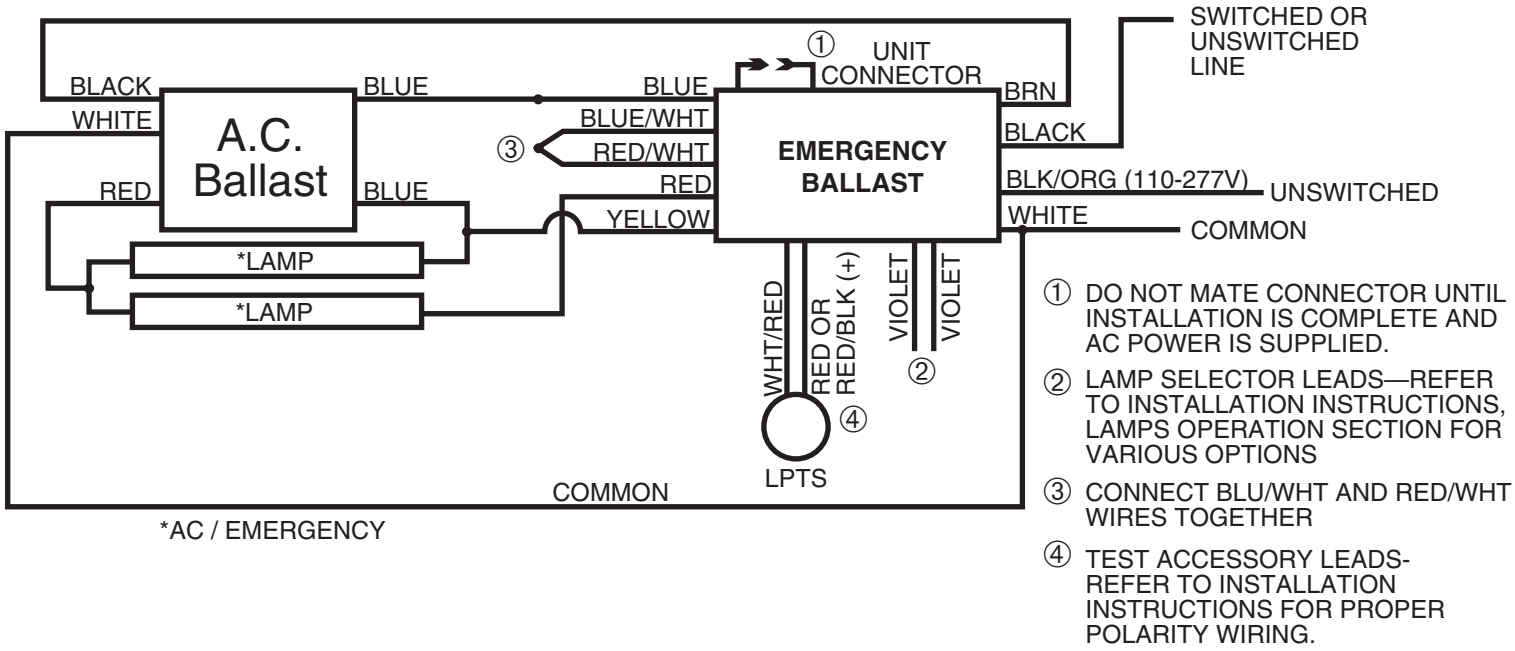
③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

NISD80_9

NOTES

AB10 AB10

TWO LAMP INSTANT START BALLAST W/ TWO LAMP EMERGENCY OPERATION



*AC / EMERGENCY

① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

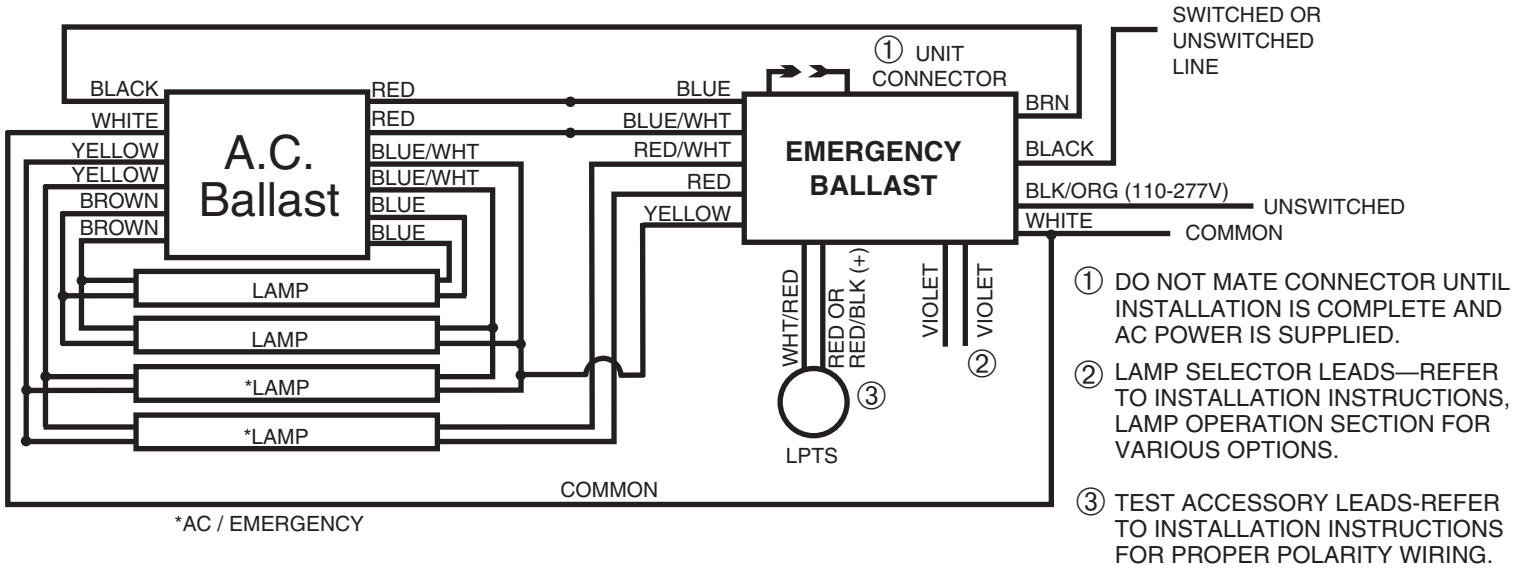
NISD80_10

NOTES

AB11

AB11

FOUR LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

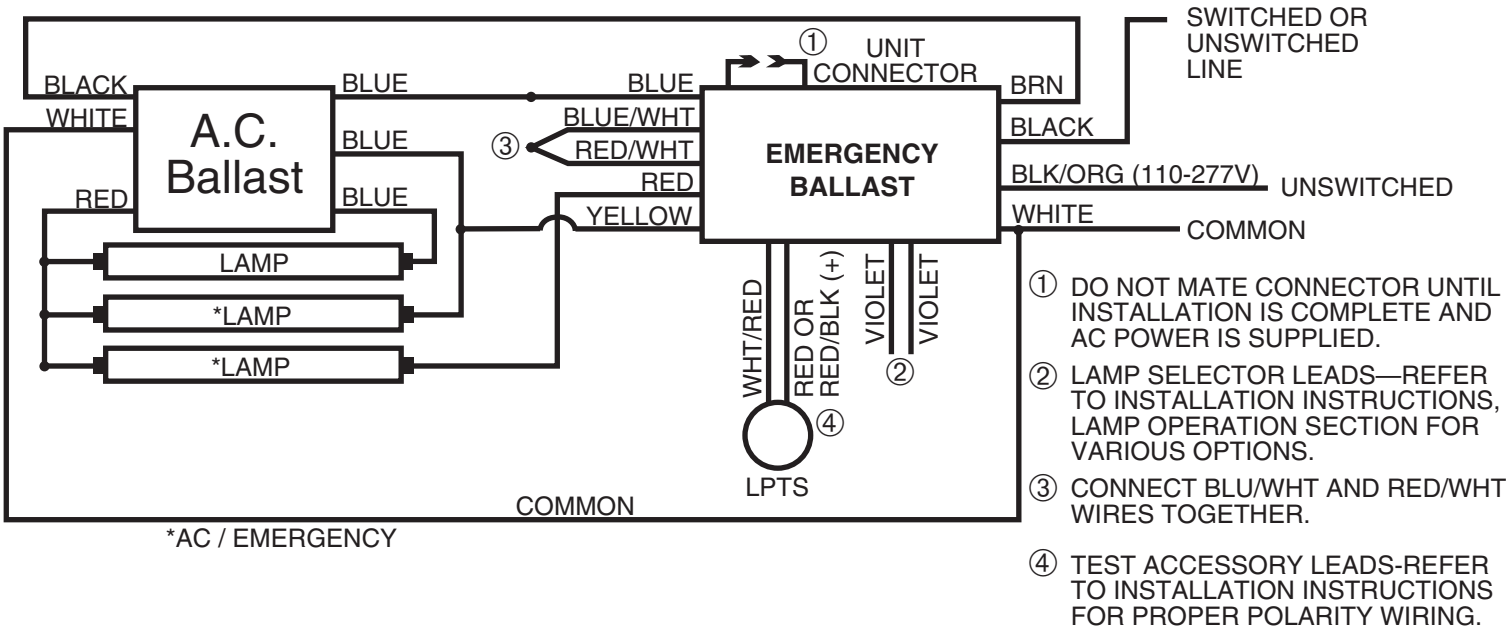
NISD80_11

NOTES

AB12

AB12

THREE LAMP INSTANT START BALLAST TWO LAMP EMERGENCY OPERATION



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

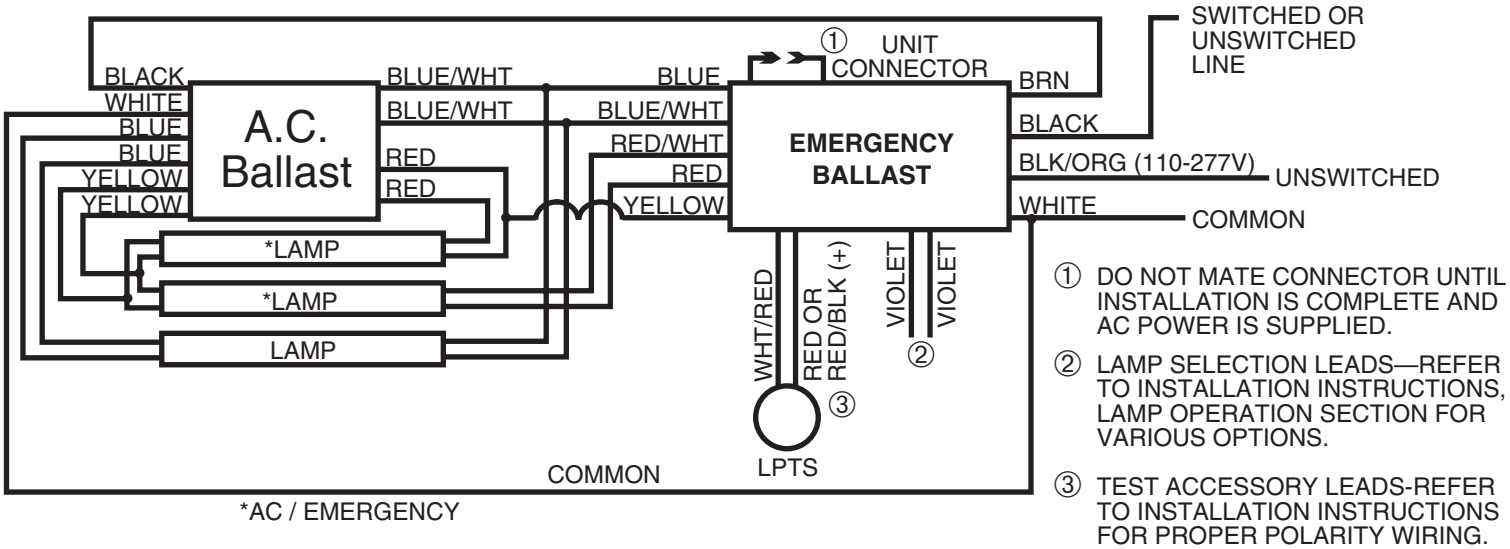
NISD80_12

NOTES

AB13

AB13

THREE LAMP RAPID START BALLAST TWO LAMP EMERGENCY OPERATION



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

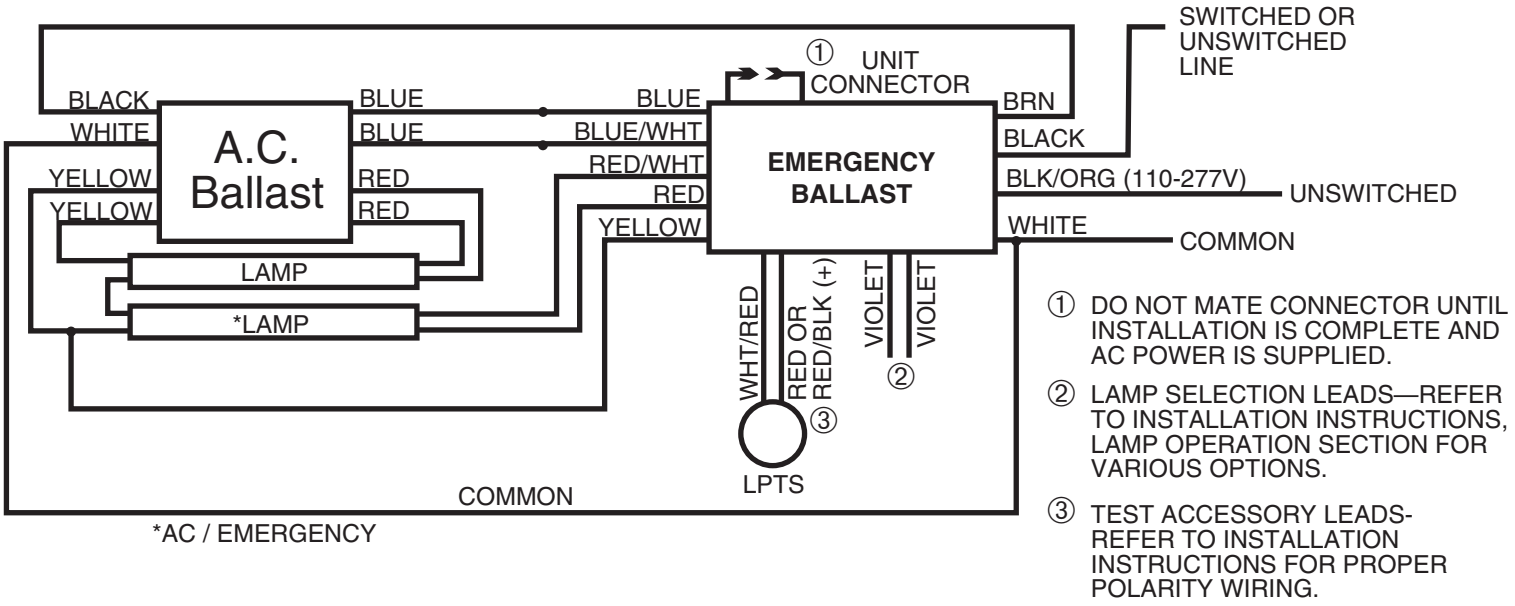
NISD80_13

NOTES

AB14

AB14

TWO LAMP RAPID START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

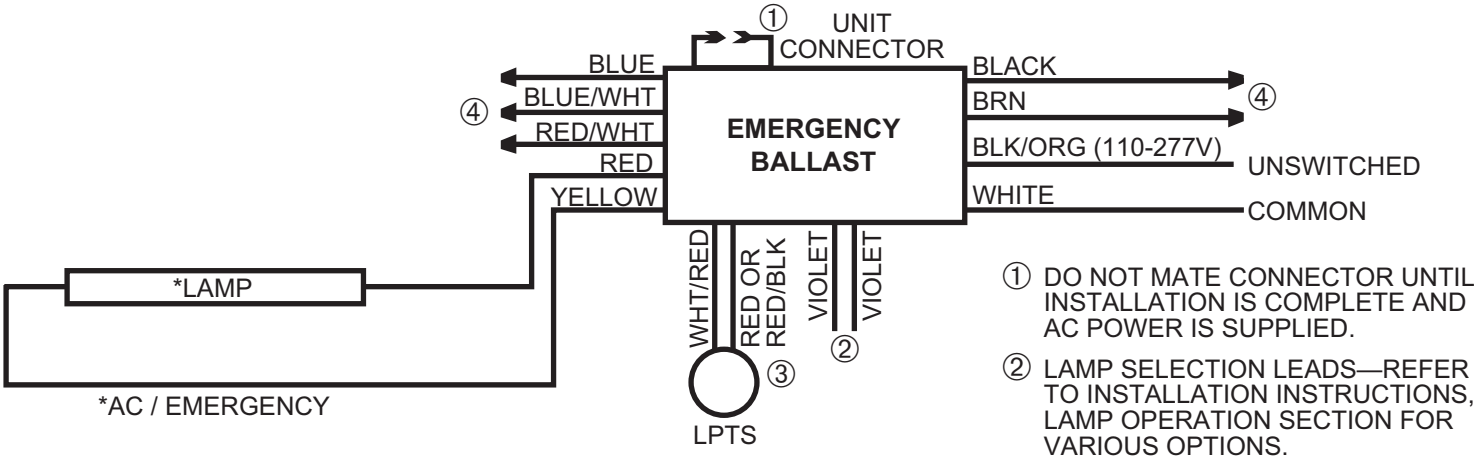
NISD80_14

NOTES

AB15

AB15

ONE LAMP EMERGENCY ONLY



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

④ CAP UNUSED LEADS.

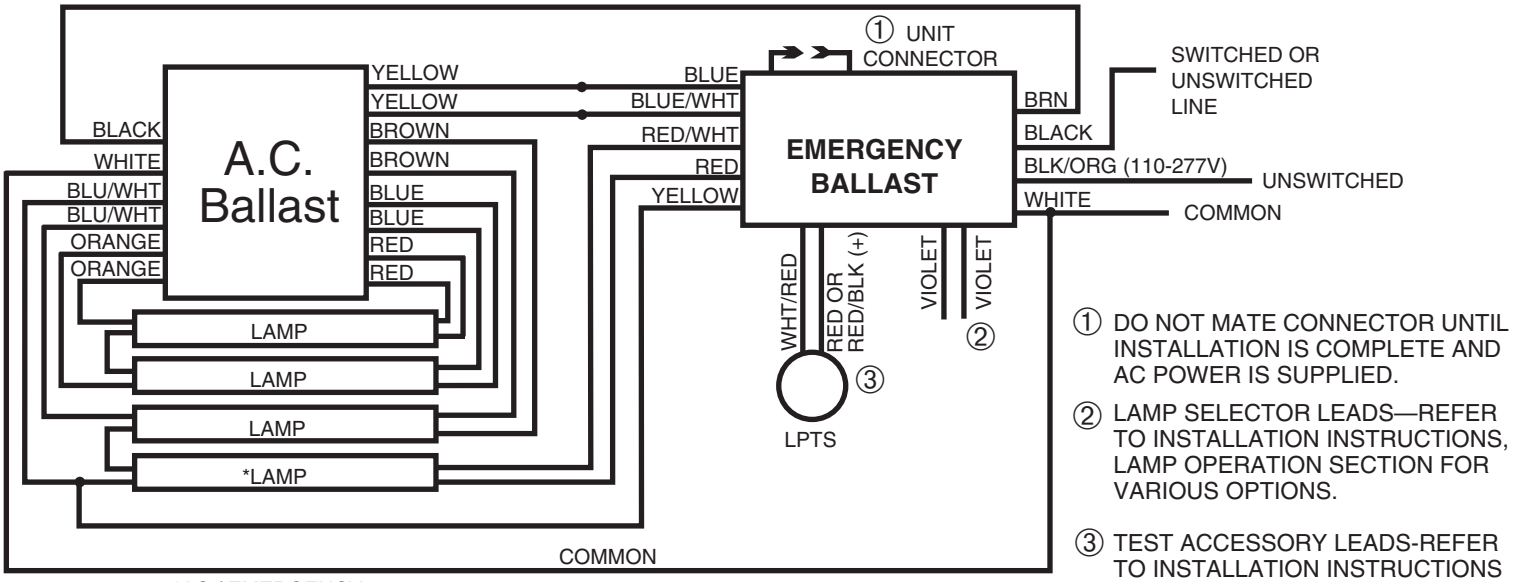
NISD80_15

NOTES

AB16

AB16

FOUR LAMP RAPID START BALLAST



*AC / EMERGENCY

① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

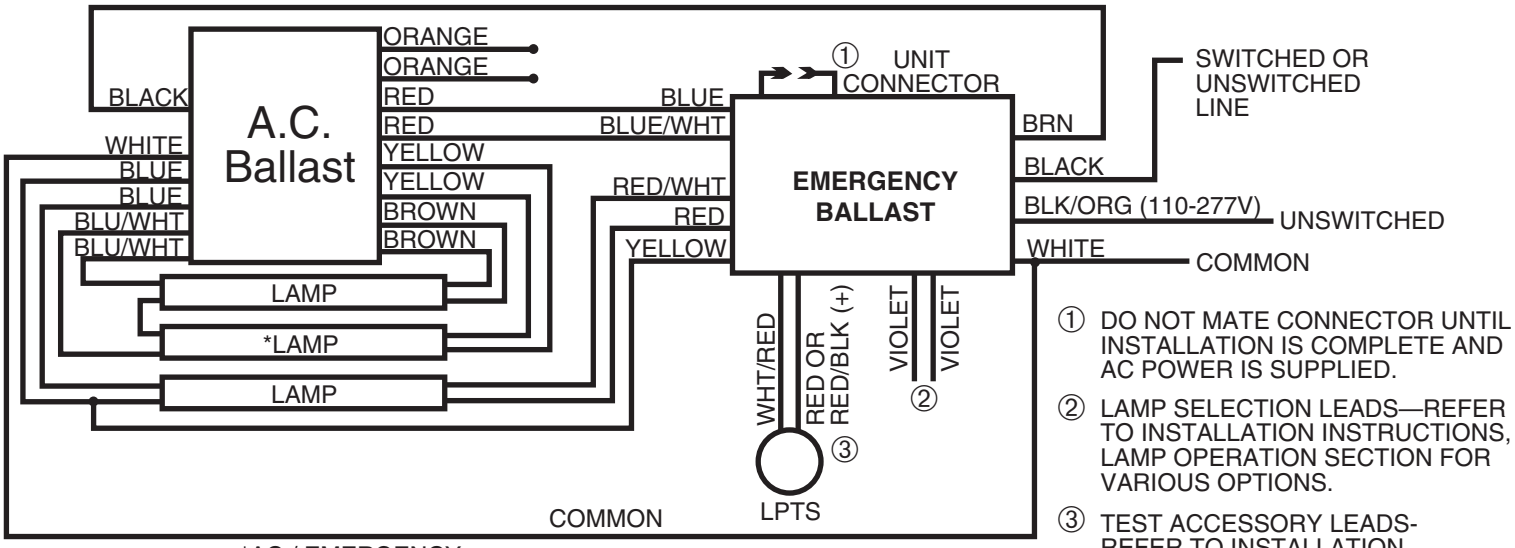
NISD80_16

NOTES

AB17

AB17

THREE LAMP RAPID START BALLAST



*AC / EMERGENCY

① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

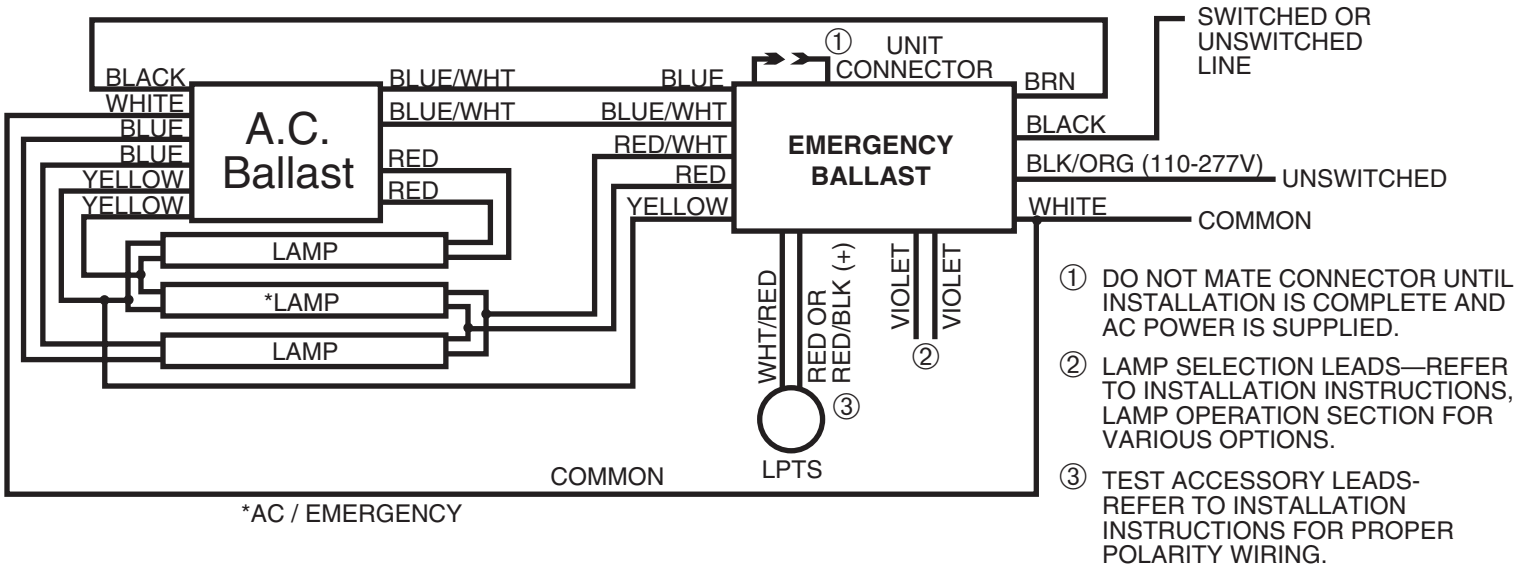
NISD80_17

NOTES

AB18

AB18

THREE LAMP RAPID START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

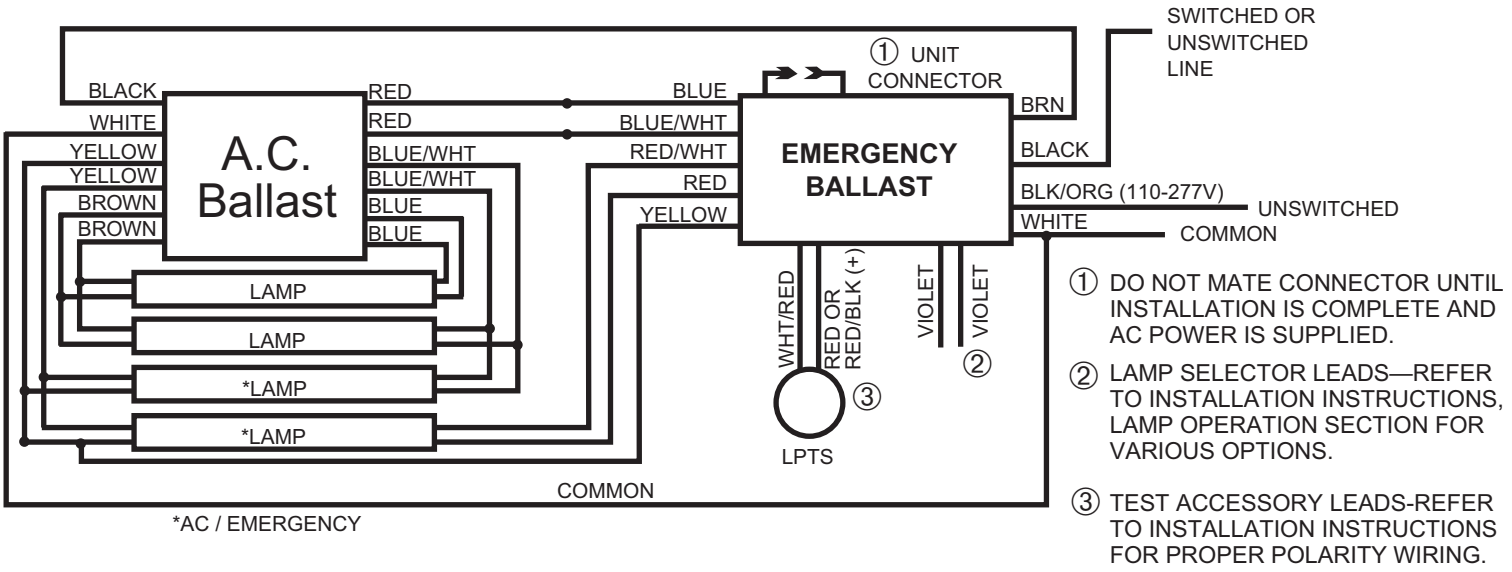
③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

NISD80_18

NOTES

AB19 AB19

FOUR LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

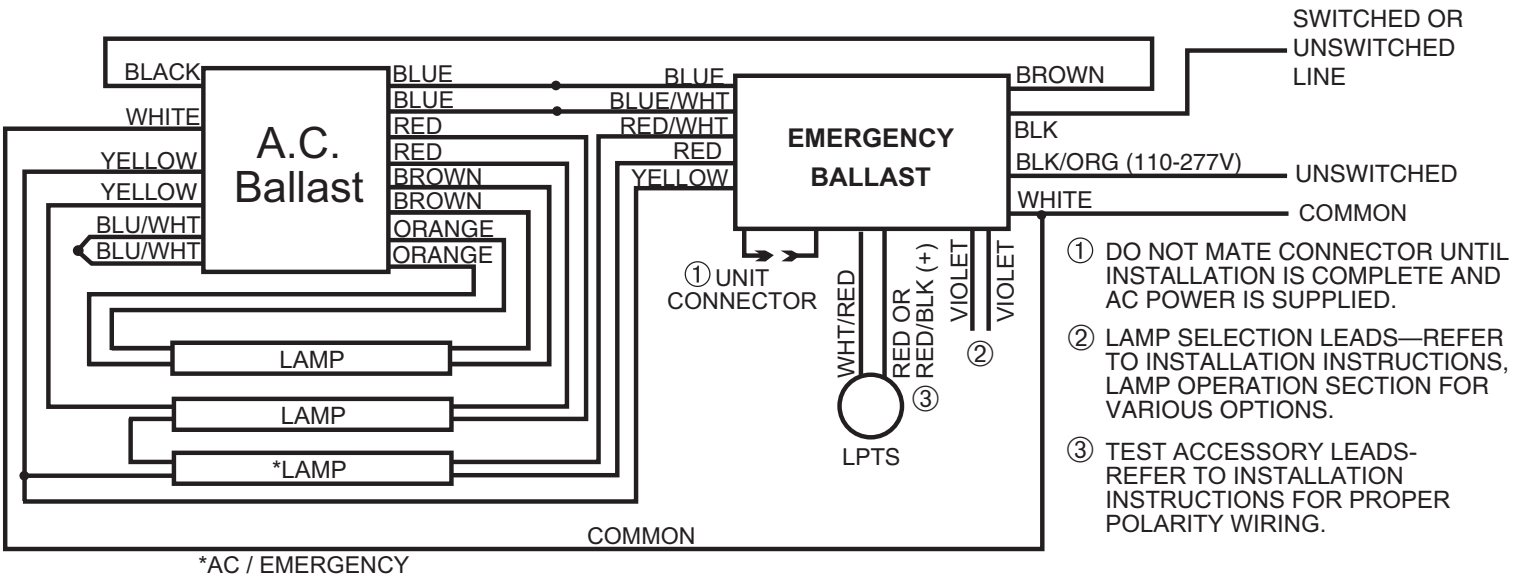
NISD80_19

NOTES

AB20

AB20

THREE LAMP RAPID START BALLAST



① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

② LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

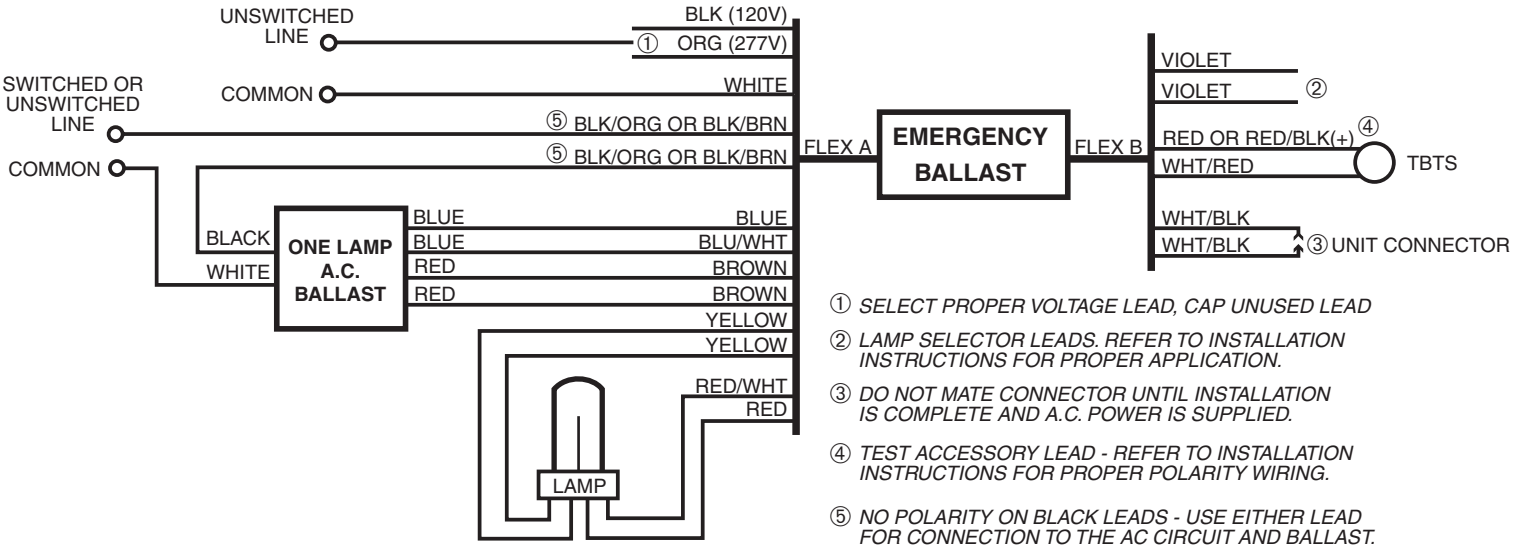
NISD80_20

NOTES

AC1

AC1

ONE LAMP RAPID START BALLAST



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

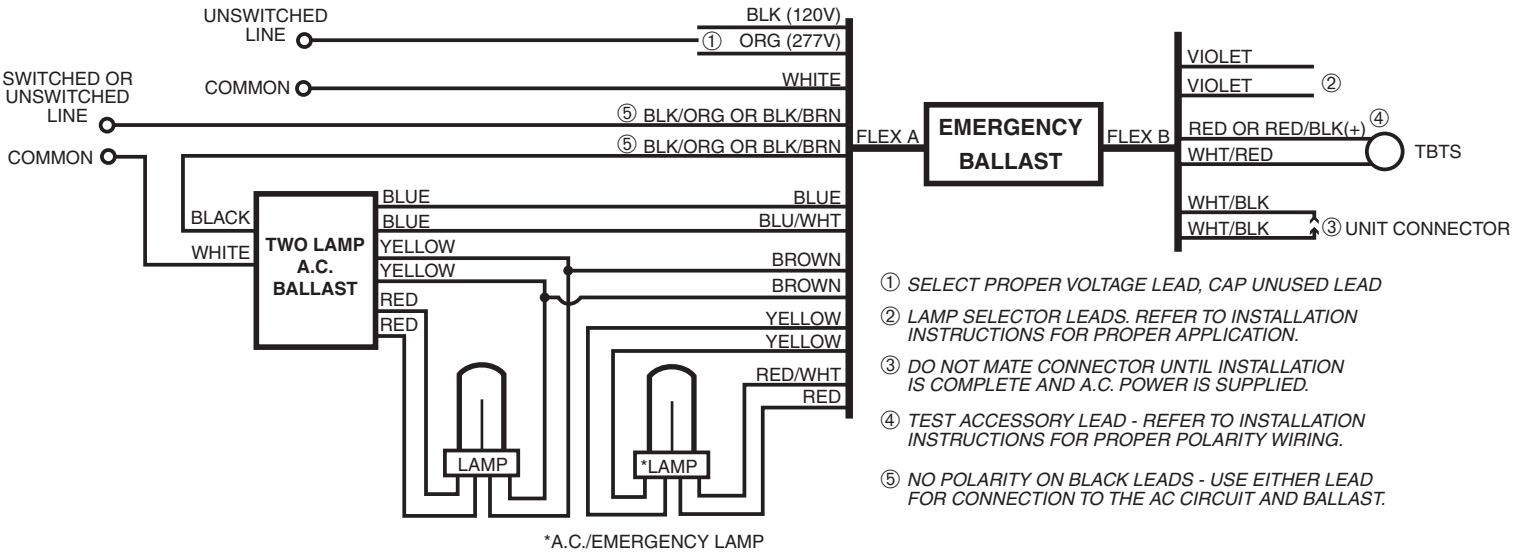
1LRSB42A_AC

NOTES

AC2

AC2

TWO LAMP RAPID START BALLAST



*A.C./EMERGENCY LAMP

① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

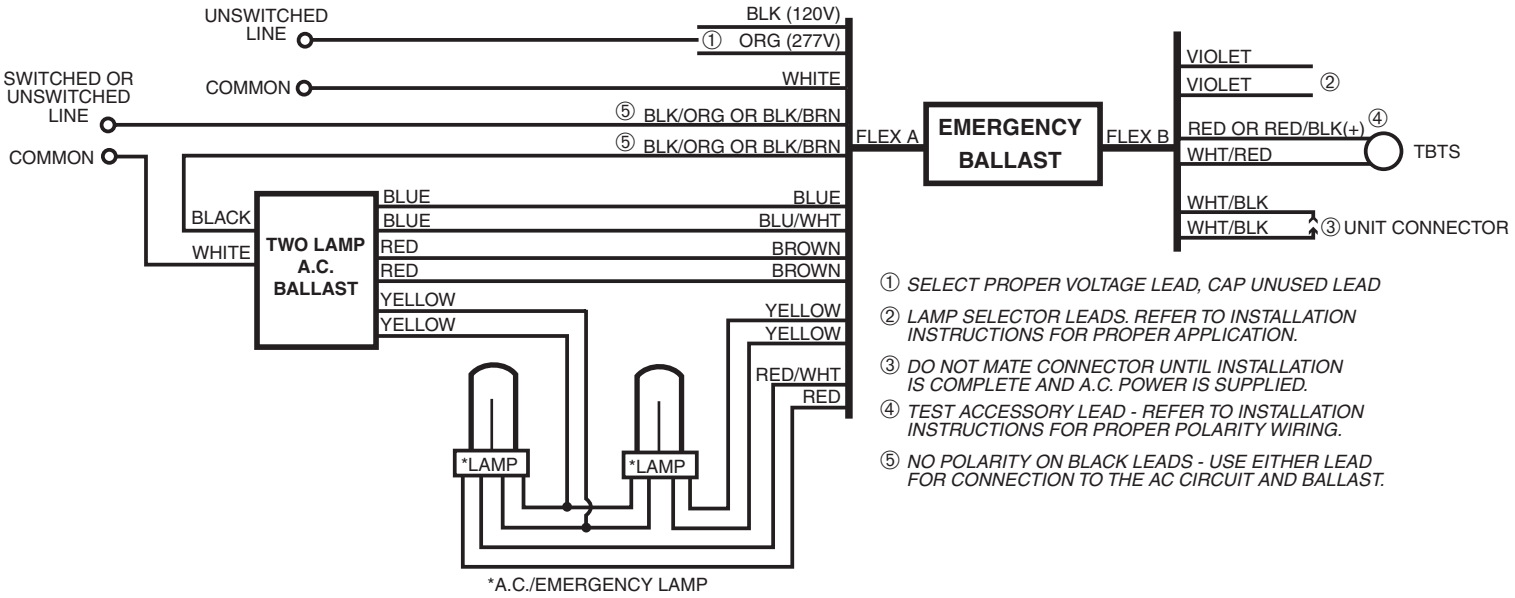
2LRSB42A_AC

NOTES

AC3

AC3

TWO LAMP RAPID START BALLAST TWO LAMP EMERGENCY OPERATION



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

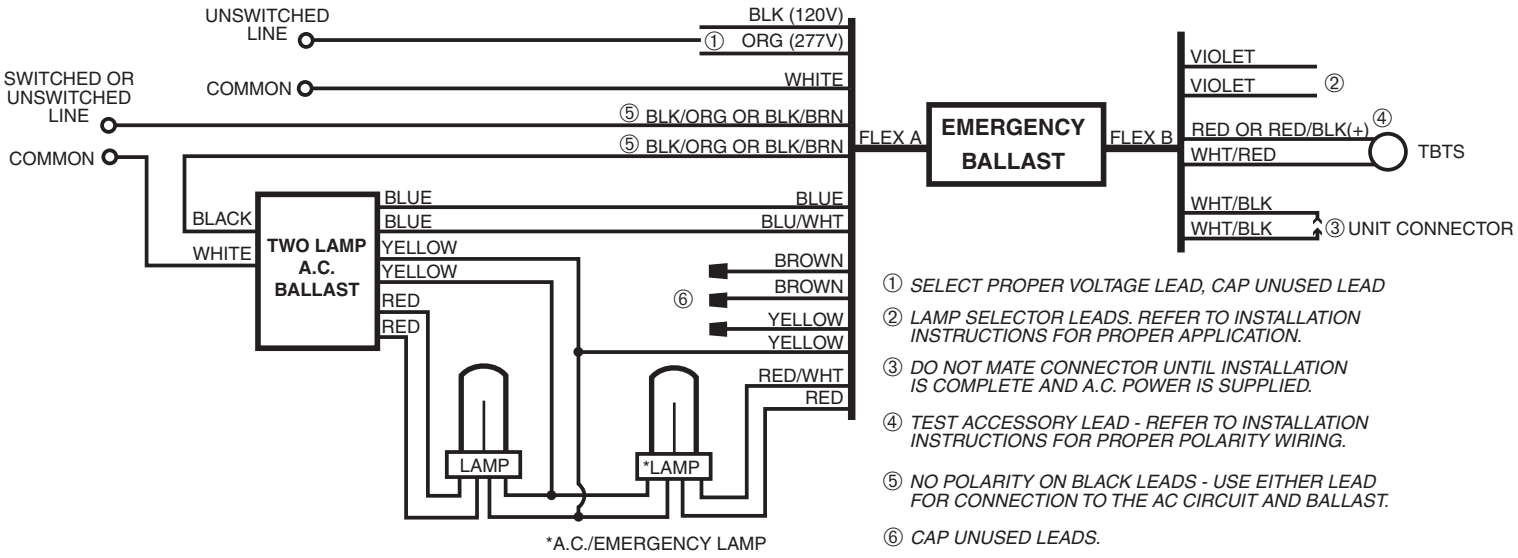
2LRSB42A_AC_2LEO

NOTES

AC4

AC4

TWO LAMP RAPID START BALLAST



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

⑥ *CAP UNUSED LEADS.*

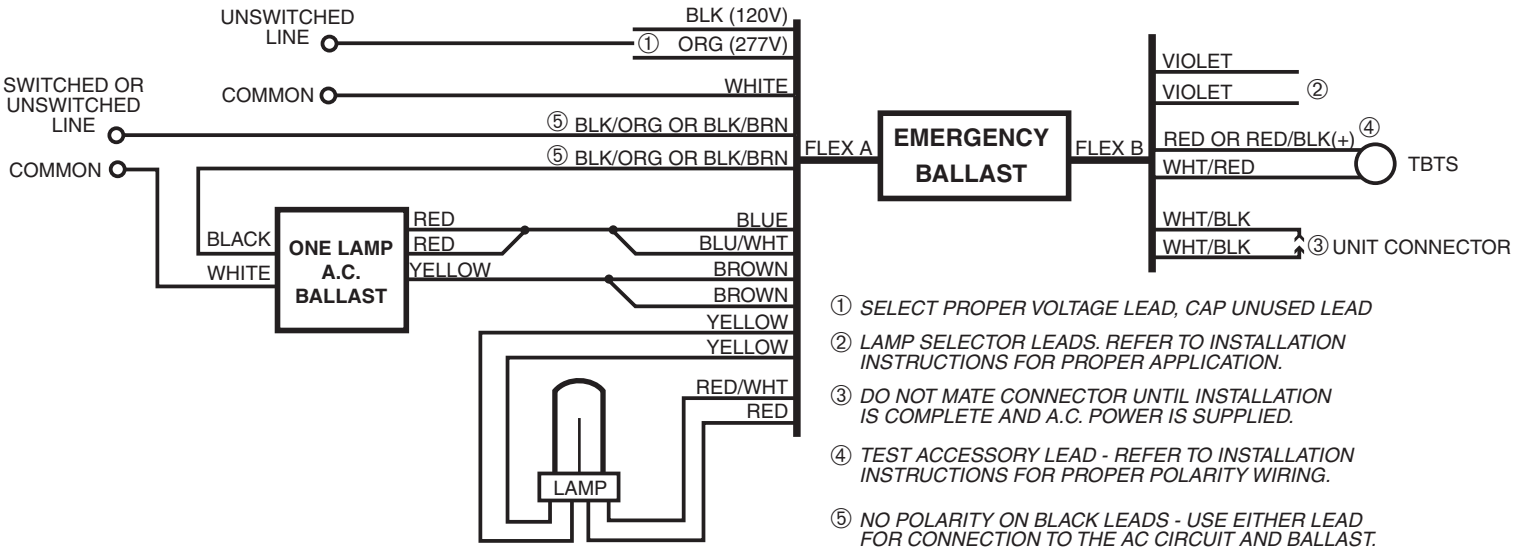
2LRSB42A_AC_2

NOTES

AC5

AC5

ONE LAMP INSTANT START FULHAM BALLAST



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

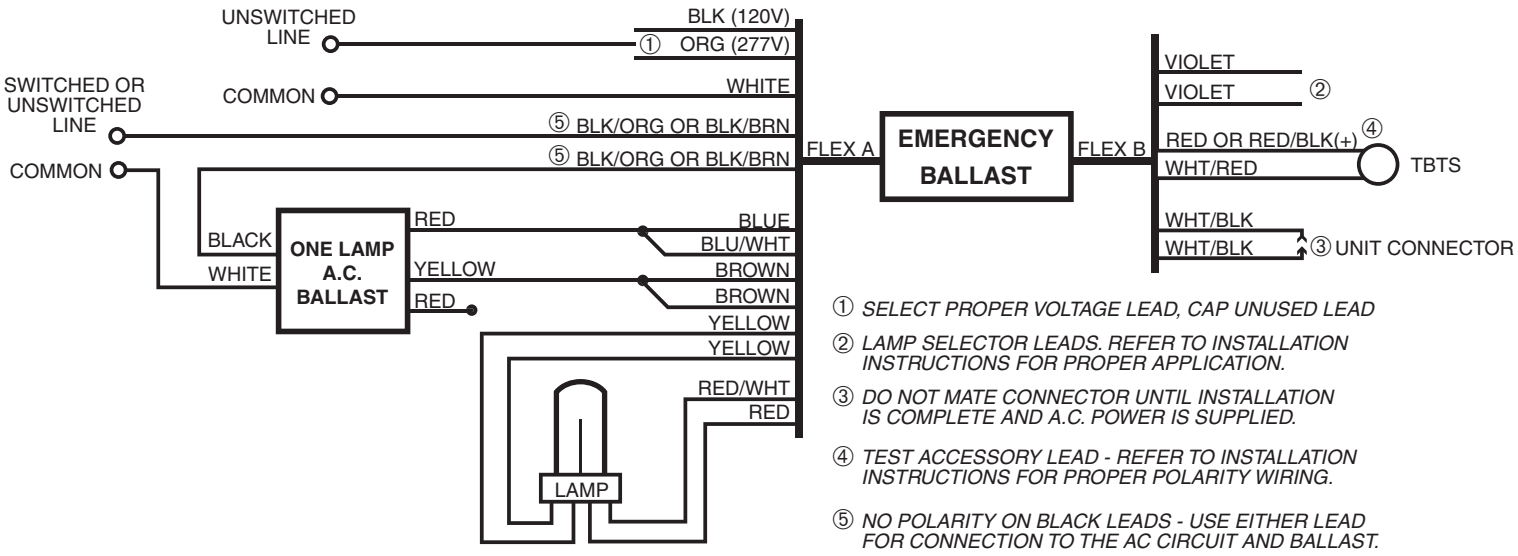
1LRSB42A_AC_F

NOTES

AC6

AC6

ONE LAMP INSTANT START FULHAM BALLAST



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

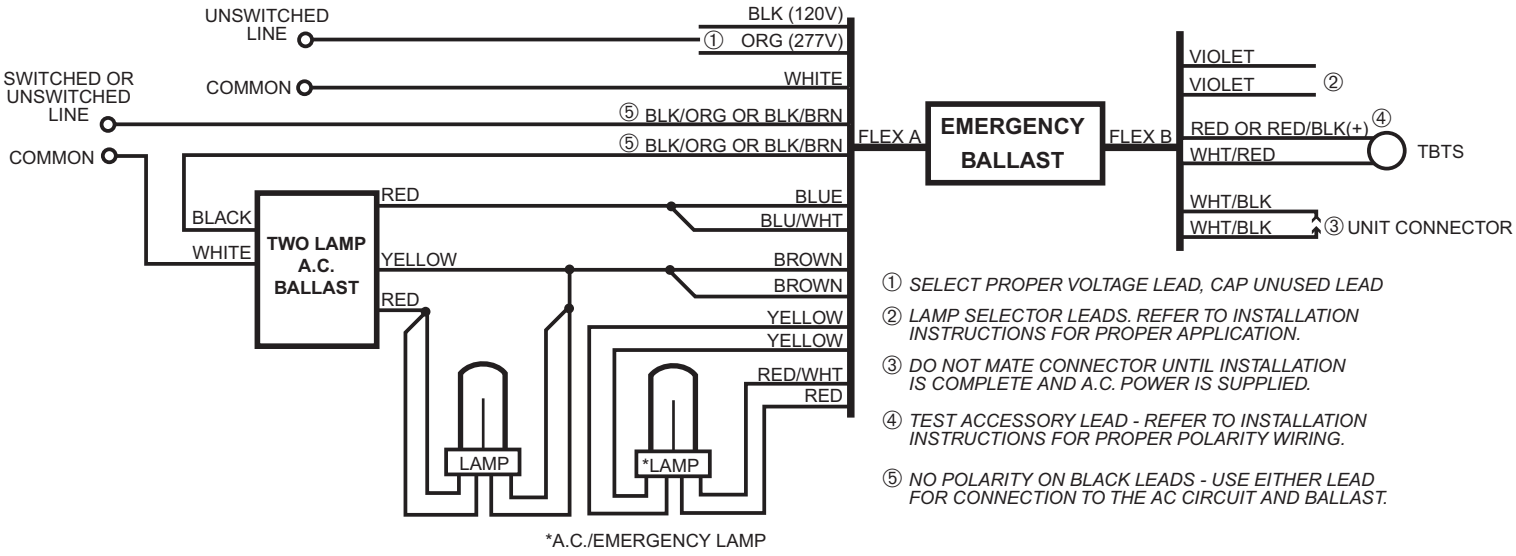
1LRSB42A_AC_F_2

NOTES

AC7

AC7

TWO LAMP INSTANT START FULHAM BALLAST



*A.C./EMERGENCY LAMP

① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

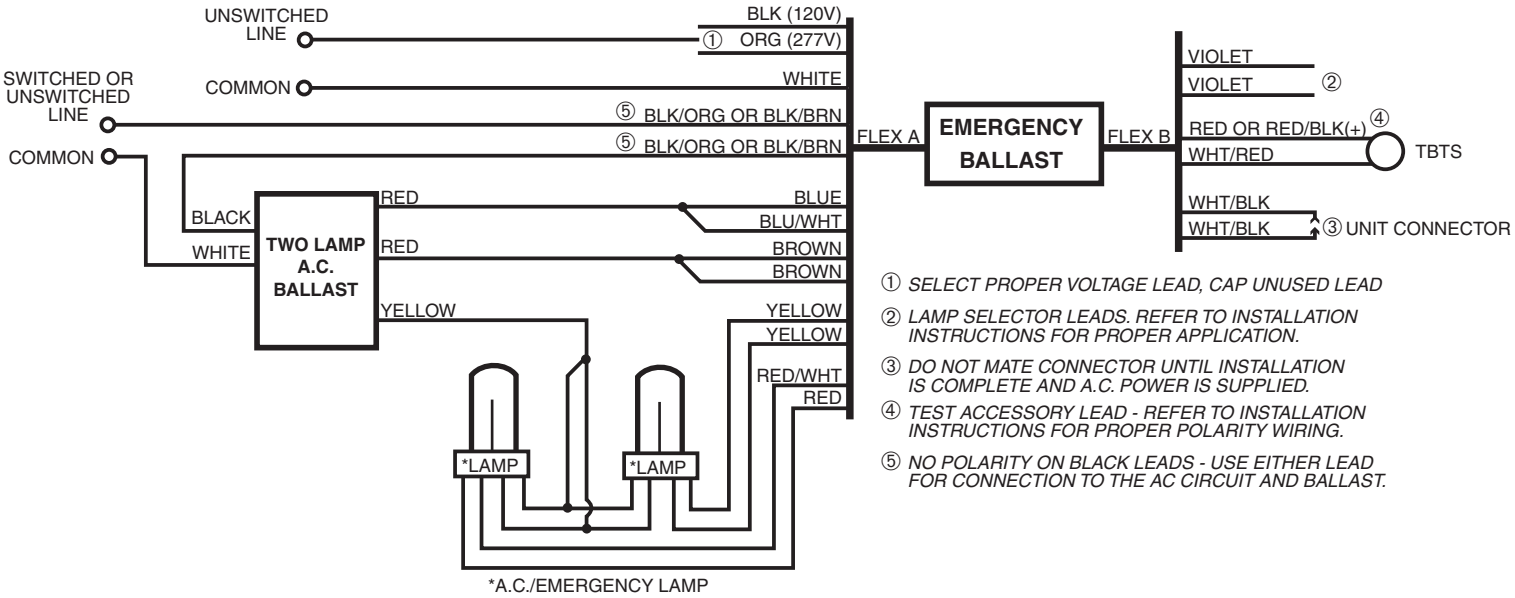
2LRSB42A_AC_F

NOTES

AC8

AC8

TWO LAMP INSTANT START FULHAM BALLAST TWO LAMP EMERGENCY OPERATION



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

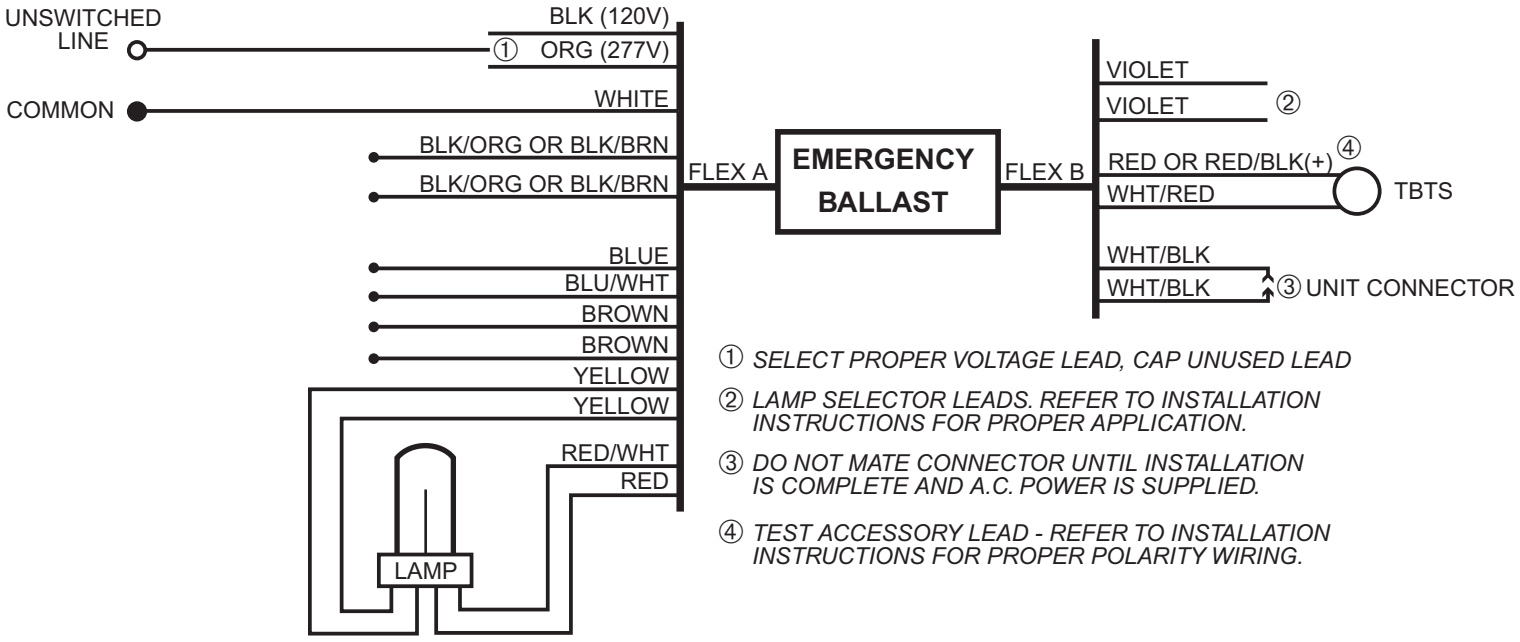
2LRSB42A_AC_2LEO_F

NOTES

AC9

AC9

ONE LAMP EMERGENCY ONLY



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

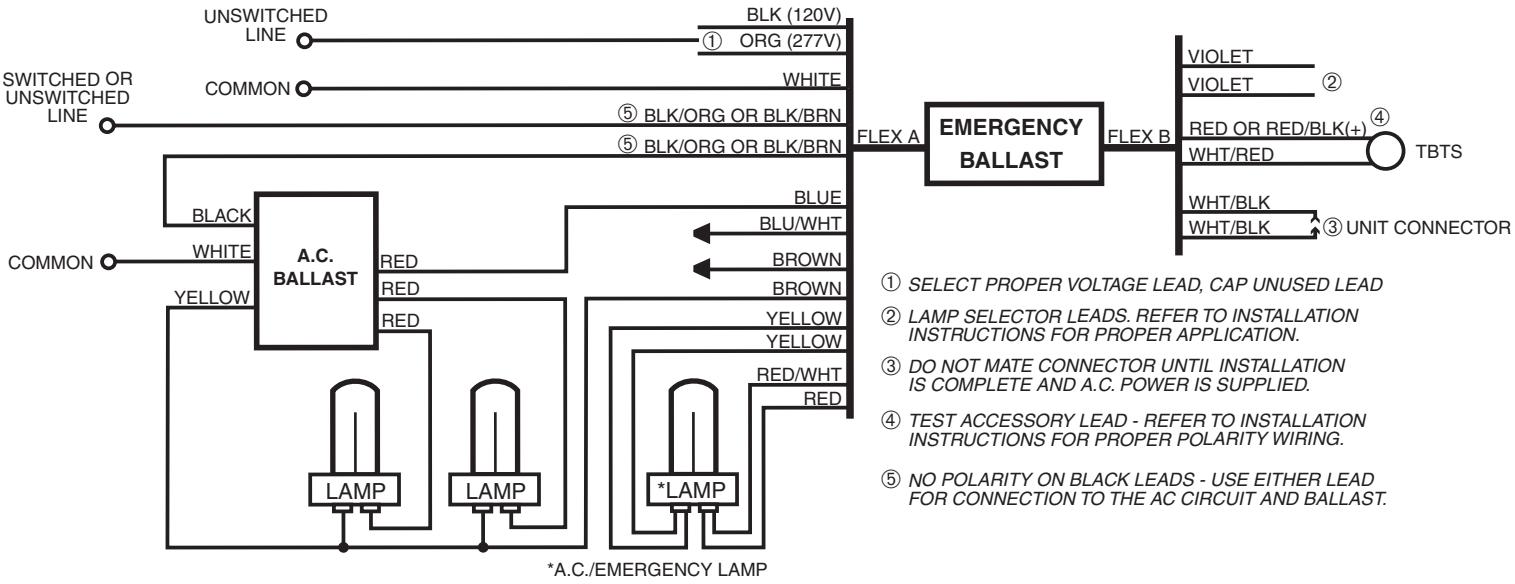
1LEO_AC_F

NOTES

AC10

AC10

THREE LAMP FULHAM BALLAST



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

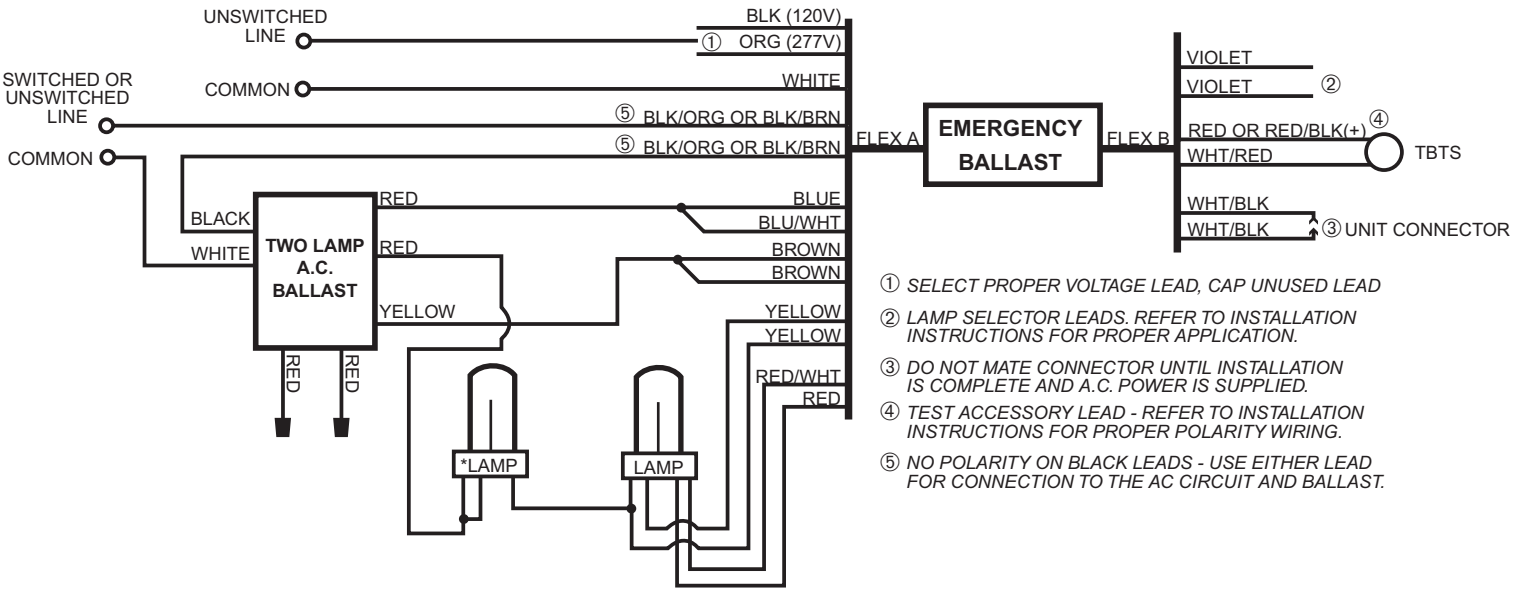
3LISFB42A_AC

NOTES

AC11

AC11

TWO LAMP INSTANT START FULHAM WORKHORSE III BALLAST



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

*A.C./EMERGENCY LAMP

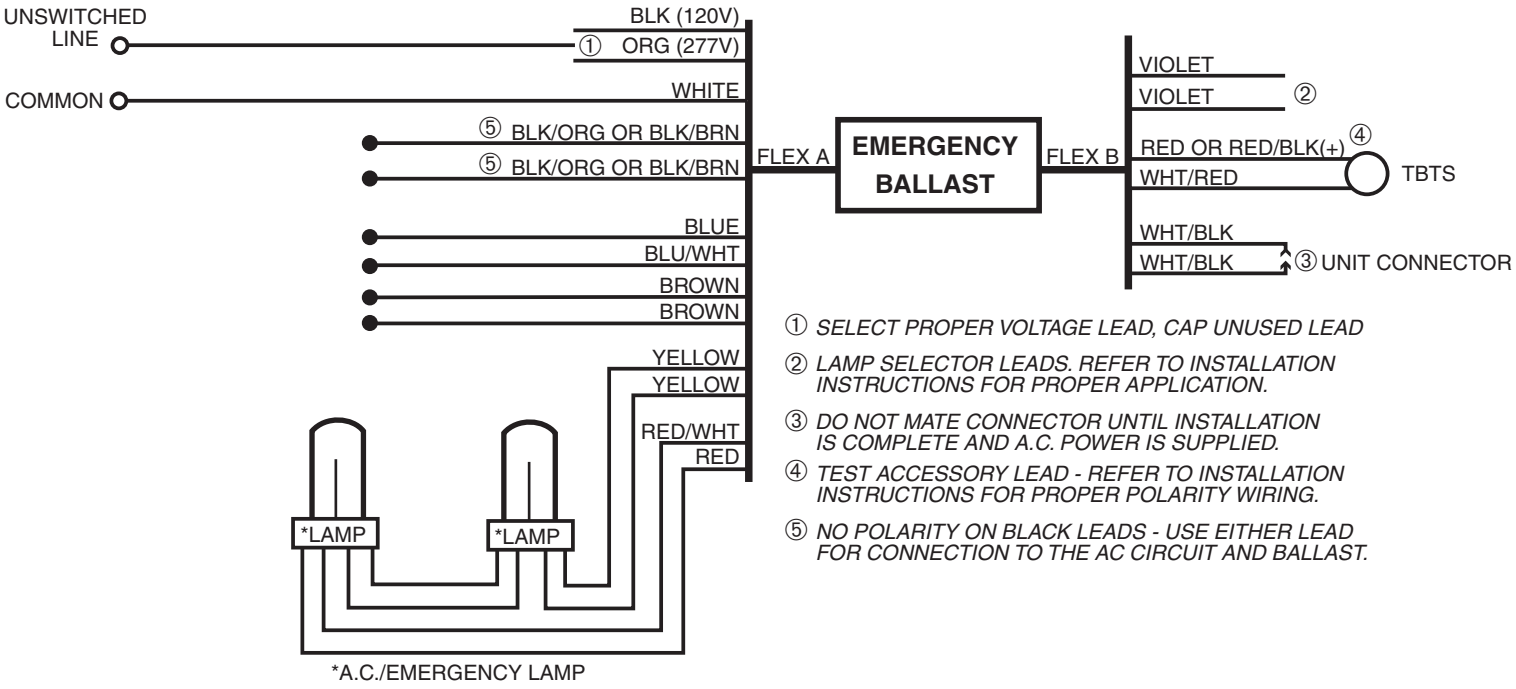
2LRSB42A_AC_2LEO_F_2

NOTES

AC12

AC12

TWO LAMP EMERGENCY OPERATION ONLY



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

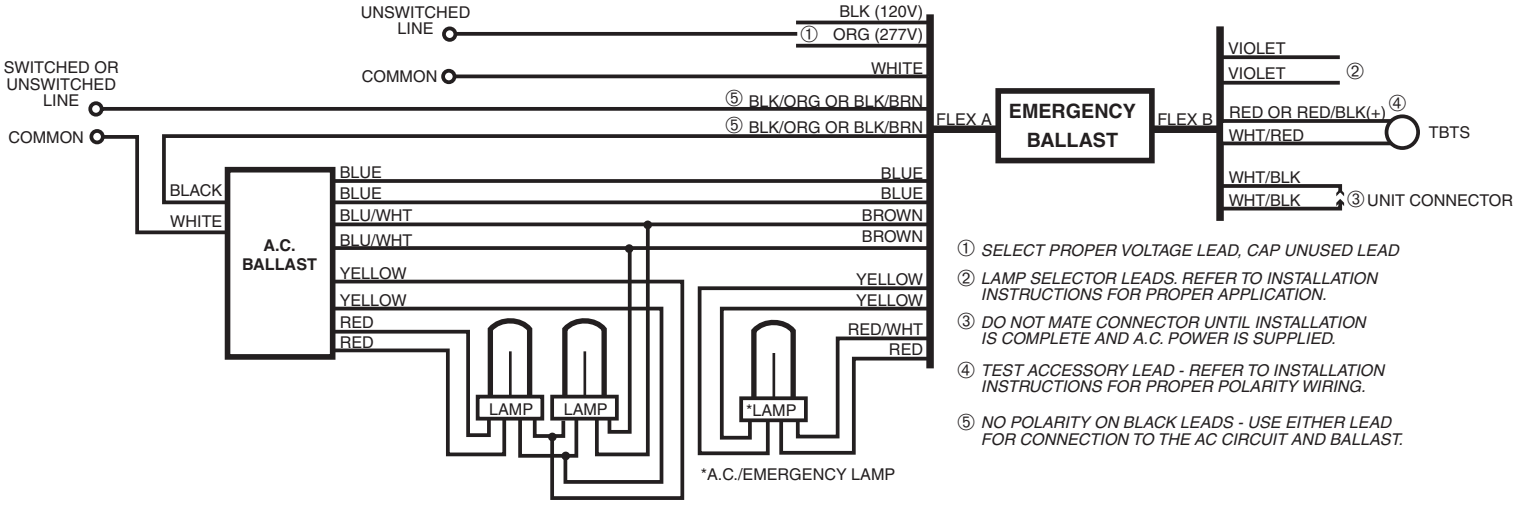
2LRSB42A_AC_2LEO_2

NOTES

AC13

AC13

THREE LAMP RAPID START BALLAST



① *SELECT PROPER VOLTAGE LEAD, CAP UNUSED LEAD*

② *LAMP SELECTOR LEADS. REFER TO INSTALLATION INSTRUCTIONS FOR PROPER APPLICATION.*

③ *DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.*

④ *TEST ACCESSORY LEAD - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.*

⑤ *NO POLARITY ON BLACK LEADS - USE EITHER LEAD FOR CONNECTION TO THE AC CIRCUIT AND BALLAST.*

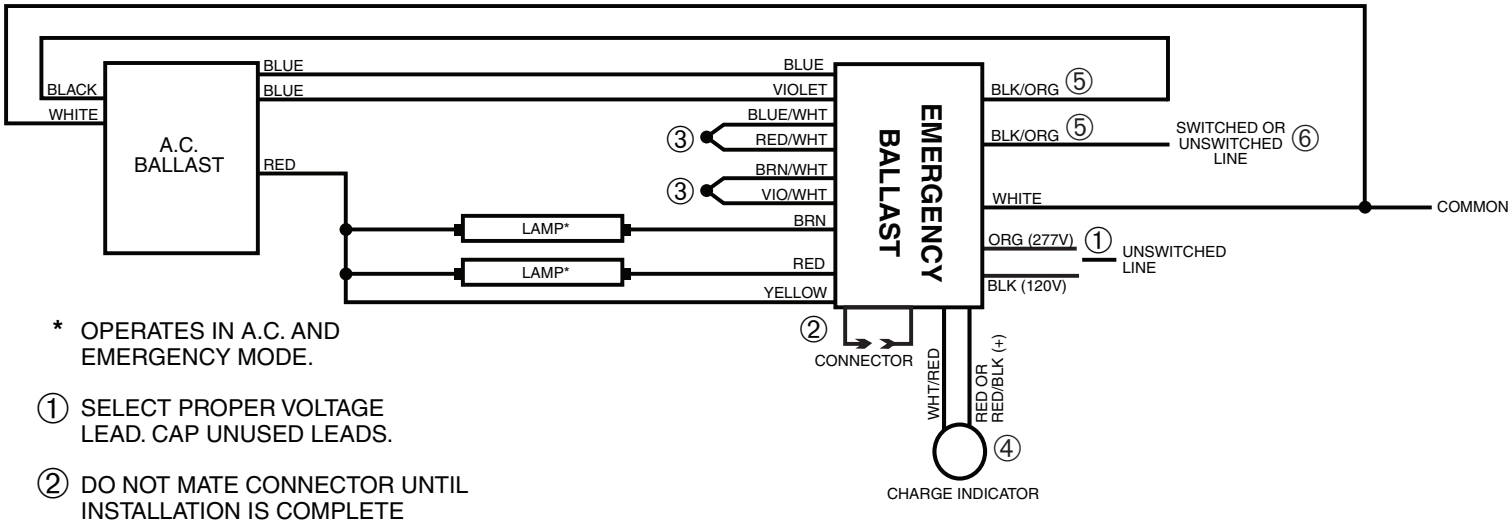
3LRSB42A_AC

NOTES

FC1

FC1

TWO LAMP INSTANT START BALLAST



* OPERATES IN A.C. AND EMERGENCY MODE.

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEADS.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

③ PIGTAIL LEADS TOGETHER.

④ TEST ACCESSORY LEADS - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY LEAD WIRING.

⑤ NO POLARITY ON BLK/ORG LEADS.

⑥ SWITCHED OR UNSWITCHED LINE- REFER TO INSTALLATION MANUAL FOR HOT AND TEST SWITCH PLACEMENT.

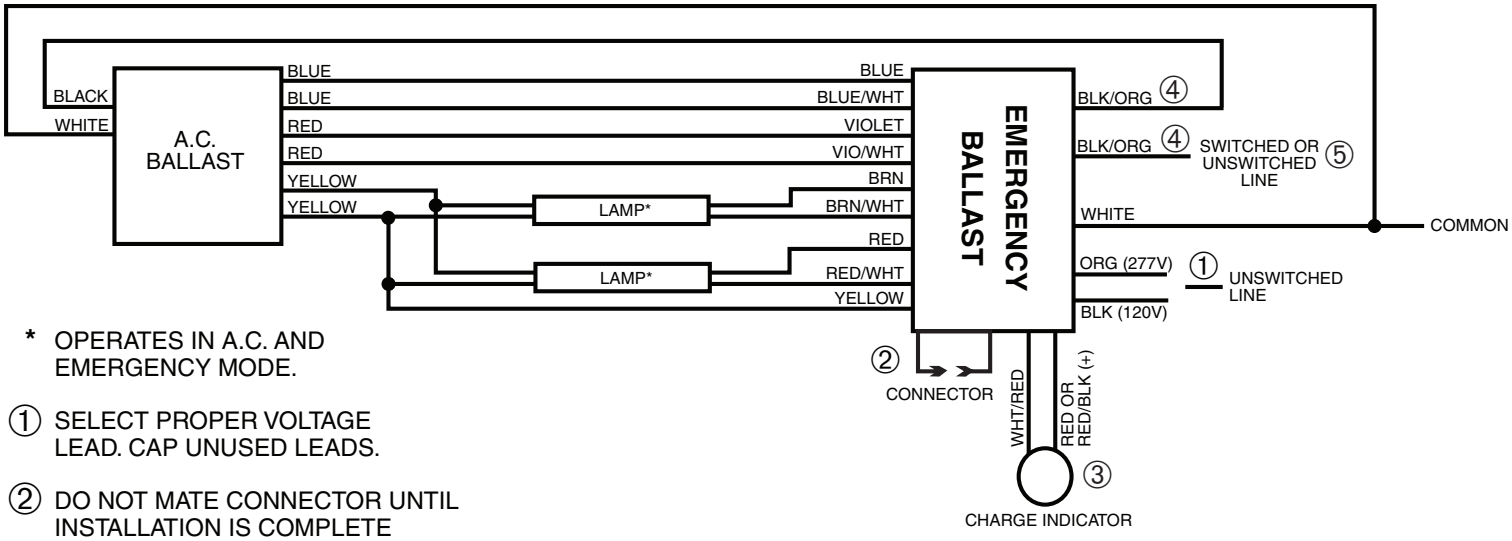
2LISB_232_D

NOTES

FC2

FC2

TWO LAMP RAPID START BALLAST



* OPERATES IN A.C. AND EMERGENCY MODE.

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEADS.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY LEAD WIRING.

④ NO POLARITY ON BLK/ORG LEADS.

⑤ SWITCHED OR UNSWITCHED LINE- REFER TO INSTALLATION MANUAL FOR HOT AND TEST SWITCH PLACEMENT.

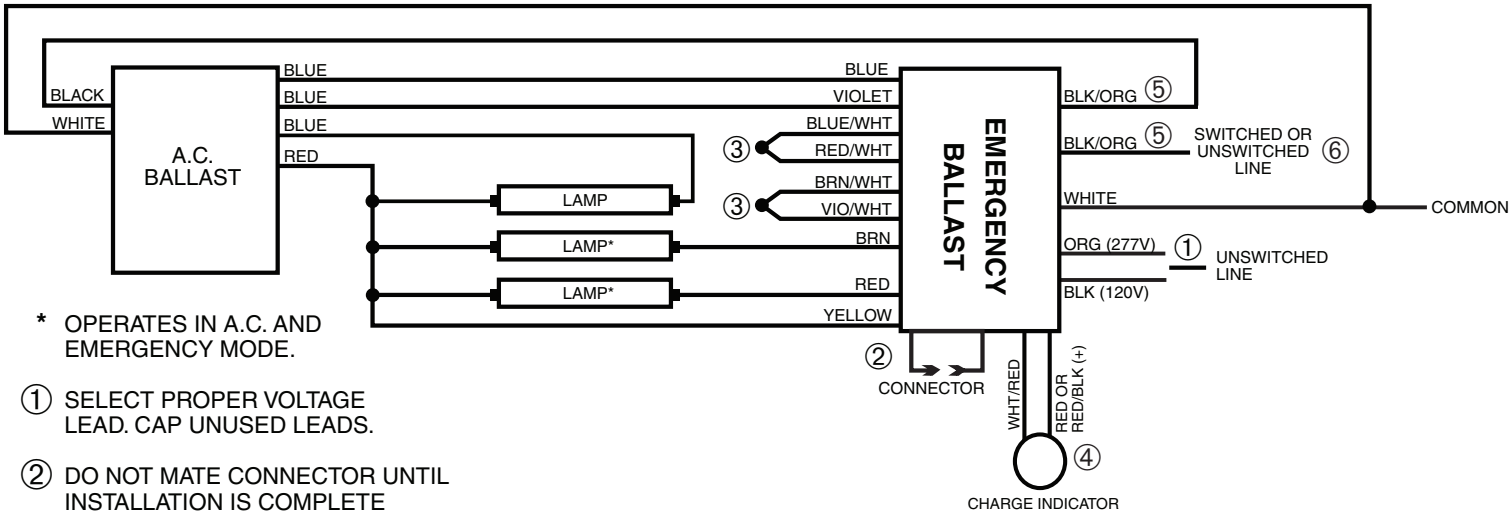
2LRSB_232_D

NOTES

FC3

FC3

THREE LAMP INSTANT START BALLAST



* OPERATES IN A.C. AND EMERGENCY MODE.

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEADS.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

③ PIGTAIL LEADS TOGETHER.

④ TEST ACCESSORY LEADS - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY LEAD WIRING.

⑤ NO POLARITY ON BLK/ORG LEADS.

⑥ SWITCHED OR UNSWITCHED LINE- REFER TO INSTALLATION MANUAL FOR HOT AND TEST SWITCH PLACEMENT.

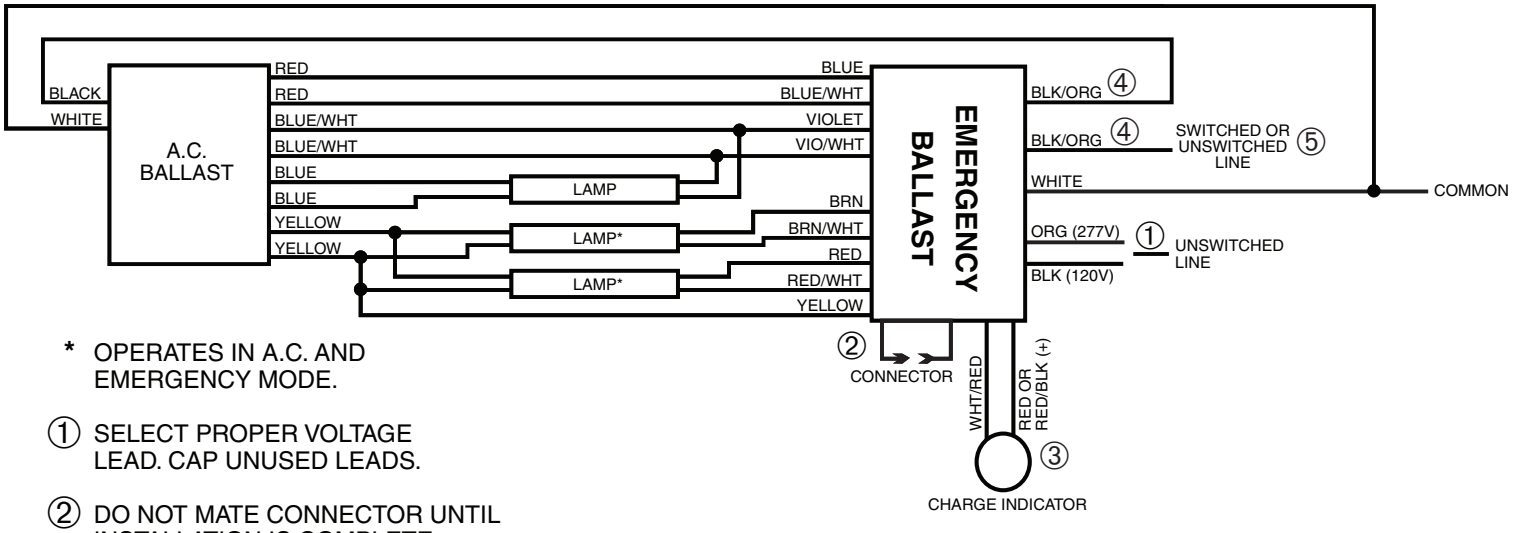
3LISB_232_D

NOTES

FC4

FC4

THREE LAMP RAPID START BALLAST



* OPERATES IN A.C. AND EMERGENCY MODE.

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEADS.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY LEAD WIRING.

④ NO POLARITY ON BLK/ORG LEADS.

⑤ SWITCHED OR UNSWITCHED LINE- REFER TO INSTALLATION MANUAL FOR HOT AND TEST SWITCH PLACEMENT.

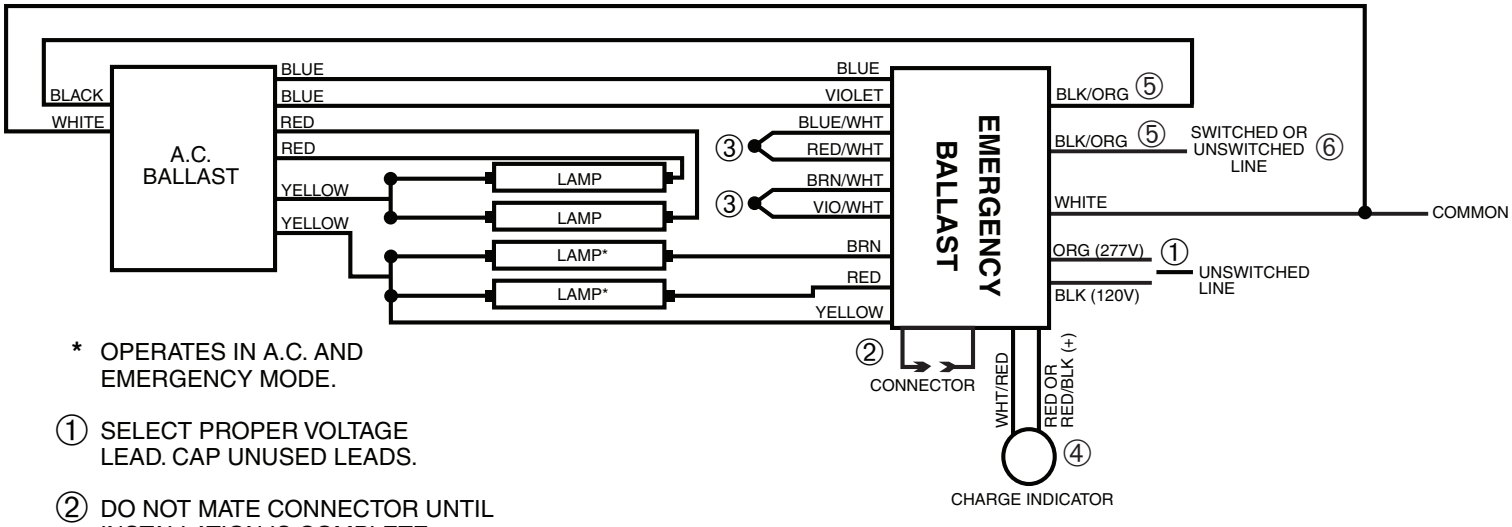
3LRSB_232_D

NOTES

FC5

FC5

FOUR LAMP INSTANT START BALLAST



* OPERATES IN A.C. AND EMERGENCY MODE.

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEADS.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

③ PIGTAIL LEADS TOGETHER.

④ TEST ACCESSORY LEADS - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY LEAD WIRING.

⑤ NO POLARITY ON BLK/ORG LEADS.

⑥ SWITCHED OR UNSWITCHED LINE- REFER TO INSTALLATION MANUAL FOR HOT AND TEST SWITCH PLACEMENT.

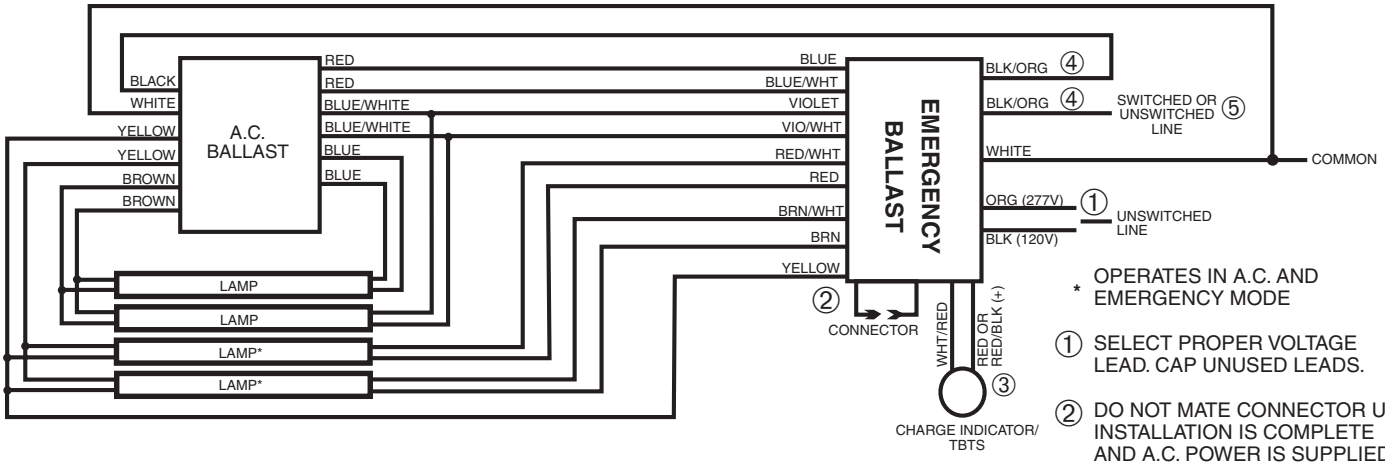
4LISB_232_D

NOTES

FC6

FC6

FOUR LAMP RAPID START BALLAST



* OPERATES IN A.C. AND EMERGENCY MODE

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEADS.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

④ NO POLARITY ON BLK/ORG LEADS.

⑤ SWITCHED OR UNSWITCHED LINE- REFER TO INSTALLATION MANUAL FOR HOT AND TEST SWITCH PLACEMENT.

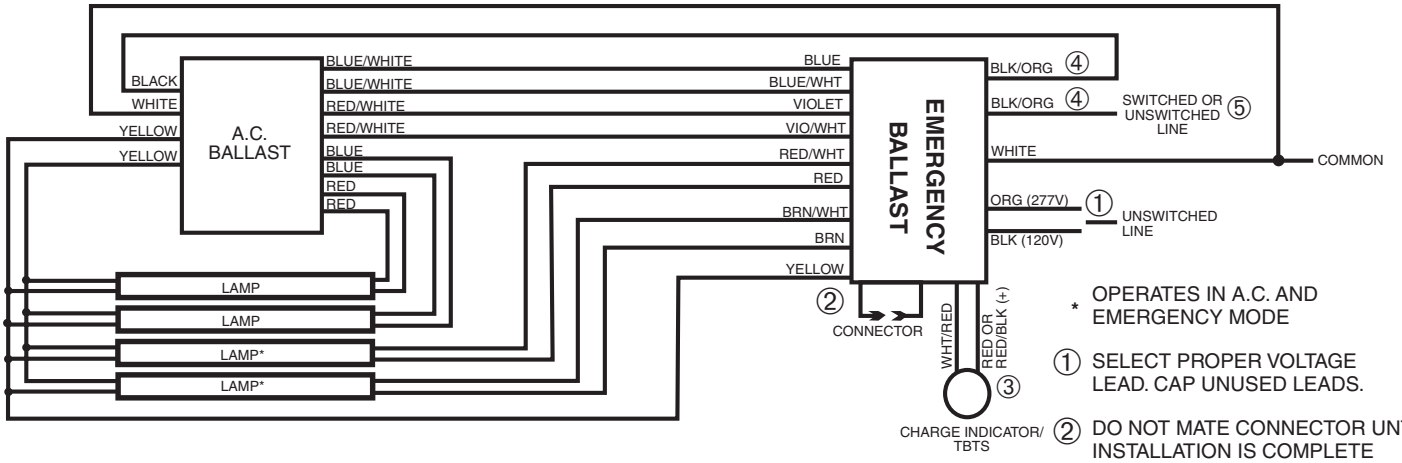
4LRSB_232_D

NOTES

FC7

FC7

FOUR LAMP RAPID START BALLAST



* OPERATES IN A.C. AND EMERGENCY MODE

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEADS.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND A.C. POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

④ NO POLARITY ON BLK/ORG LEADS.

⑤ SWITCHED OR UNSWITCHED LINE- REFER TO INSTALLATION MANUAL FOR HOT AND TEST SWITCH PLACEMENT.

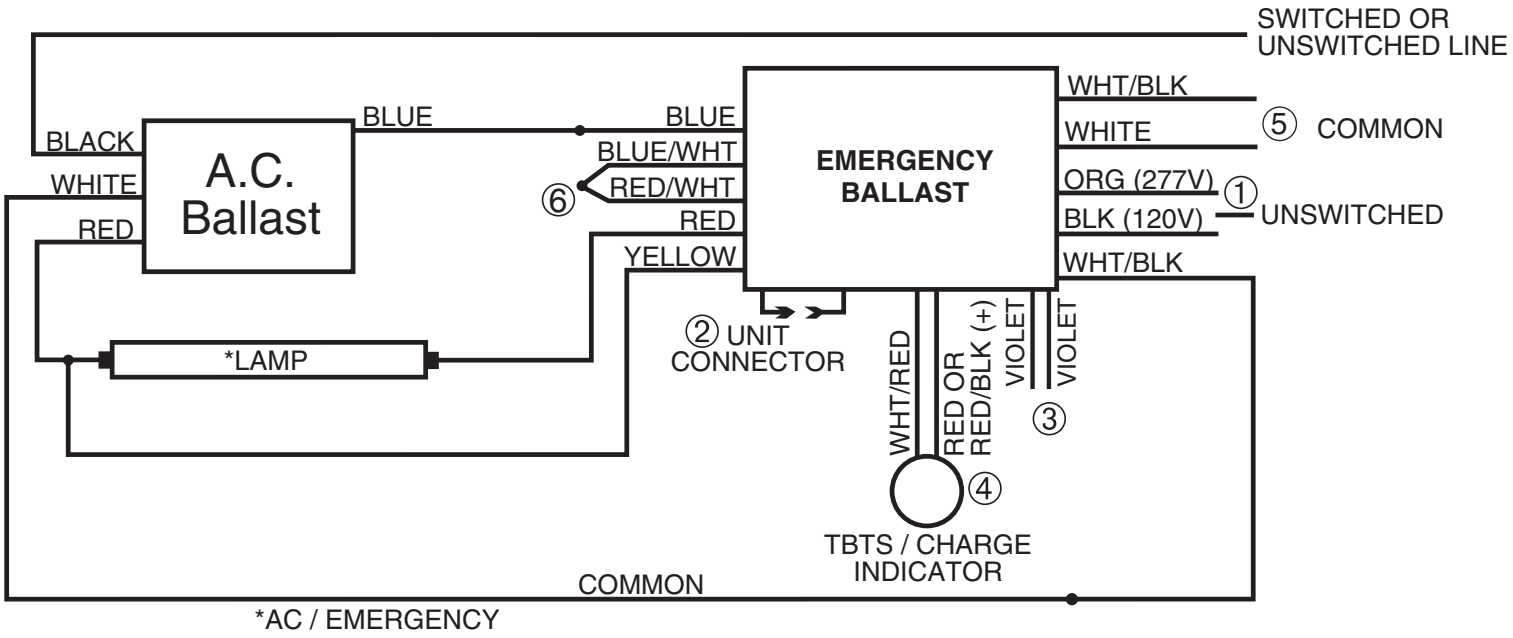
4LRSB_232_2_D

NOTES

MC1

MC1

ONE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

⑥ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

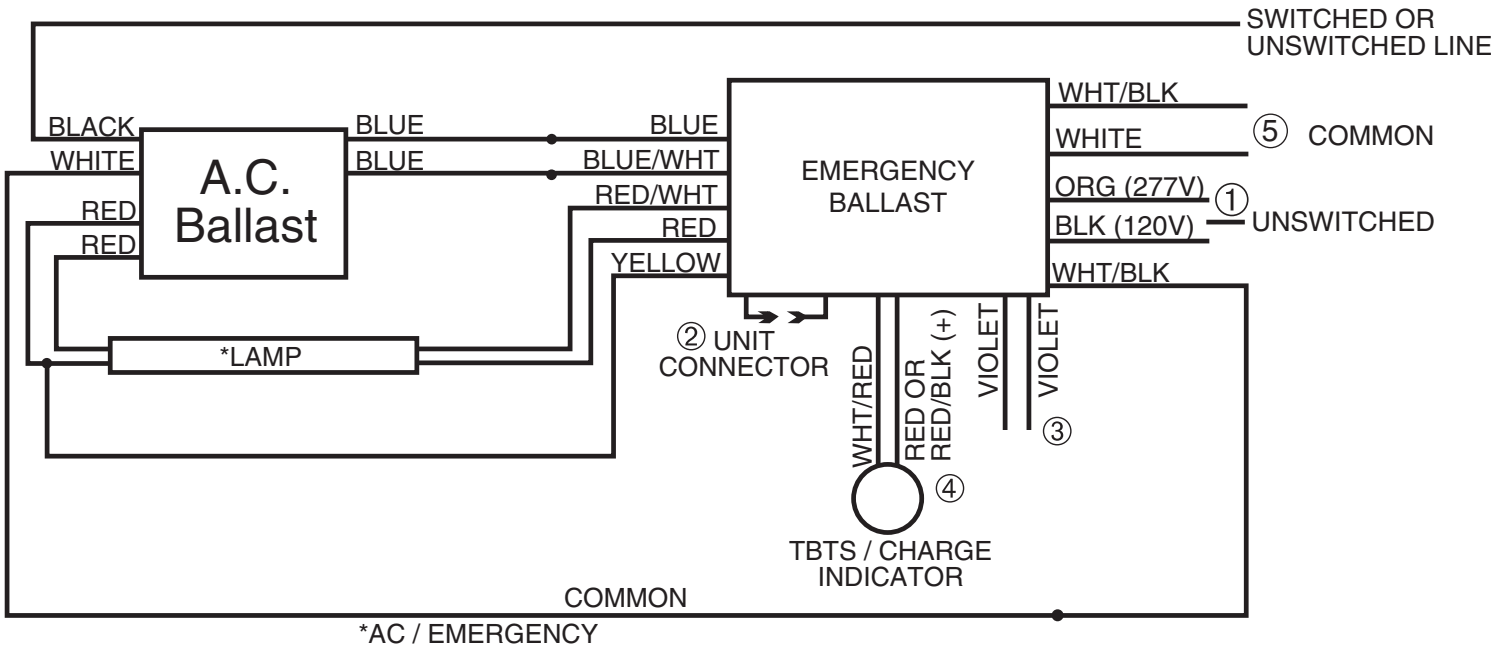
1LISB_E

NOTES

MC2

MC2

ONE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

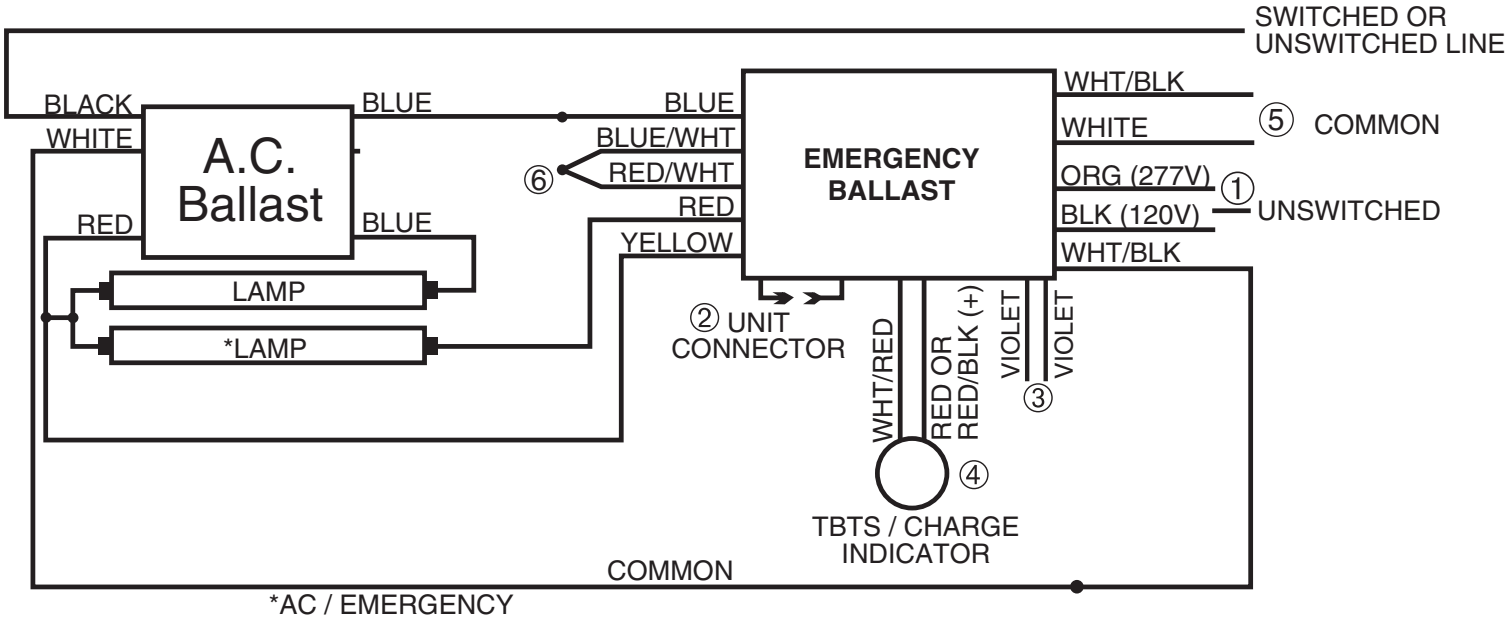
⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

1LRSB_E

NOTES

MC3 MC3

TWO LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

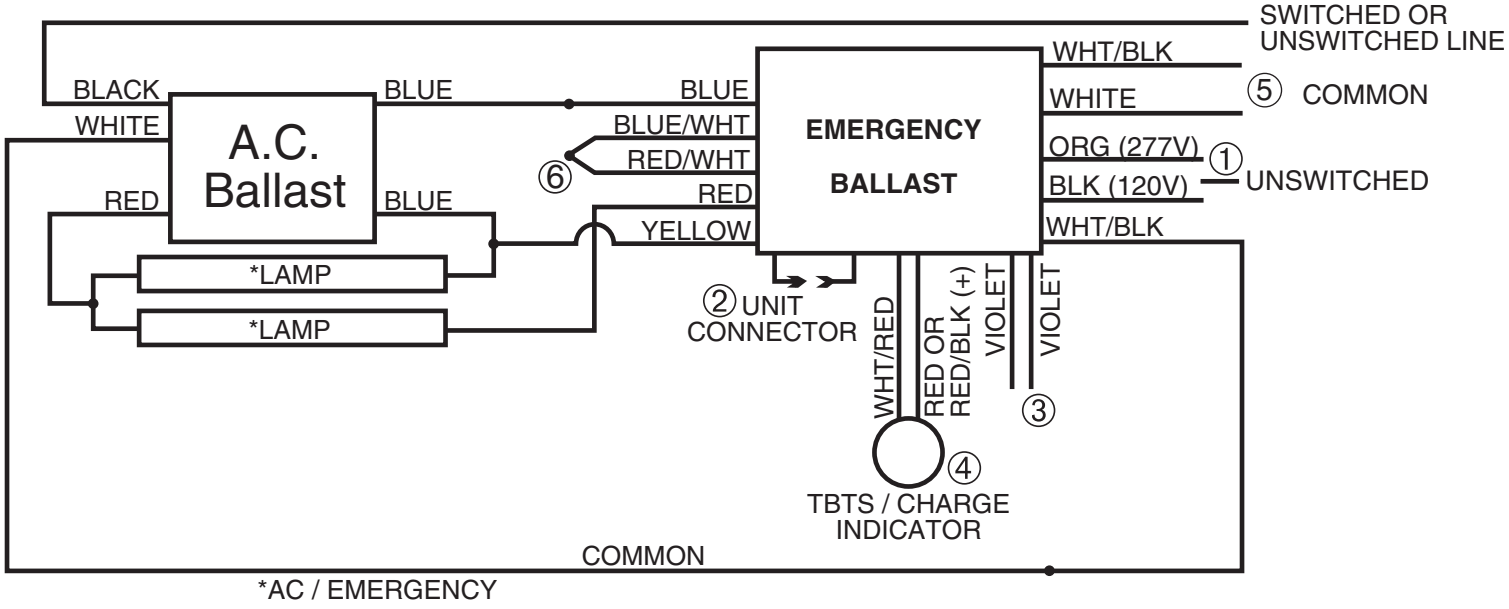
⑥ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

2LISB_2_E

NOTES

MC4 MC4

TWO LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

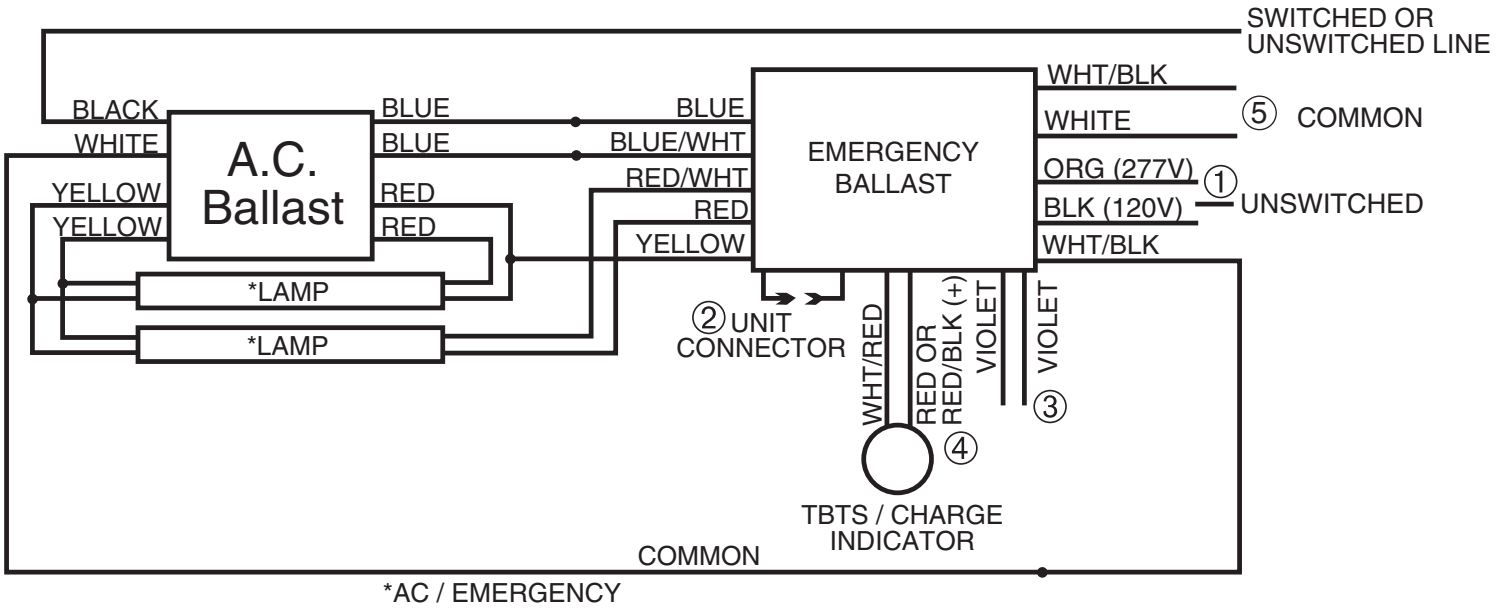
⑥ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

2LISB_2LEO_80_E

NOTES

MC5 MC5

TWO LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

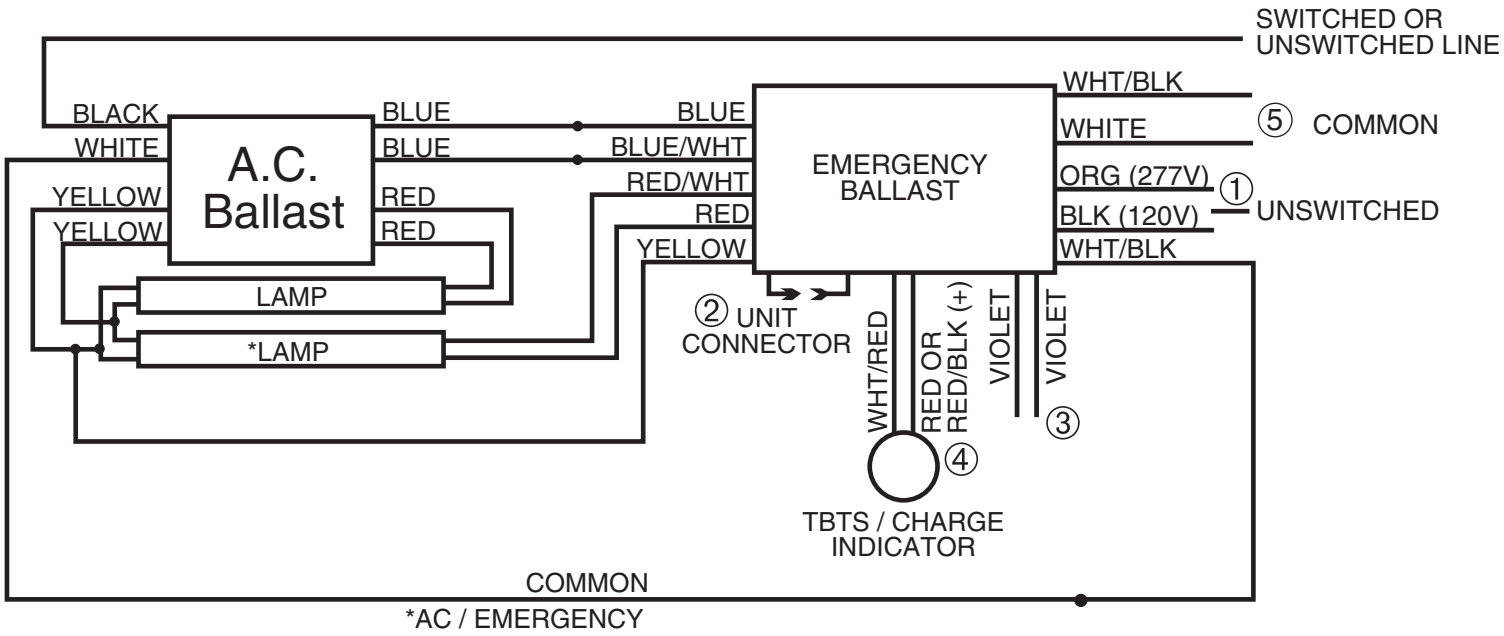
⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

2LRSB_2LEO_80_E

NOTES

MC6 MC6

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

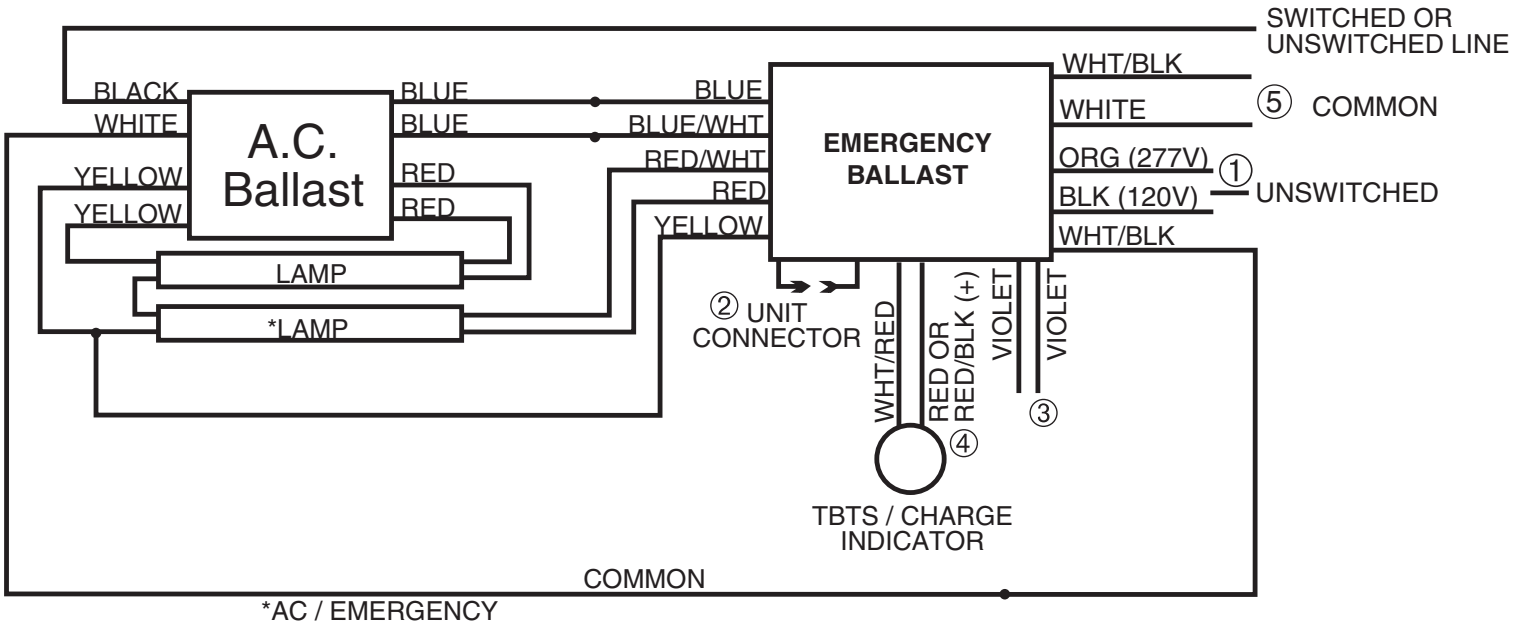
⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

2LRSB_E

NOTES

MC7 MC7

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

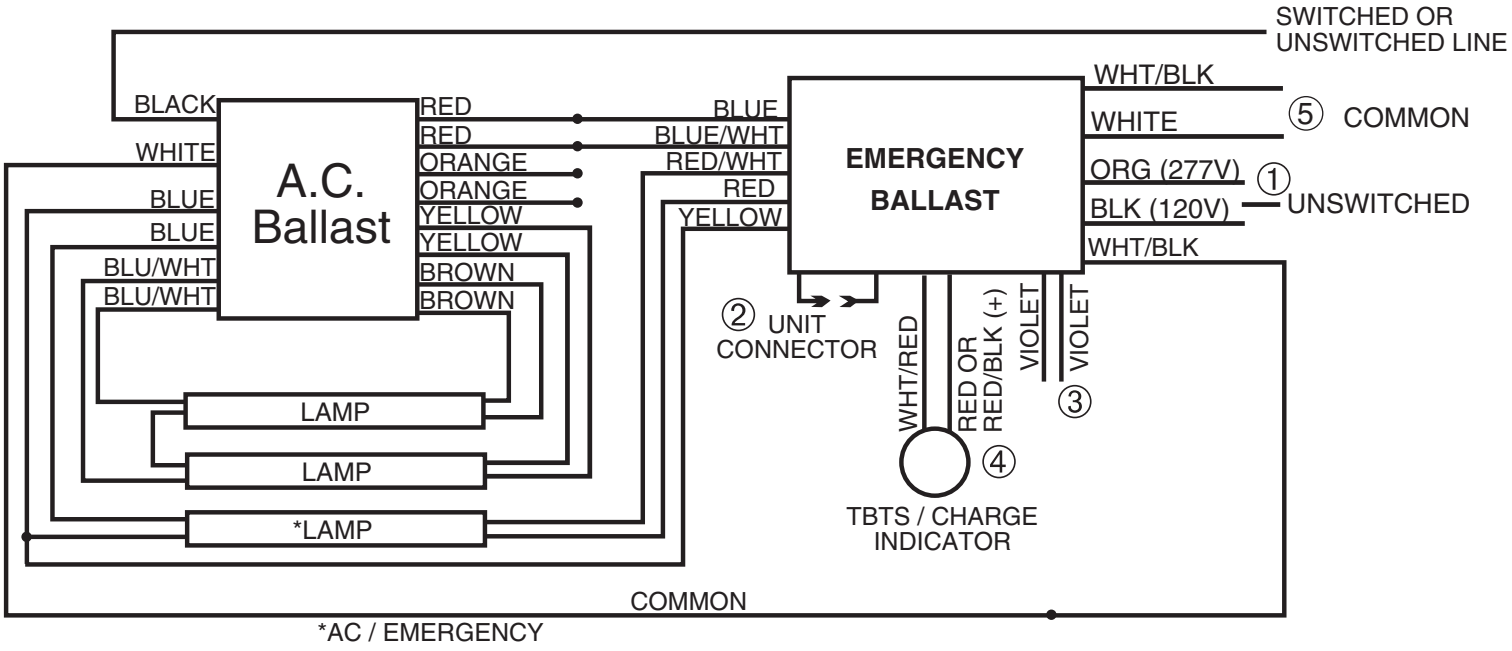
⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

2LRSB_E_4

NOTES

MC8 MC8

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

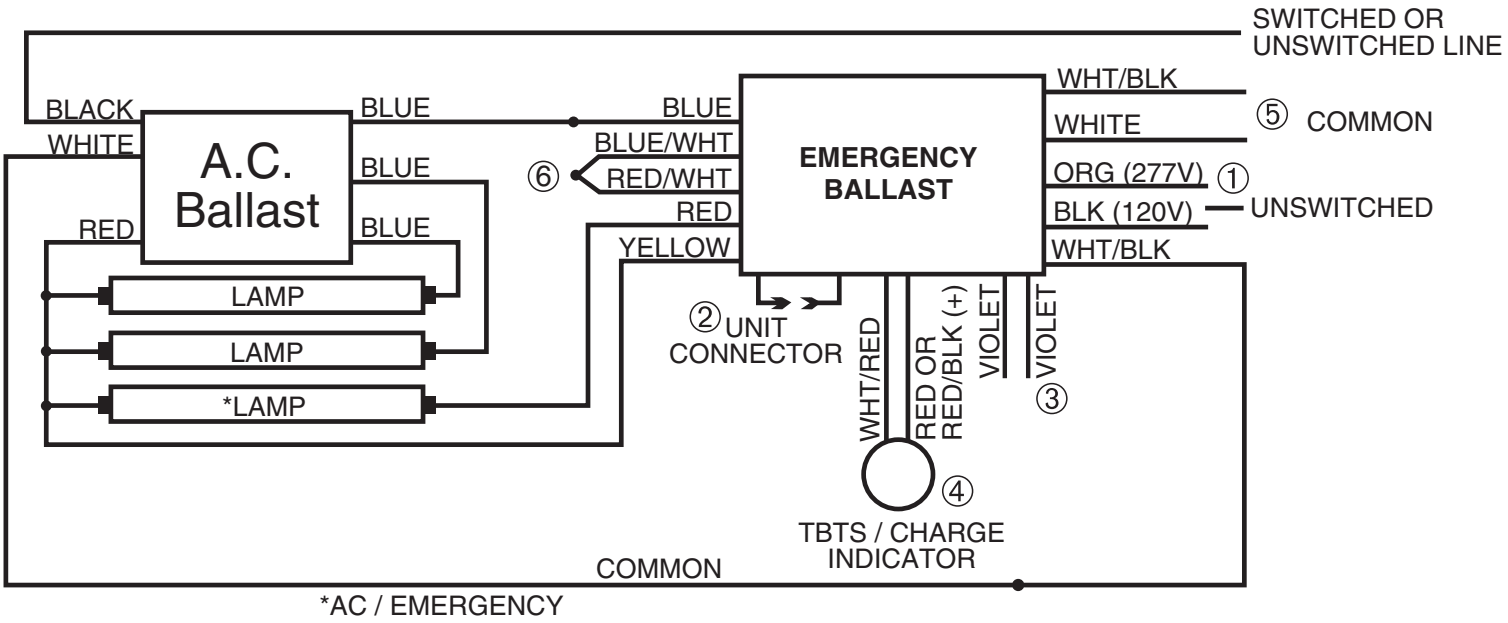
⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

3_LRSB_E_3

NOTES

MC9 MC9

THREE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

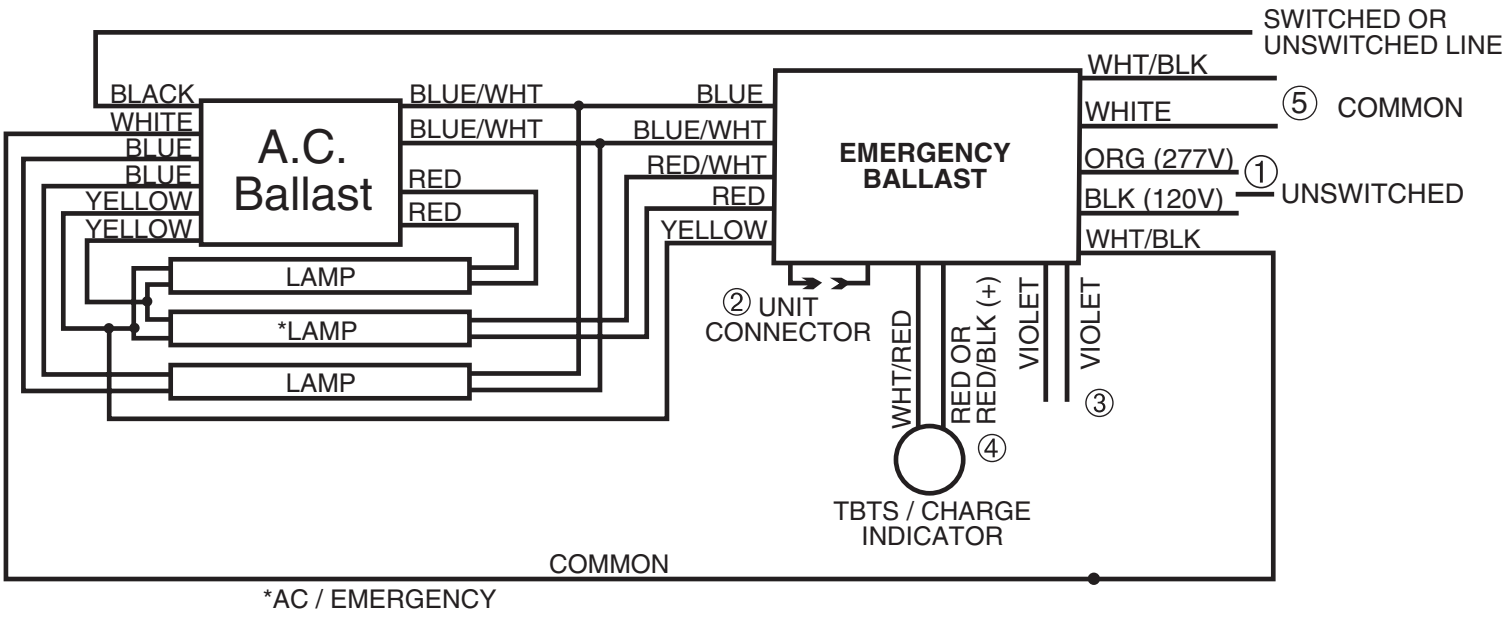
⑥ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

3LISB_E

NOTES

MC10 MC10

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

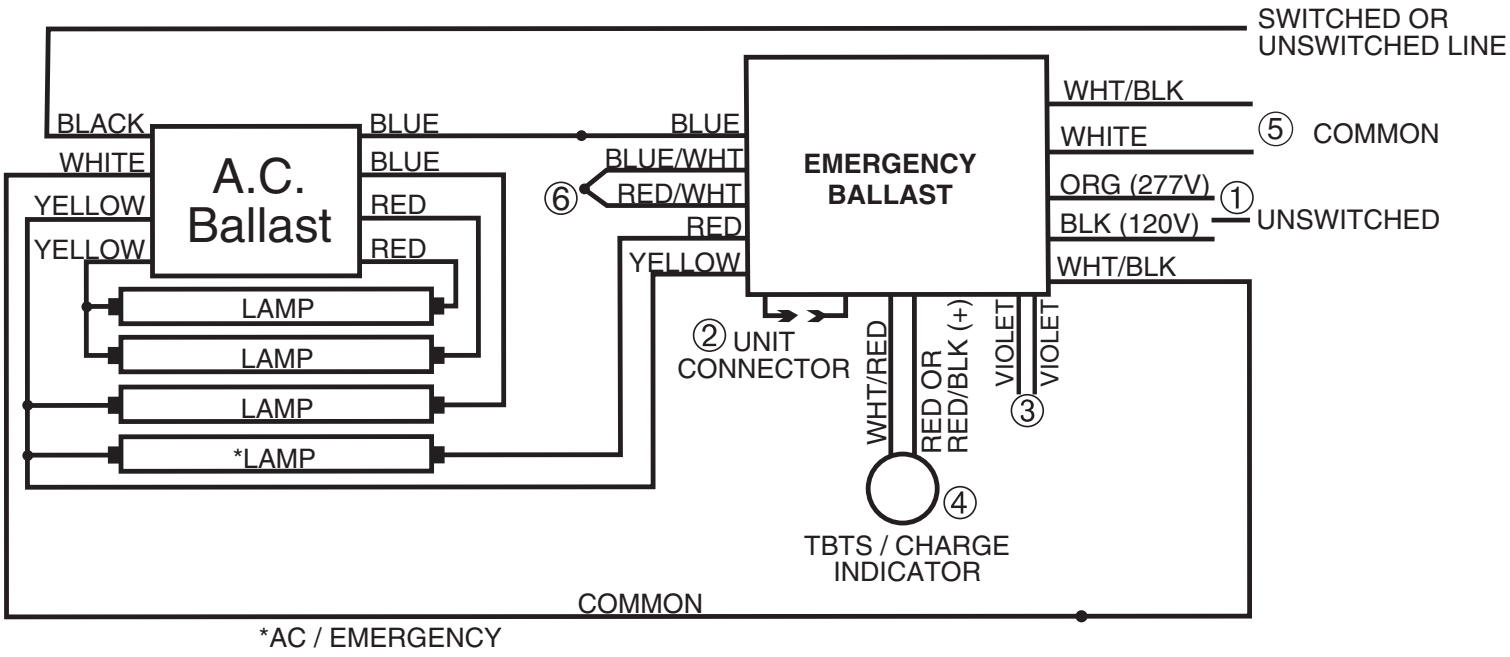
⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

3LRSB_E

NOTES

MC11 MC11

FOUR LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

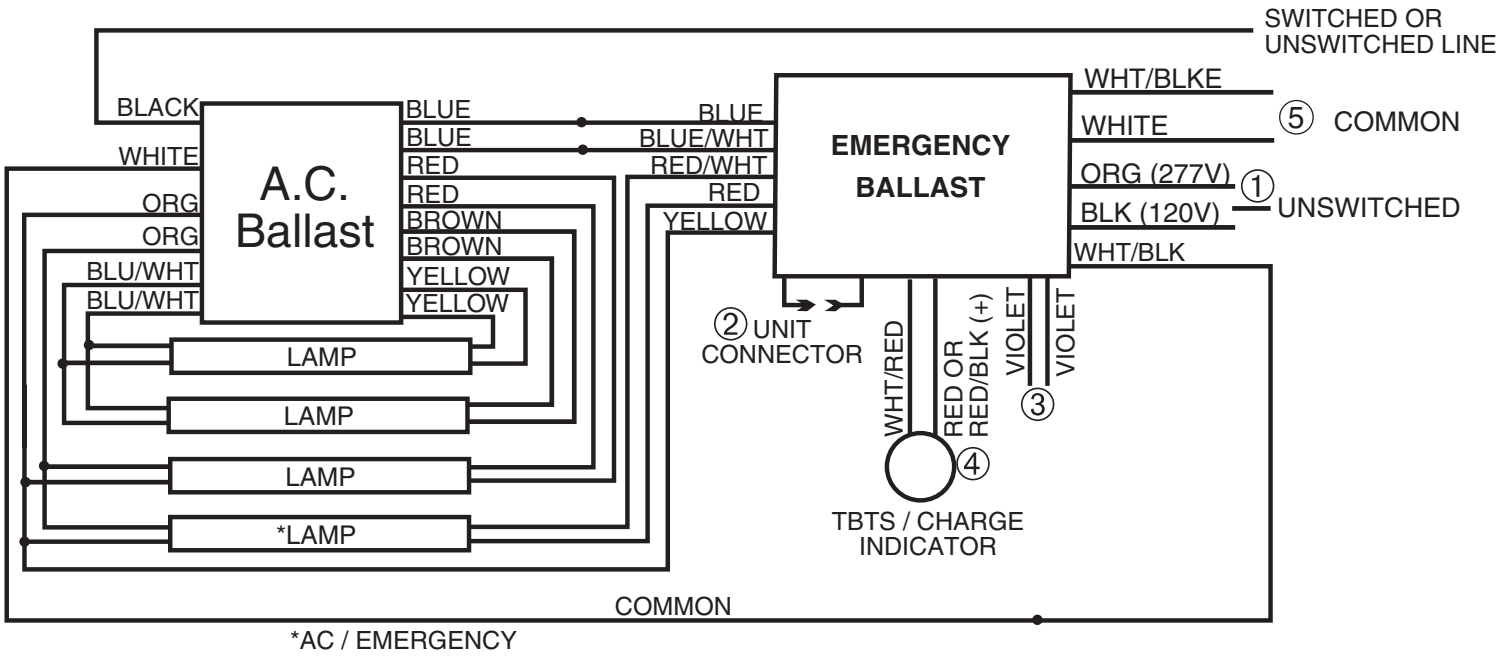
⑥ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

4LISB_E

NOTES

MC12 MC12

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

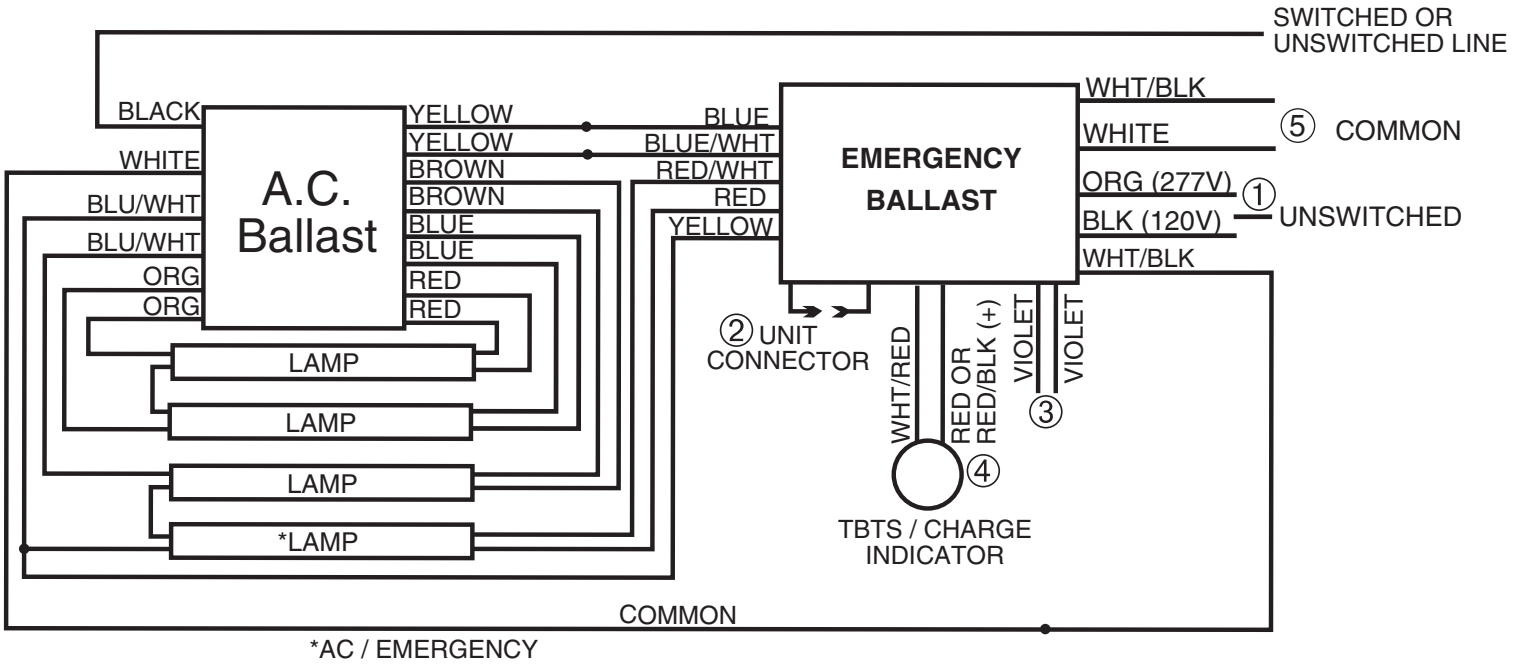
⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

4LRSB_E_3

NOTES

MC13 MC13

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

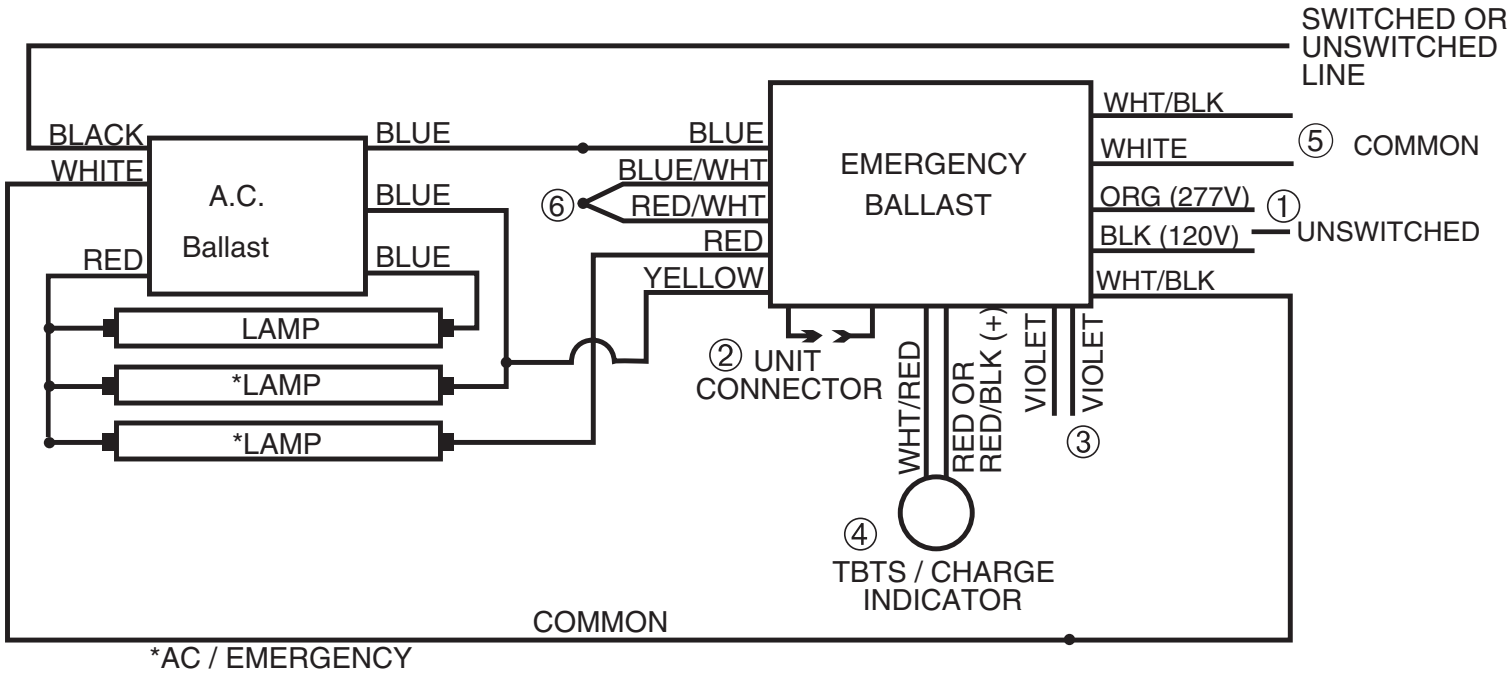
⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

4LRSB_E_4

NOTES

MC14 MC14

THREE LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

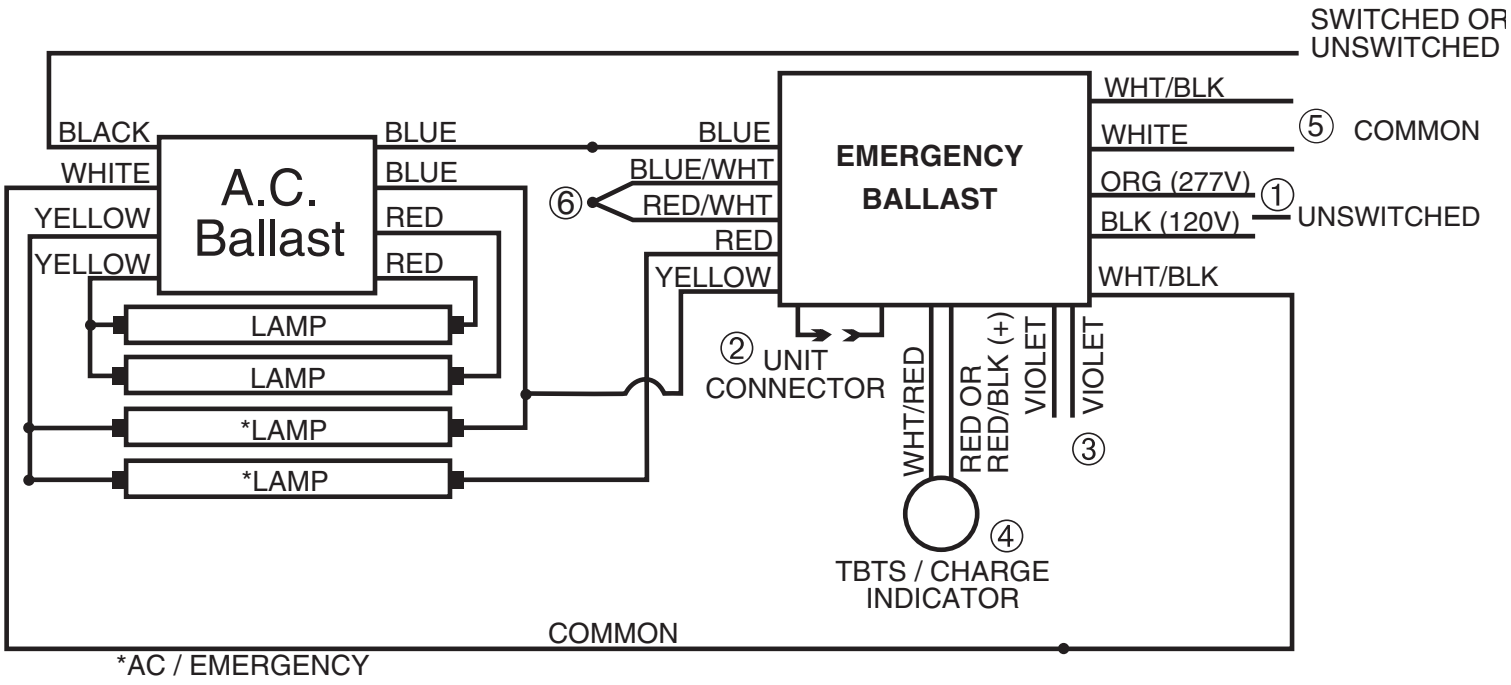
⑥ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

3LISB_2LEO_E

NOTES

MC15 MC15

FOUR LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

⑥ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

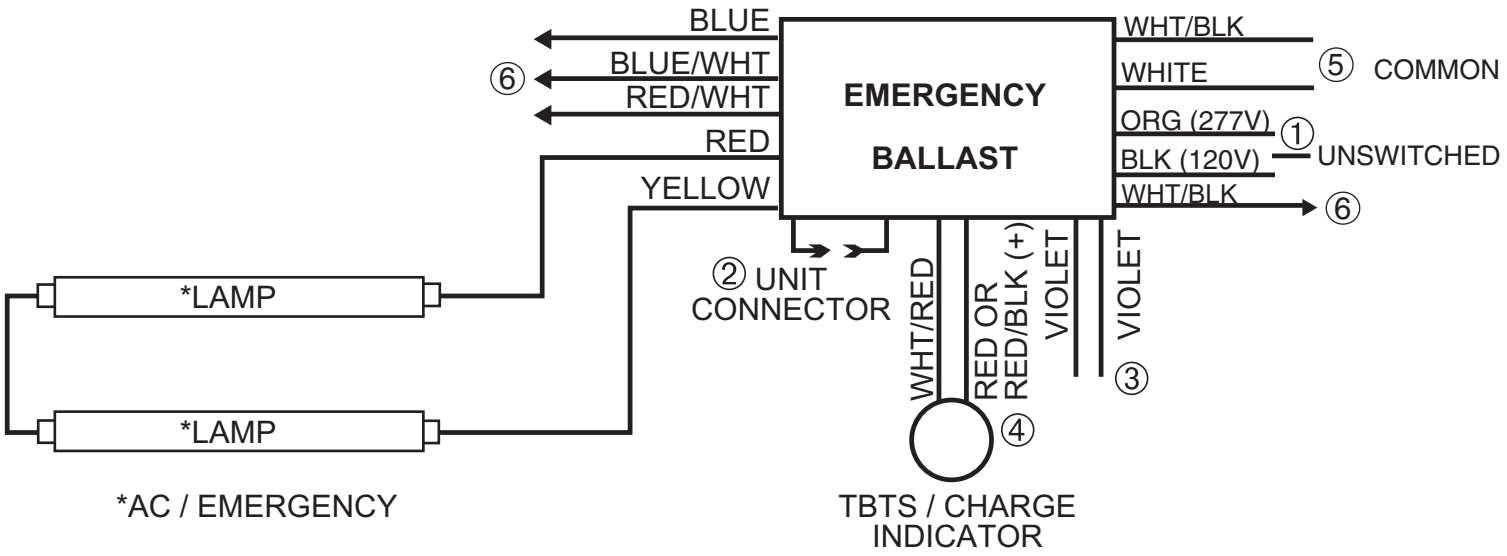
4LISB_2LEO_80E

NOTES

MC16

MC16

TWO LAMP EMERGENCY ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

⑥ CAP UNUSED LEADS.

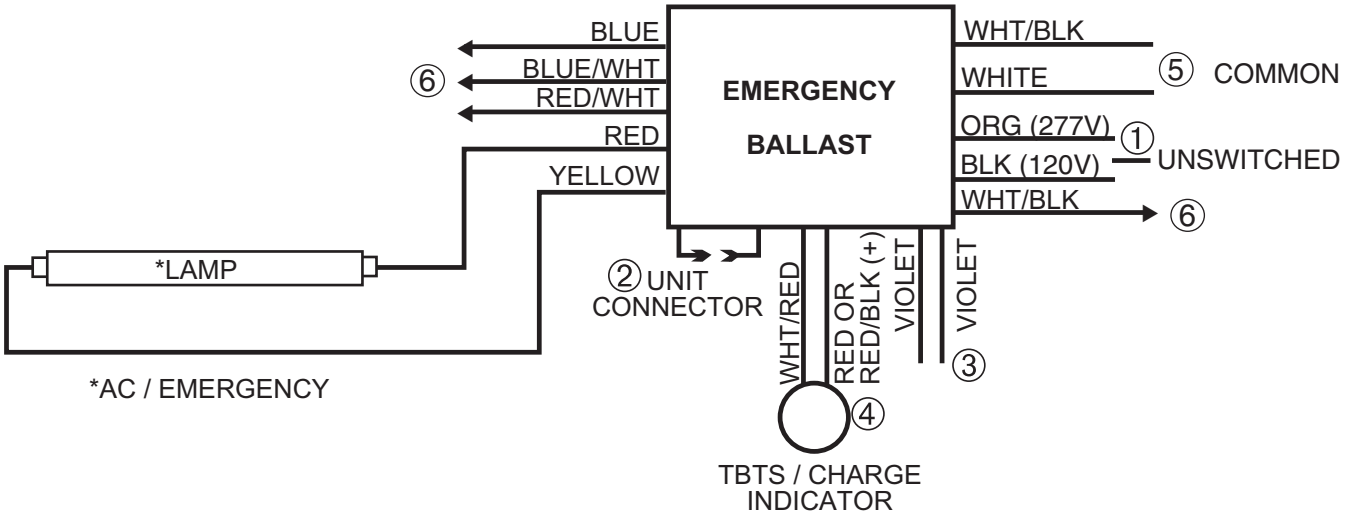
2LEO_80_E

NOTES

MC17

MC17

ONE LAMP EMERGENCY ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL FOR PROPER INPUT CIRCUIT WIRING.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

⑤ USE EITHER WHT/BLK LEAD FOR WIRING THE COMMON. REFER TO AC INPUT WIRING ON ILLUSTRATION 3 OF INSTALLATION MANUAL.

⑥ CAP UNUSED LEADS.

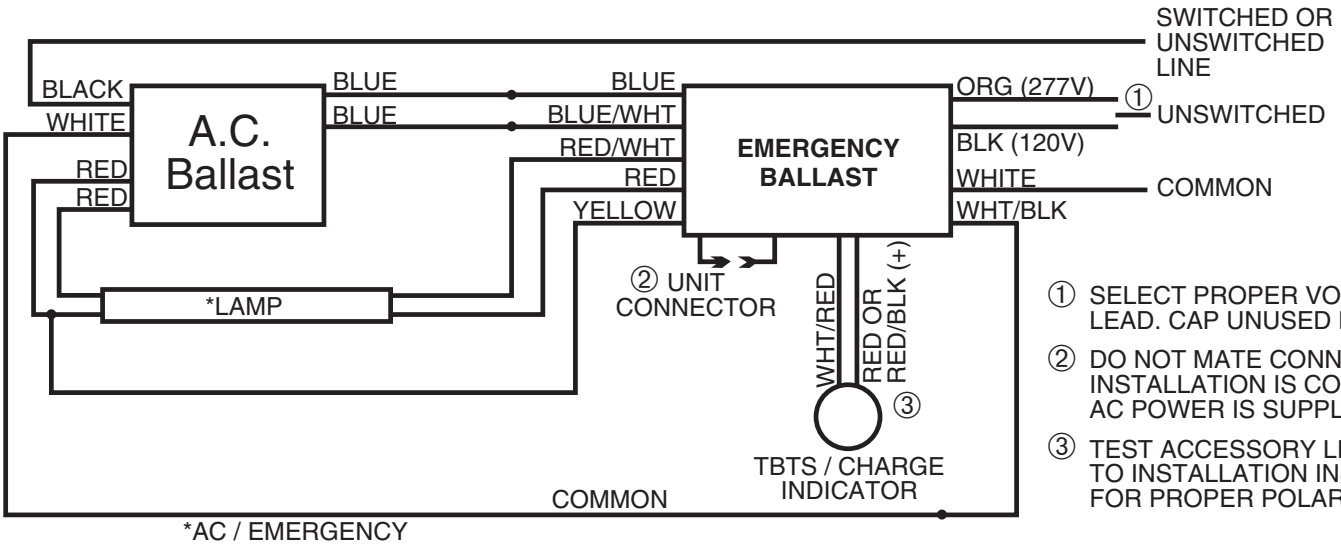
1LEO_80_E

NOTES

QQ1

QQ1

ONE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

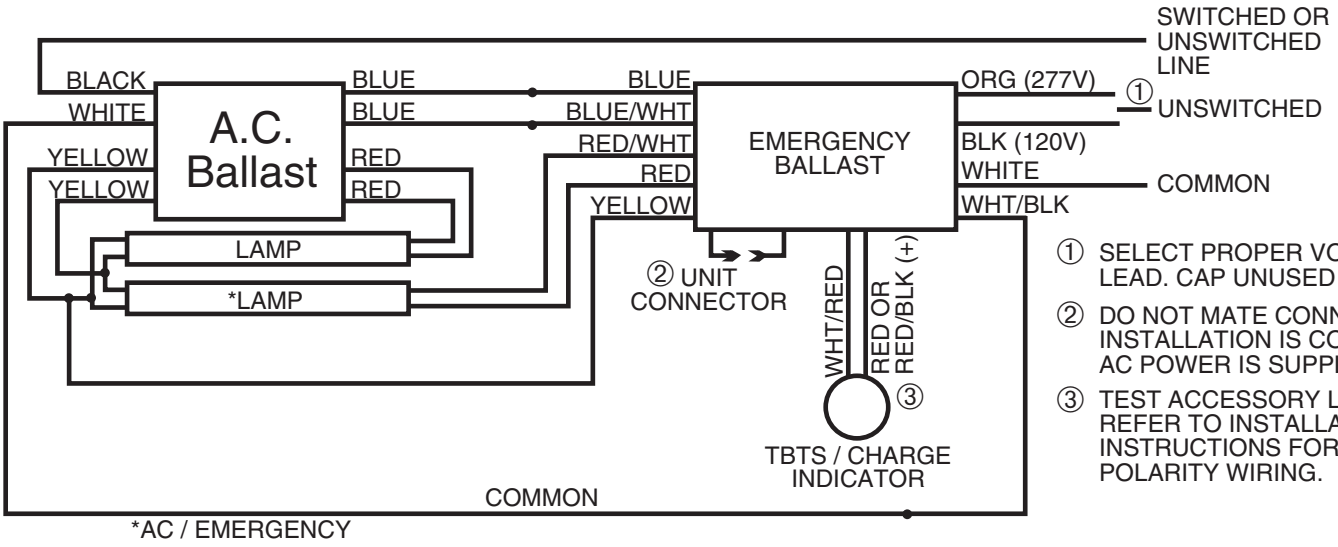
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

1LRSB

NOTES

QQ2

QQ2



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

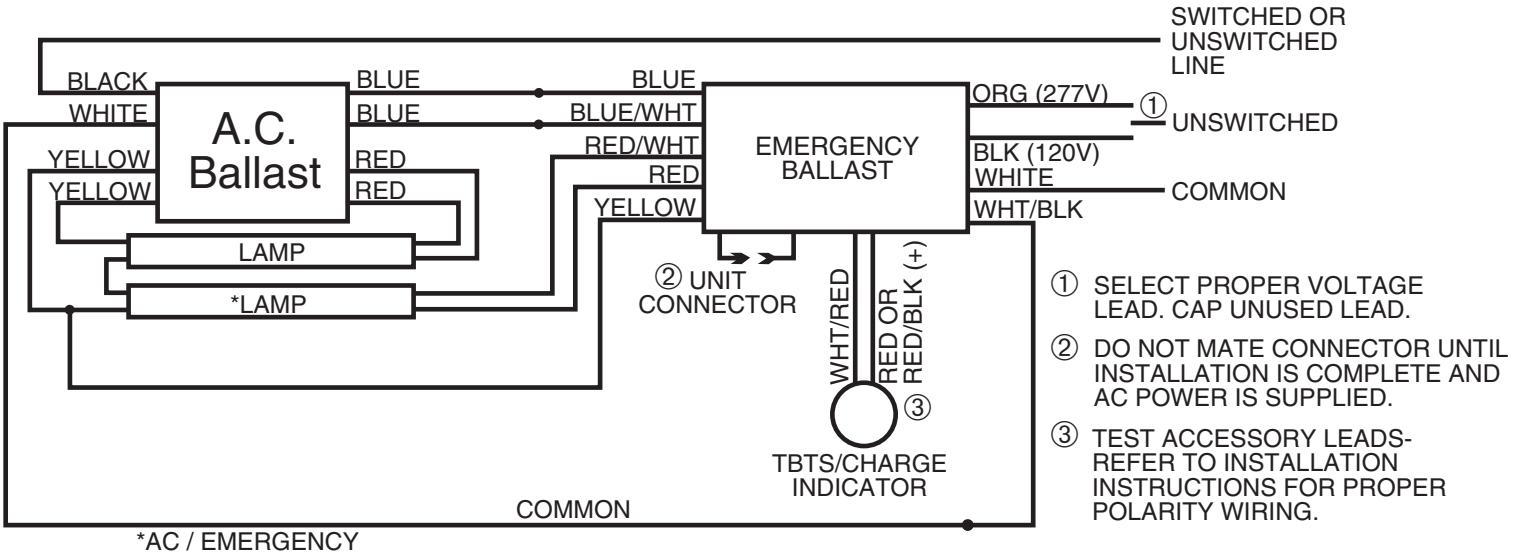
2LRSB_D

NOTES

QQ3

QQ3

TWO LAMP RAPID START BALLAST



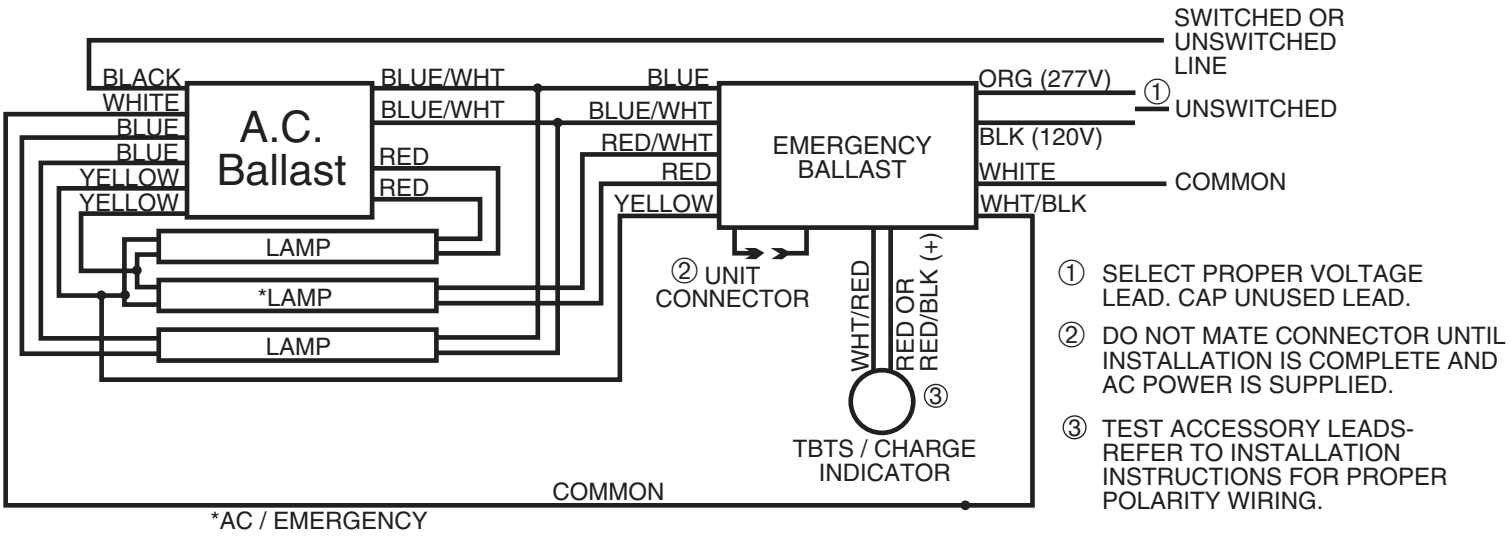
2LRSB_2_ISL

NOTES

QQ4

QQ4

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

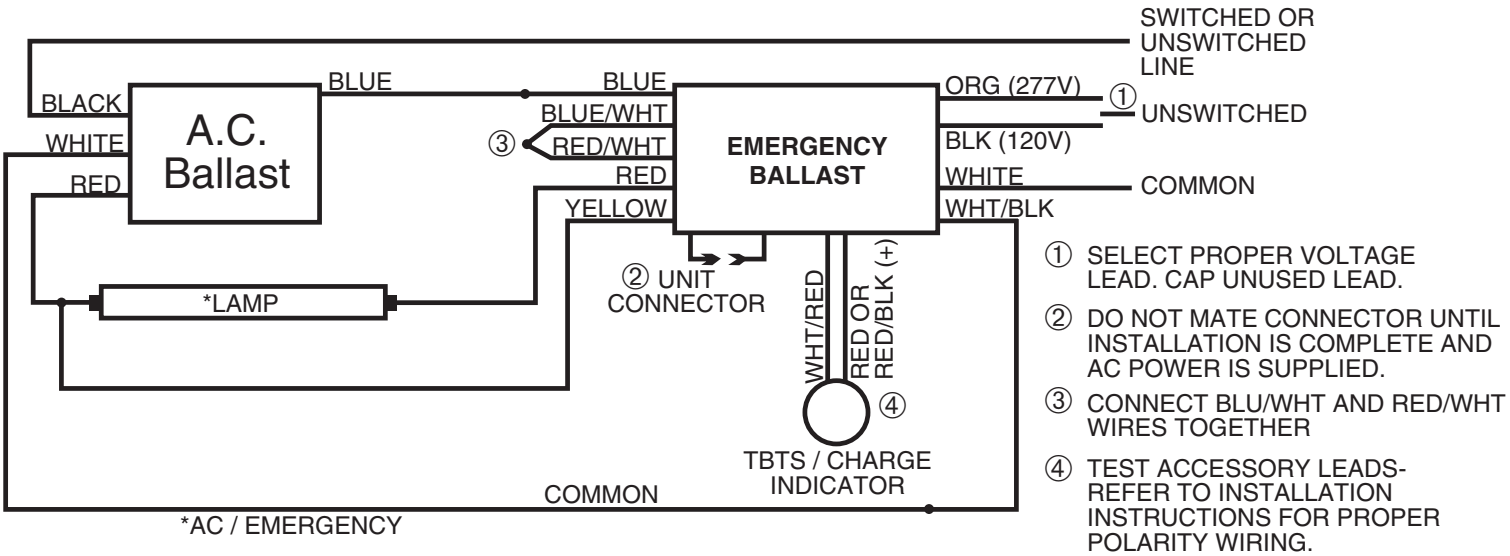
3LRSB_ISL

NOTES

QQ5

QQ5

ONE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

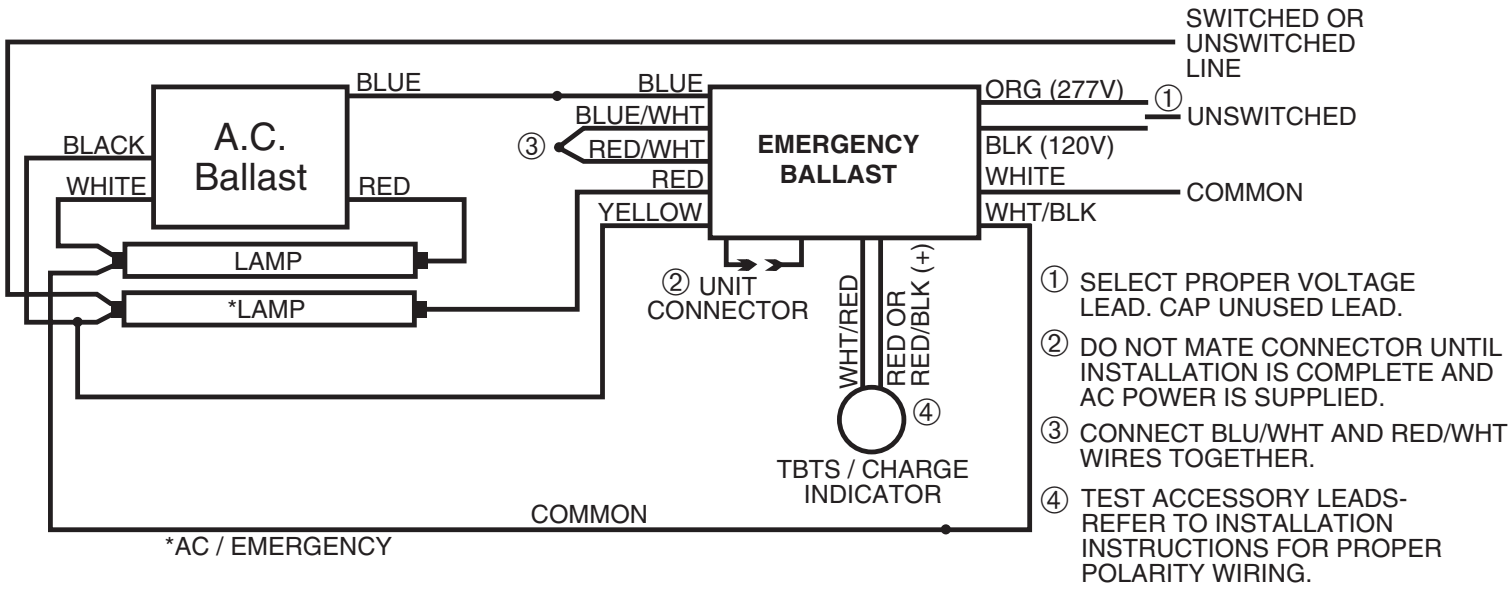
1LISB_ISL

NOTES

QQ6

QQ6

TWO LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

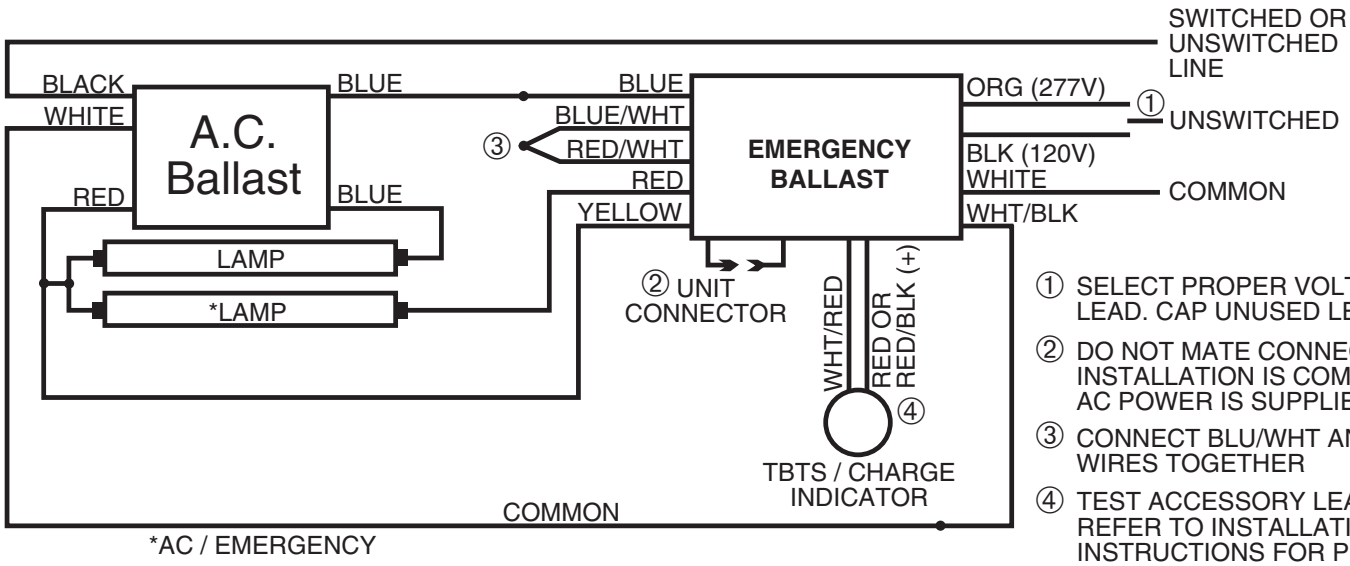
2LISB_ISL

NOTES

QQ7

QQ7

TWO LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

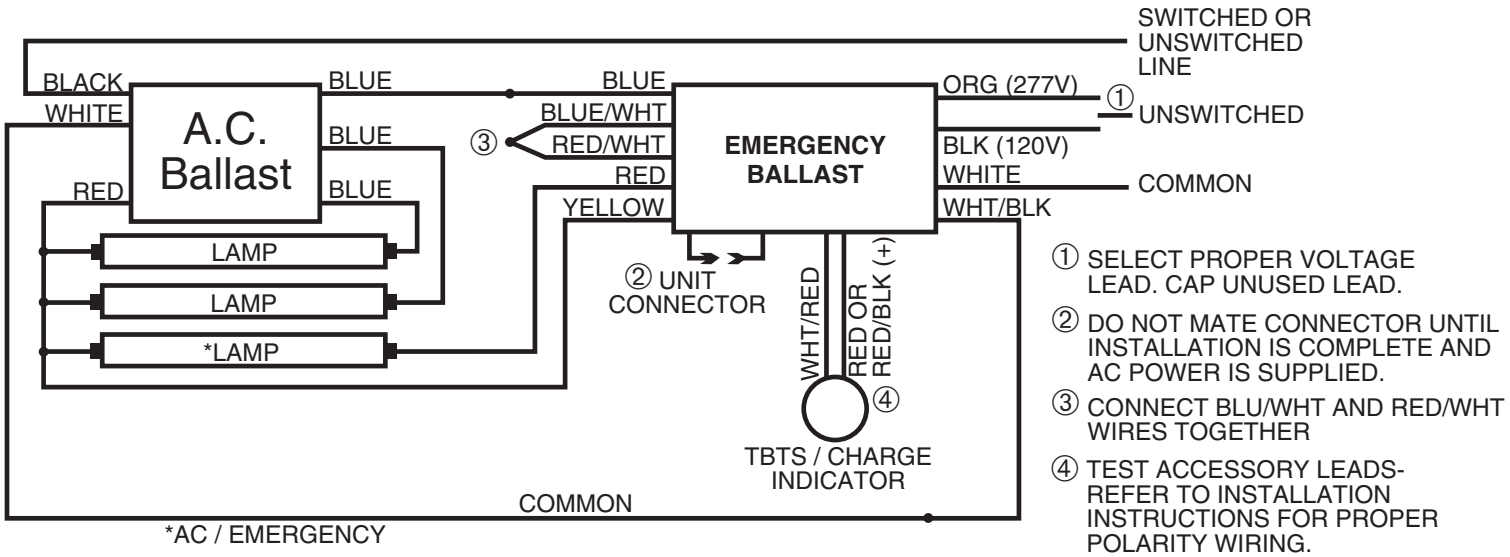
2LISB_2_ISL

NOTES

QQ8

QQ8

THREE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

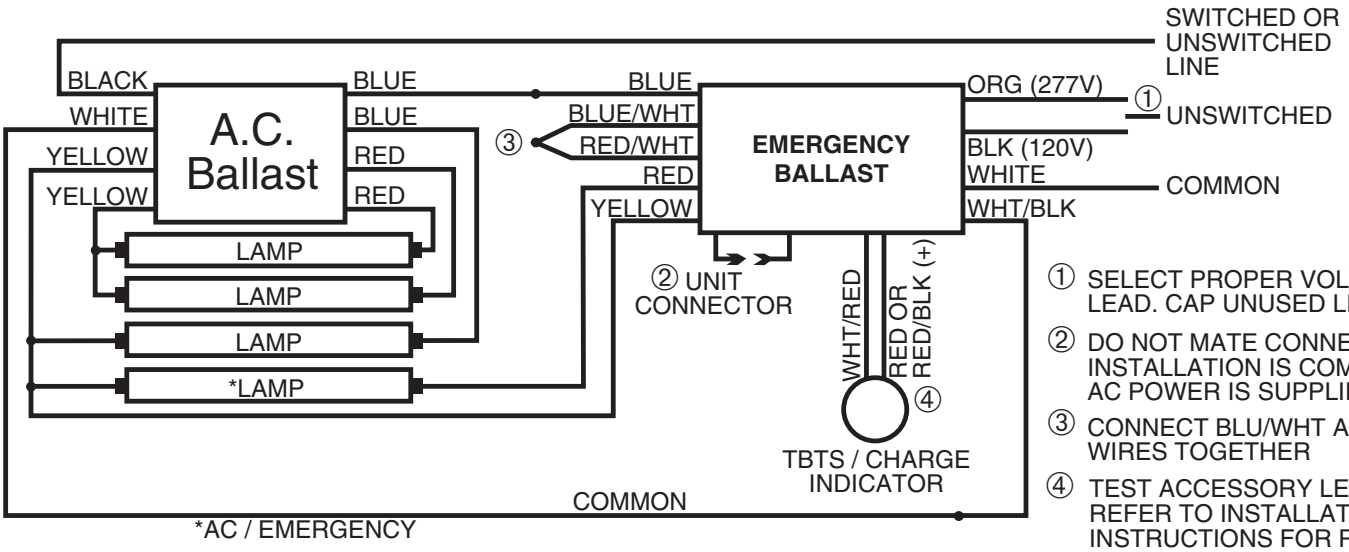
3LISB_ISL

NOTES

QQ9

QQ9

FOUR LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

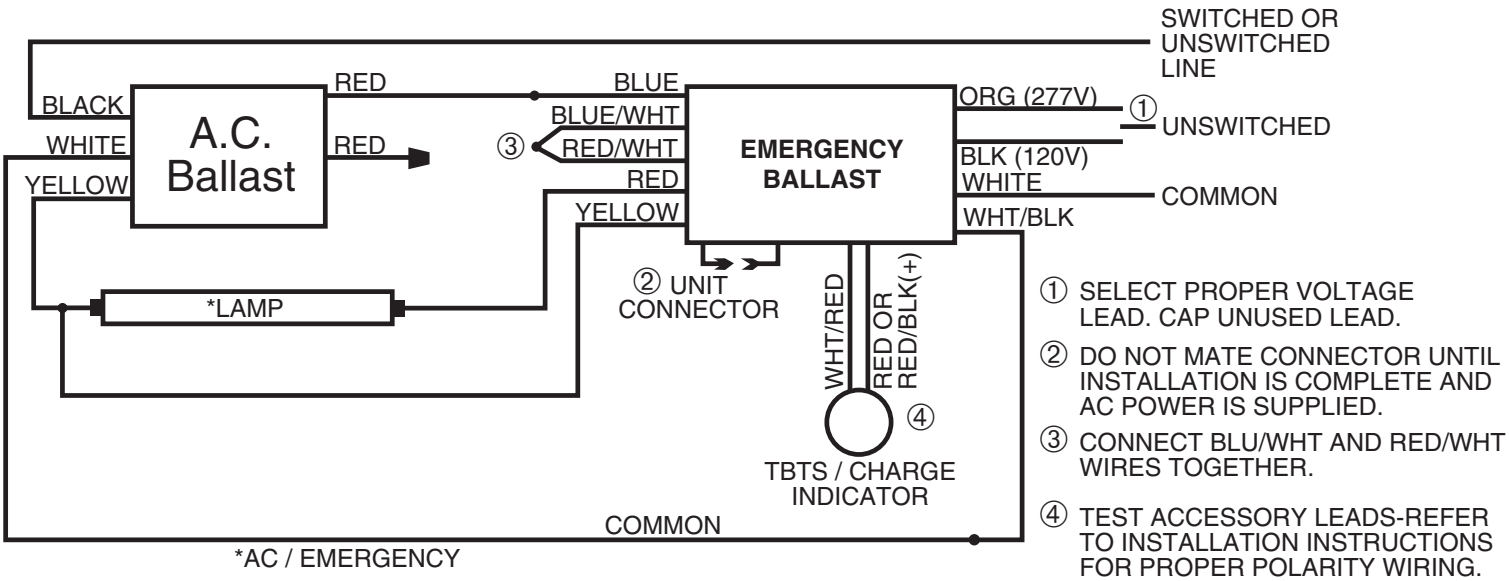
4LISB_ISL

NOTES

QQ10

QQ10

ONE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

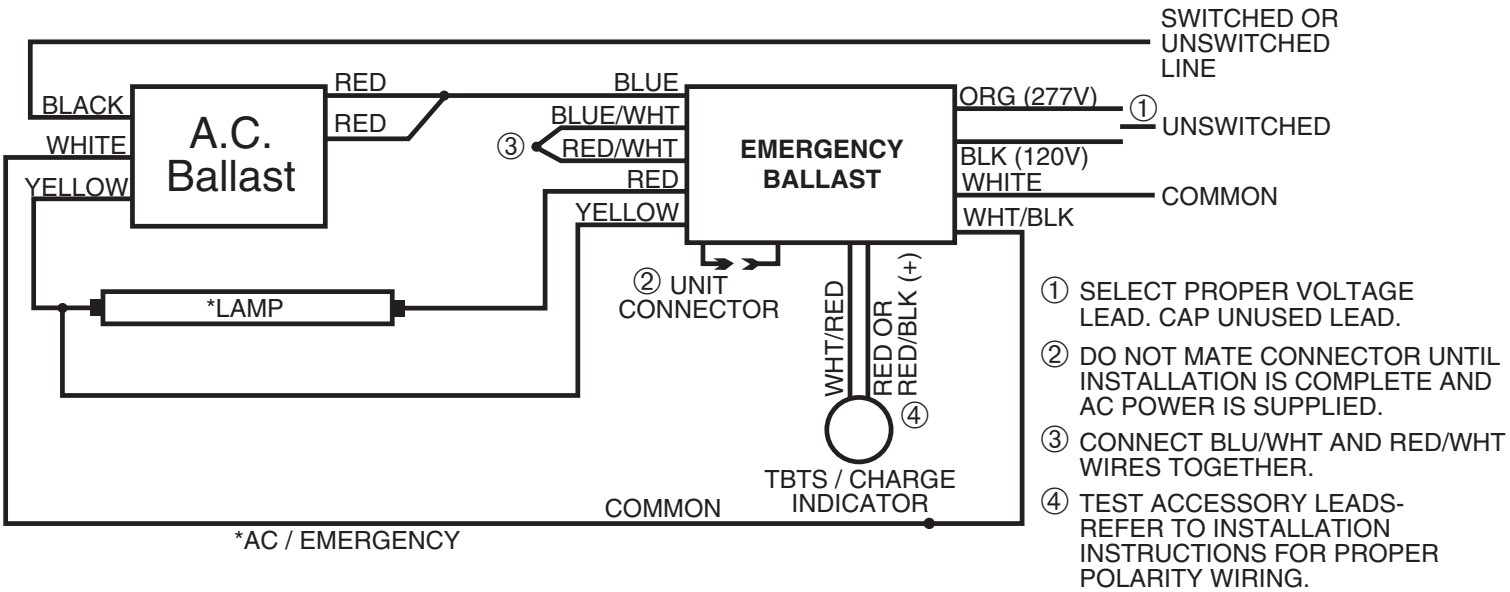
1LISB_ISL_2

NOTES

QQ11

QQ11

ONE LAMP INSTANT START FULLHAM BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

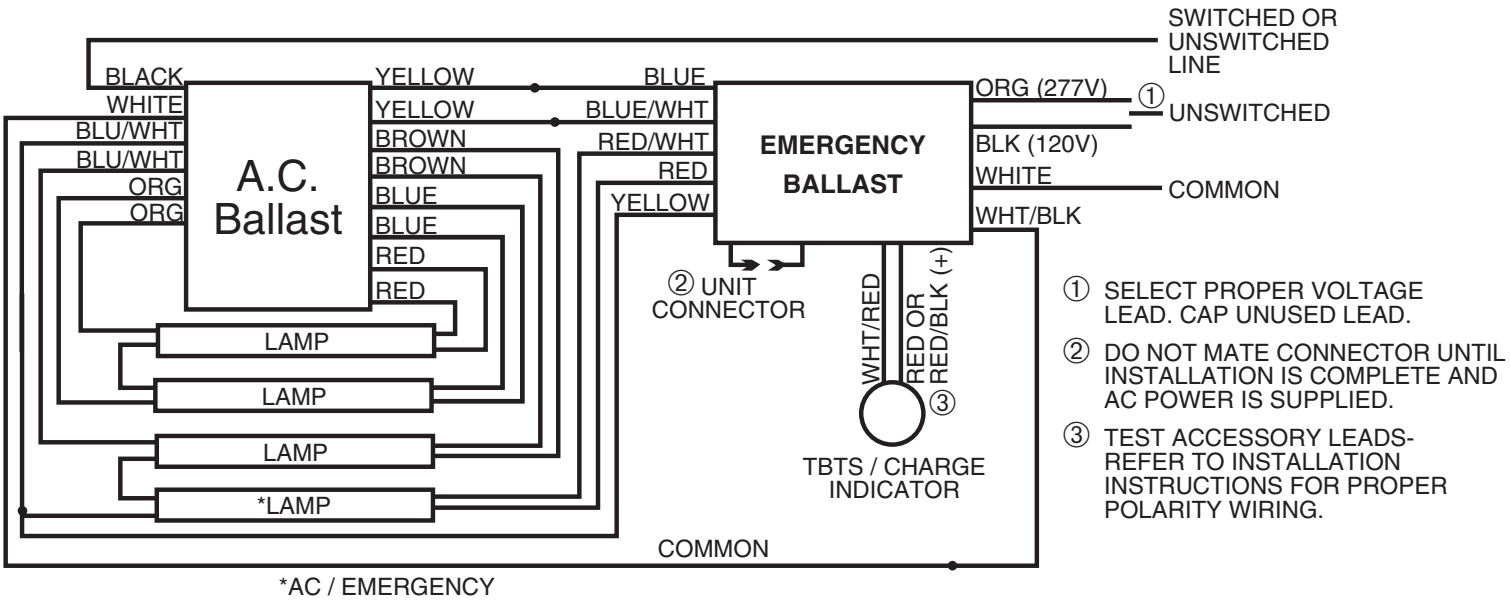
1LISFB_ISL

NOTES

QQ12

QQ12

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

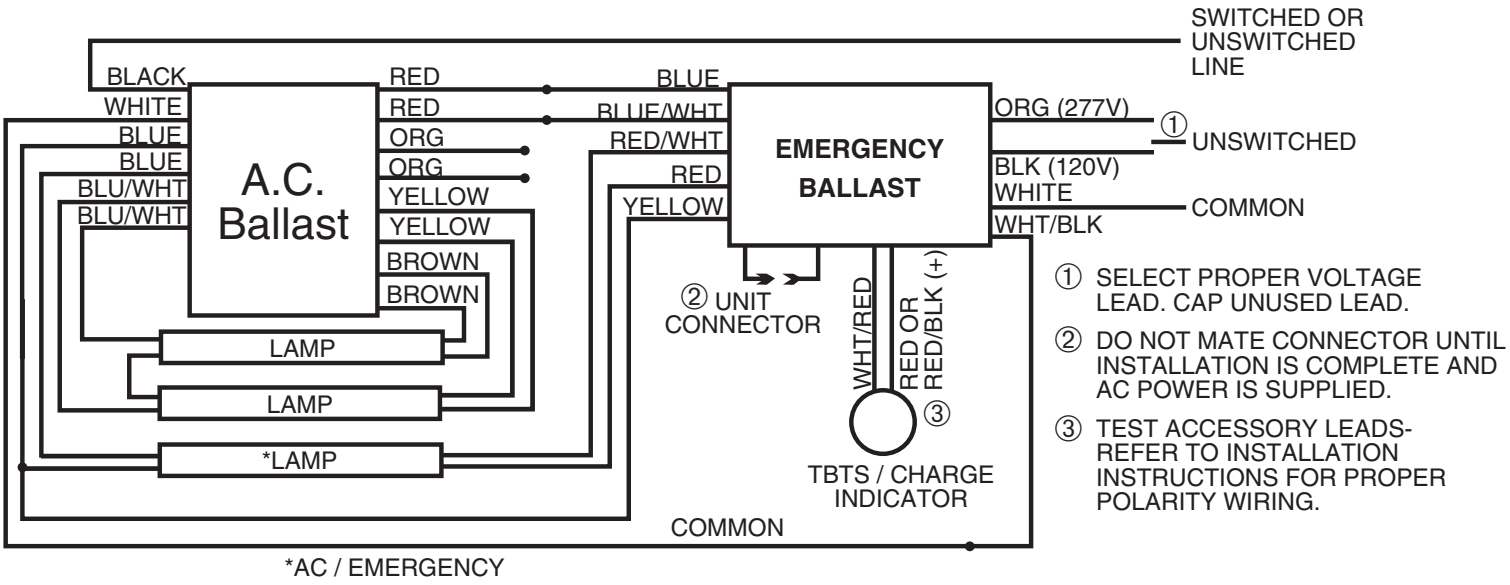
③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

4LRSB_ISL

NOTES

QQ13 QQ13

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

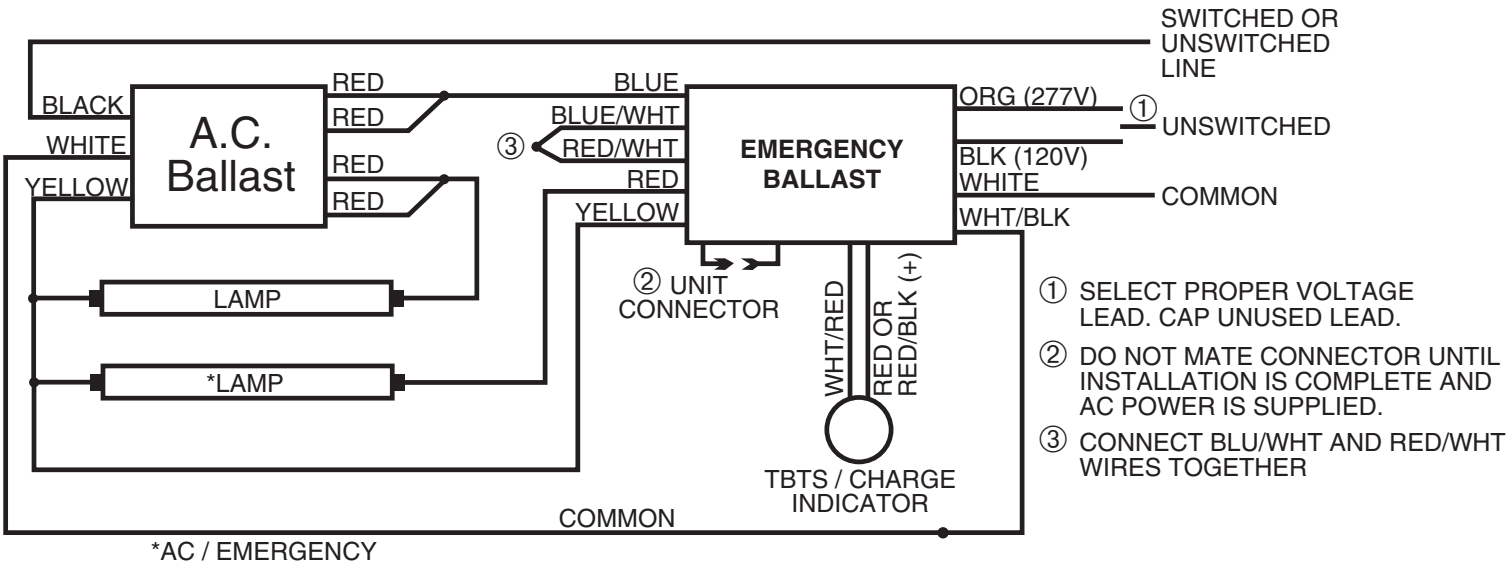
③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

3LRSB_ISL_2

NOTES

QQ14 QQ14

TWO LAMP INSTANT START FULLHAM BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

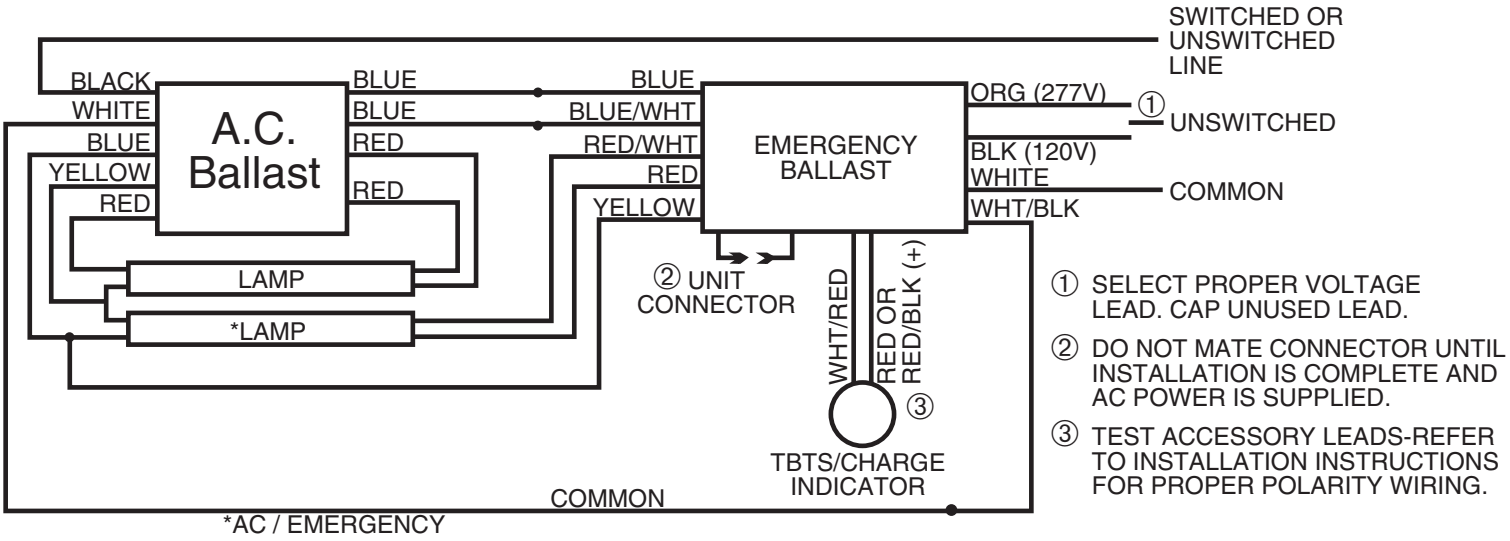
2LISFB_ISL

NOTES

QQ15

QQ15

SUNPARK TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

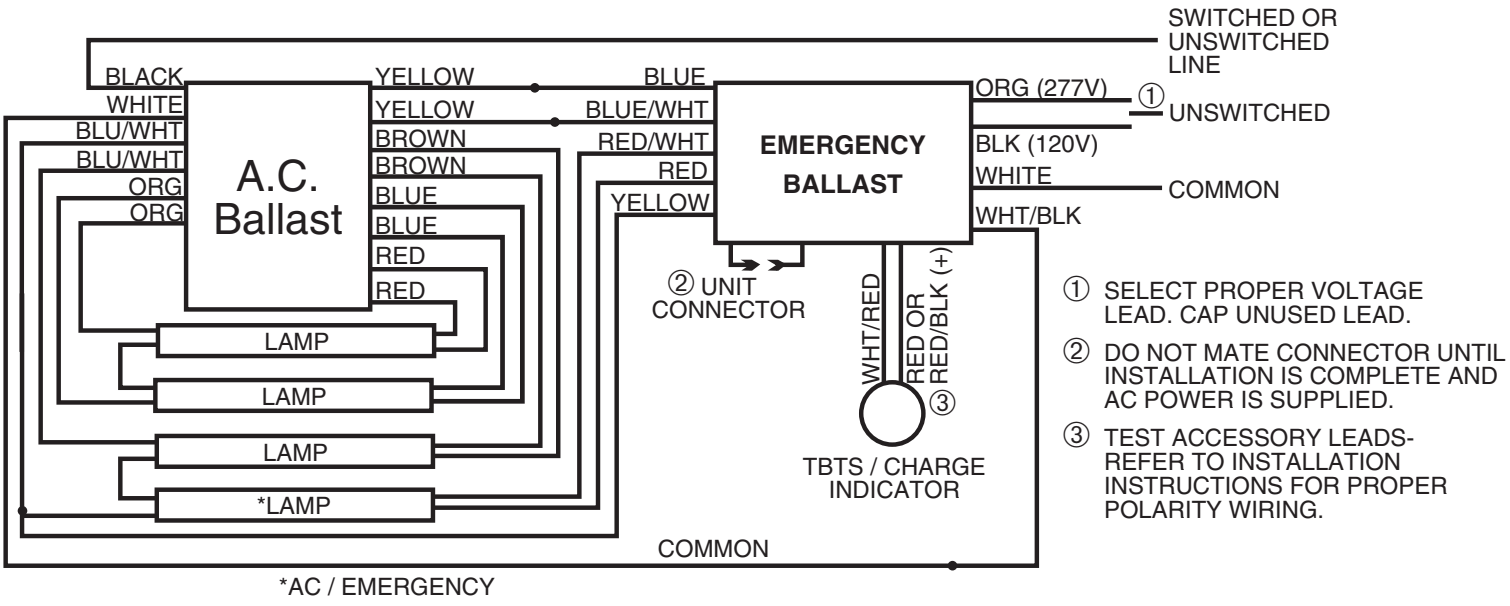
2LRSB_SP_ISL

NOTES

QQ16

QQ16

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

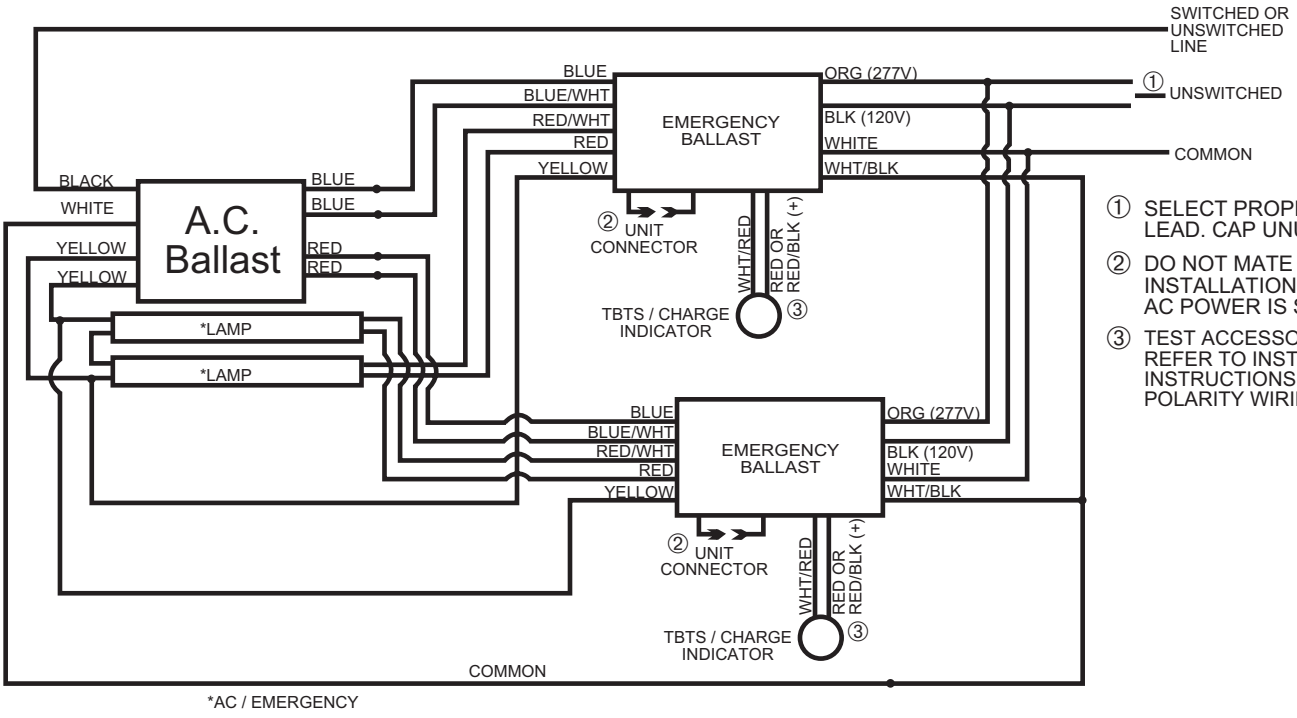
③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

4LRSB_ISL

NOTES

QQ17 QQ17

TWO LAMP RAPID START BALLAST WITH DUAL EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

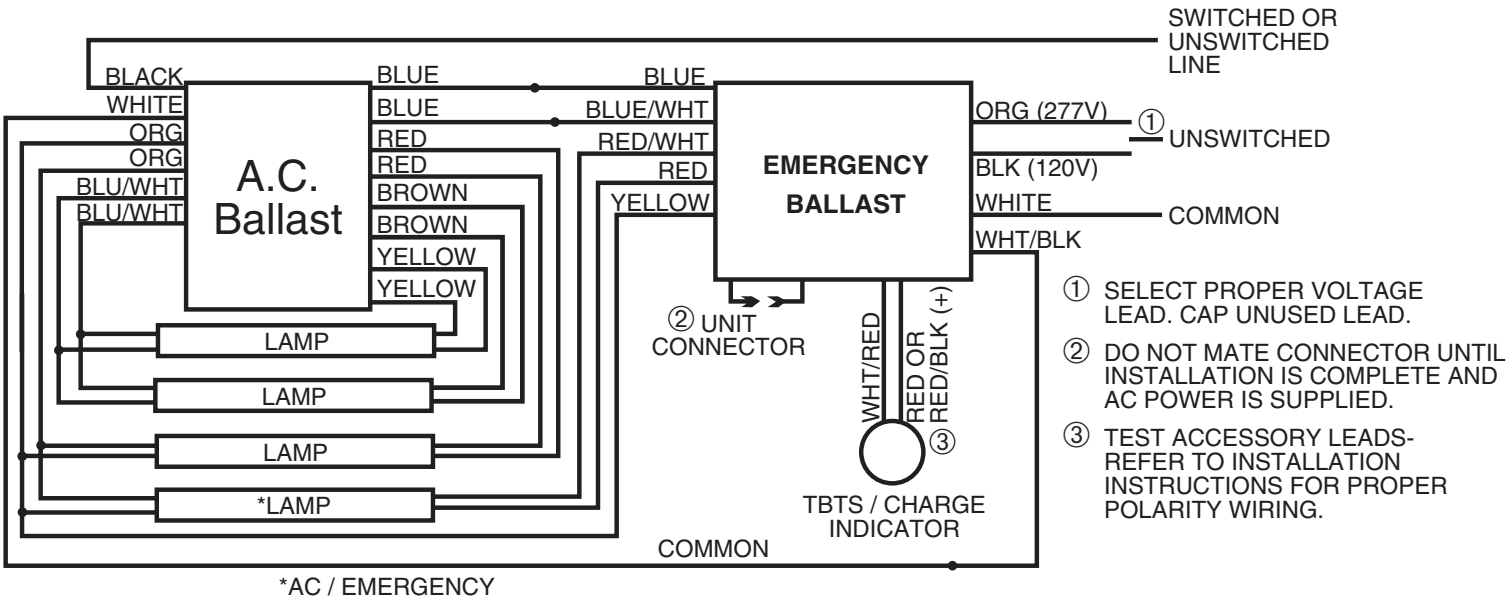
③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LRSBDUAL_ISL

NOTES

QQ18 QQ18

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

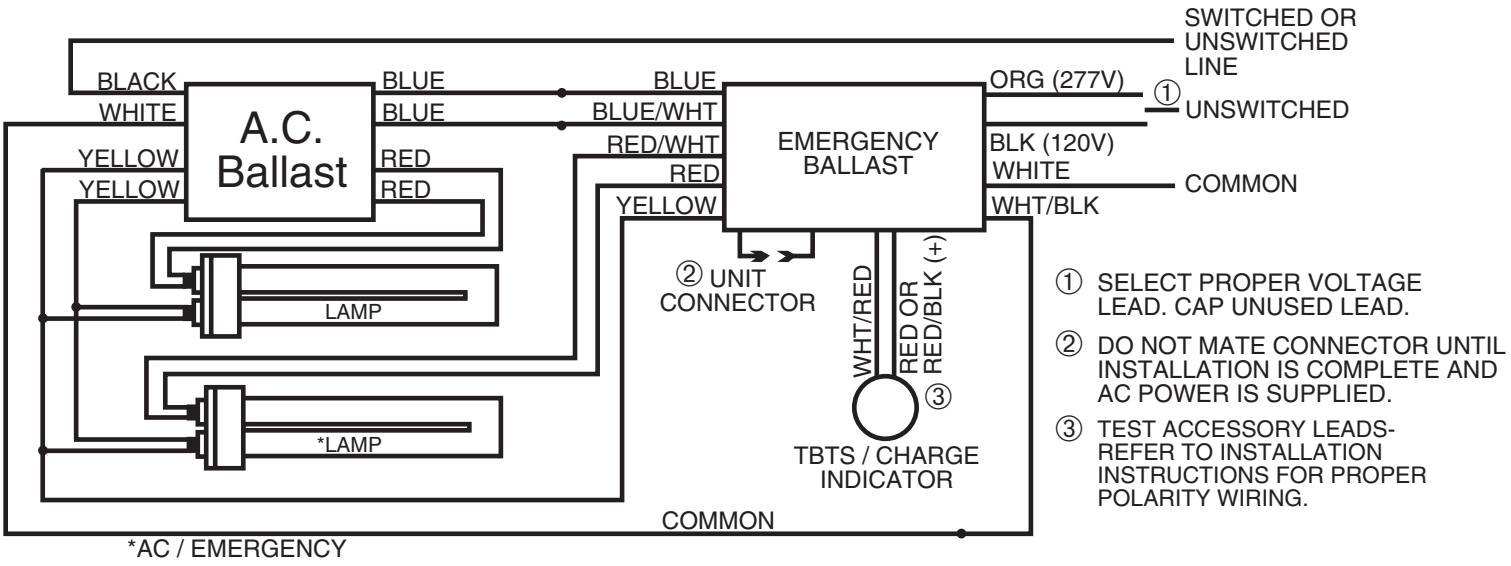
4LRSB_ISL_2

NOTES

QQ19

QQ19

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

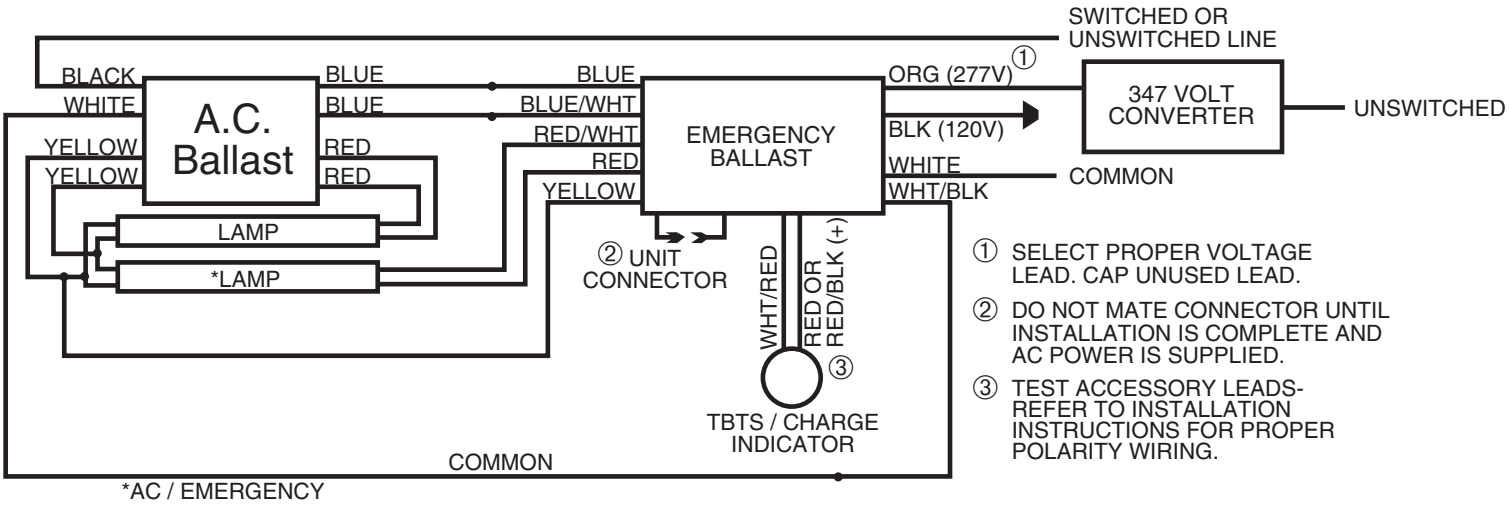
2BXLRSB_ISL

NOTES

QQ20

QQ20

TWO LAMP RAPID START BALLAST WITH 347V CONVERTER



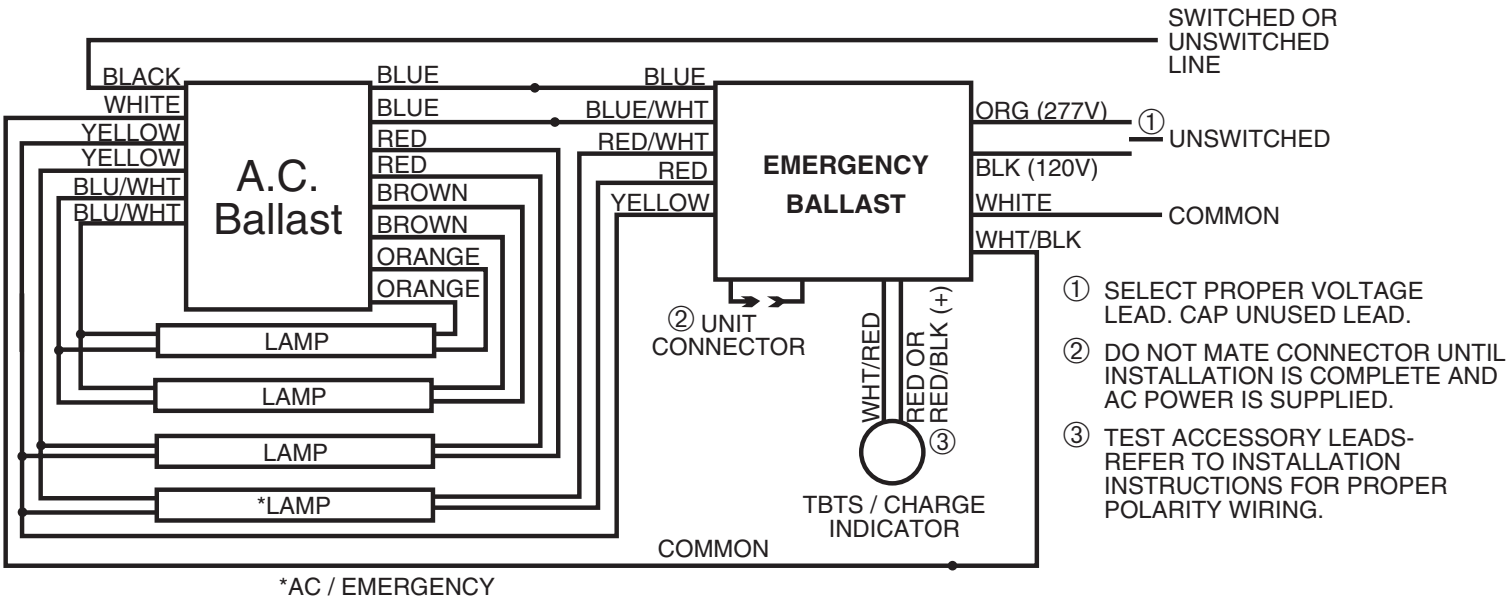
2LRSB_ISL_347

NOTES

QQ21

QQ21

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

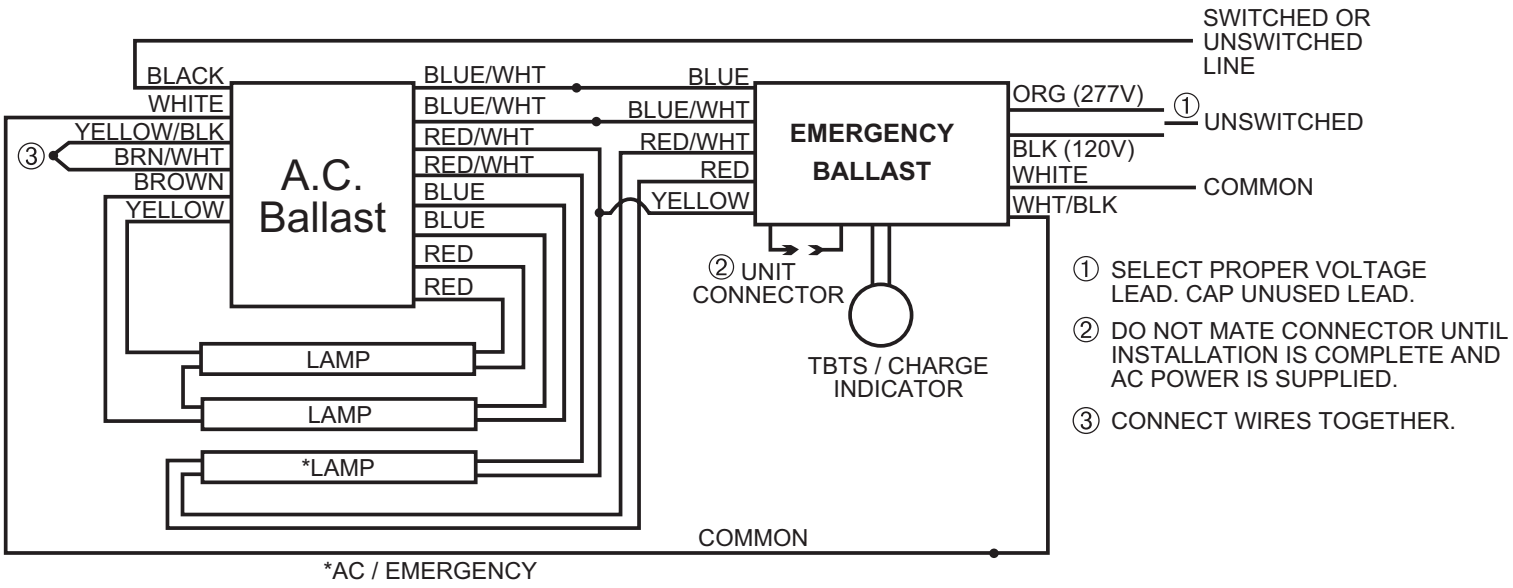
4LRSB_ISL_3

NOTES

QQ22

QQ22

FOUR LAMP RAPID START BALLAST WITH THREE LAMPS ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT WIRES TOGETHER.

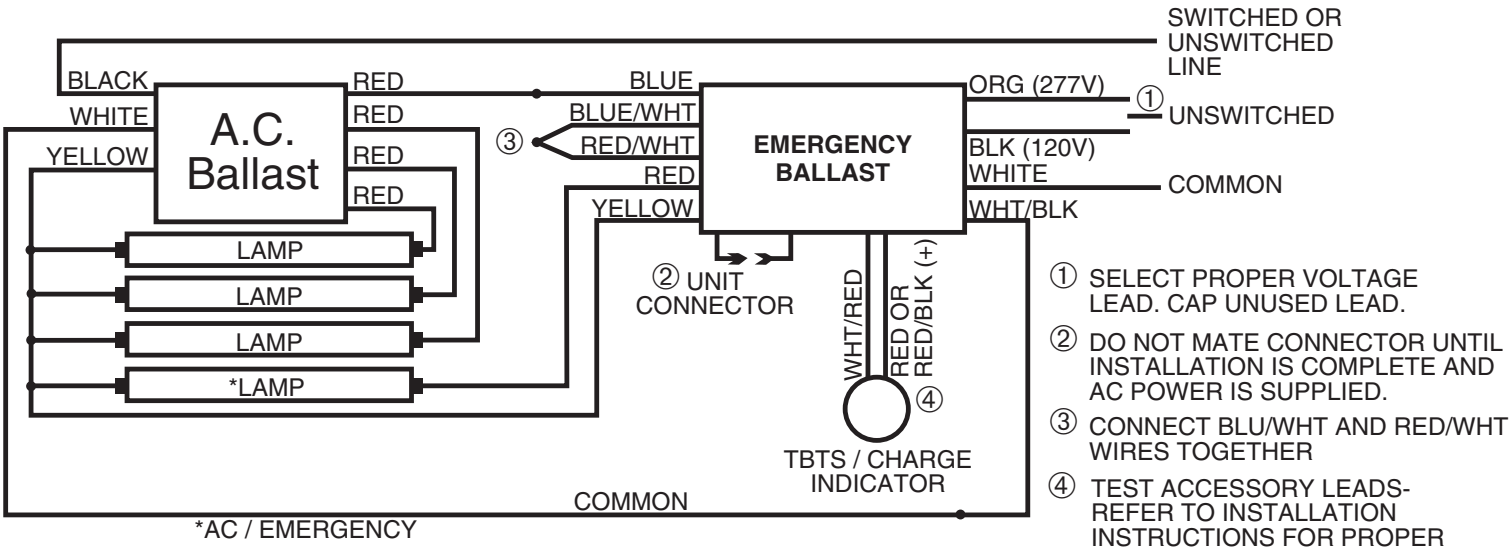
4LRSB_ISL_4

NOTES

QQ23

QQ23

FOUR LAMP INSTANT START FULHAM BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

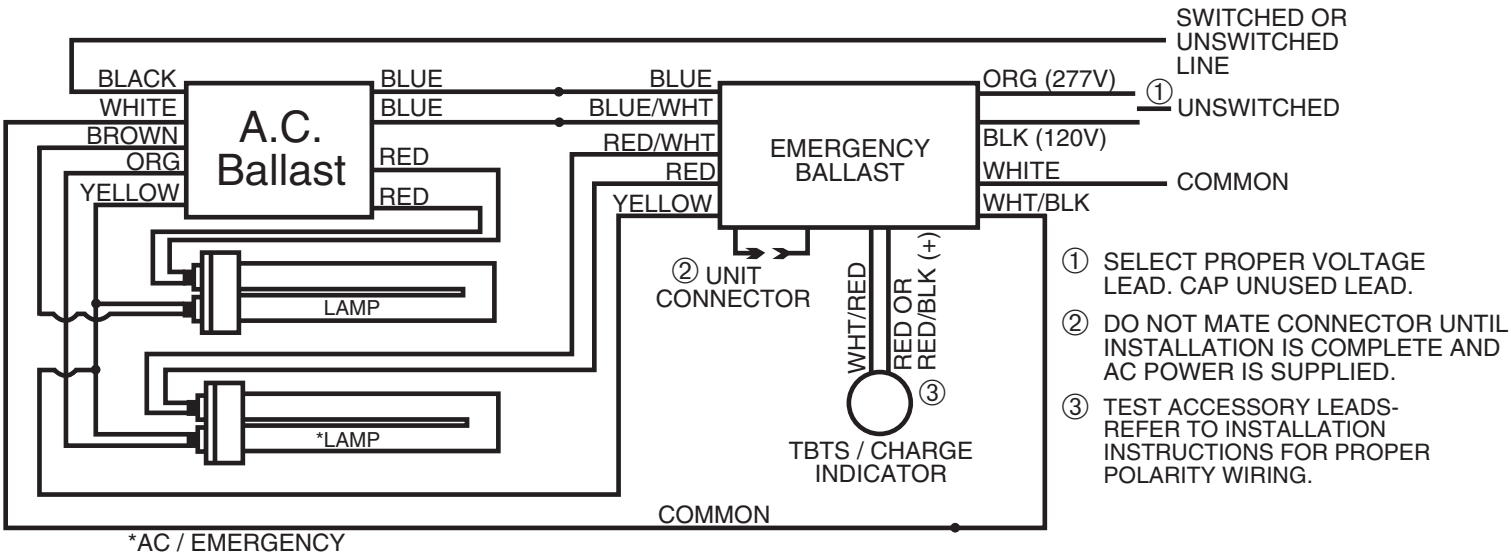
4LISFB_ISL

NOTES

QQ24

QQ24

TWO BIAX LAMP RAPID START BALLAST



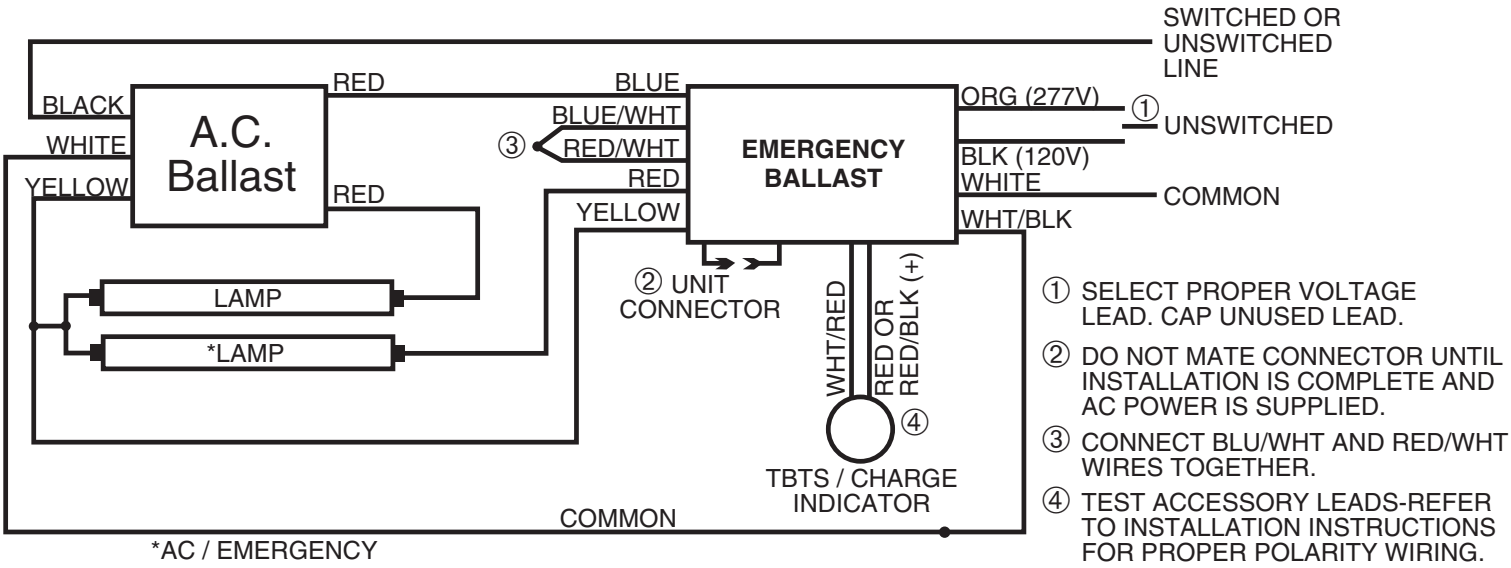
2BXLRSB_2_ISL

NOTES

QQ25

QQ25

TWO LAMP FULHAM INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

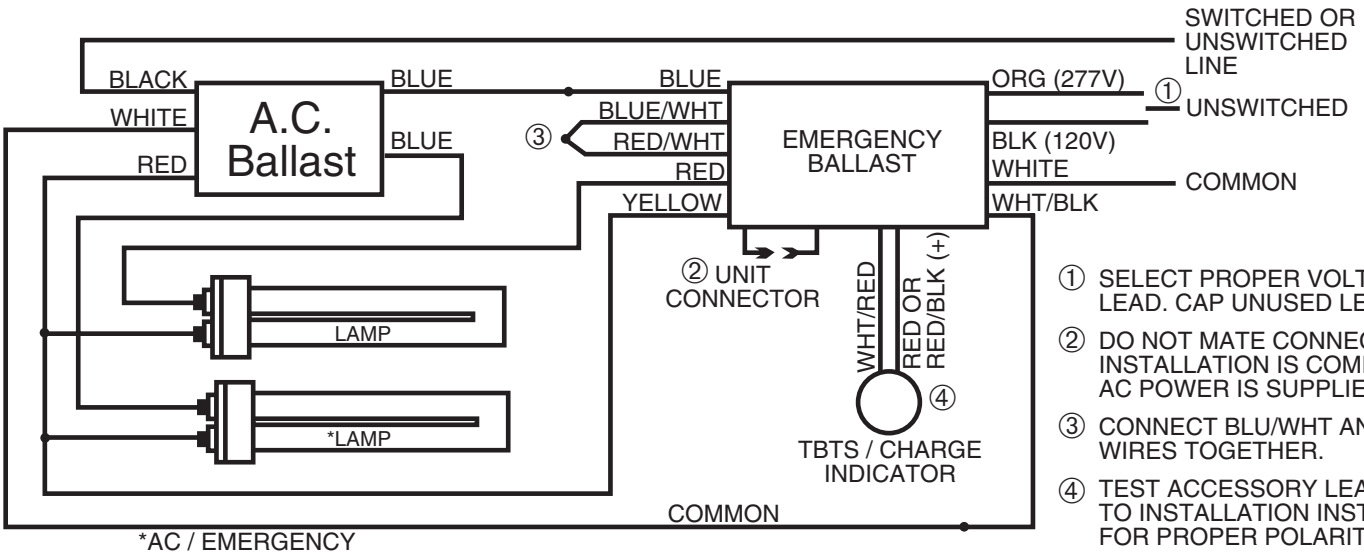
2LISB_3_F_ISL

NOTES

QQ26

QQ26

TWO BIAX LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

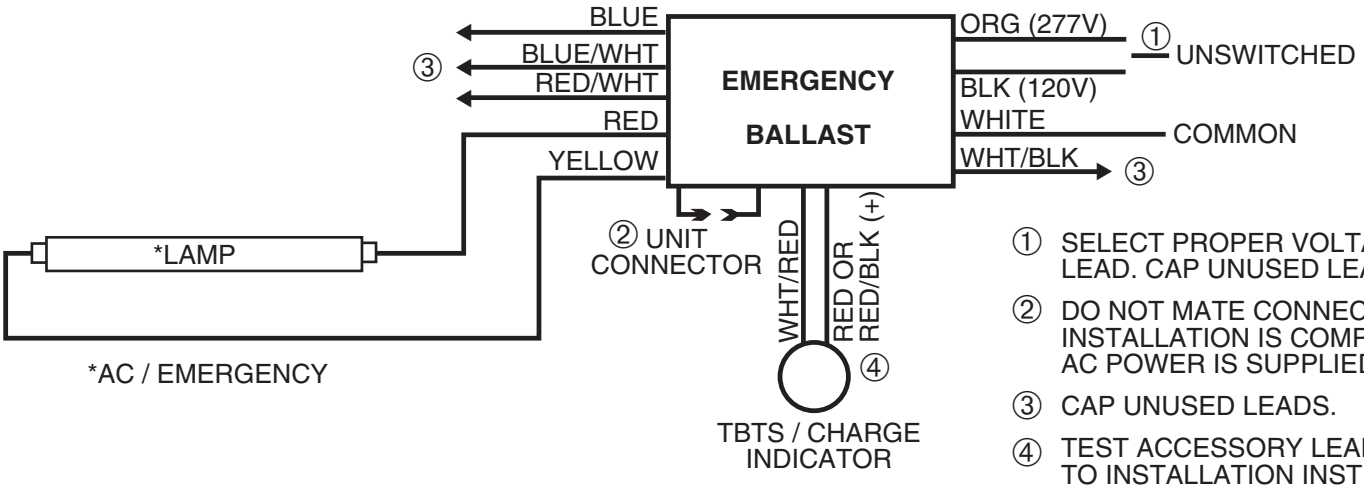
2LISBX_D

NOTES

QQ27

QQ27

ONE LAMP EMERGENCY ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CAP UNUSED LEADS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

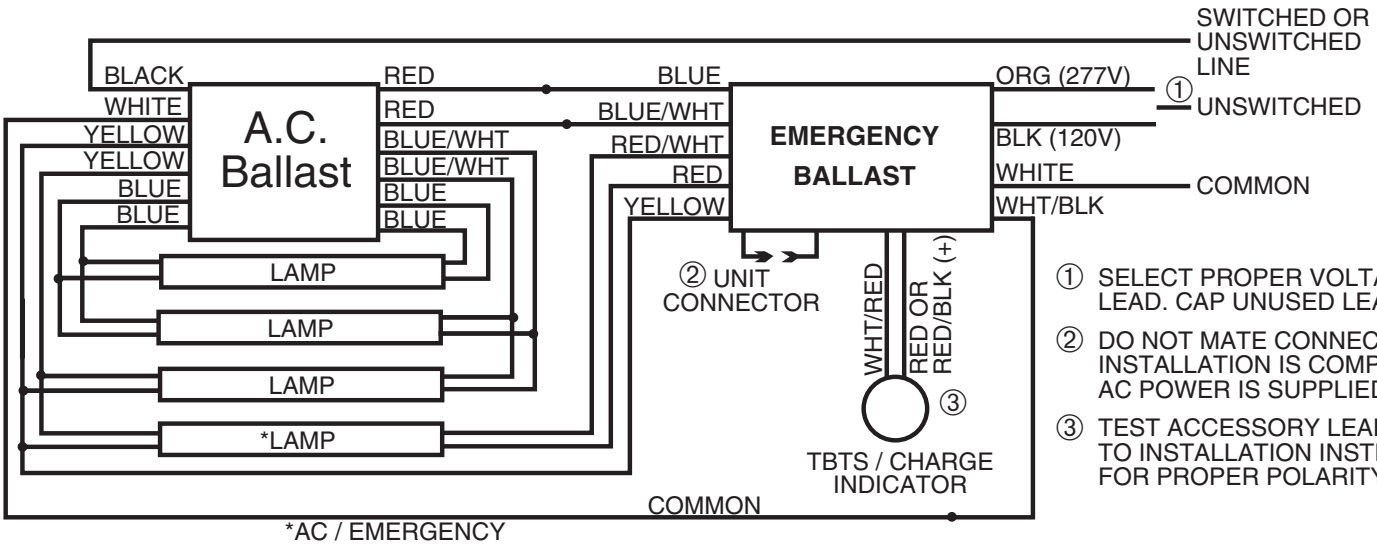
1LEO_D

NOTES

QQ28

QQ28

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

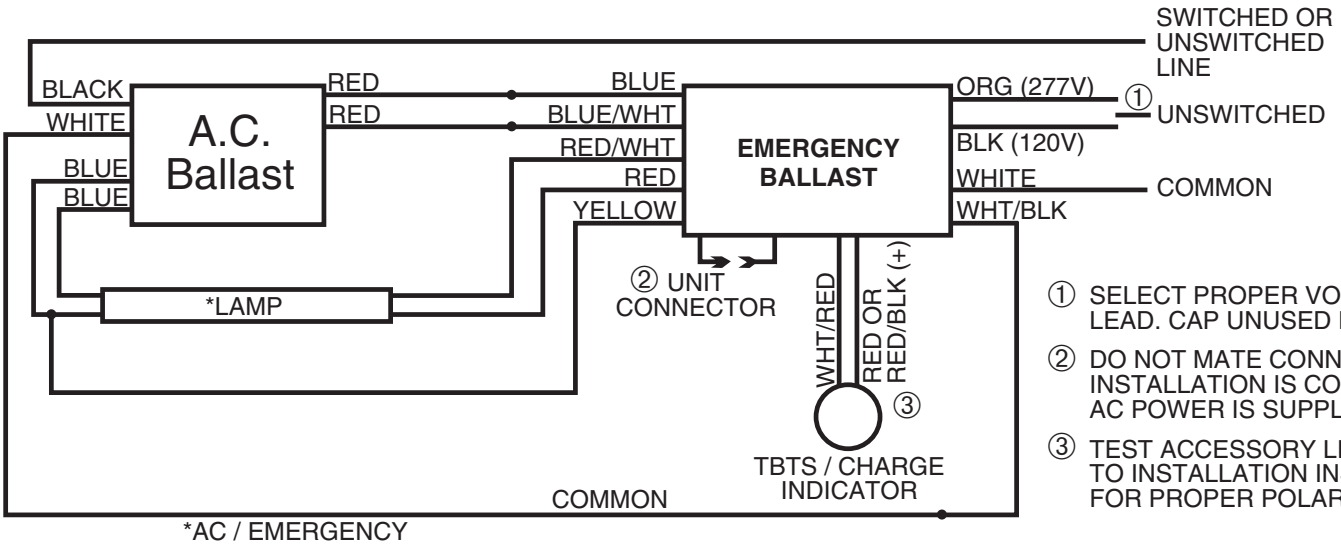
4LRSB_D

NOTES

QQ29

QQ29

ONE LAMP OSRAM PROGRAM START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

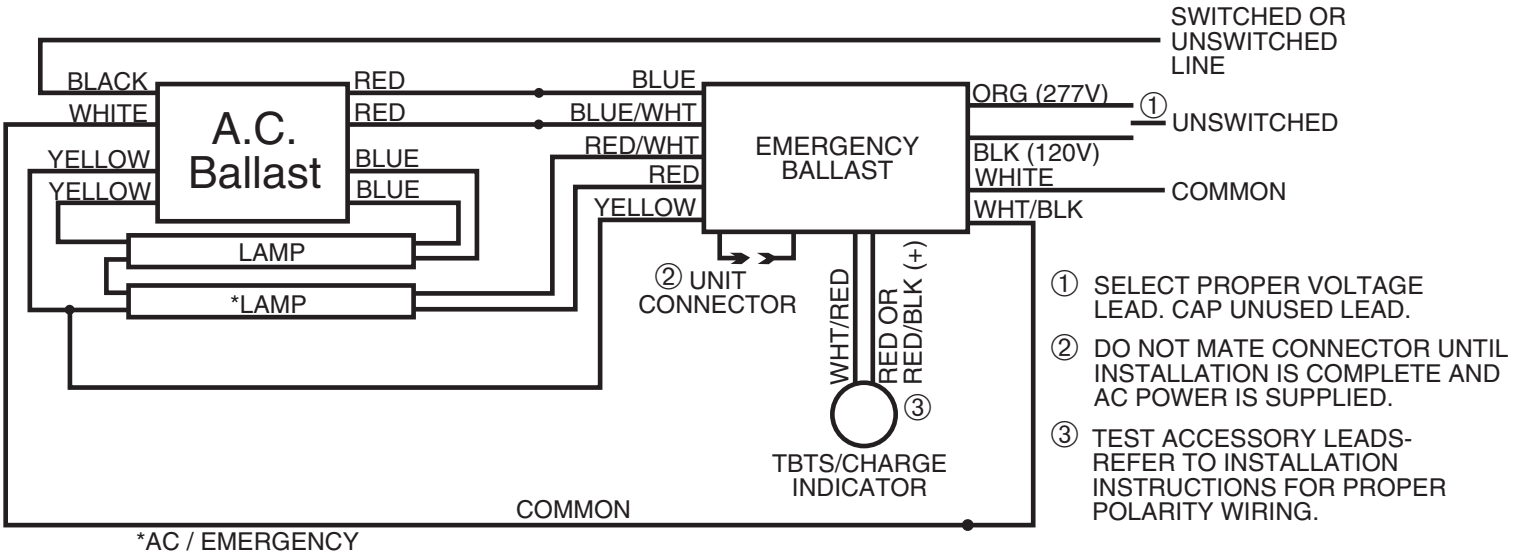
1LOSB

NOTES

QQ30

QQ30

TWO LAMP OSRAM PROGRAM START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

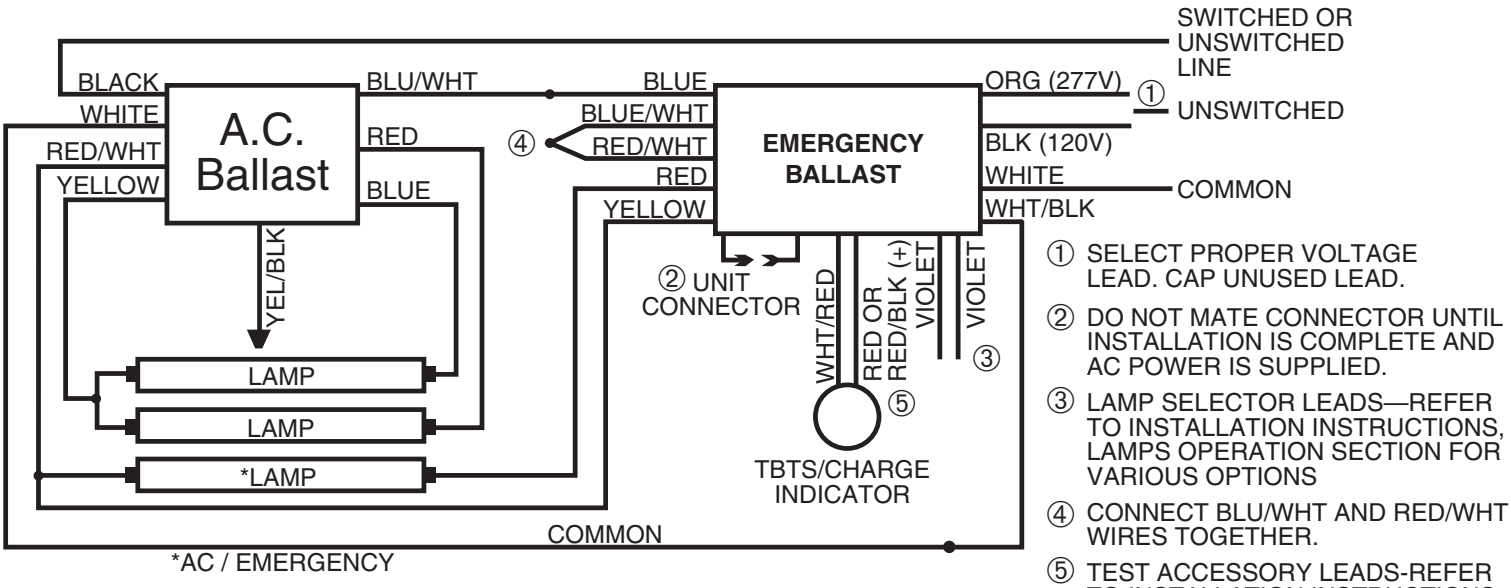
2LOSB_ISL

NOTES

QQ31

QQ31

THREE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

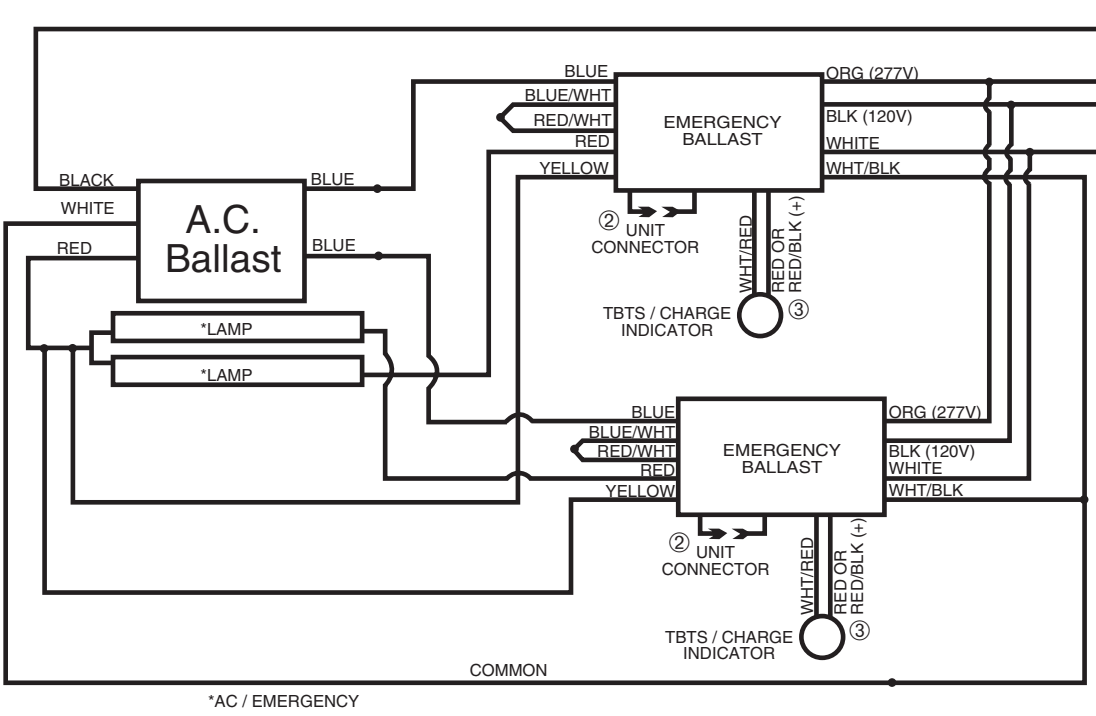
3LISB_48ST_3_D

NOTES

QQ32

QQ32

TWO LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

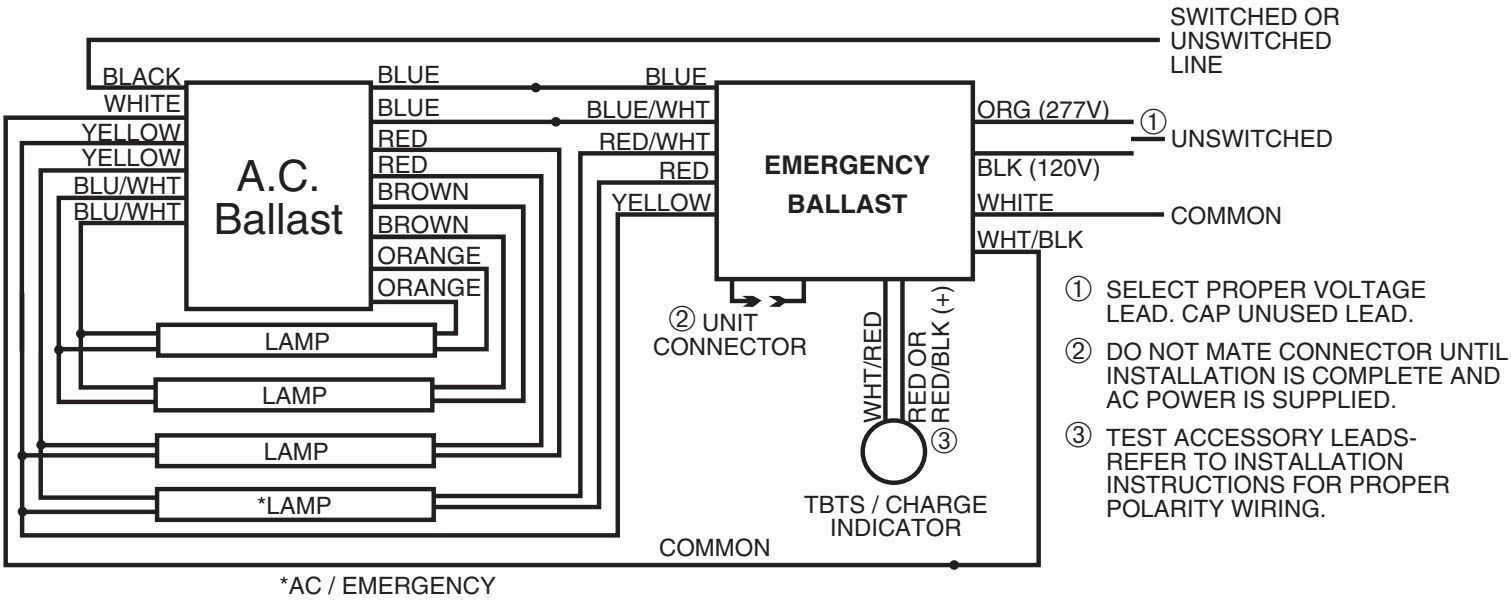
2LISBDUAL_ISL

NOTES

QQ33

QQ33

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

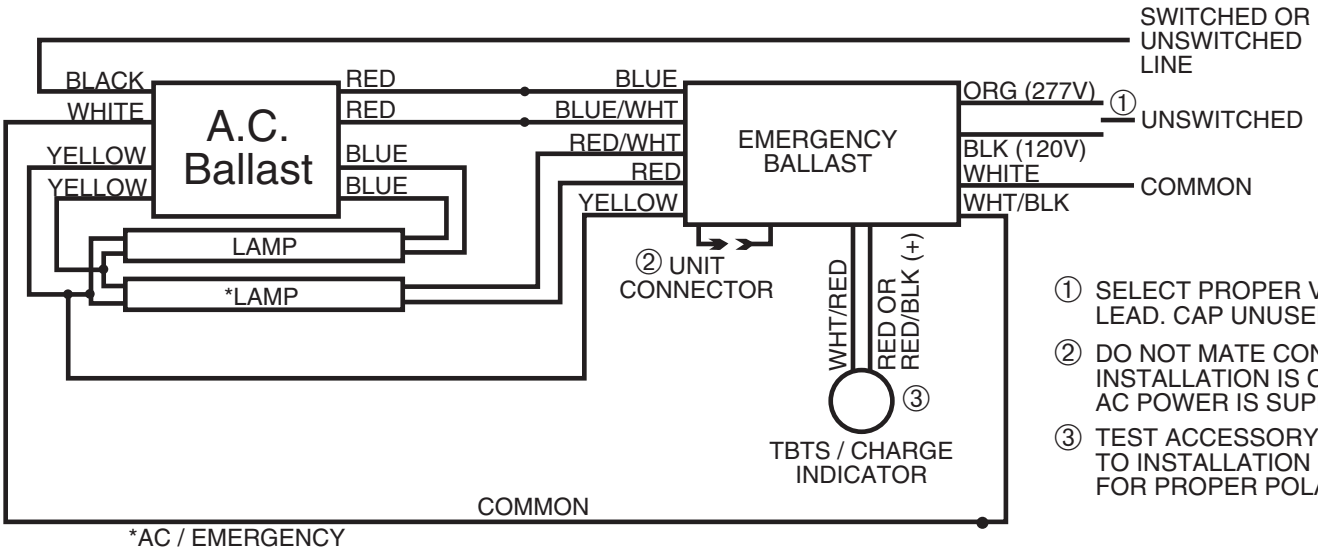
4LRSB_ISL_3

NOTES

QQ34

QQ34

TWO LAMP OSRAM PROGRAM START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

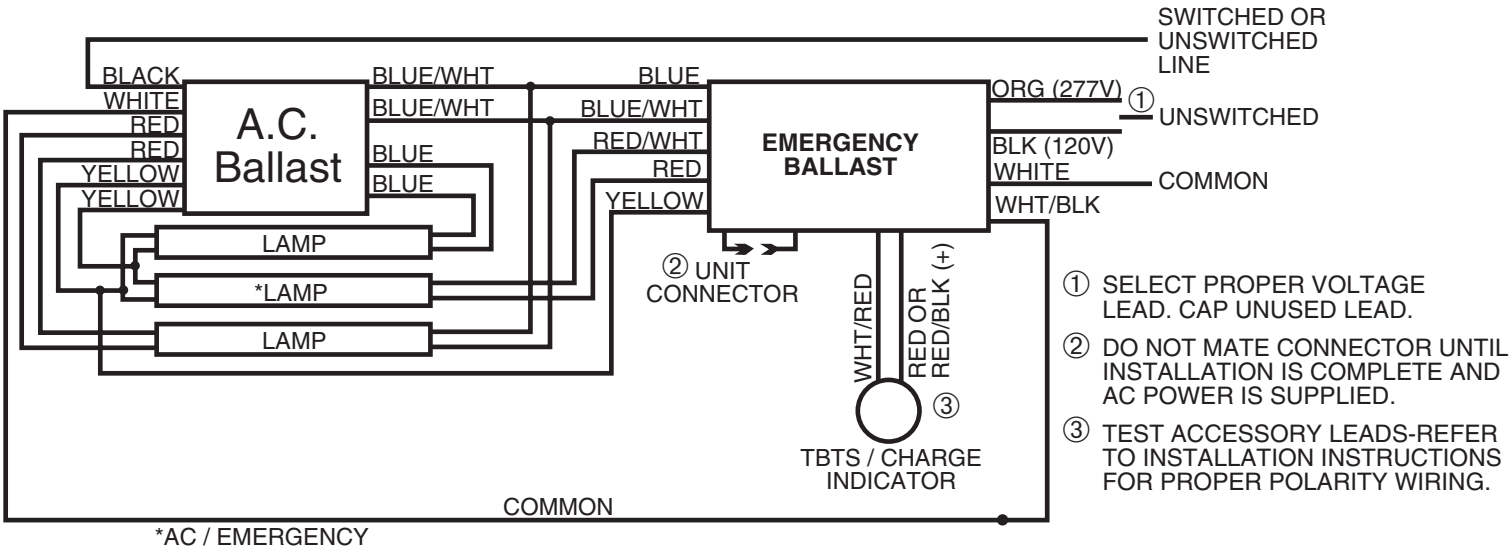
2LOSB_D_2

NOTES

QQ35

QQ35

THREE LAMP OSRAM PROGRAM START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

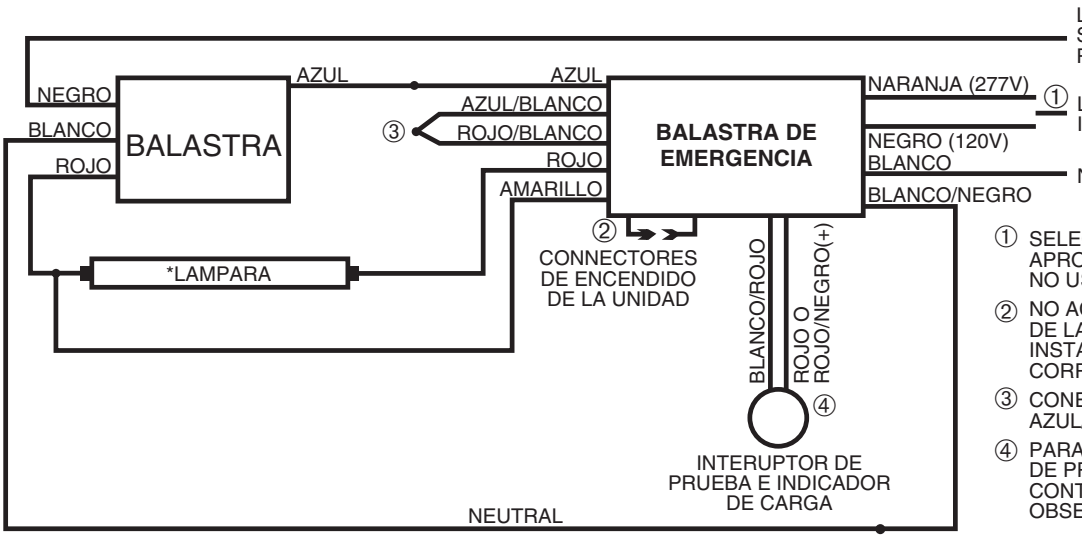
3LOSB_D

NOTES

QQ36

QQ36

INSTALACION CON UNA SOLO LAMPARA DE ENCENDIDO INSTANTANEO (INSTANT START LAMP)



*LAMPARA ENCENDIDO
INSTANTANEO OPERADA
EN FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CONECTAR LOS SIGUIENTES CABLES JUNTOS AZUL/BLANCO Y ROJO/BLANCO.

④ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

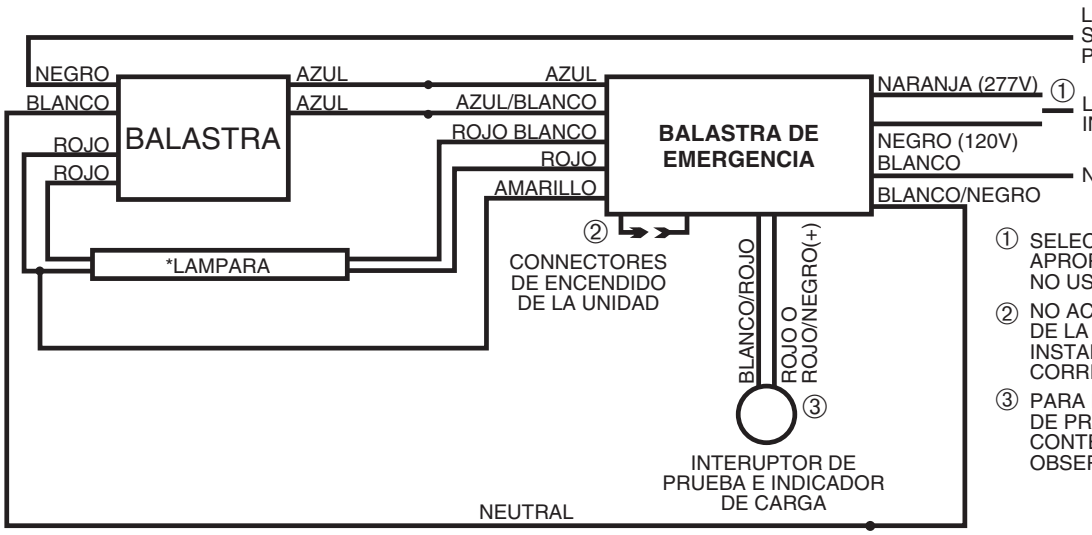
1LISB_D_SP

NOTES

QQ37

QQ37

INSTALACION CON UNA SOLA LAMPARA DE ENCENDIDO RAPIDO (RAPID START LAMP)



*LAMPARA ENCENDIDO
RAPIDO OPERADA EN
FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

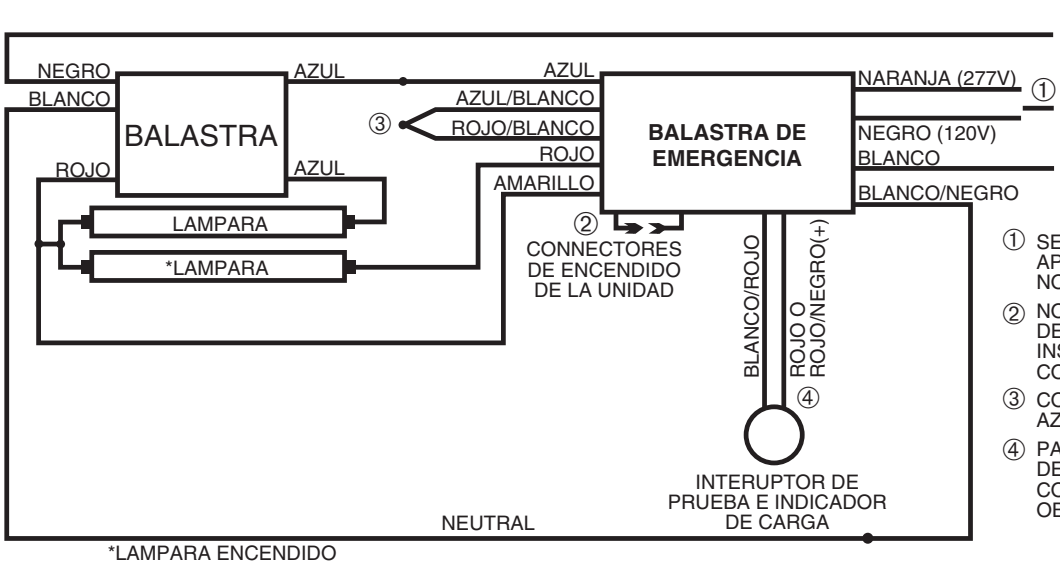
1LRSB_D_SP

NOTES

QQ38

QQ38

INSTALACION CON DOS LAMPARAS DE ENCENDIDO INSTANTANEO



*LAMPARA ENCENDIDO
INSTANTANEO OPERADA
EN FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CONECTAR LOS SIGUIENTES CABLES JUNTOS AZUL/BLANCO Y ROJO/BLANCO.

④ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

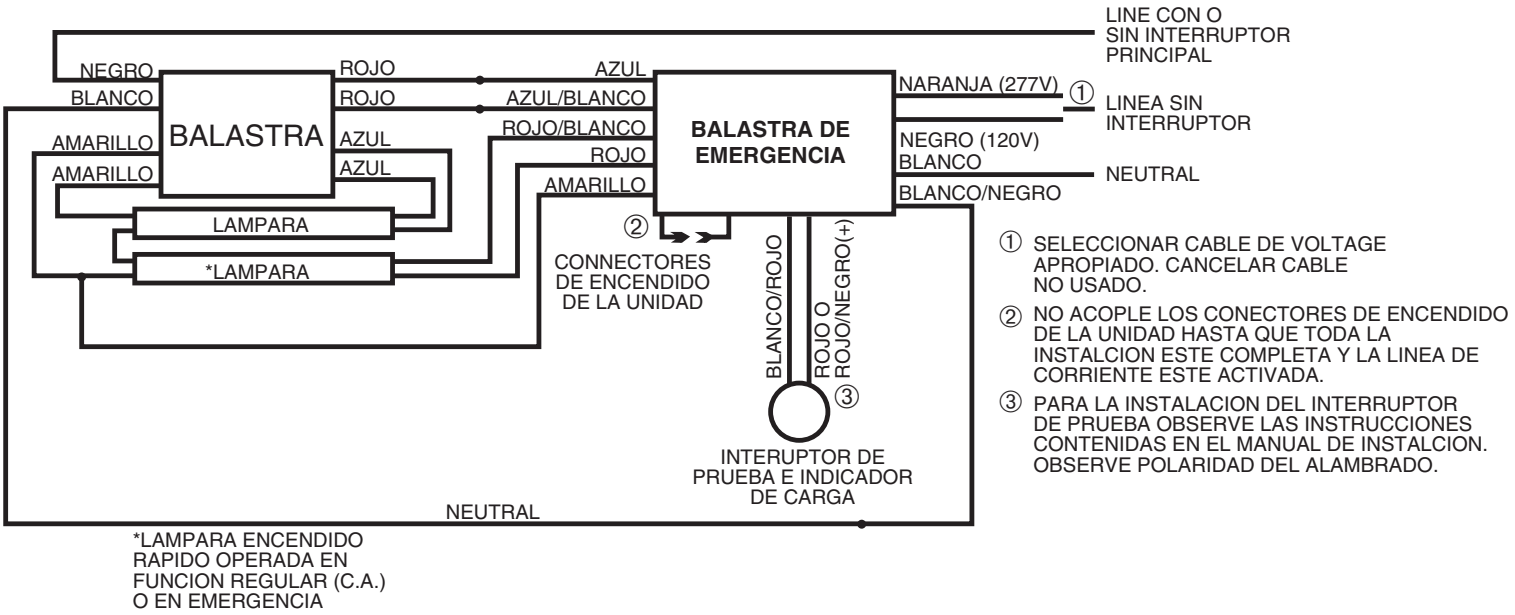
2LISB_2_D_SP

NOTES

QQ39

QQ39

INSTALACION CON DOS LAMPARAS DE ENCENDIDO RAPIDO



① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

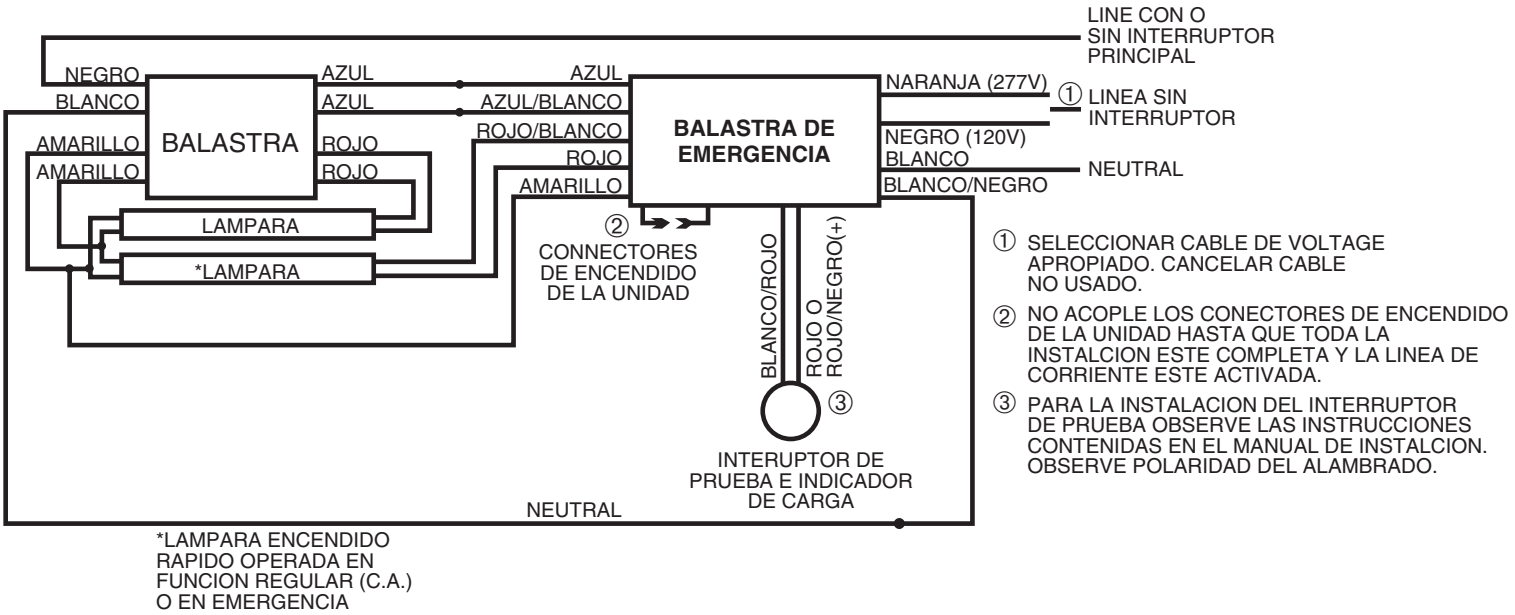
2LRSB_D_5_SP

NOTES

QQ40

QQ40

INSTALACION CON UNA SOLA LAMPARA DE ENCENDIDO RAPIDO



① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

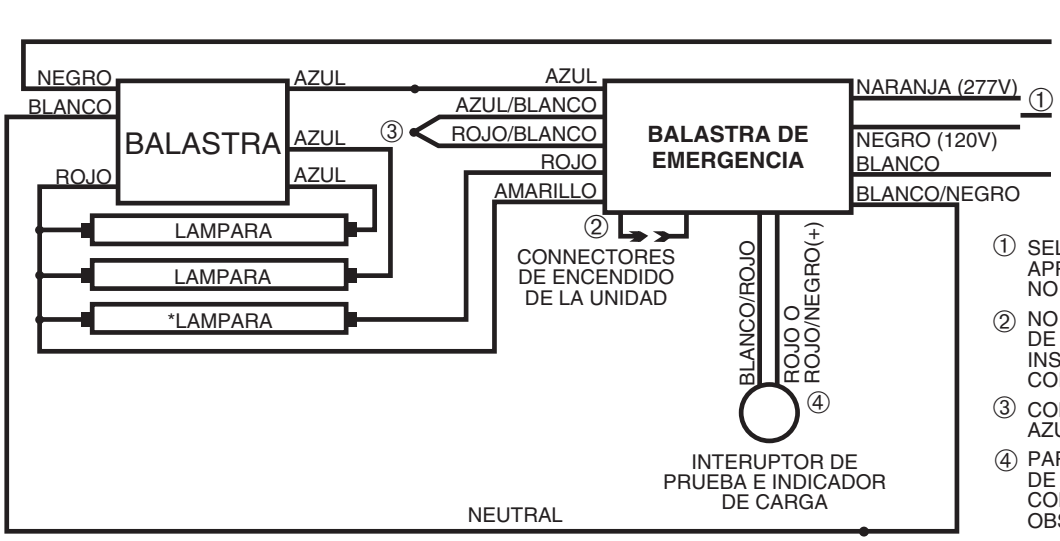
2LRSB_D_SP

NOTES

QQ41

QQ41

INSTALACION CON TRES LAMPARAS DE ENCENDIDO INSTANTANEO



*LAMPARA ENCENDIDO
INSTANTANEO OPERADA
EN FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CONECTAR LOS SIGUIENTES CABLES JUNTOS AZUL/BLANCO Y ROJO/BLANCO.

④ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

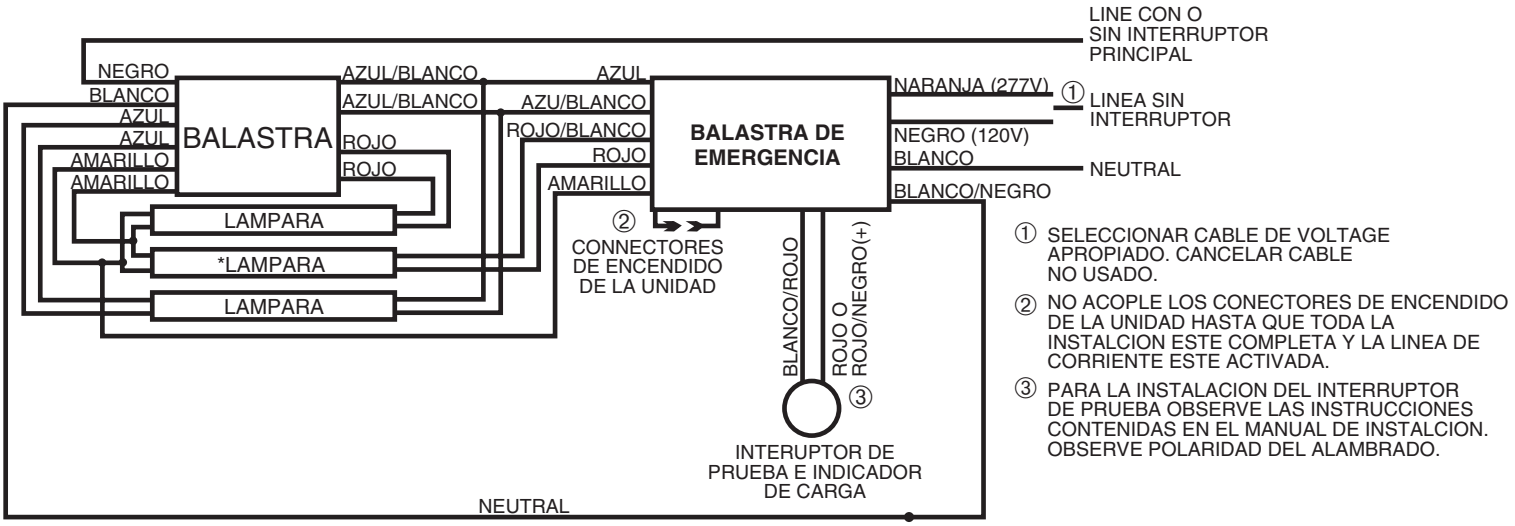
3LISB_D_SP

NOTES

QQ42

QQ42

INSTALACION CON TRES LAMPARAS DE ENCENDIDO RAPIDO



*LAMPARA ENCENDIDO
RAPIDO OPERADA EN
FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

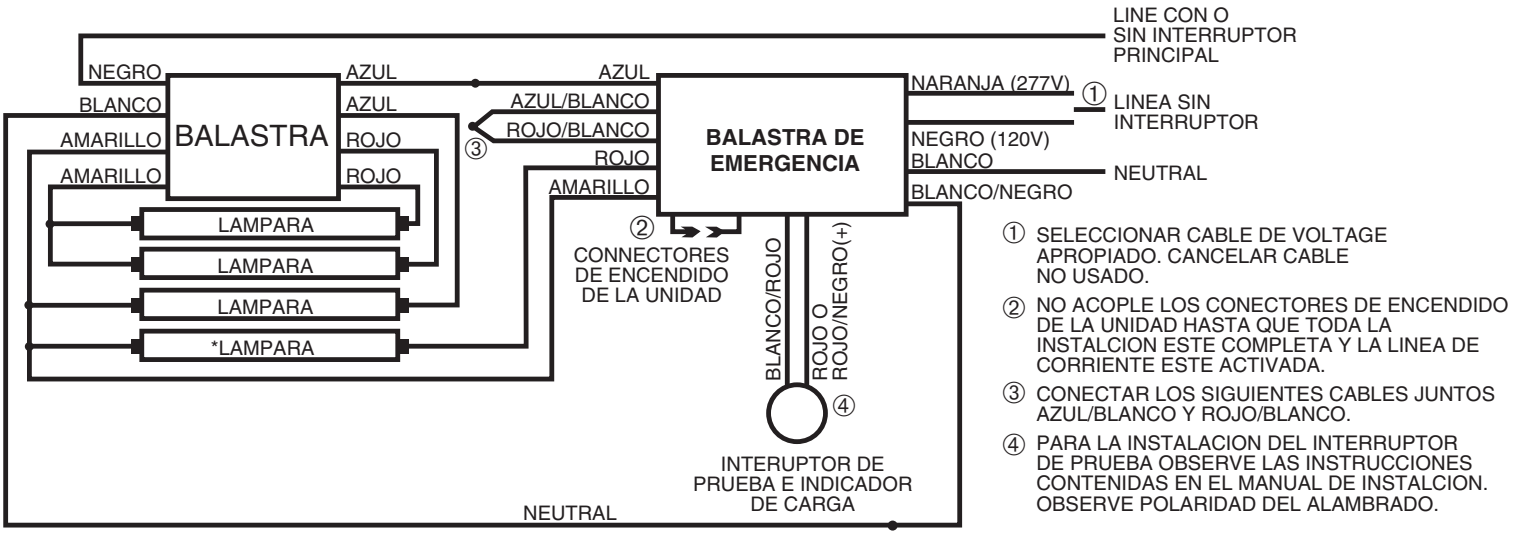
3LRSB_D_SP

NOTES

QQ43

QQ43

INSTALACION CON CUATRO LAMPARAS DE ENCENDIDO INSTANTANEO



*LAMPARA ENCENDIDO
INSTANTANEO OPERADA
EN FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CONECTAR LOS SIGUIENTES CABLES JUNTOS AZUL/BLANCO Y ROJO/BLANCO.

④ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

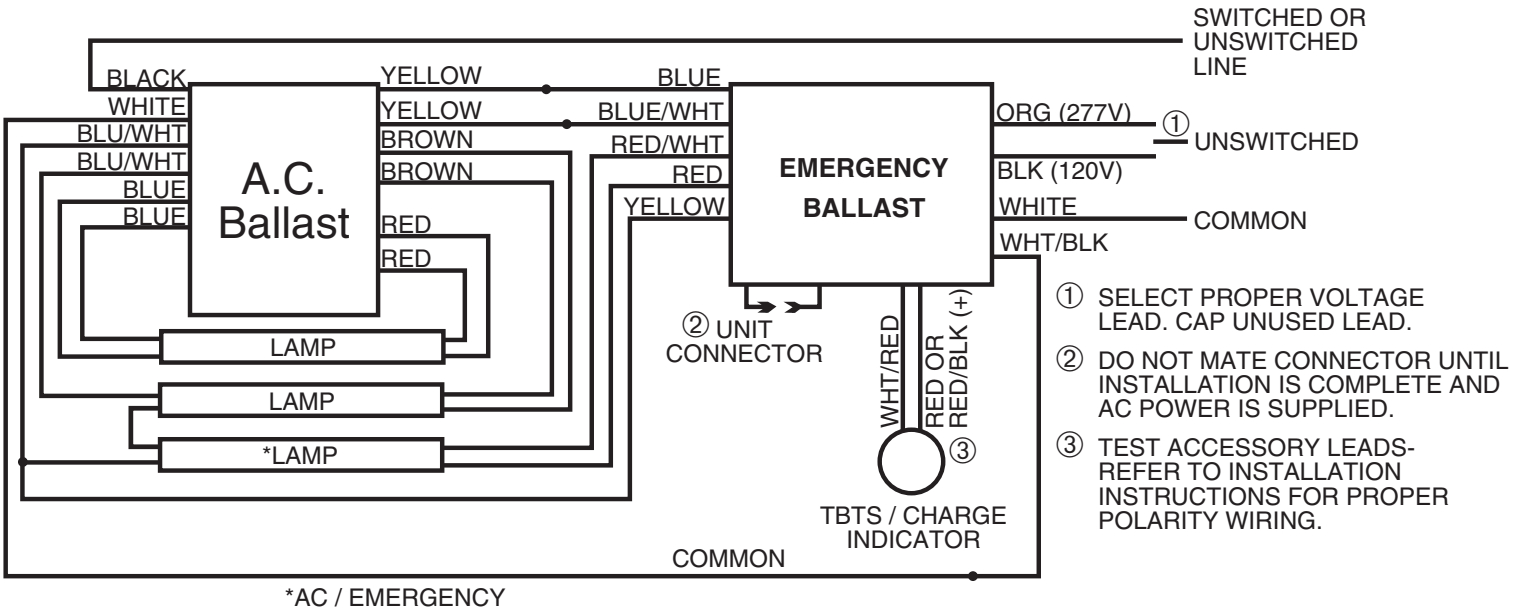
4LISB_D_SP

NOTES

QQ44

QQ44

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

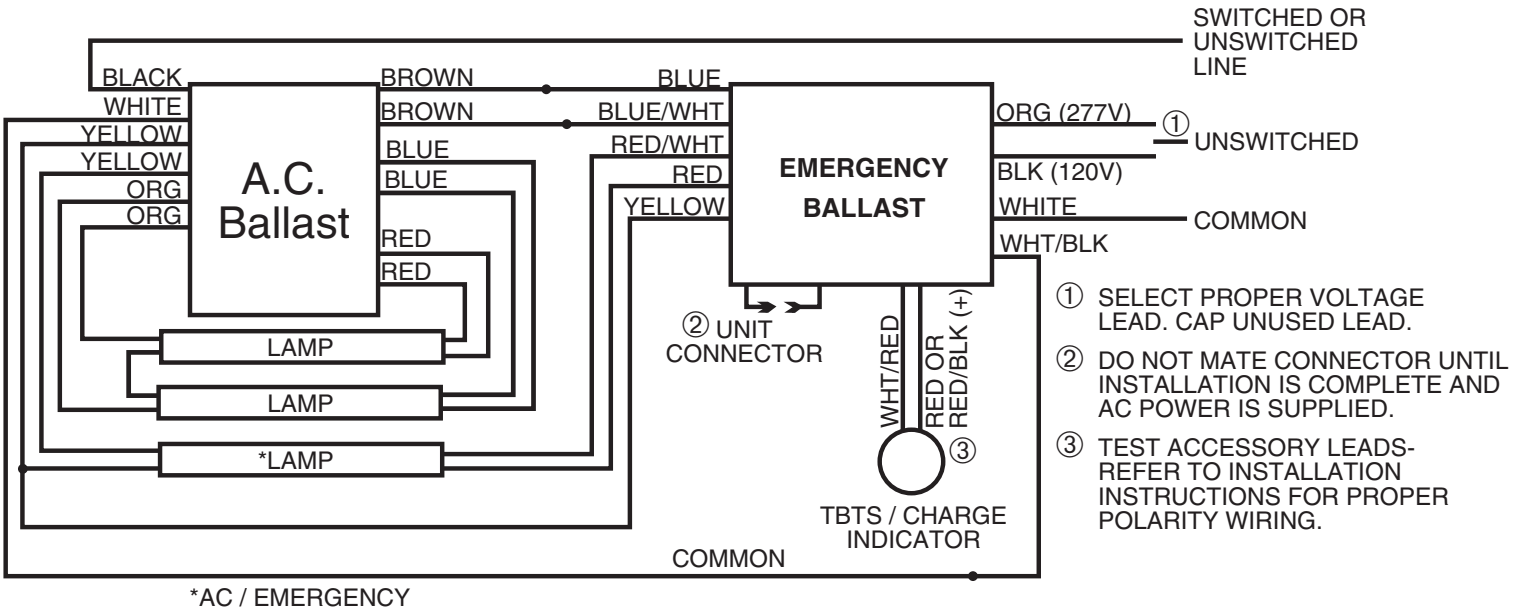
3LRSB_ISL_3

NOTES

QQ45

QQ45

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

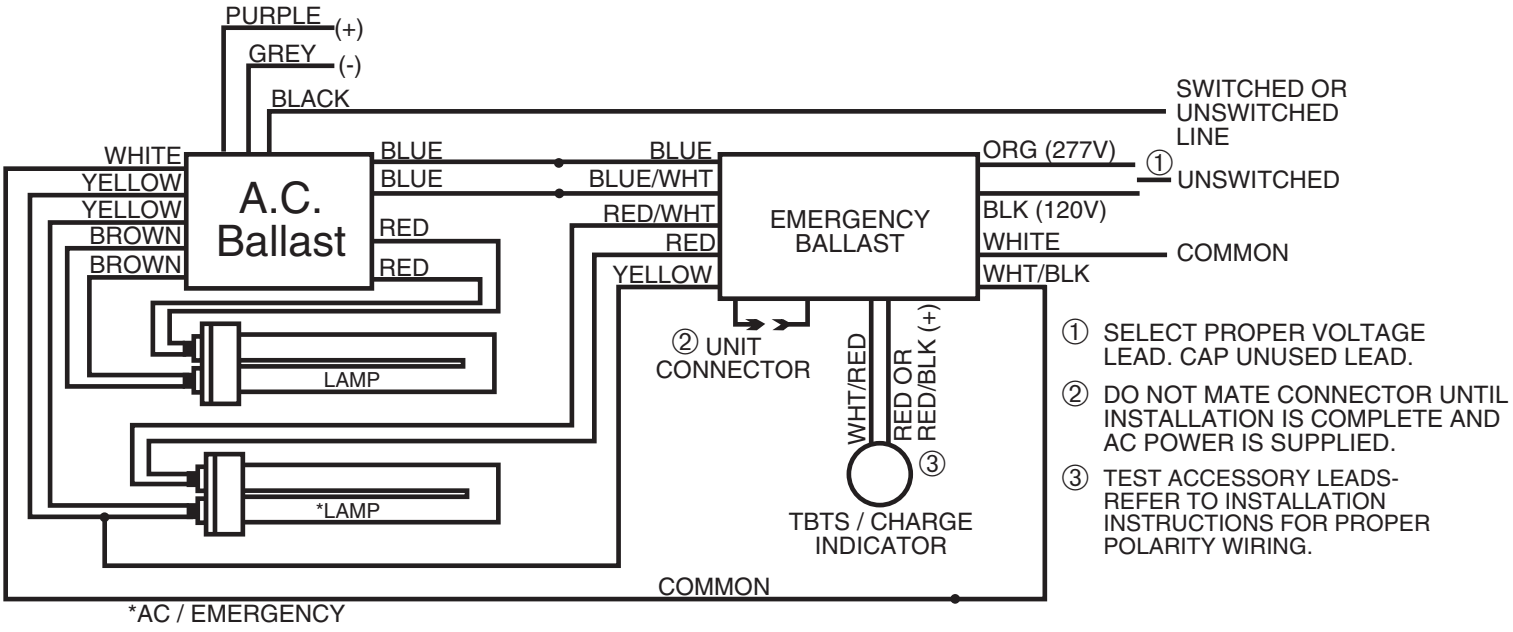
3LRSB_ISL_4

NOTES

QQ46

QQ46

TWO BIAX LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

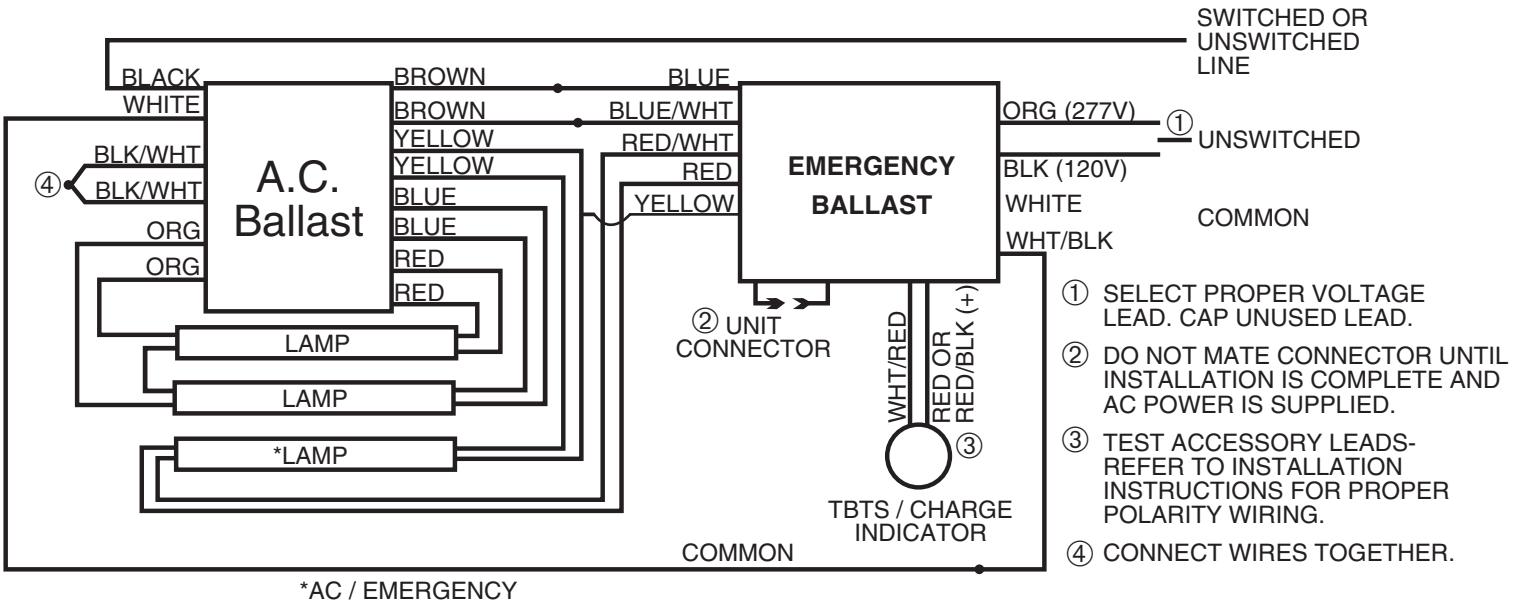
2BXLRSB_3_ISL

NOTES

QQ47

QQ47

FOUR LAMP RAPID START BALLAST WITH THREE LAMPS ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

④ CONNECT WIRES TOGETHER.

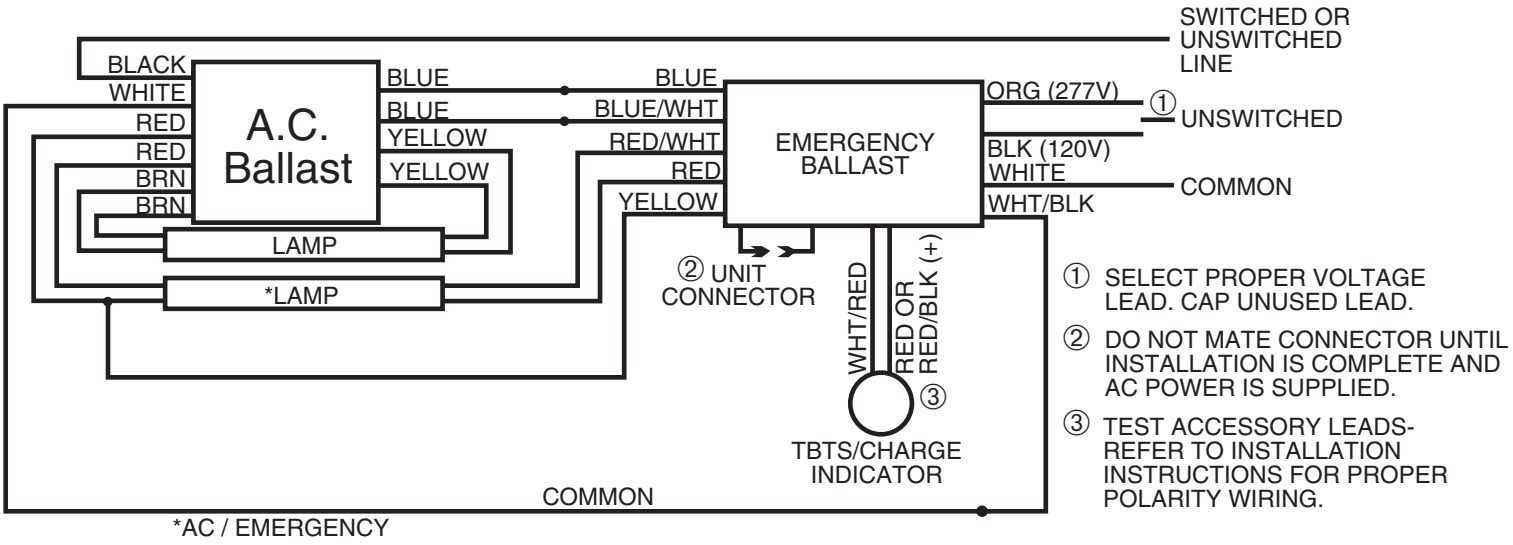
4LRSB_ISL_5

NOTES

QQ48

QQ48

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

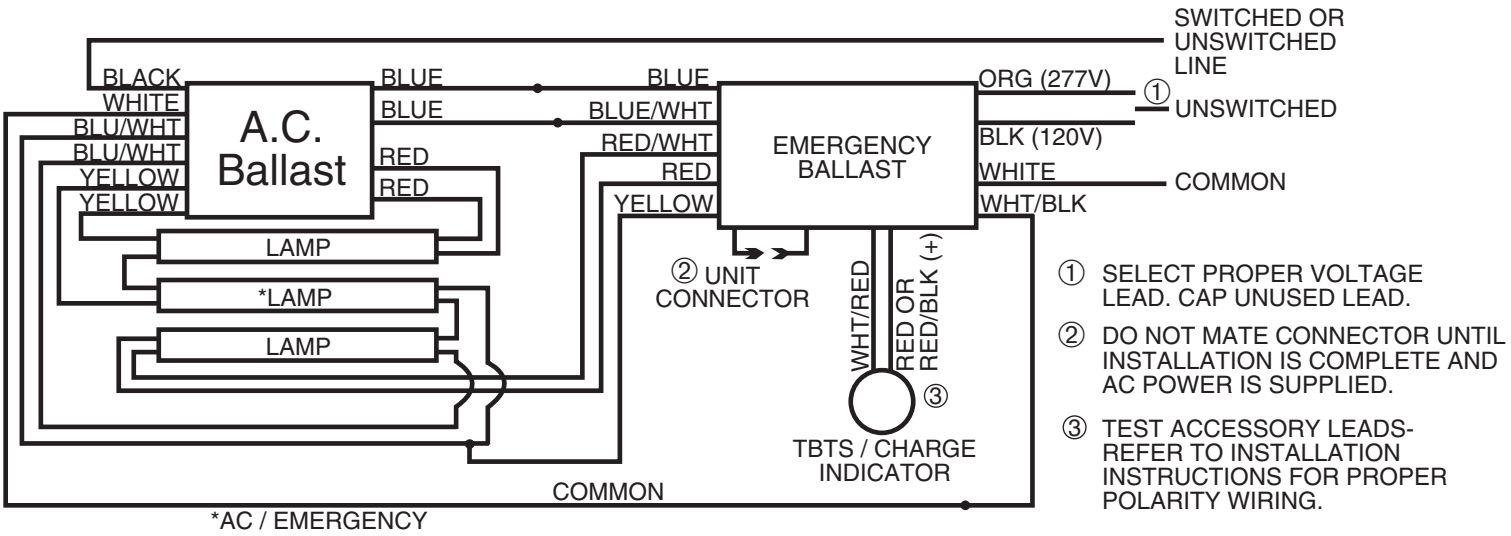
2LRSB_3_ISL

NOTES

QQ49

QQ49

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

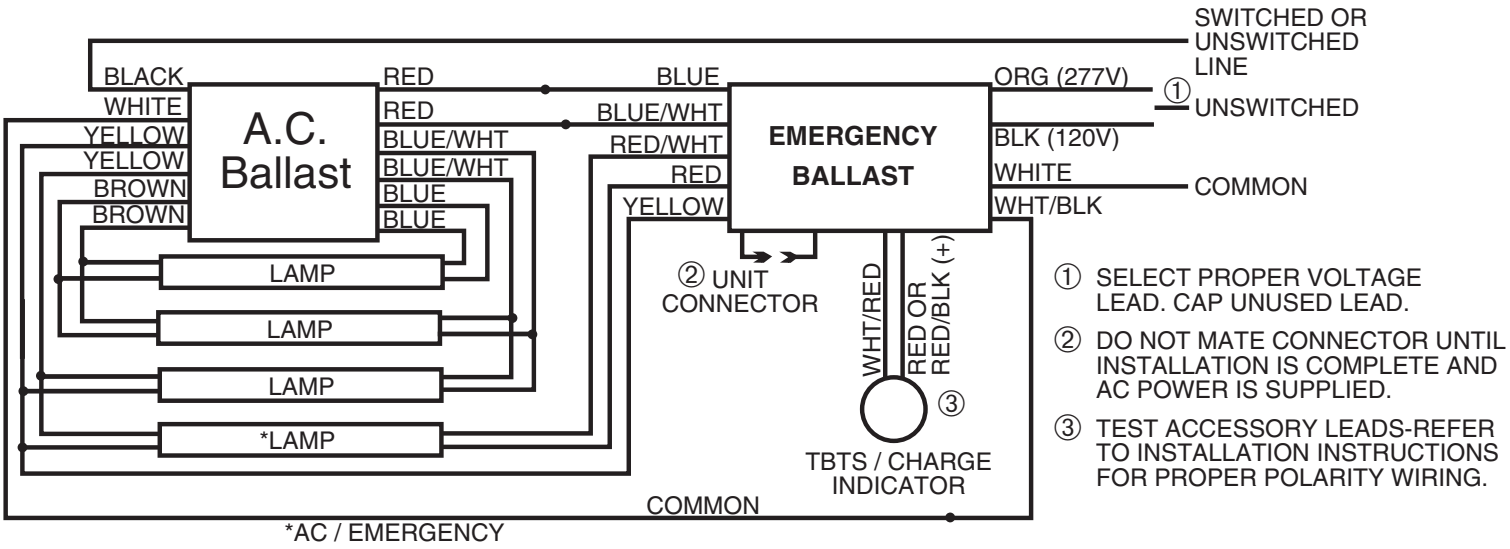
3LRSB_ISL_5

NOTES

QQ50

QQ50

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

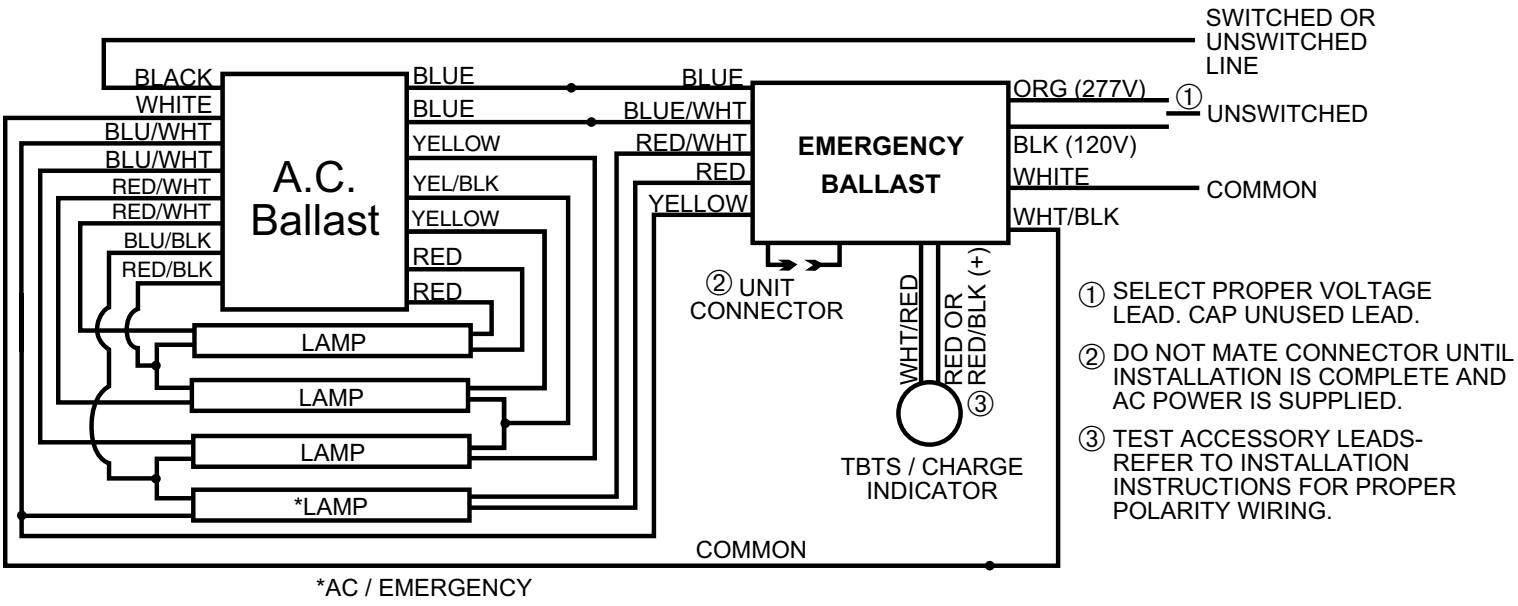
③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

4LRSB_6_D

NOTES

QQ51 QQ51

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

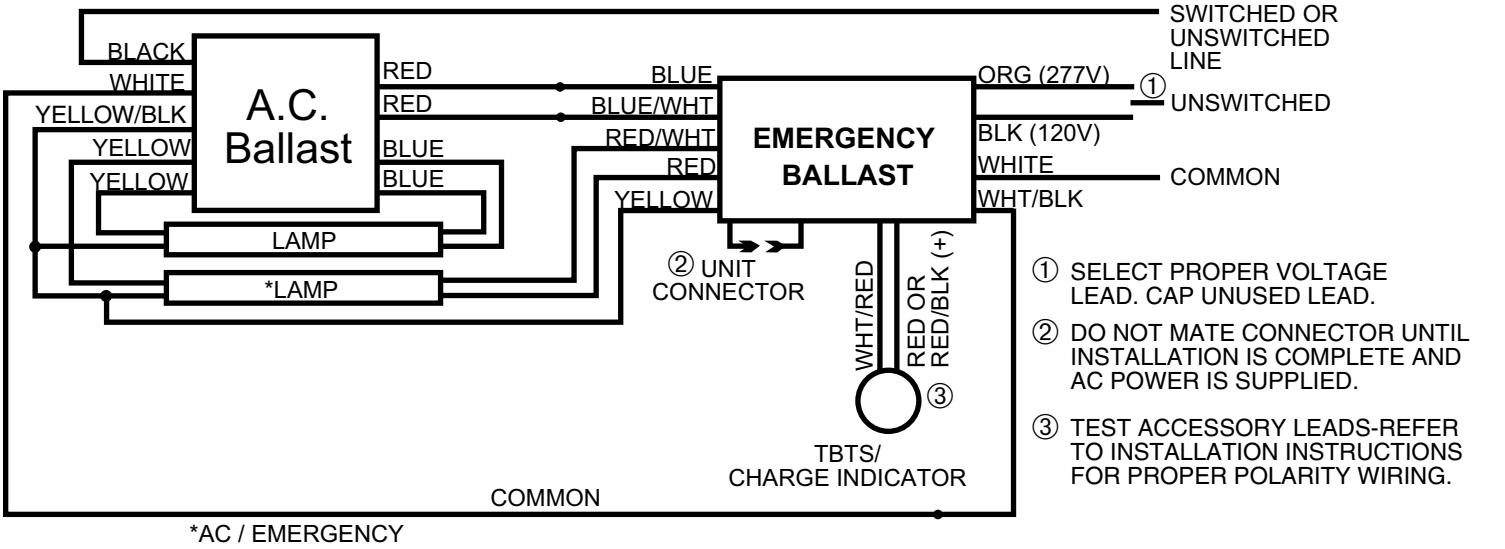
4LRSB_ISL

NOTES

QQ52

QQ52

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

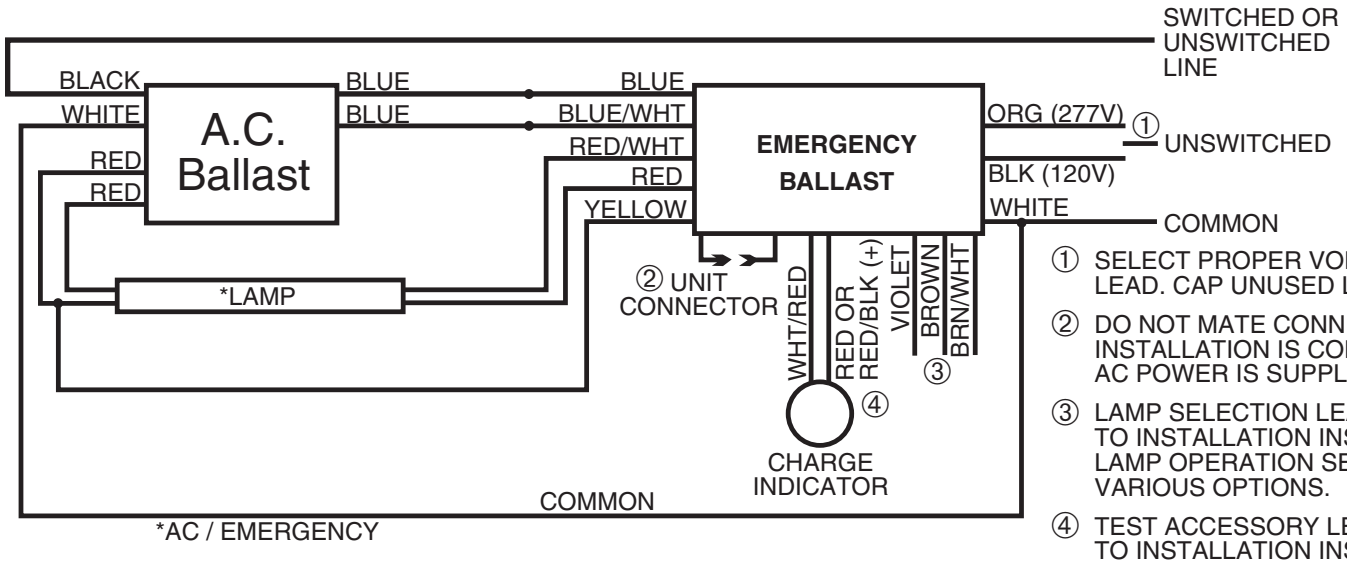
NOTE:
DIMMING WIRE IS NOT AFFECTED BY THE EM BALLAST

2LRSB_420_D

NOTES

V1 V1

ONE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

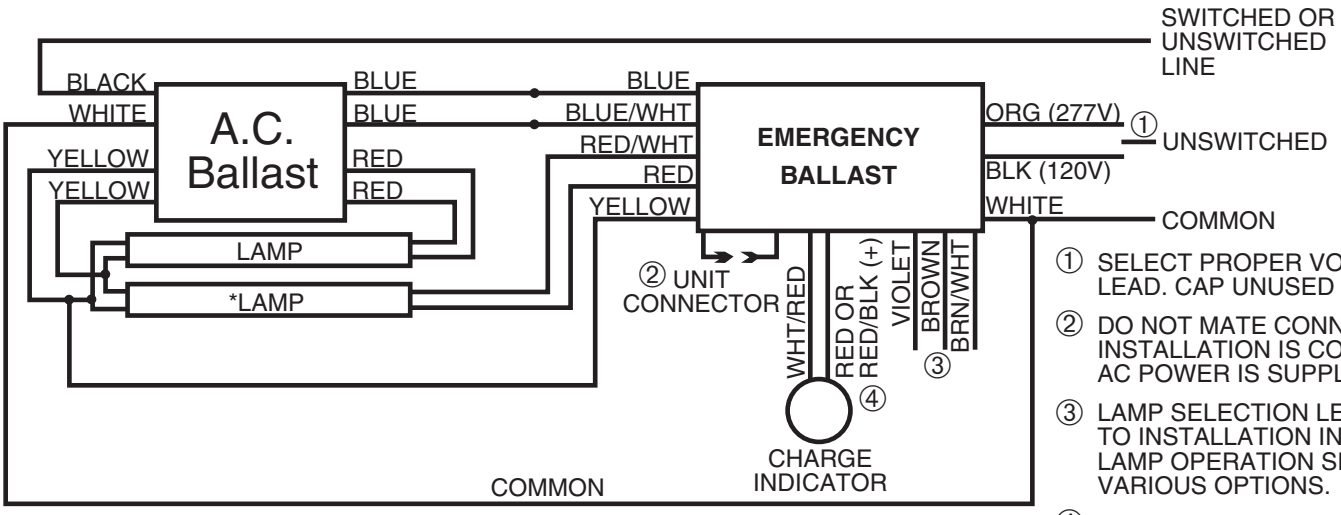
④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

1LRSB_160

NOTES

V2 V2

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

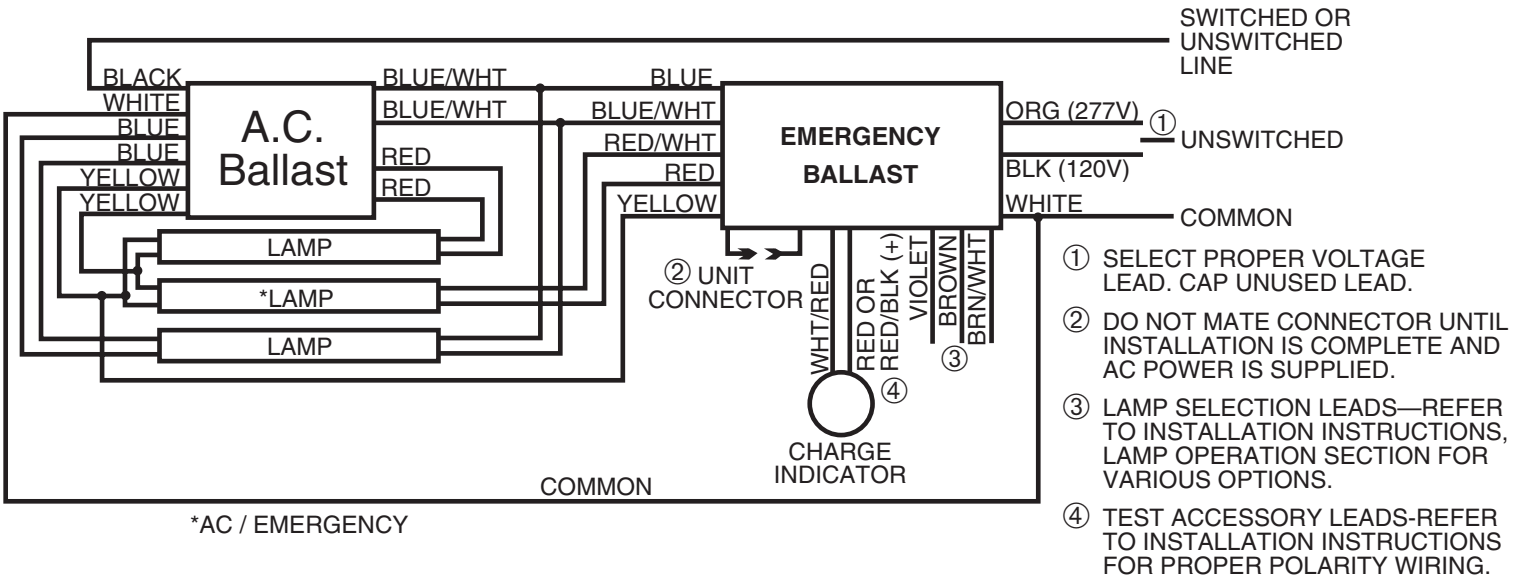
④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LRSB_160

NOTES

V3 V3

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

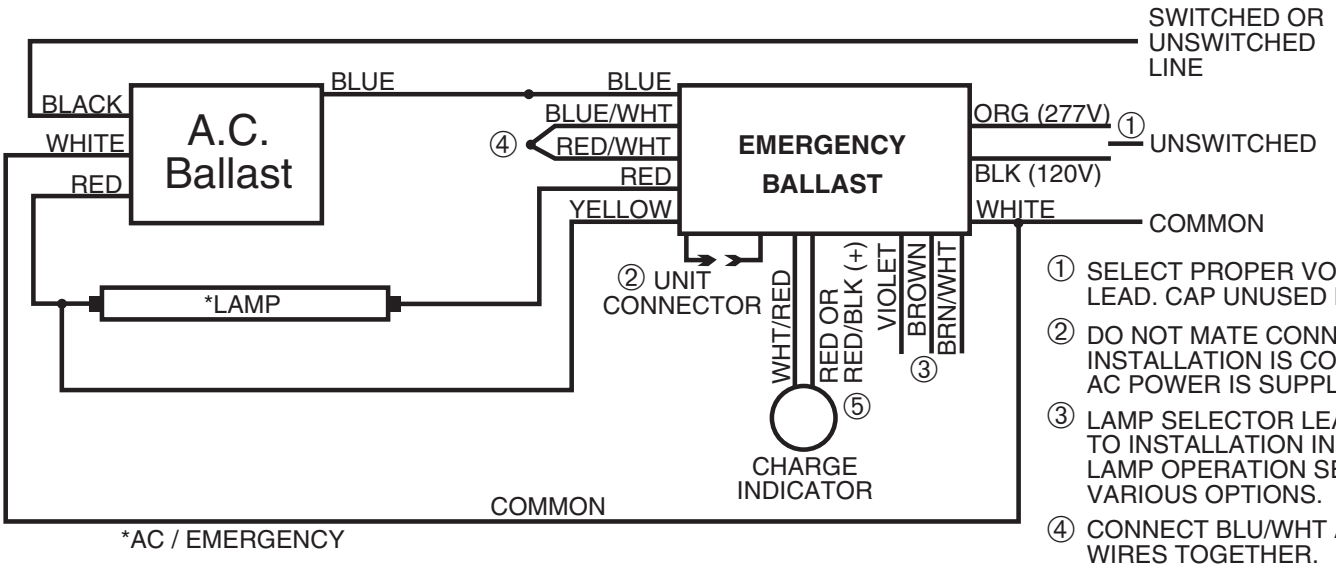
④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

3LRSB_160

NOTES

V4 V4

ONE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

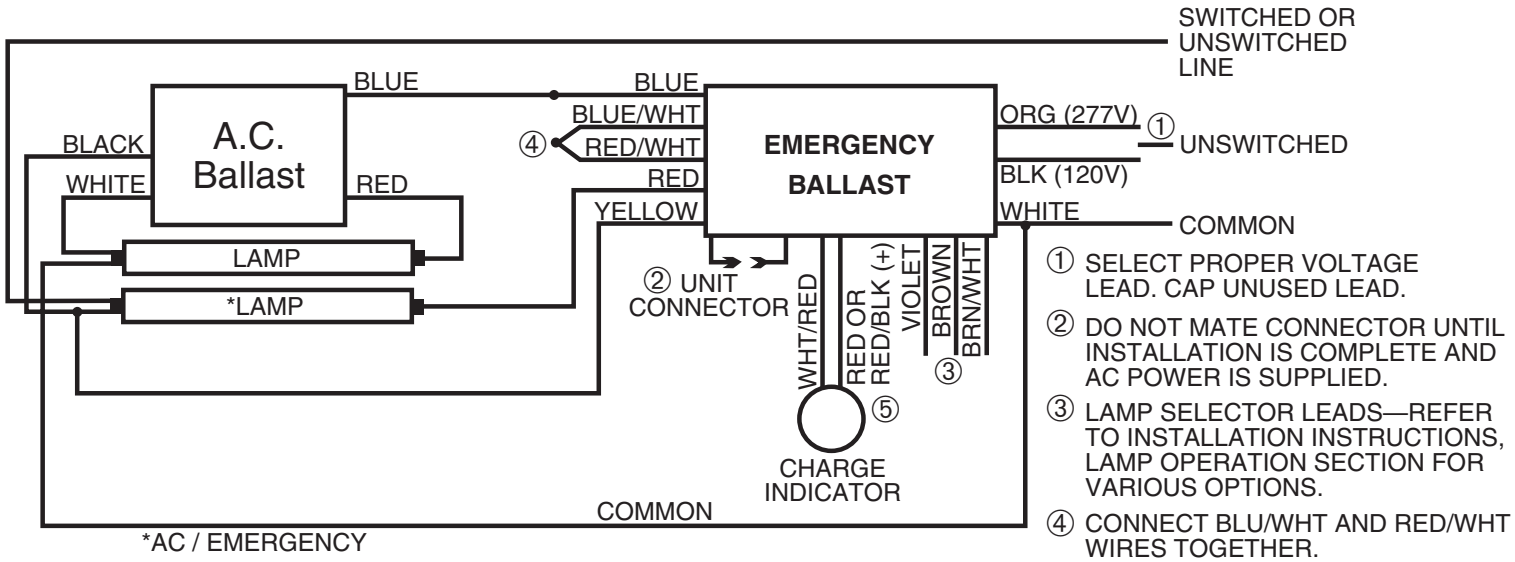
⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION ISNTRUCTIONS FOR PROPER POLARITY WIRING.

1LISB_160

NOTES

V5 V5

TWO LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

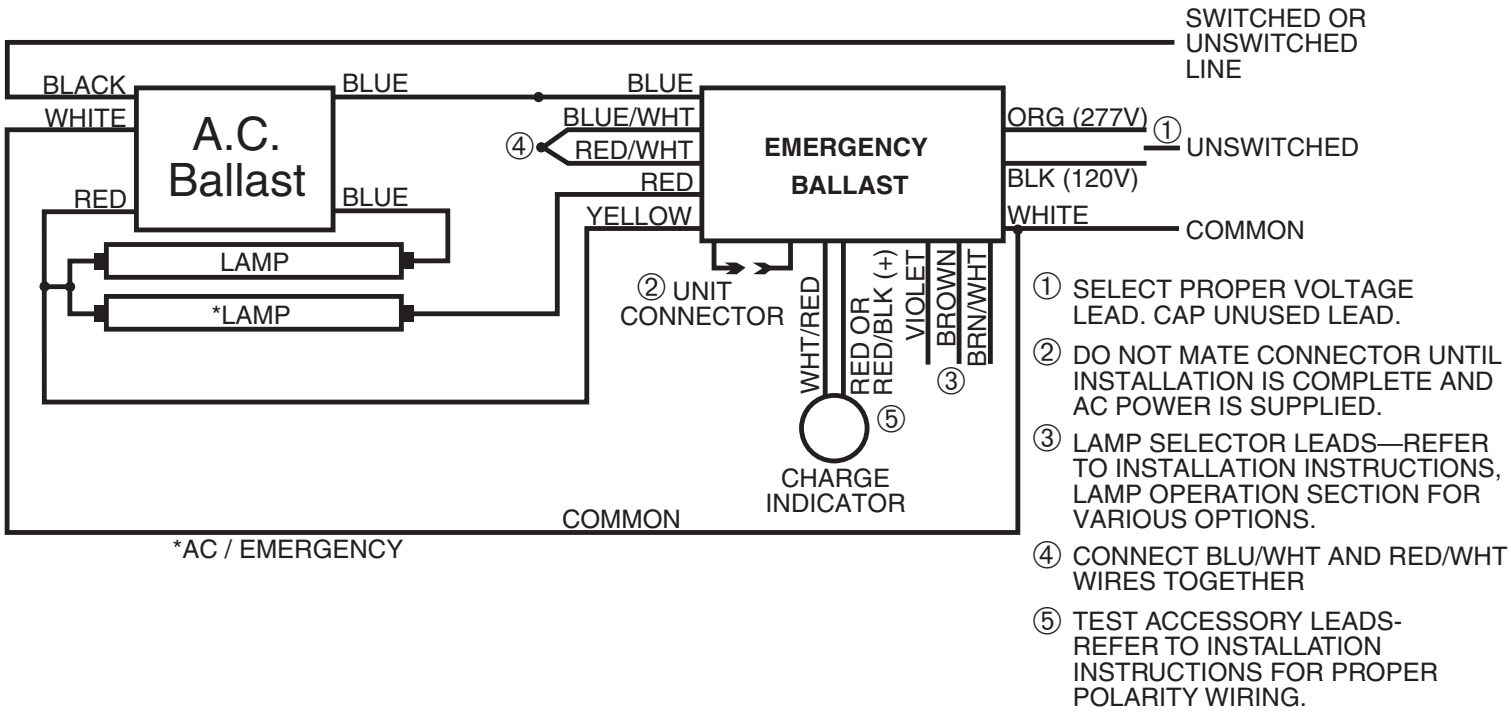
⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LISB_160

NOTES

V6 V6

TWO LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

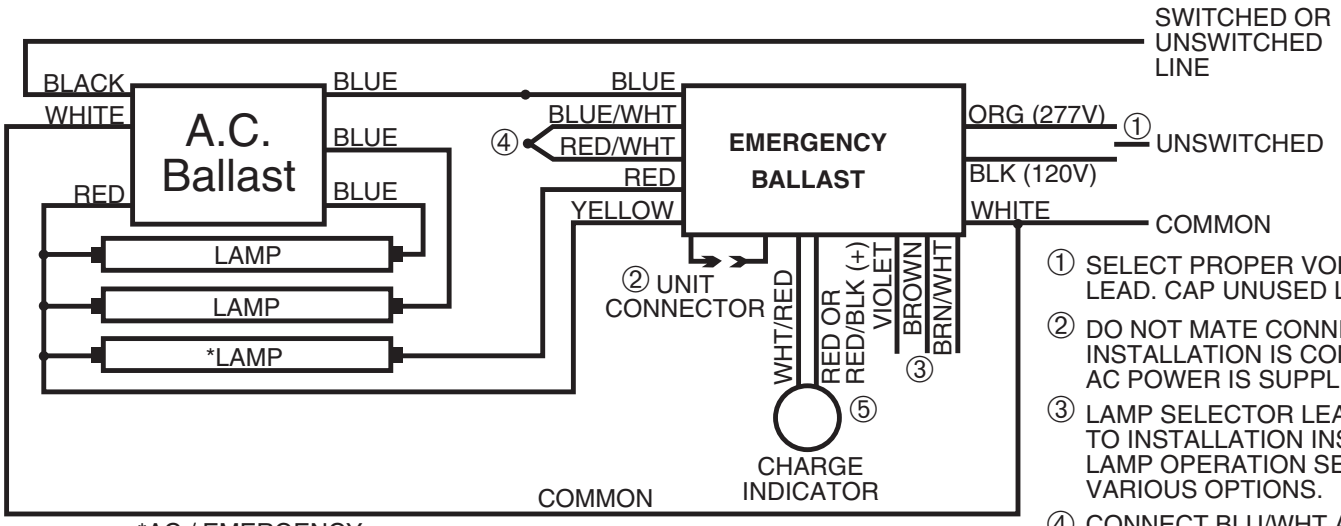
④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LISB_160_2

NOTES

THREE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

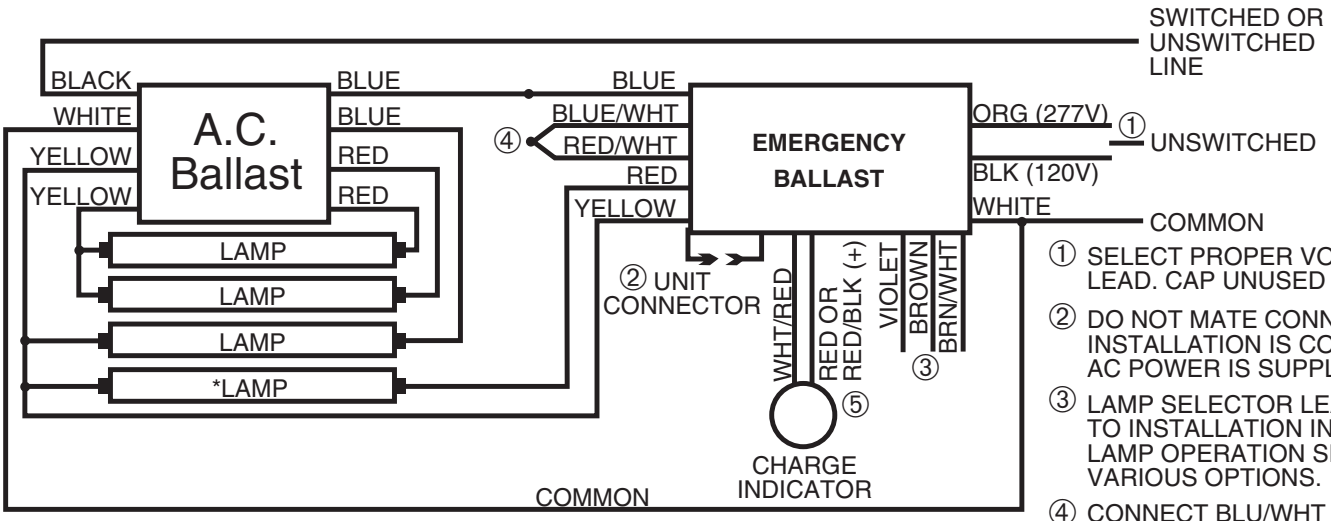
④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

3LISB_160

NOTES

FOUR LAMP INSTANT START BALLAST



*AC / EMERGENCY

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

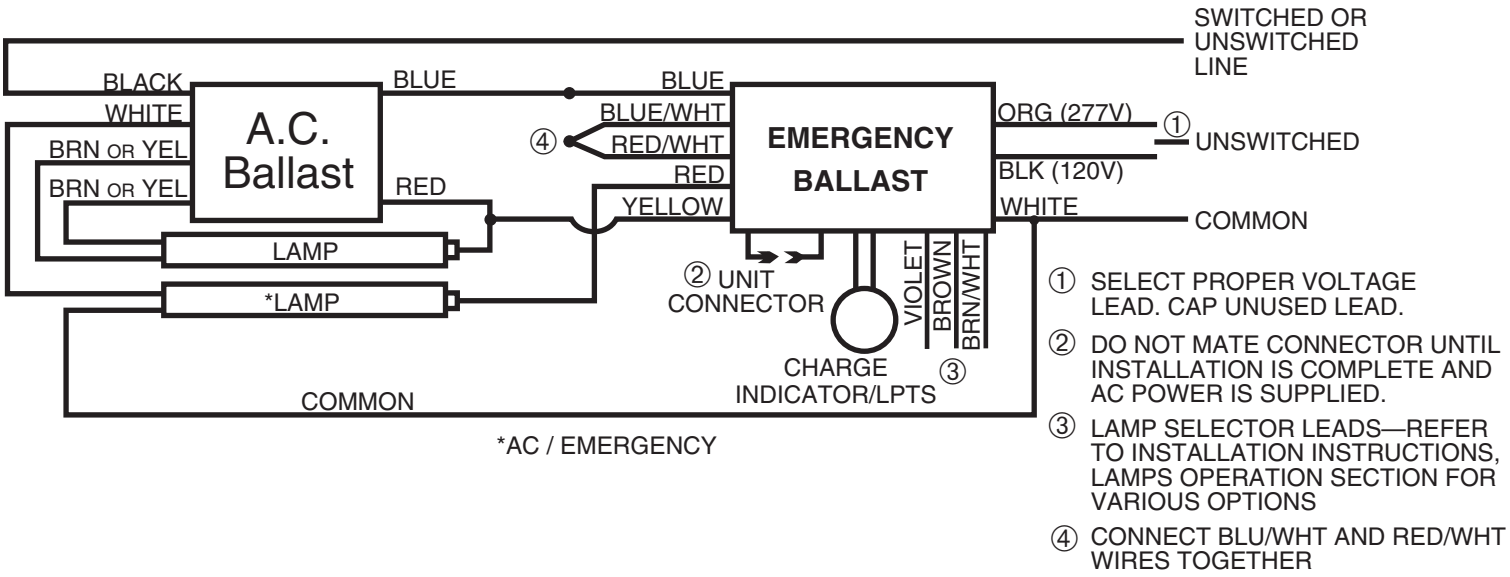
⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

4LISB_160

NOTES

V9

TWO LAMP SERIES LEAD BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

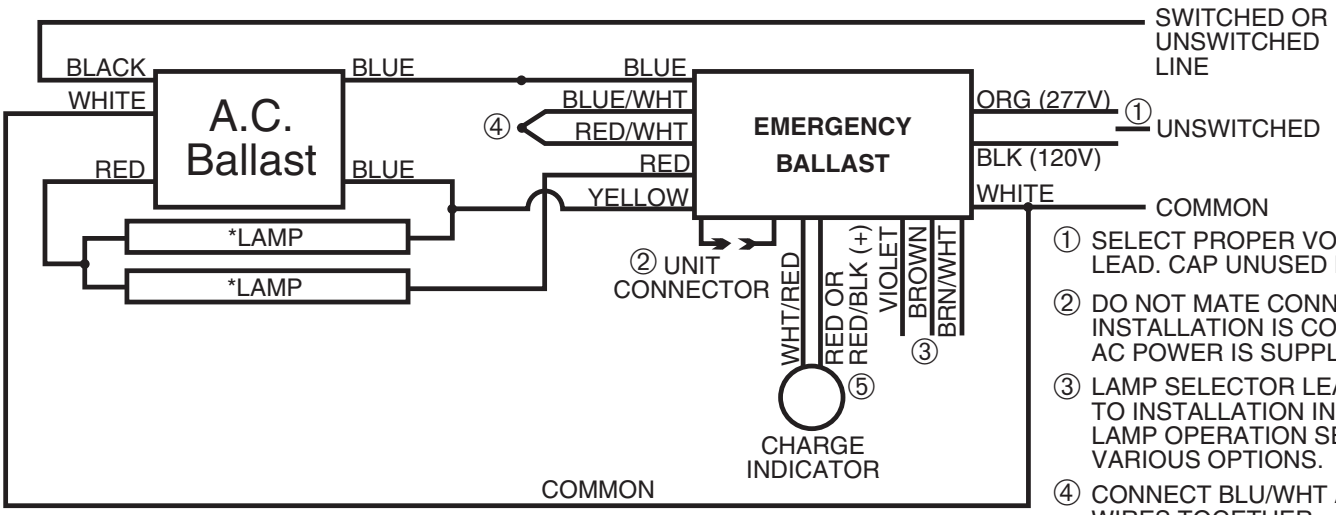
④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

2LSL_2LEO_160

NOTES

V10 V10

TWO LAMP INSTART START BALLAST WITH TWO LAMP EMERGENCY OPERATION



*AC / EMERGENCY

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

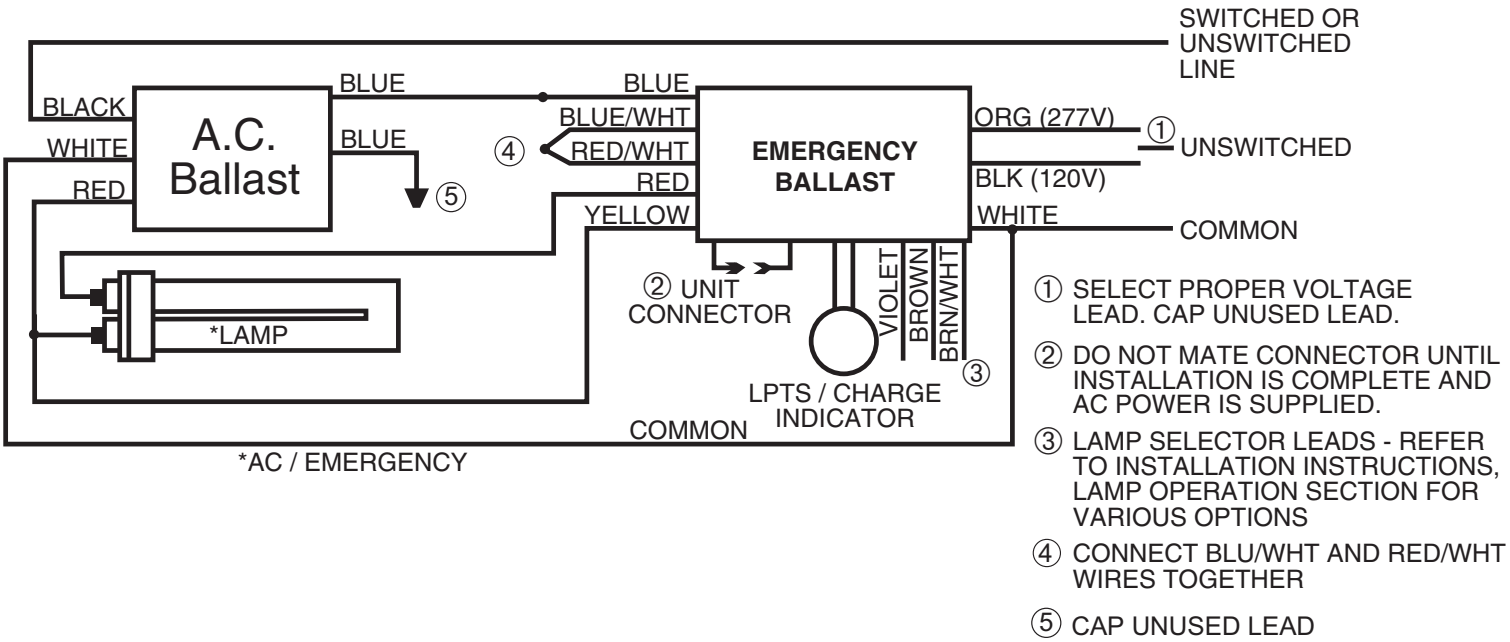
2LISB_2LEO_160

NOTES

V11

V11

ONE LAMP BIAX



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

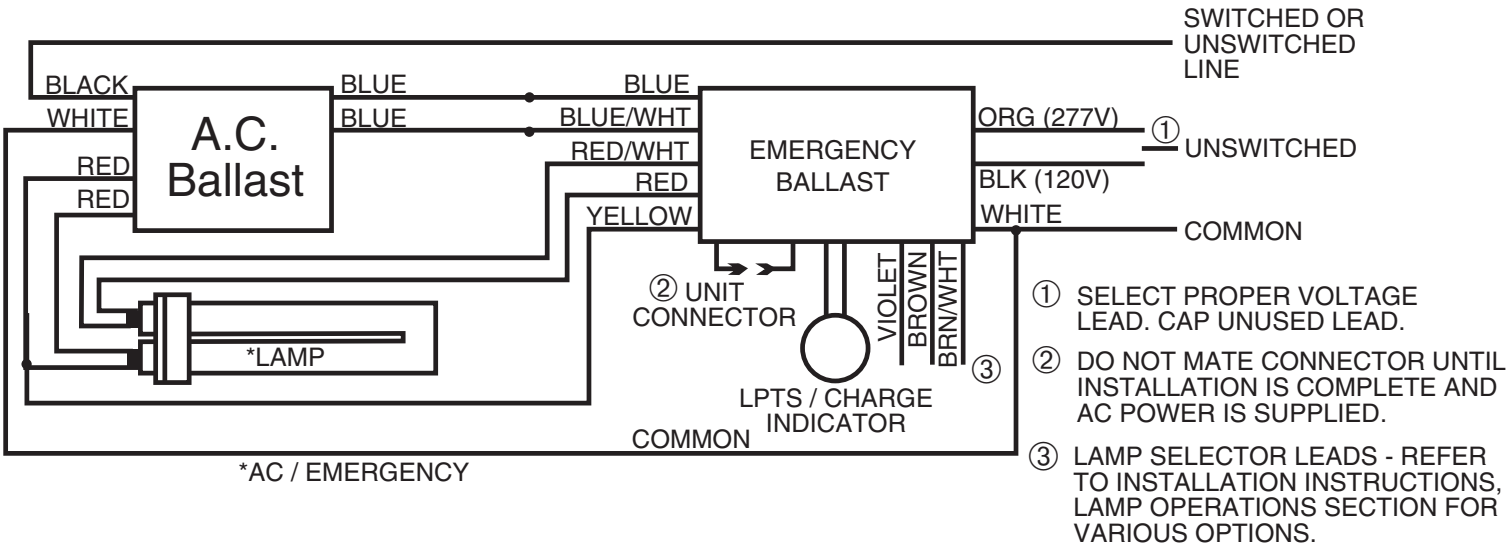
⑤ CAP UNUSED LEAD

1LBX_160

NOTES

V12 V12

ONE BIAX LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

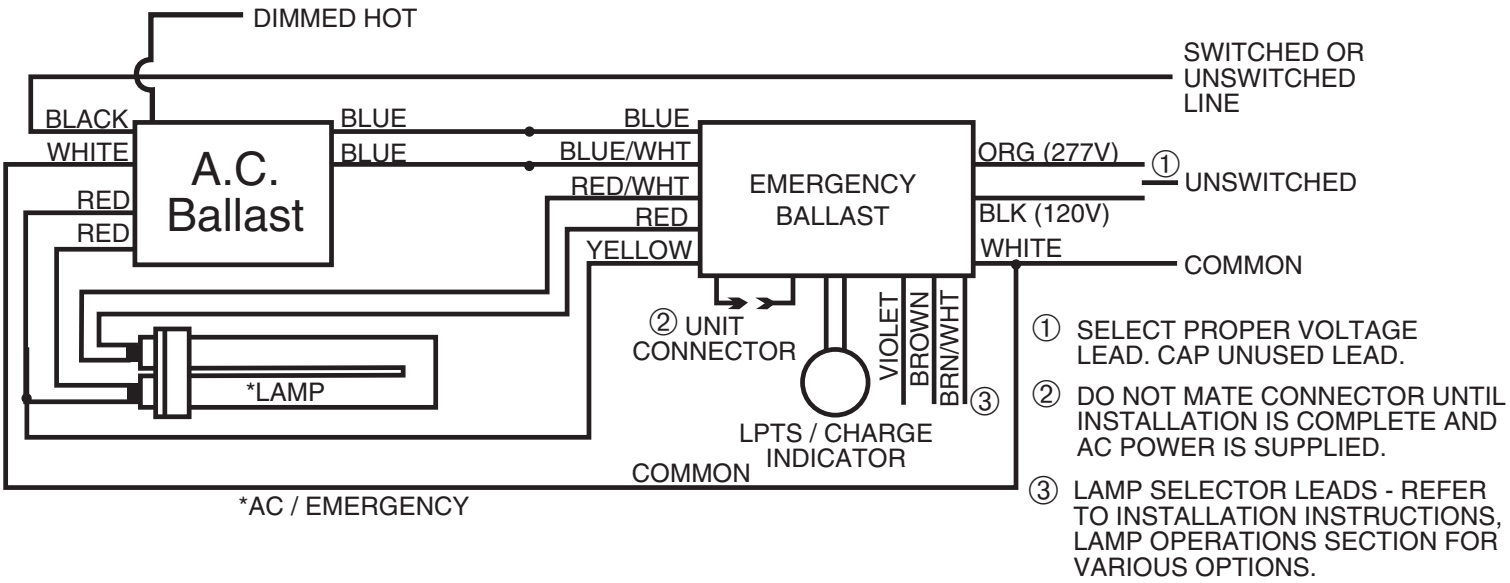
③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATIONS SECTION FOR VARIOUS OPTIONS.

1BXLRSB_160

NOTES

V13 V13

ONE BIAX LAMP RAPID START BALLAST WITH DIMMING CONTROL



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATIONS SECTION FOR VARIOUS OPTIONS.

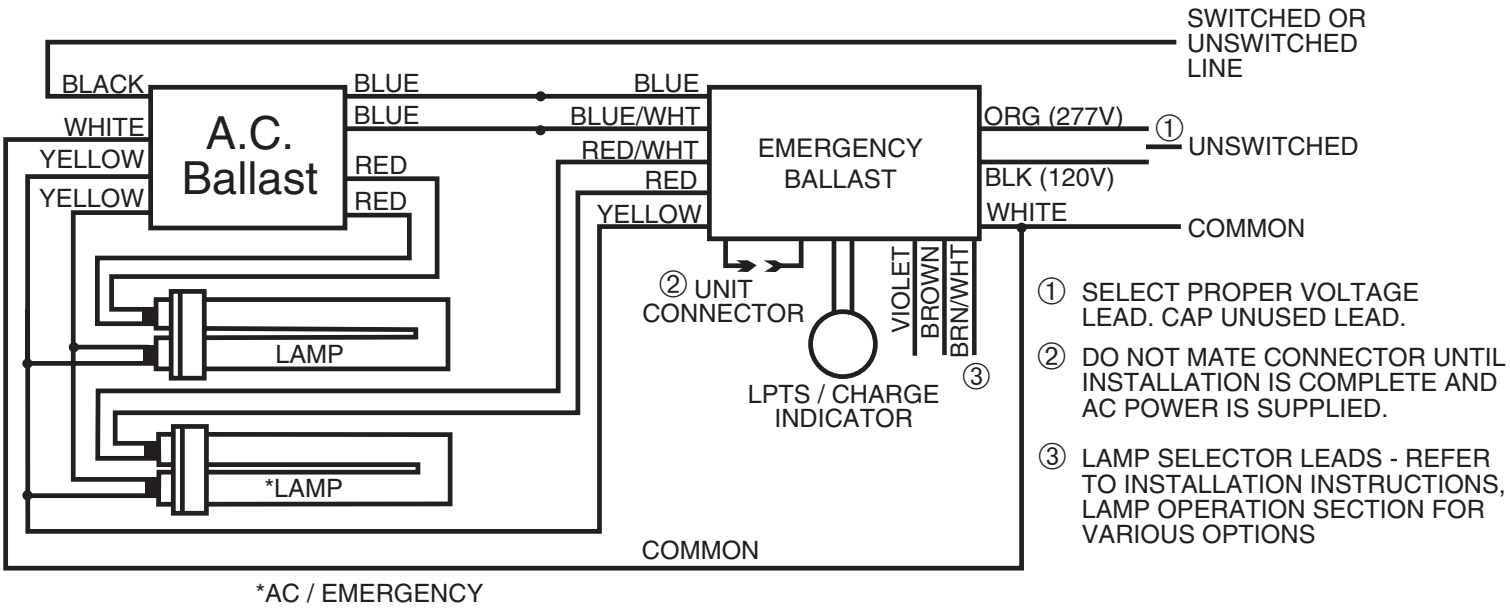
1BXLRSB_DM_160

NOTES

V14

V14

TWO COMPACT LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

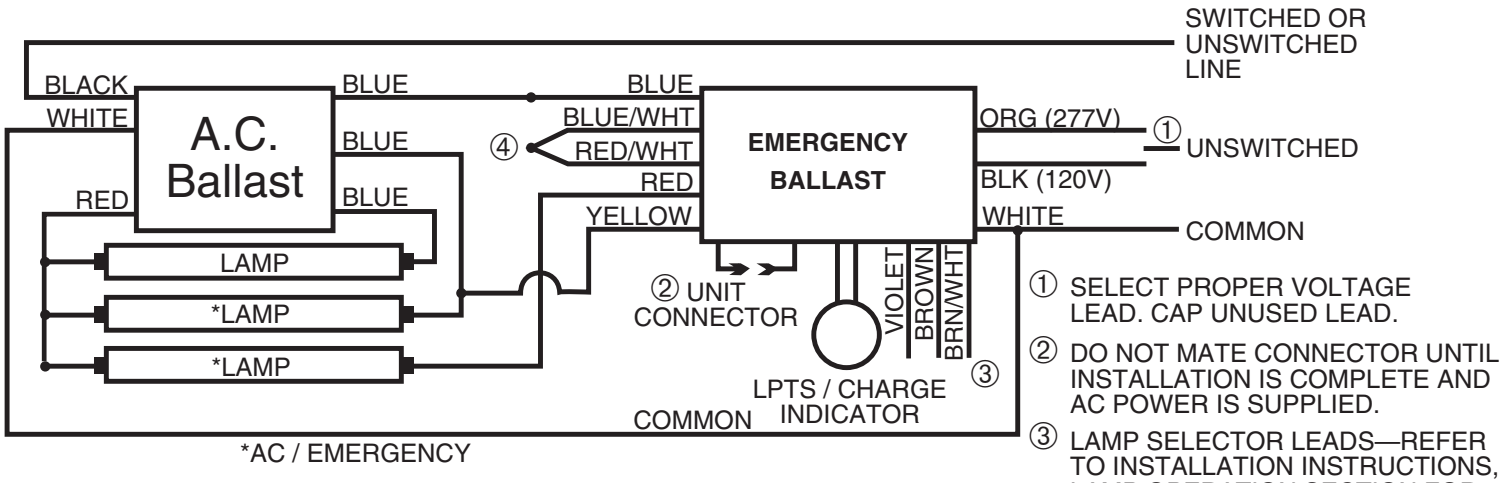
③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

2BXLRSB_DM_160

NOTES

V15 V15

THREE LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

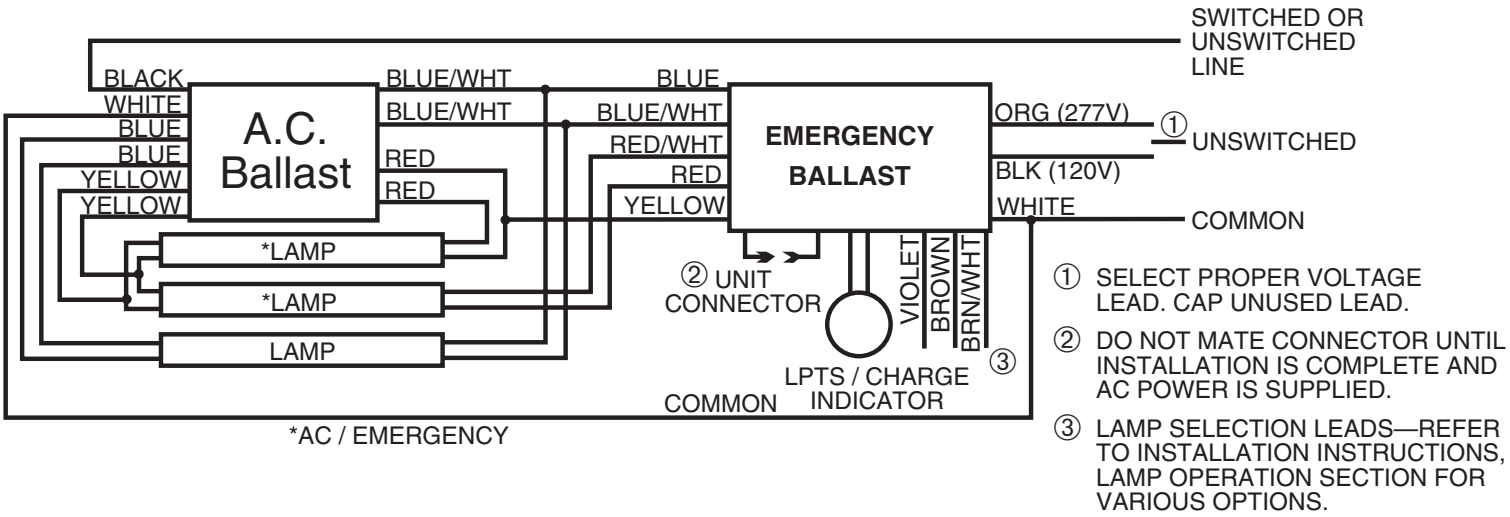
④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

3LISB_2LEO_160

NOTES

V16 V16

THREE LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

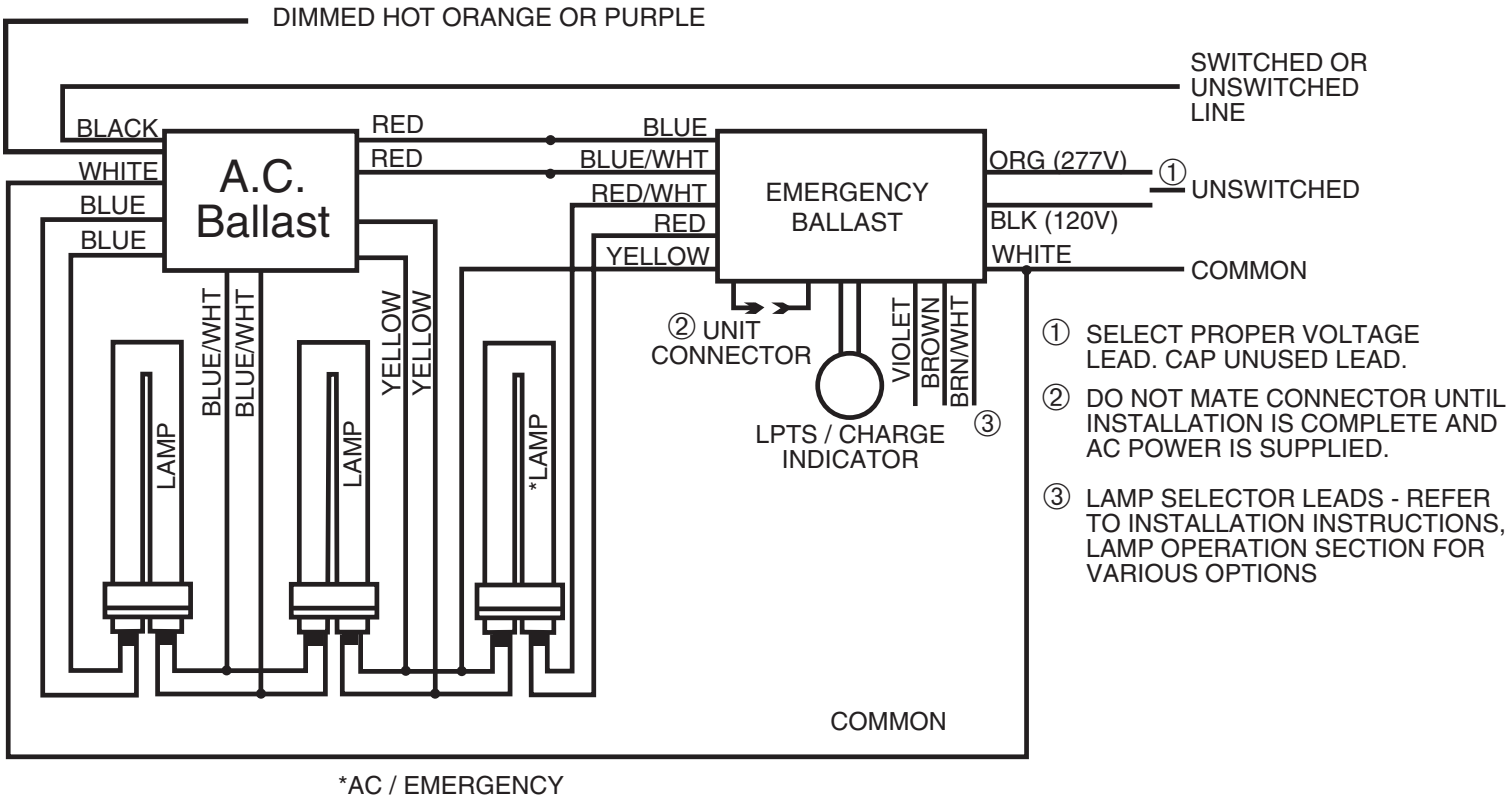
③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

3LRSB_2LEO_160

NOTES

V17 V17

THREE BIAX RAPID START BALLAST WITH DIMMING CONTROL



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

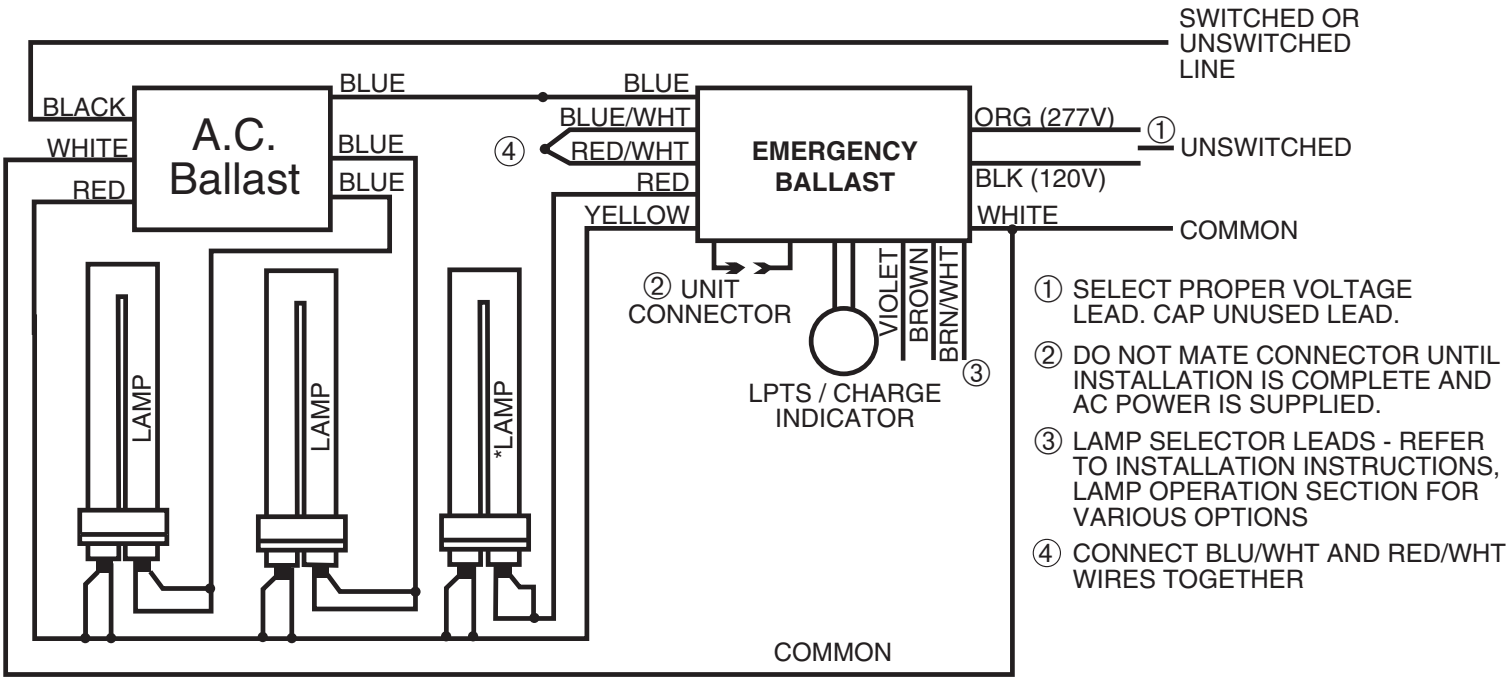
③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

3BXLRSB_DM_160

NOTES

V18 V18

THREE LAMP BIAX INSTANT START



*AC / EMERGENCY

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

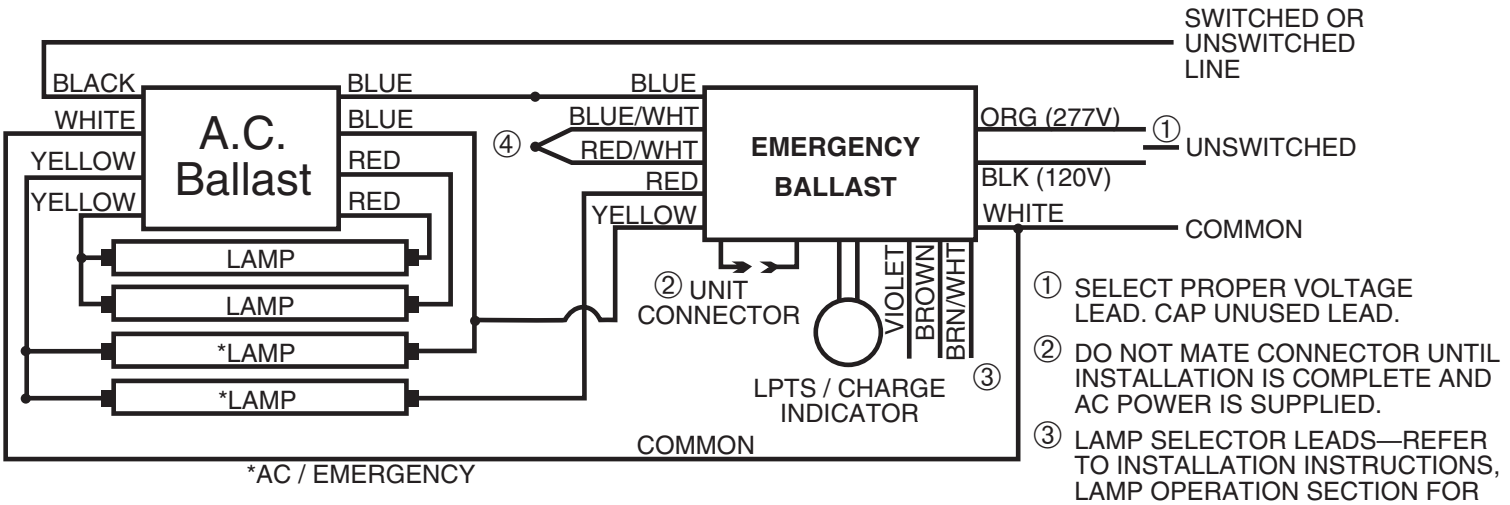
④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

3LBXIN_160

NOTES

V19 V19

FOUR LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

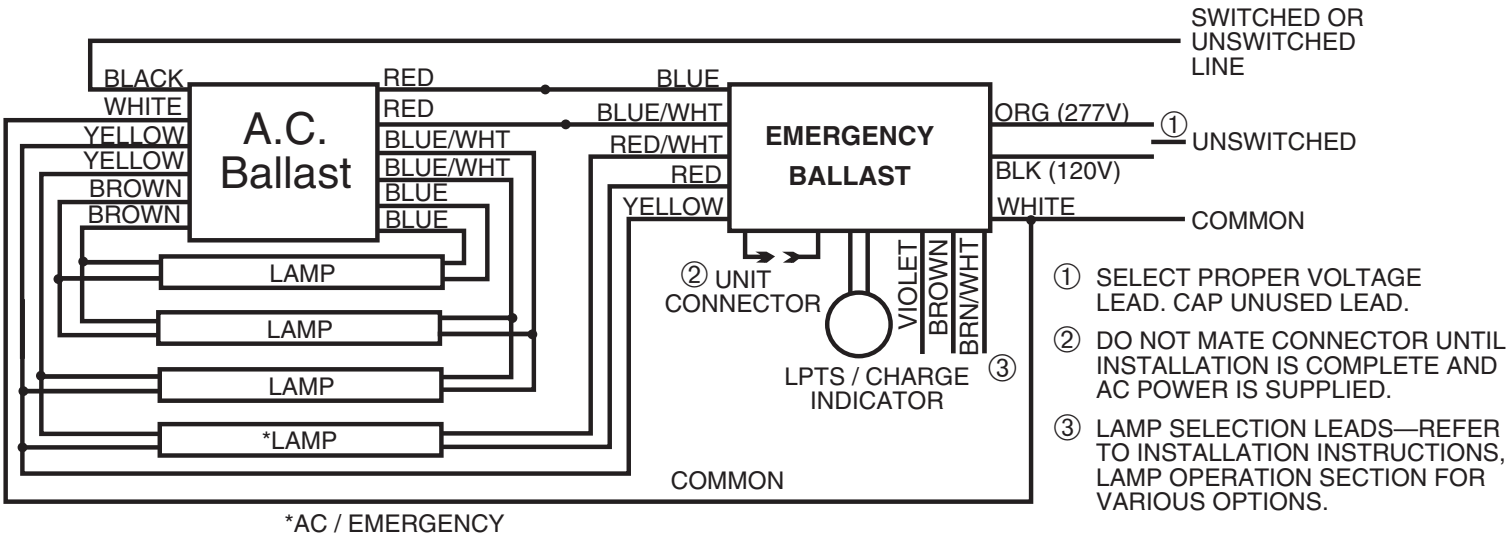
4LISB_2LEO_160

NOTES

V20

V20

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

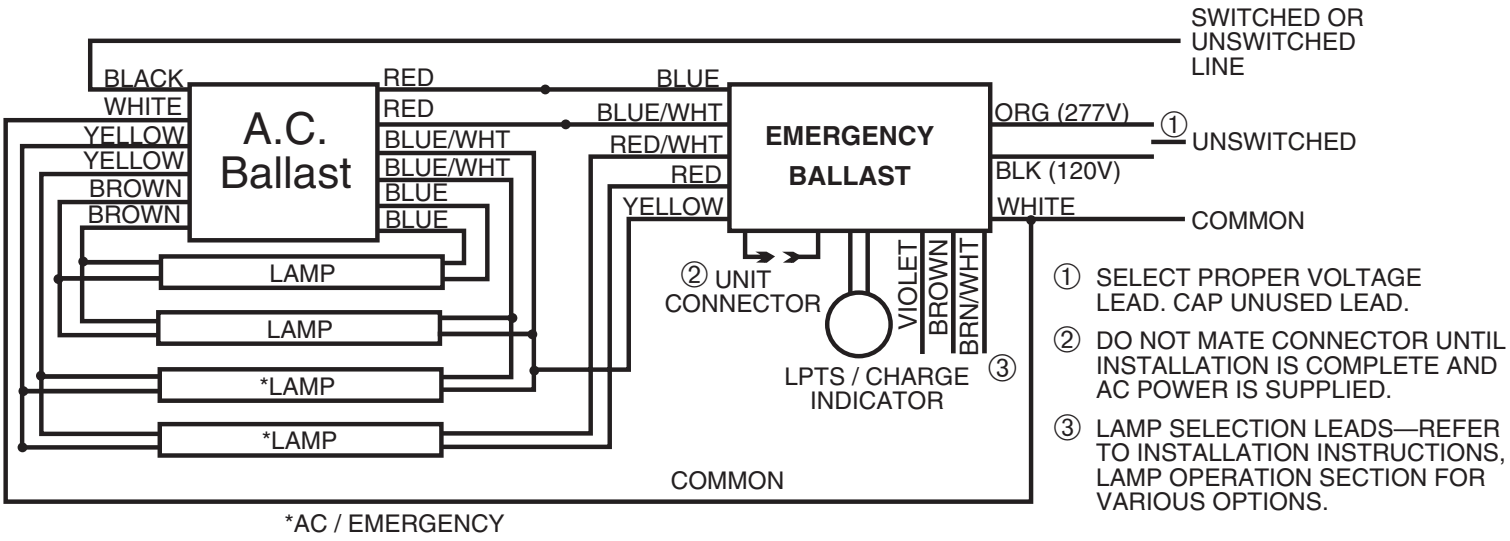
③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

4LRSB_160

NOTES

V21 V21

FOUR LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

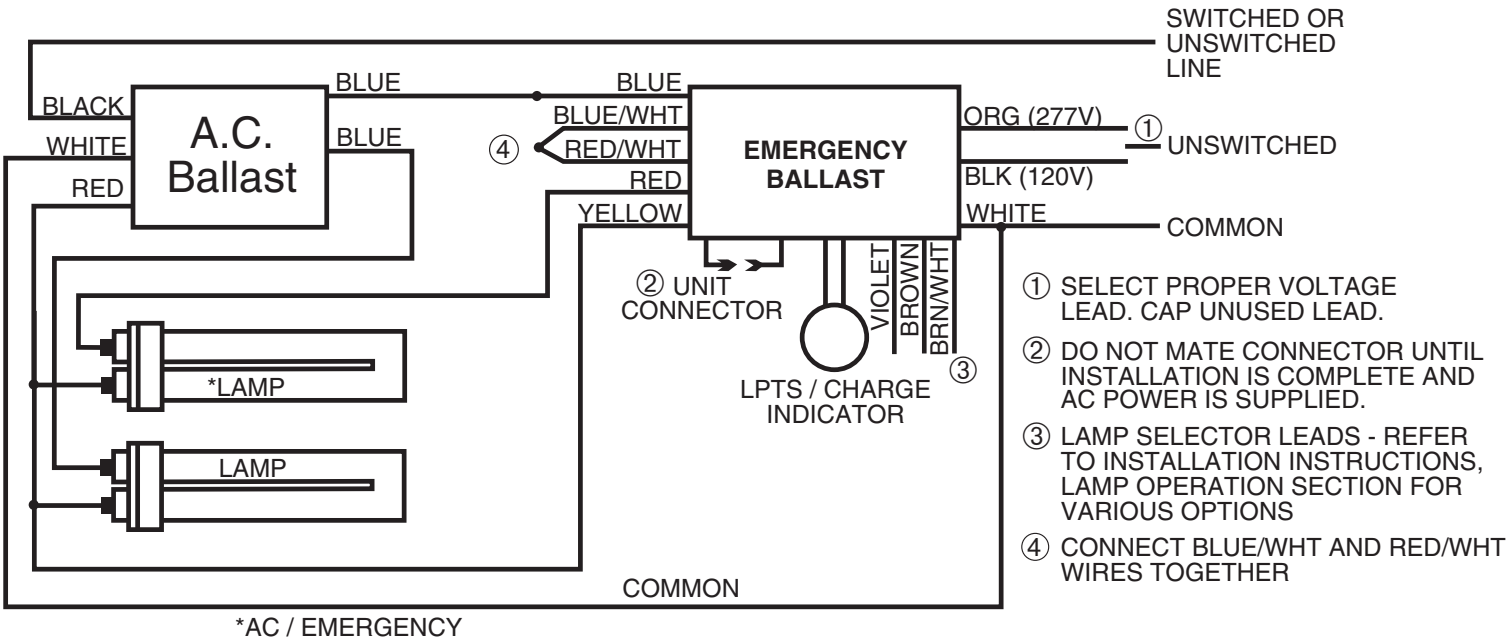
③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

4LRSB_2LEO_160

NOTES

V22 V22

TWO BIAX LAMP INSTANT START BALLAST

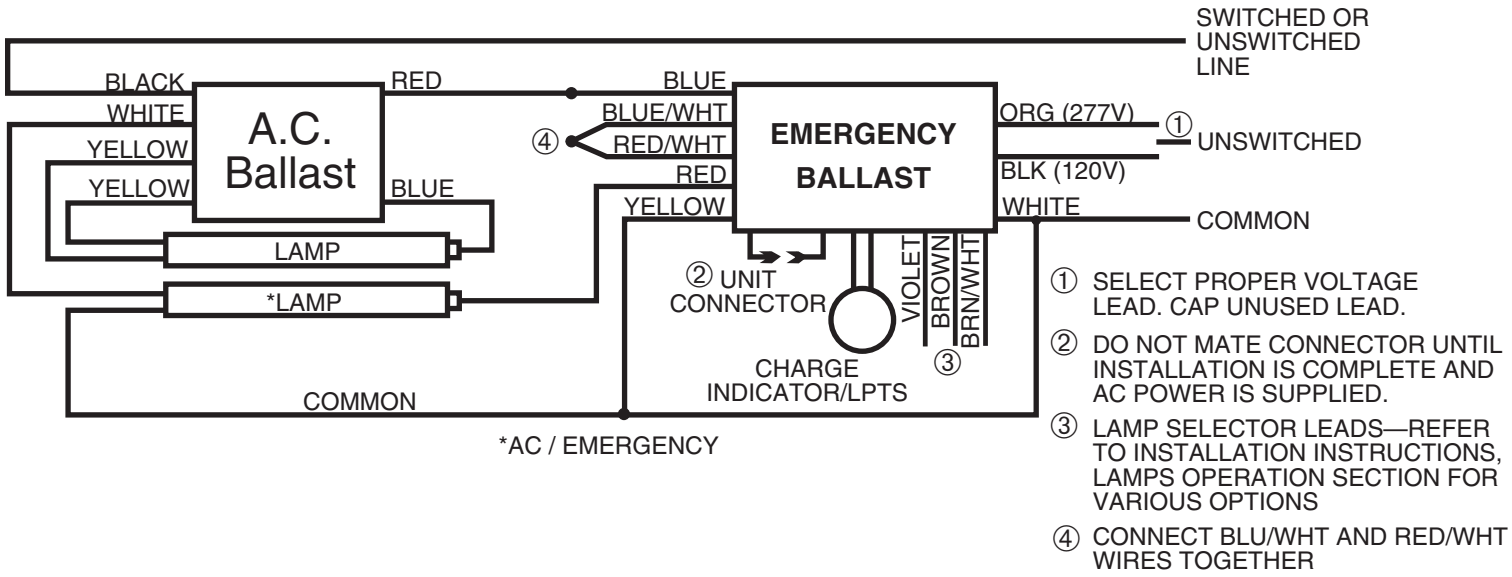


2LISBX_160

NOTES

V23 V23

TWO LAMP BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

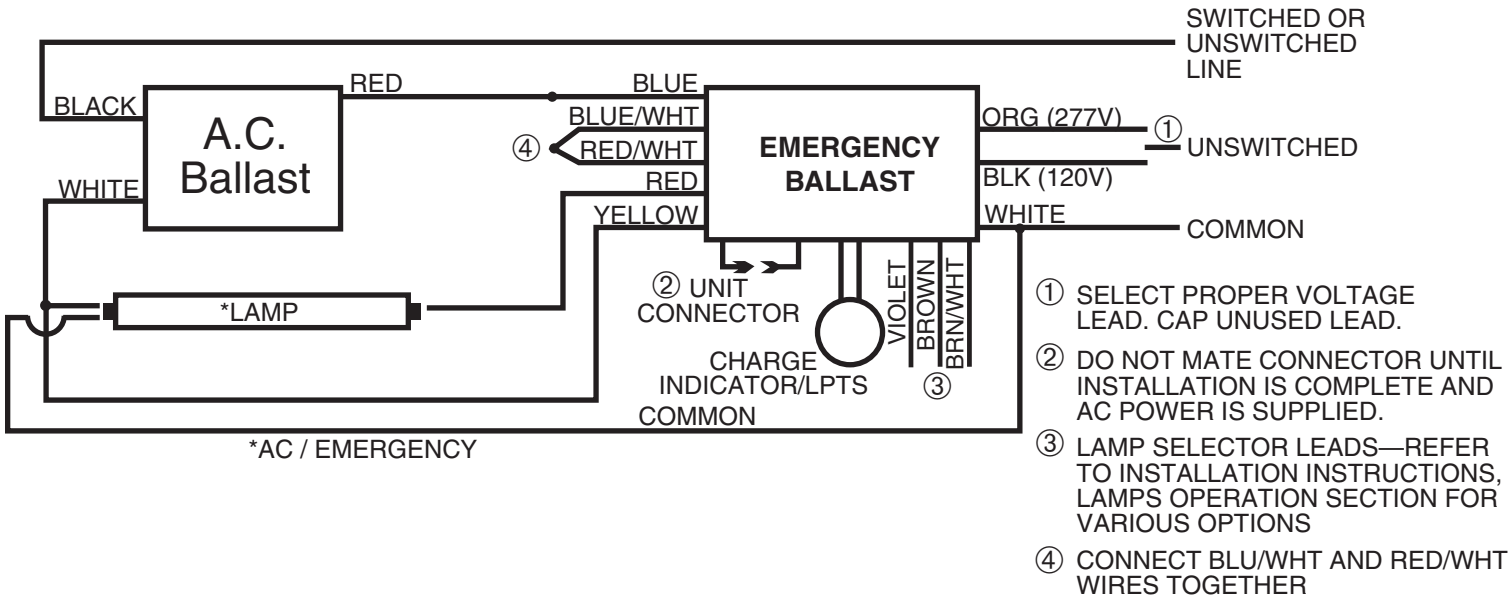
2LMB_160

NOTES

V24

V24

ONE LAMP MAGNETIC BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

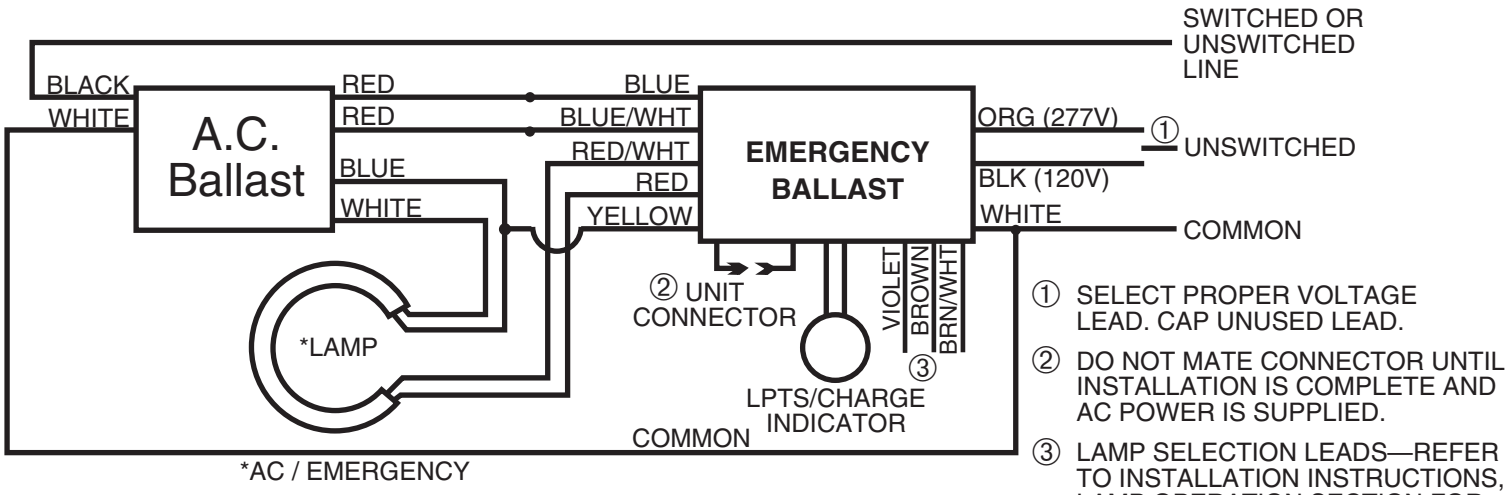
1LMB_160

NOTES

V25

V25

ONE LAMP CIRCLINE RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

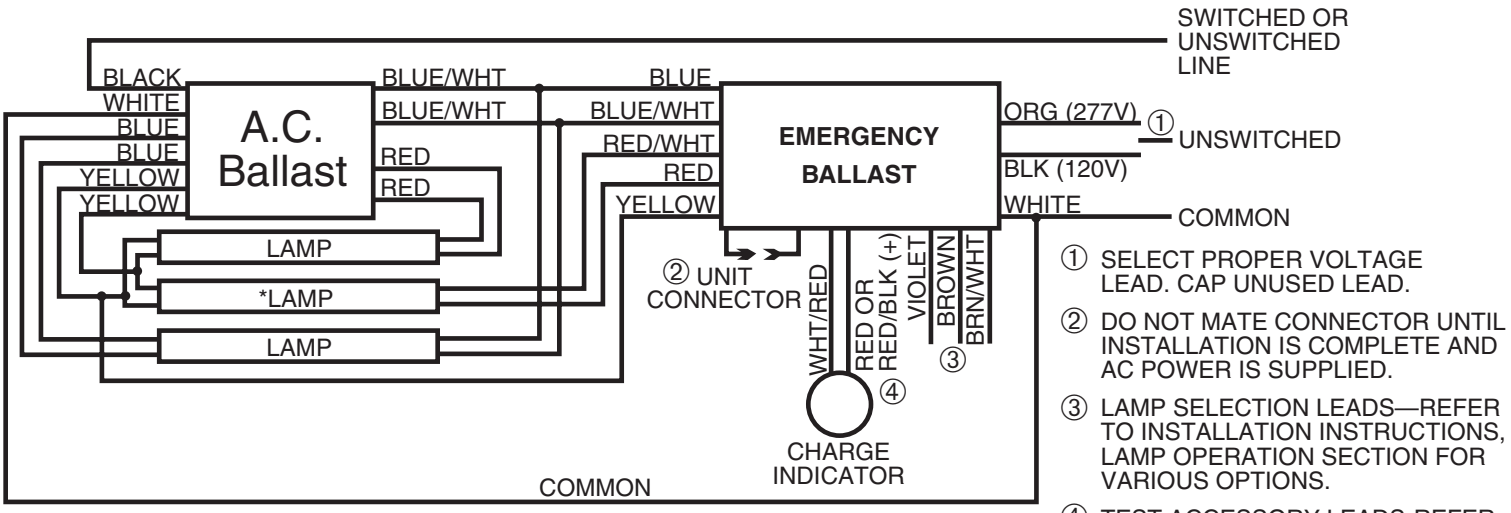
1LCRSB_160

NOTES

V26

V26

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

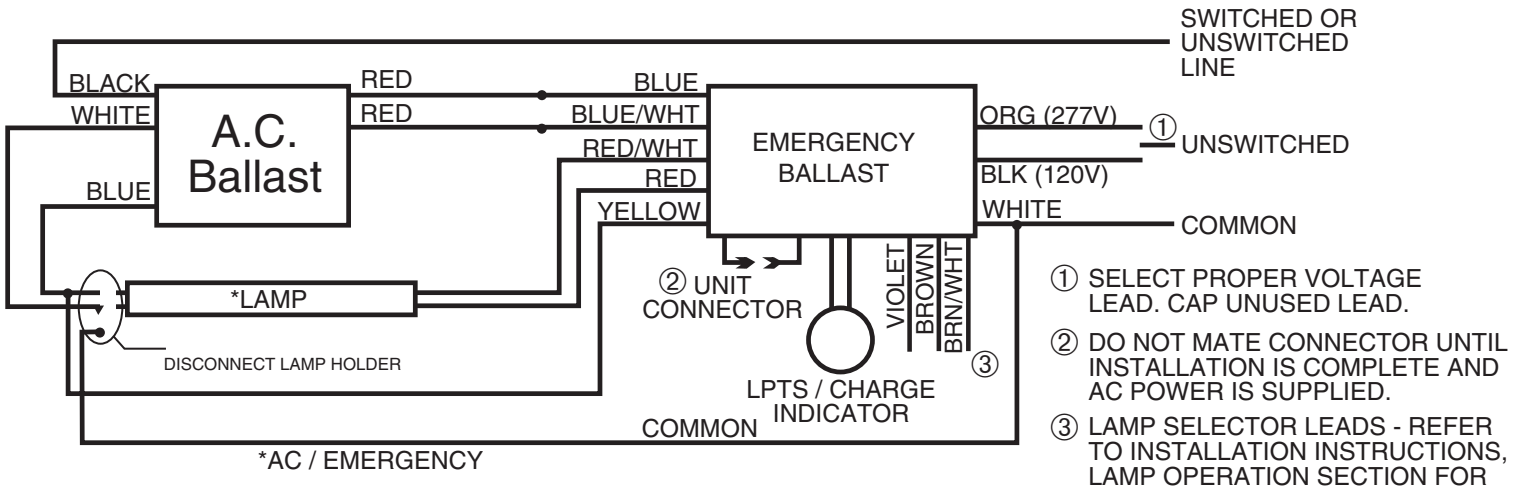
④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

3LRSB_160

NOTES

V27 V27

ONE LAMP LAG BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

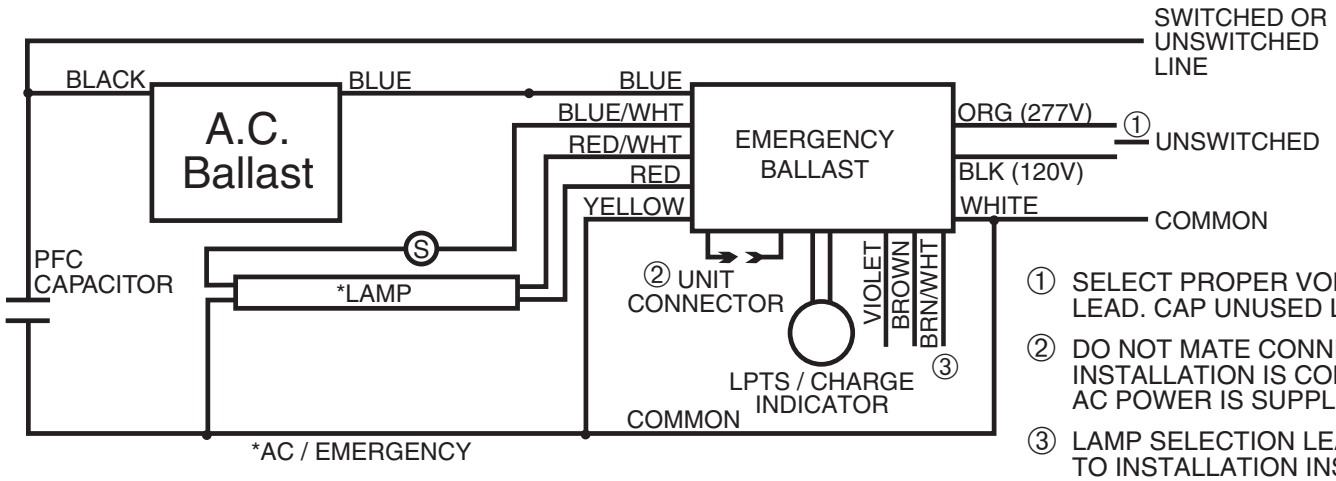
1LLAG_160

NOTES

V28

V28

ONE LAMP PRE-HEAT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

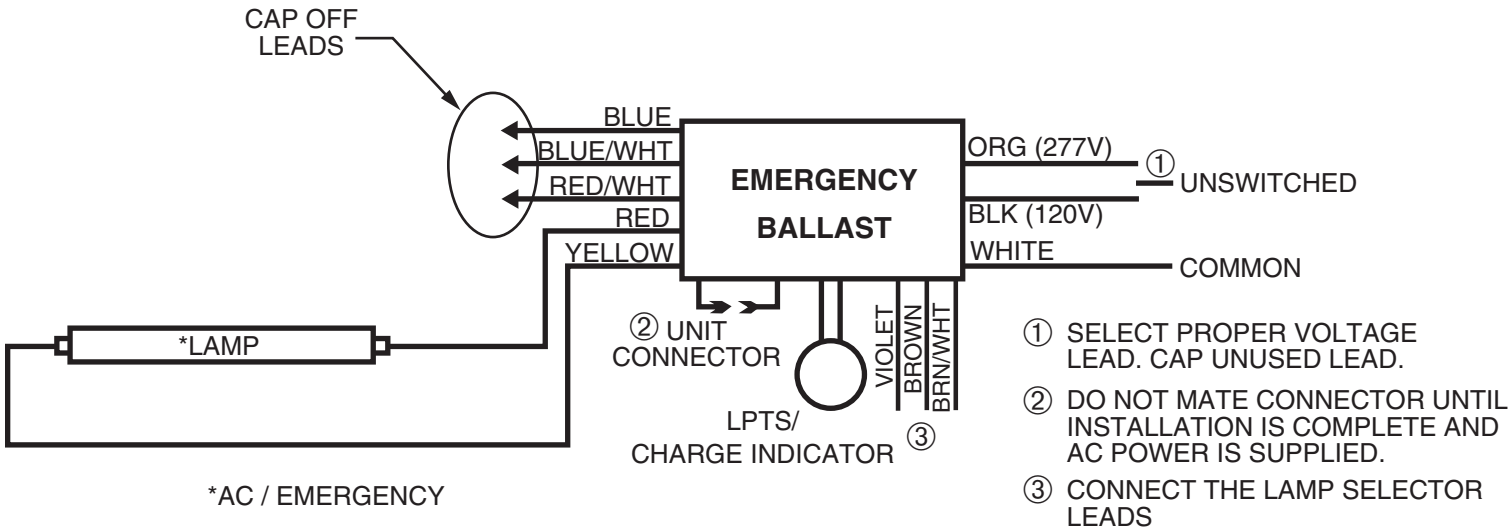
1LPHSB_160

NOTES

V29

V29

ONE LAMP EMERGENCY ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

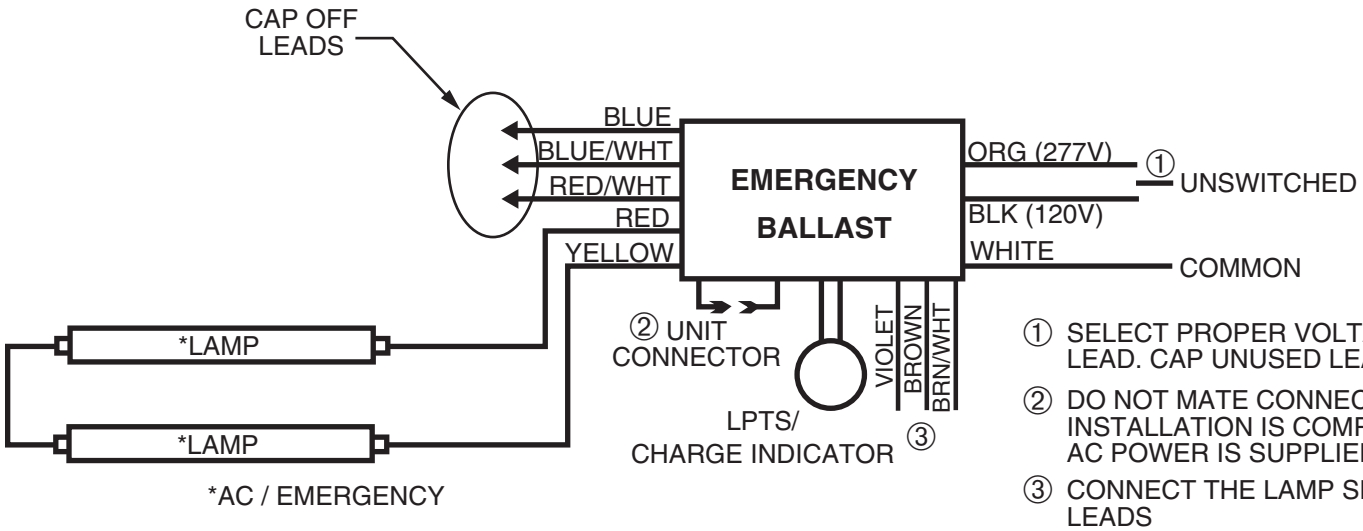
② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT THE LAMP SELECTOR LEADS

1LEO_160

NOTES

TWO LAMP EMERGENCY ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT THE LAMP SELECTOR LEADS

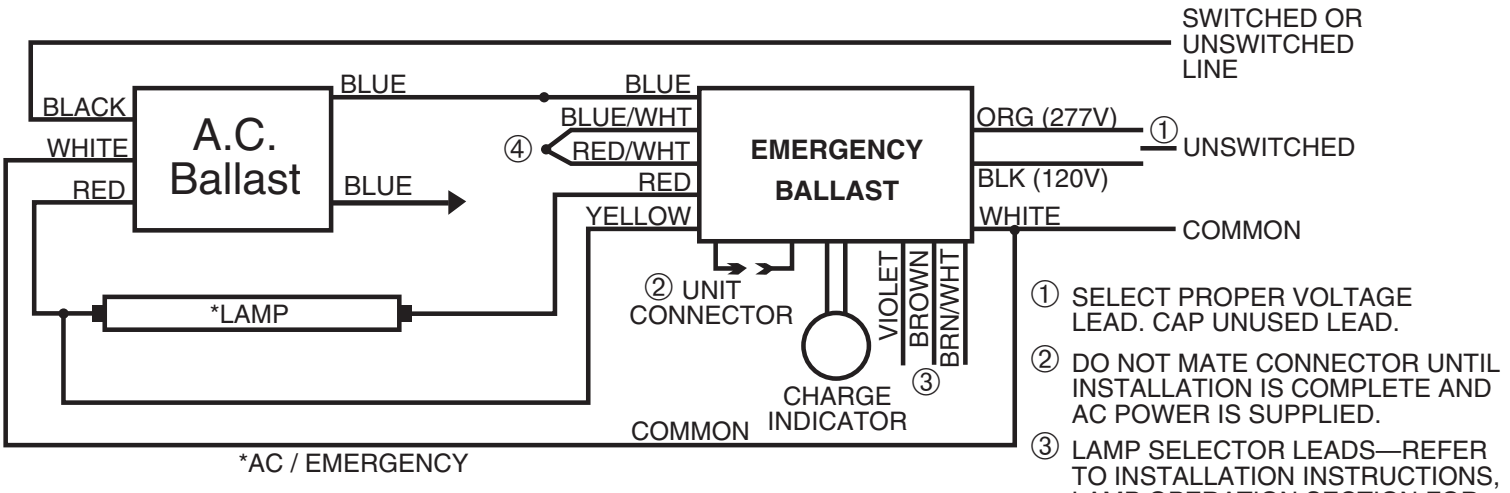
2LEO_160

NOTES

V31

V31

ONE LAMP TRIAD BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

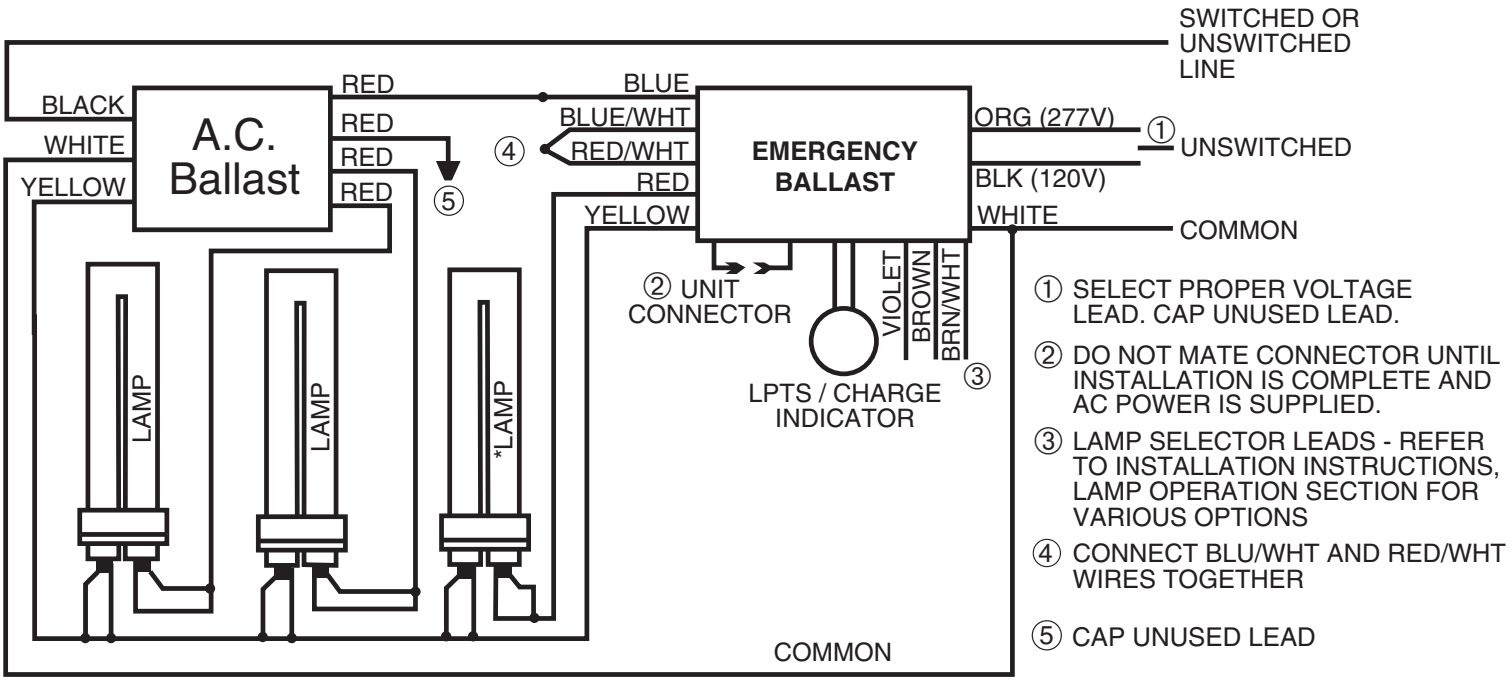
1LTB_160

NOTES

V32

V32

FULHAM WORKHORSE BALLAST



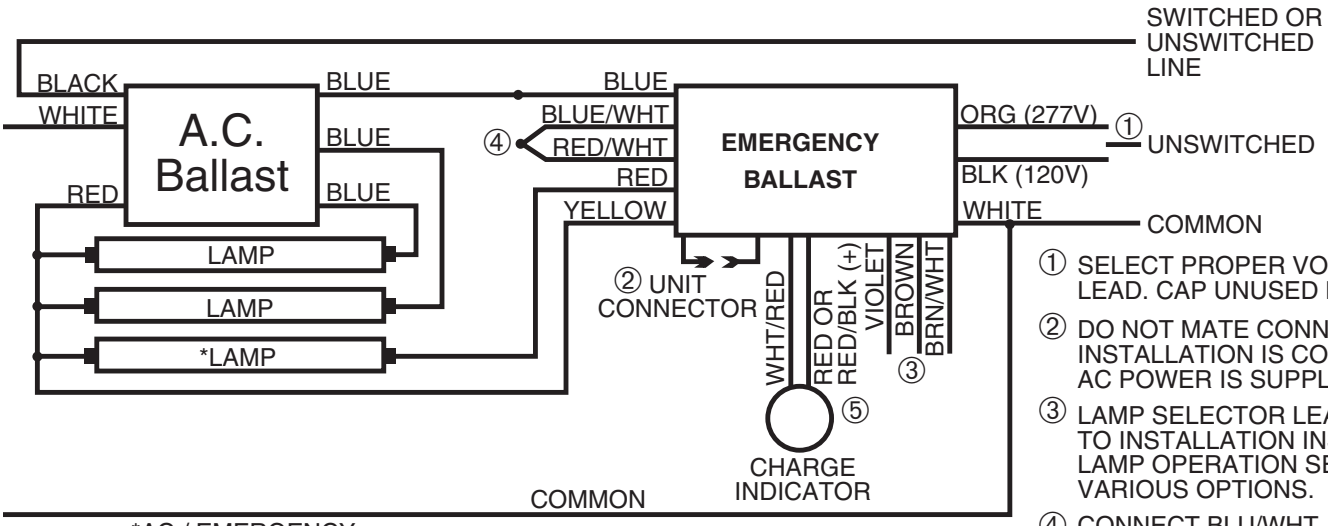
*AC / EMERGENCY

FWB_160

NOTES

V33 V33

THREE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

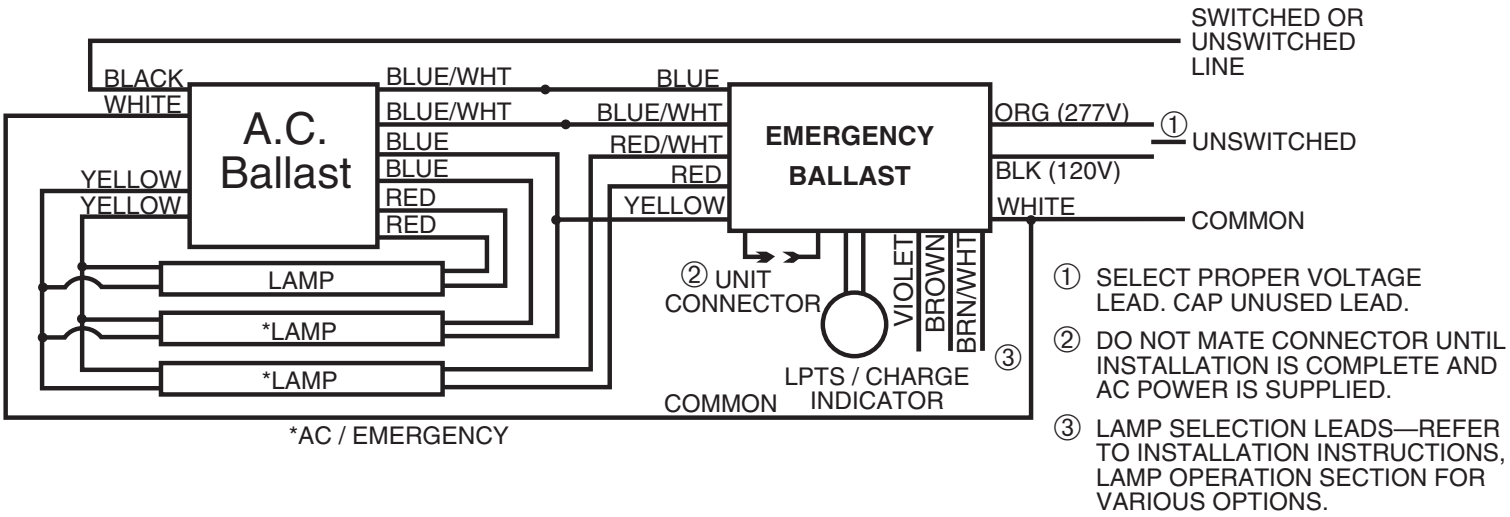
3LISB_160

NOTES

V34

V34

THREE LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

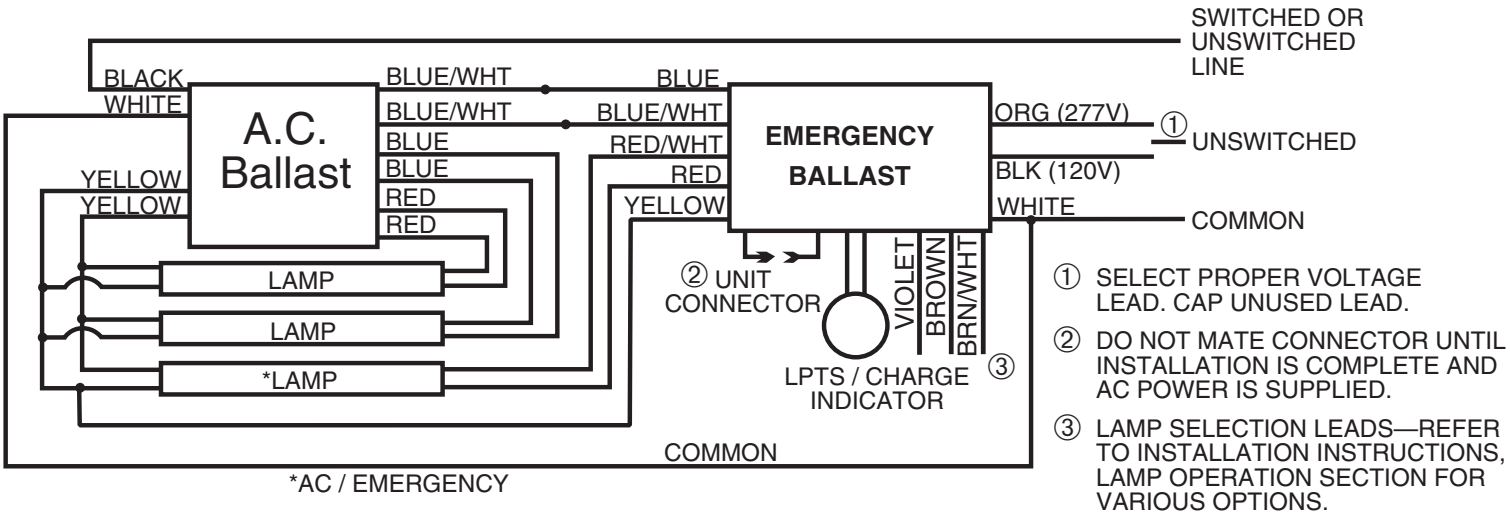
3LRSB_2LEO2_160

NOTES

V35

V35

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

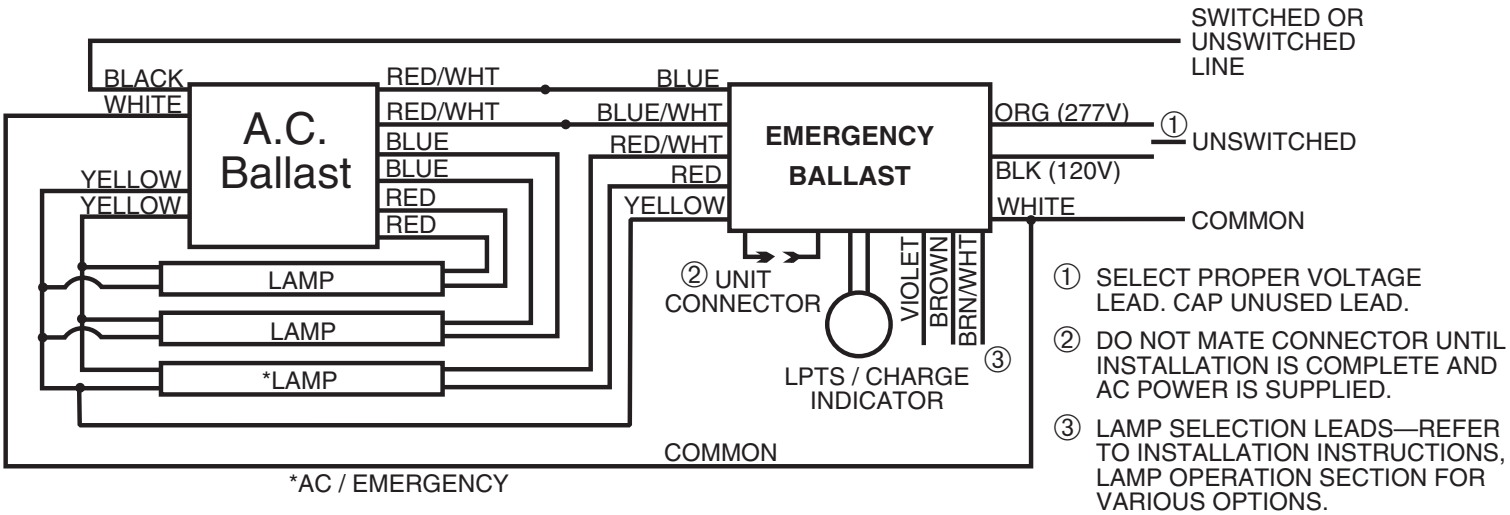
③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

3LRSB2_160

NOTES

V36 V36

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

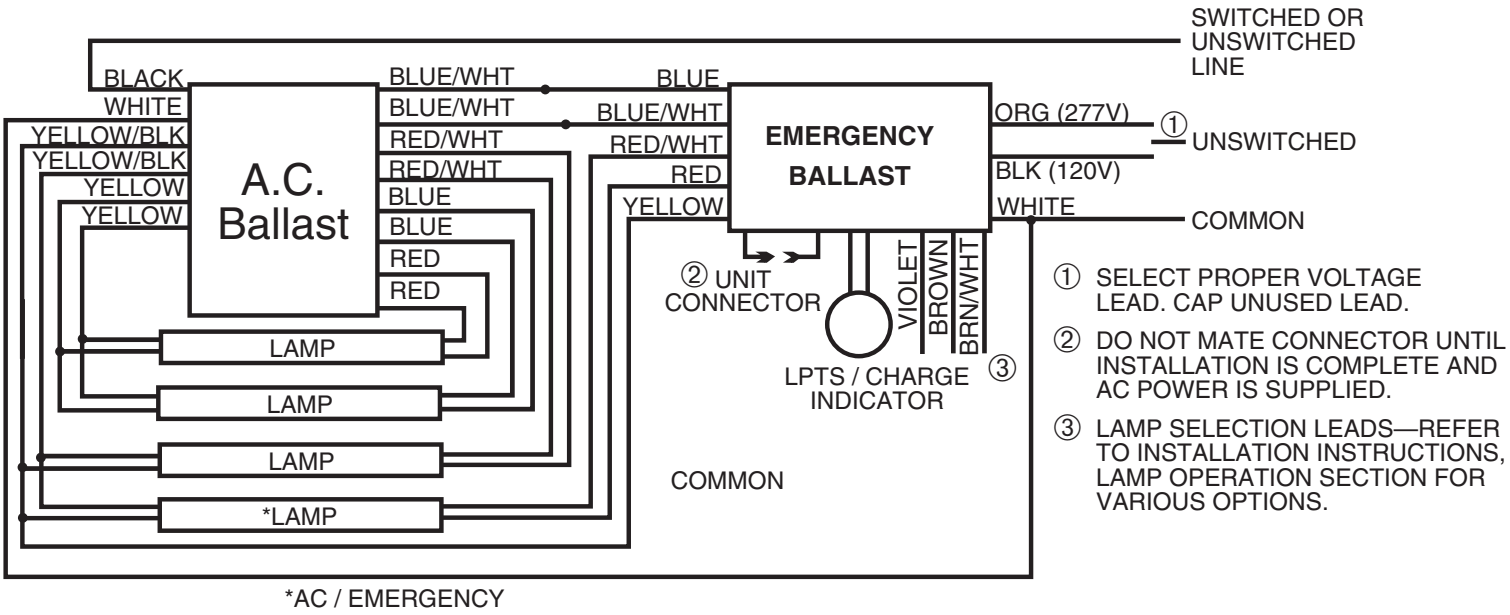
③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

3LRSB3_160

NOTES

V37 V37

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

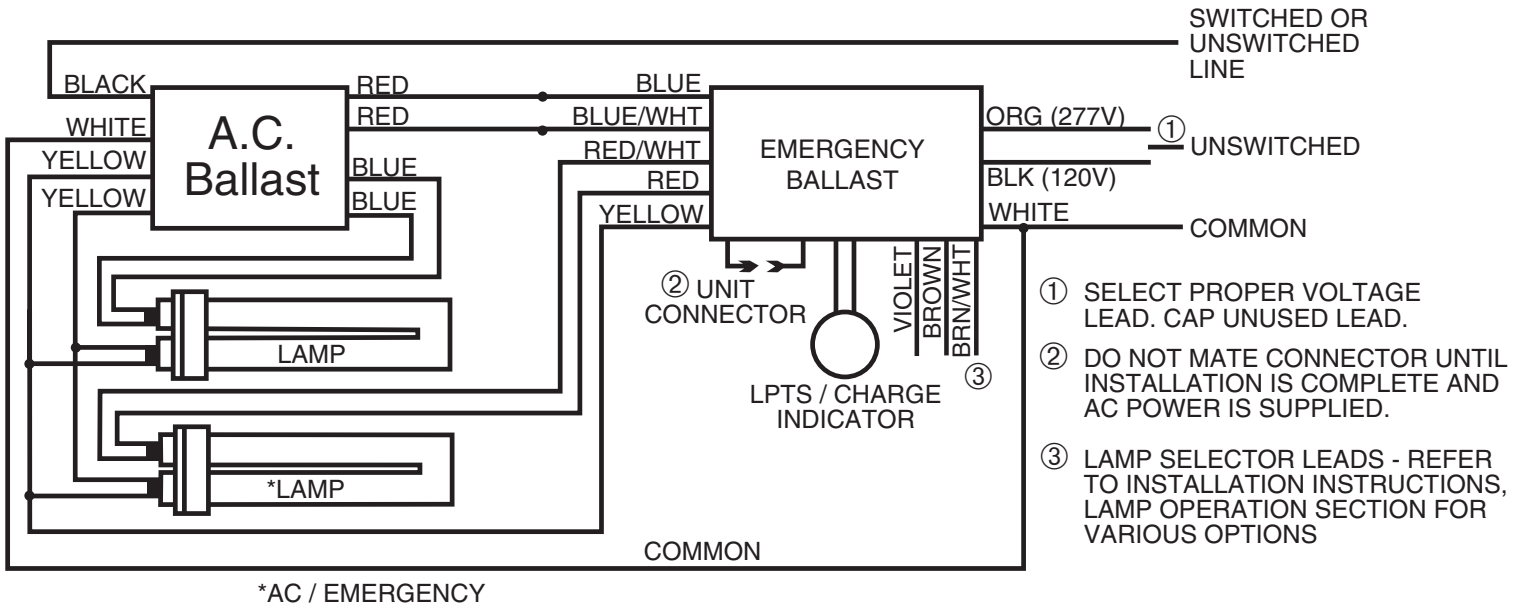
③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

4LRSB2_160

NOTES

V38 V38

TWO COMPACT LAMP RAPID START BALLAST



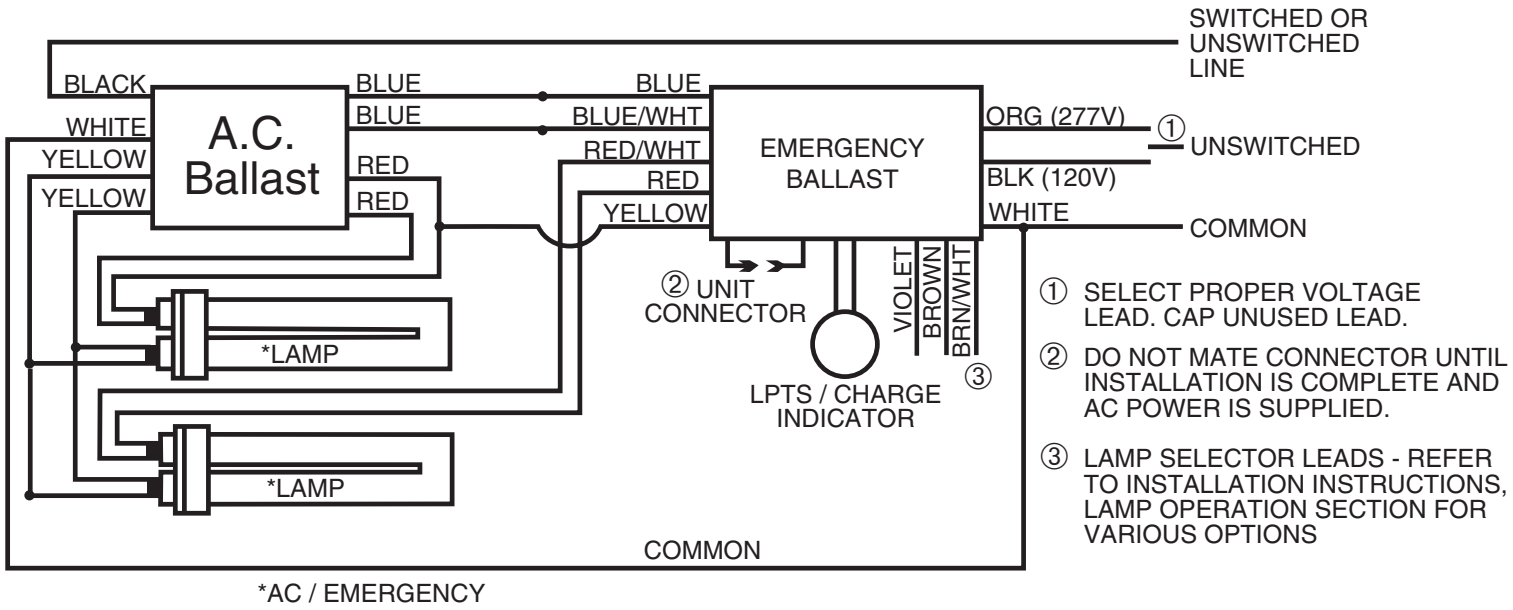
2CLRSB2_160

NOTES

V39

V39

TWO COMPACT RAPID START BALLAST TWO LAMP OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

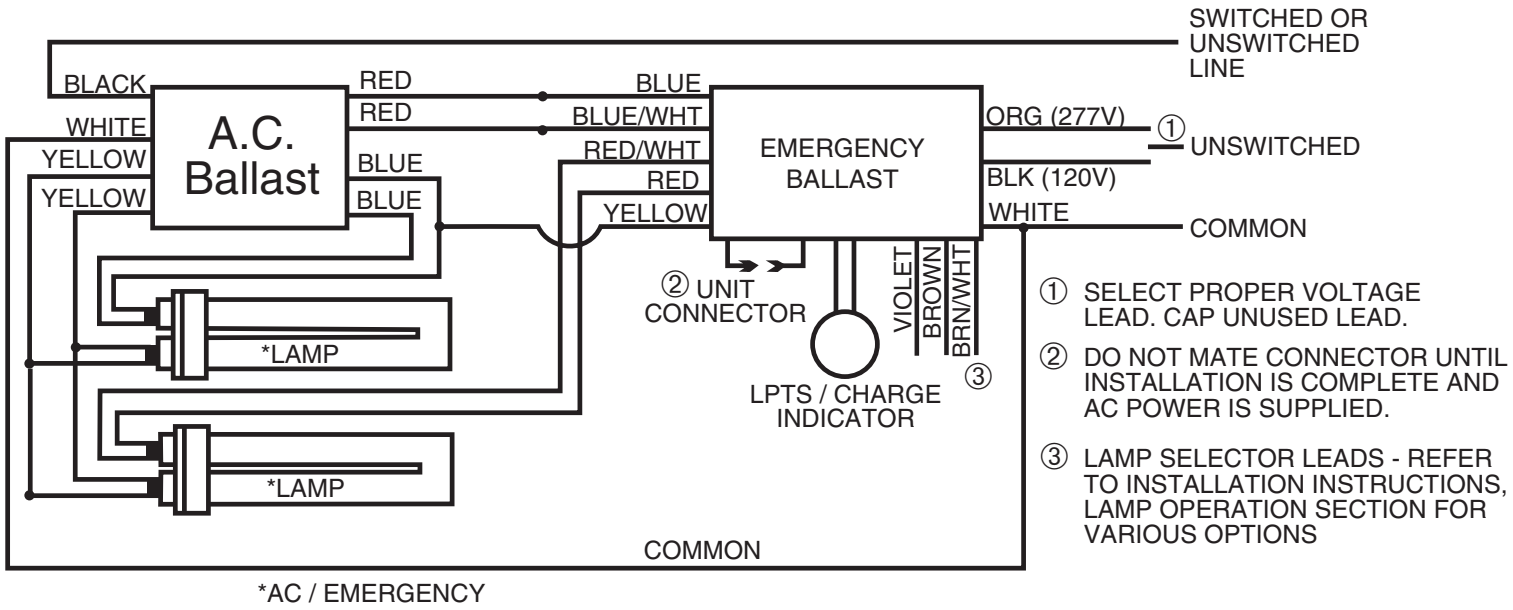
2BXLRSB2LEO_160

NOTES

V40

V40

TWO COMPACT RAPID START BALLAST TWO LAMP OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

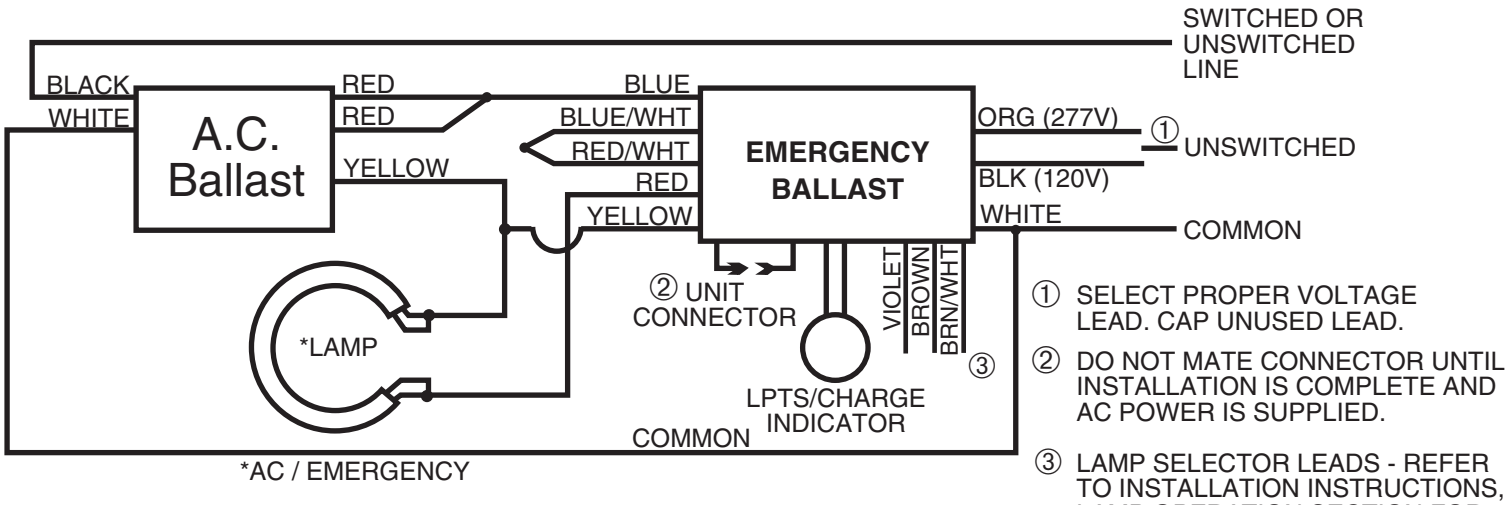
2BXLRSB2LEO2_160

NOTES

V41

V41

ONE LAMP CIRCLINE RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

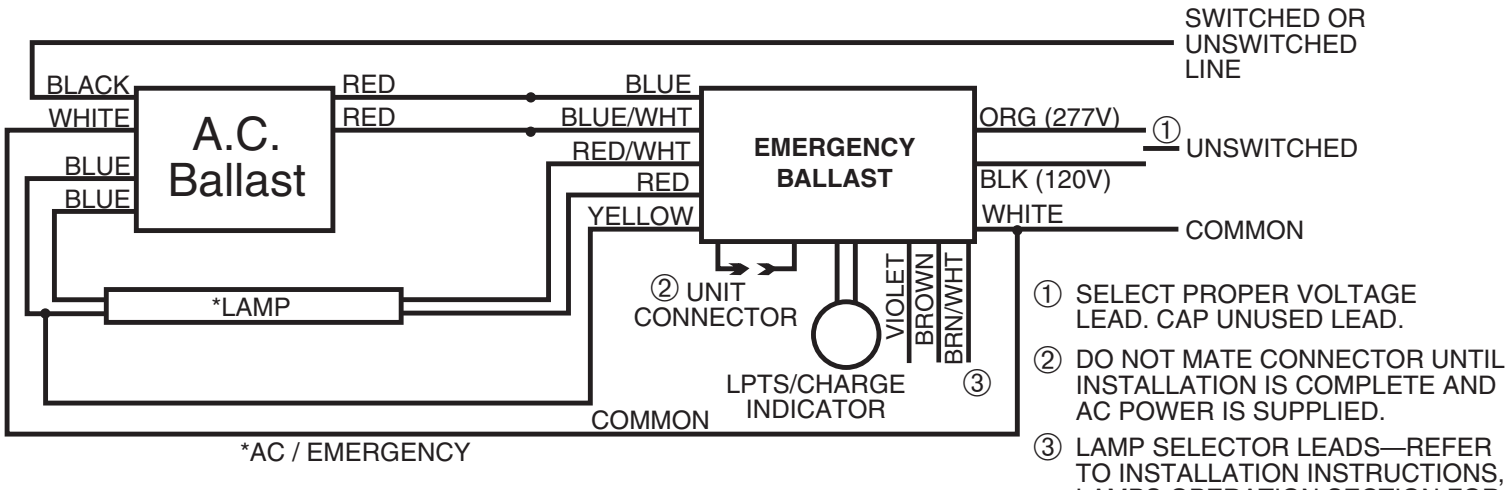
1LCRSB_160F

NOTES

V42

V42

ONE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

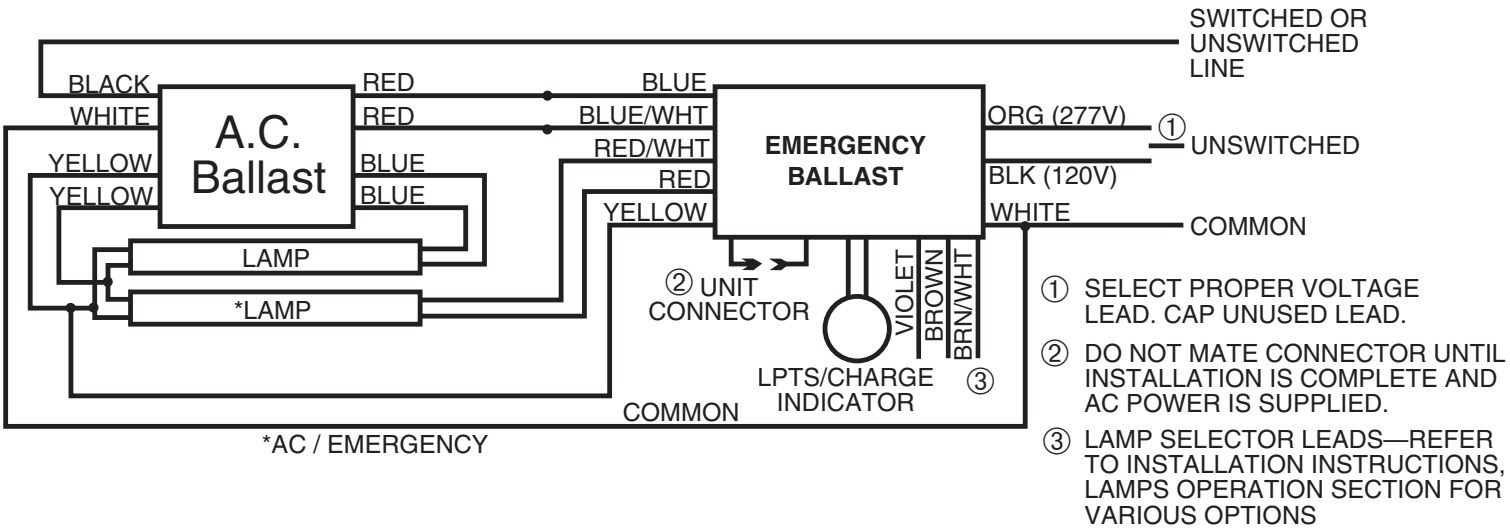
1LRSB_160_2

NOTES

V43

V43

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

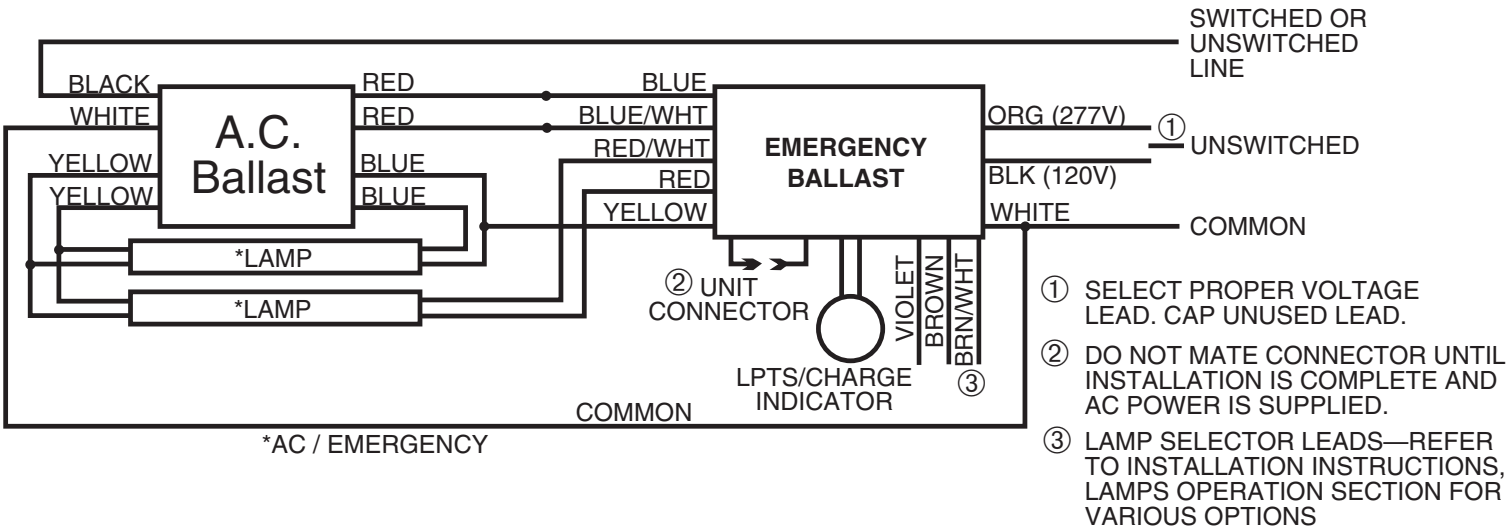
2LRSB_160_2

NOTES

V44

V44

TWO LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

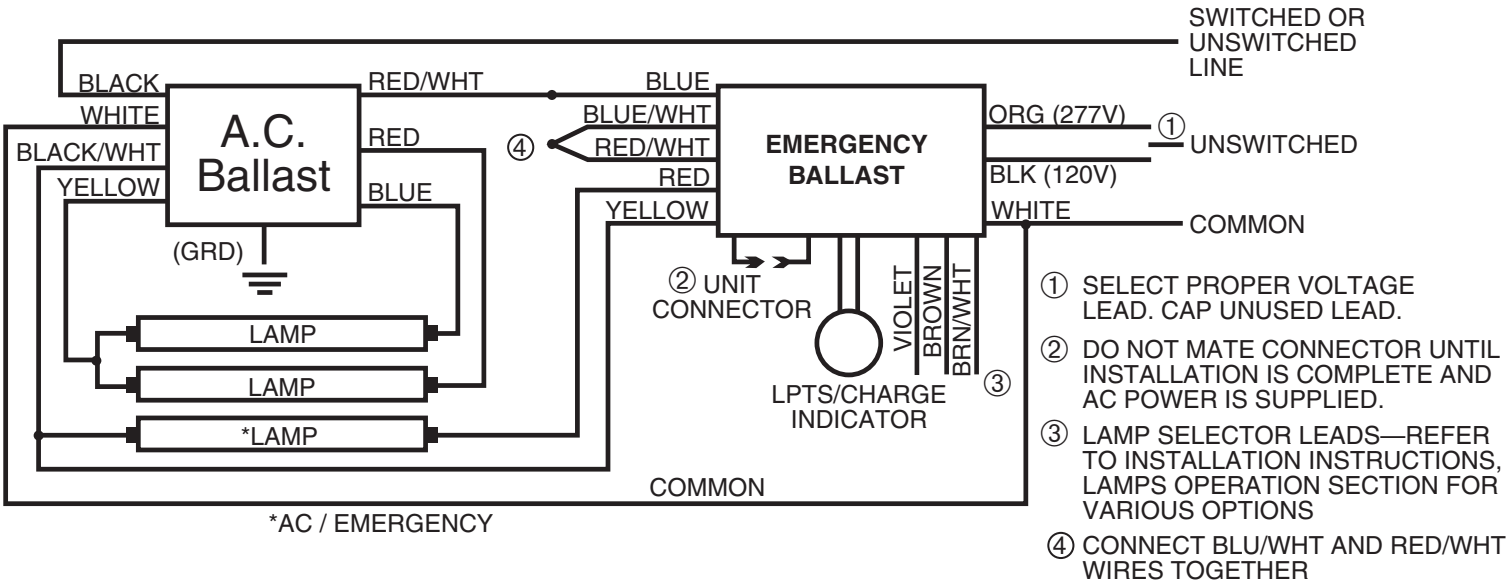
2LRSB_2LEO_1602

NOTES

V45

V45

THREE LAMP INSTANT START BALLAST



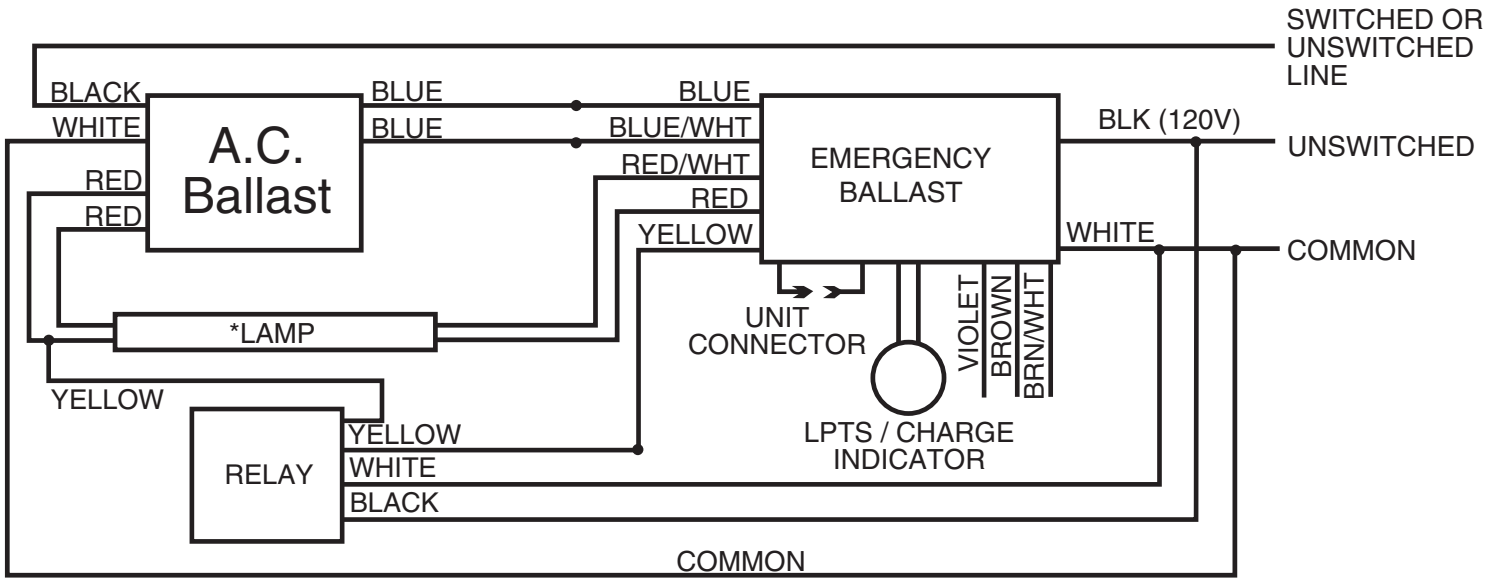
3LISB_160_3

NOTES

V46

V46

ONE LAMP RAPID START BALLAST WITH RELAY



*AC / EMERGENCY

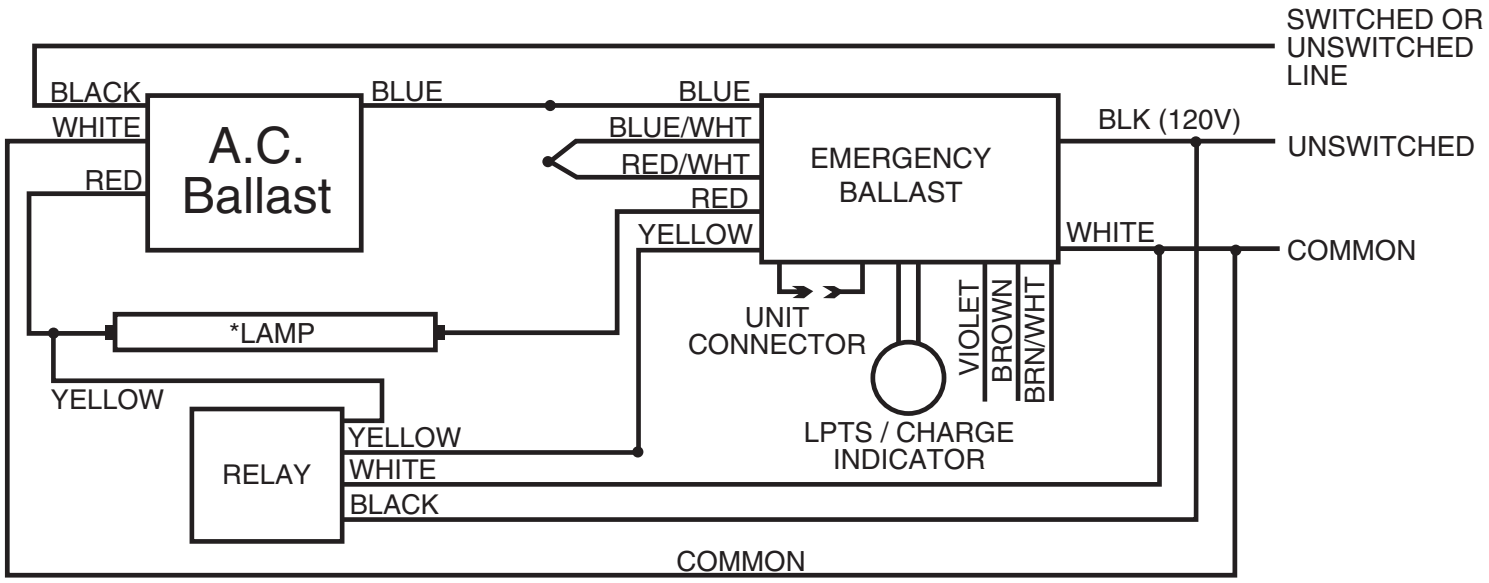
1LRSBWR_160

NOTES

V47

V47

ONE LAMP INSTANT START BALLAST WITH RELAY



*AC / EMERGENCY

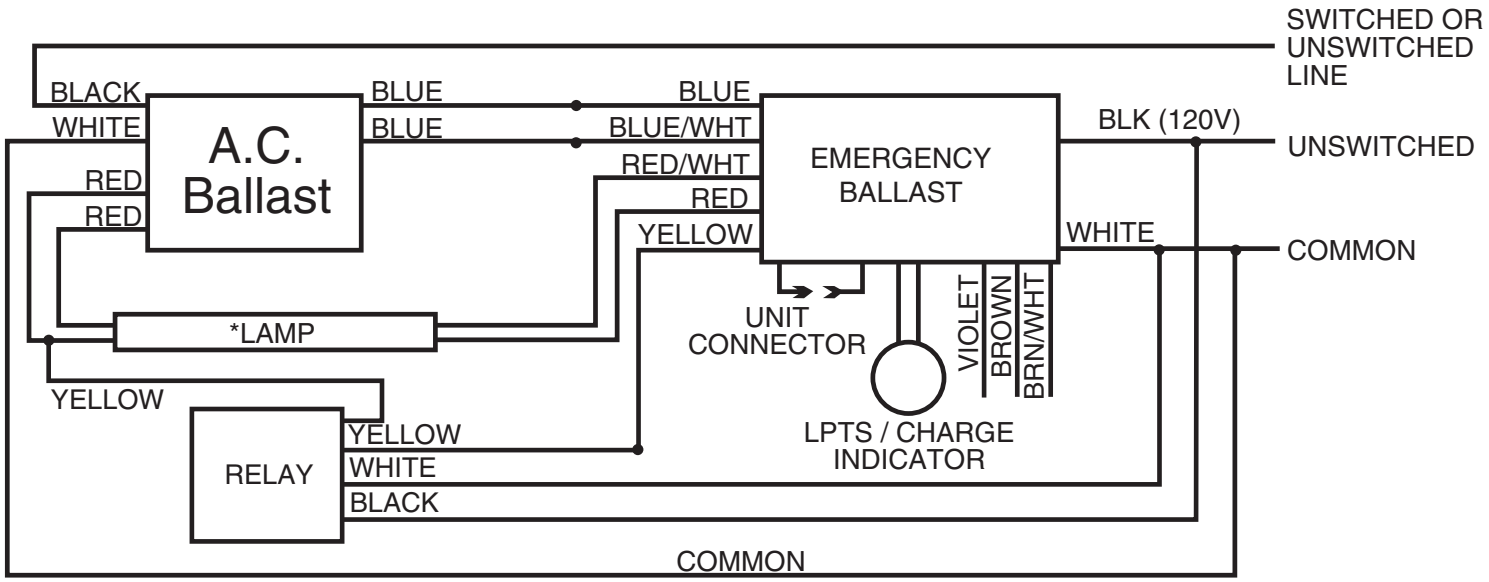
1LISBWR_160

NOTES

V48

V48

ONE LAMP RAPID START BALLAST WITH RELAY



*AC / EMERGENCY

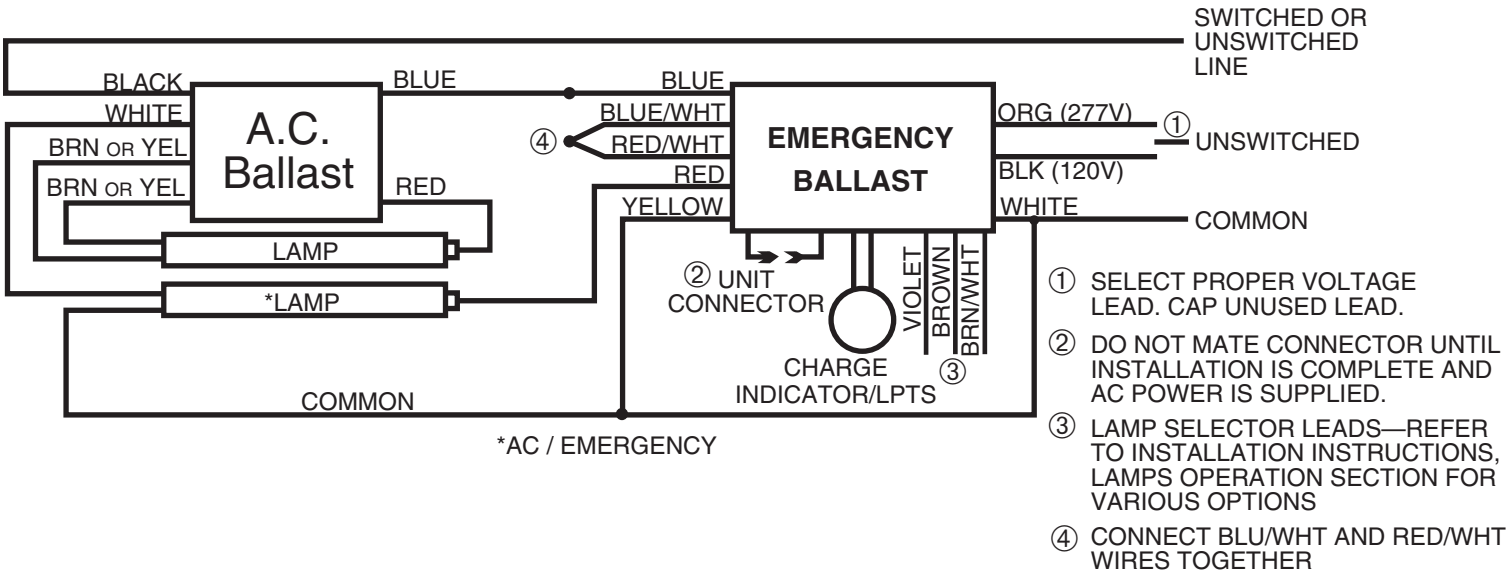
1LRSBWR_160

NOTES

V49

V49

TWO LAMP SERIES LEAD BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

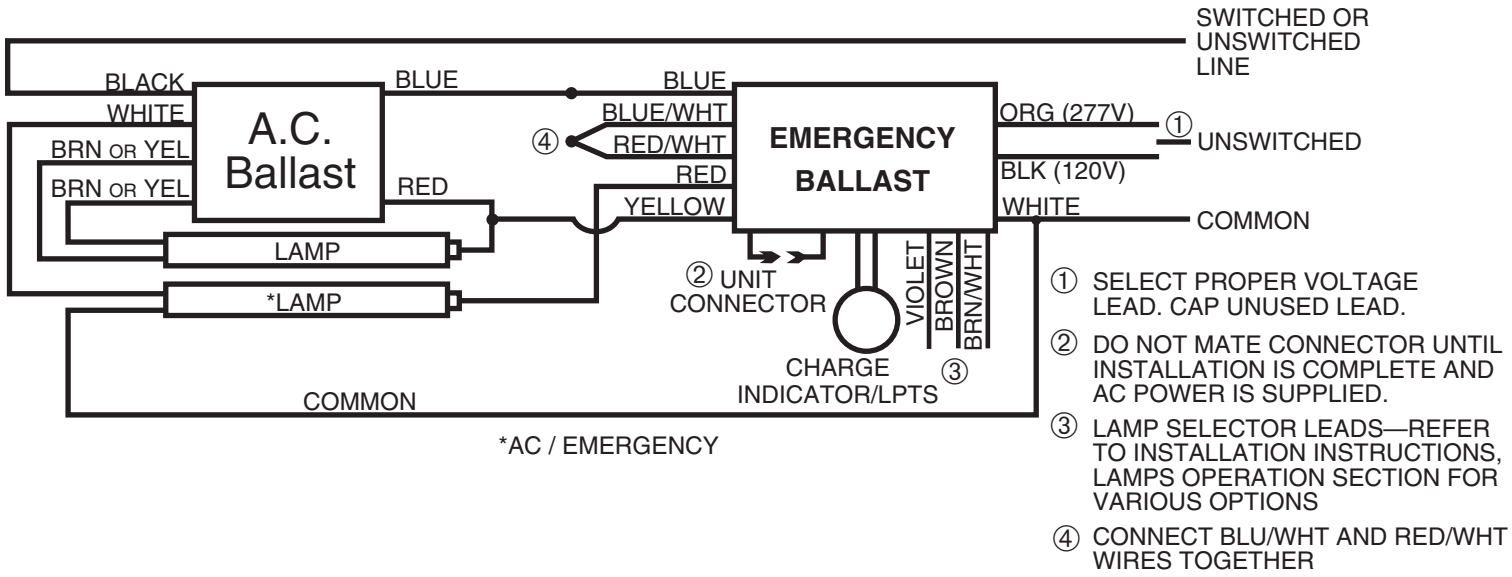
2LSL_160

NOTES

V50

V50

TWO LAMP SERIES LEAD BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

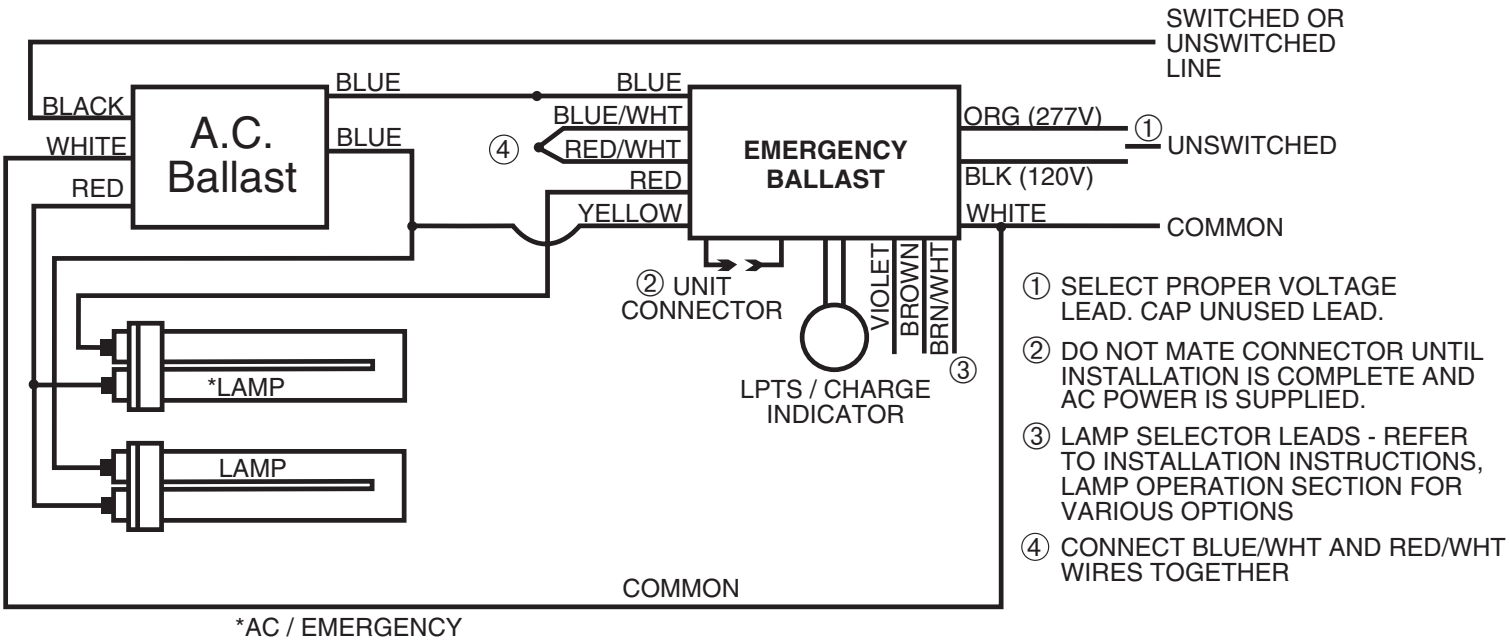
2LSL_2LEO_160

NOTES

V51

V51

TWO BIAX LAMP INSTANT START BALLAST TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLUE/WHT AND RED/WHT WIRES TOGETHER

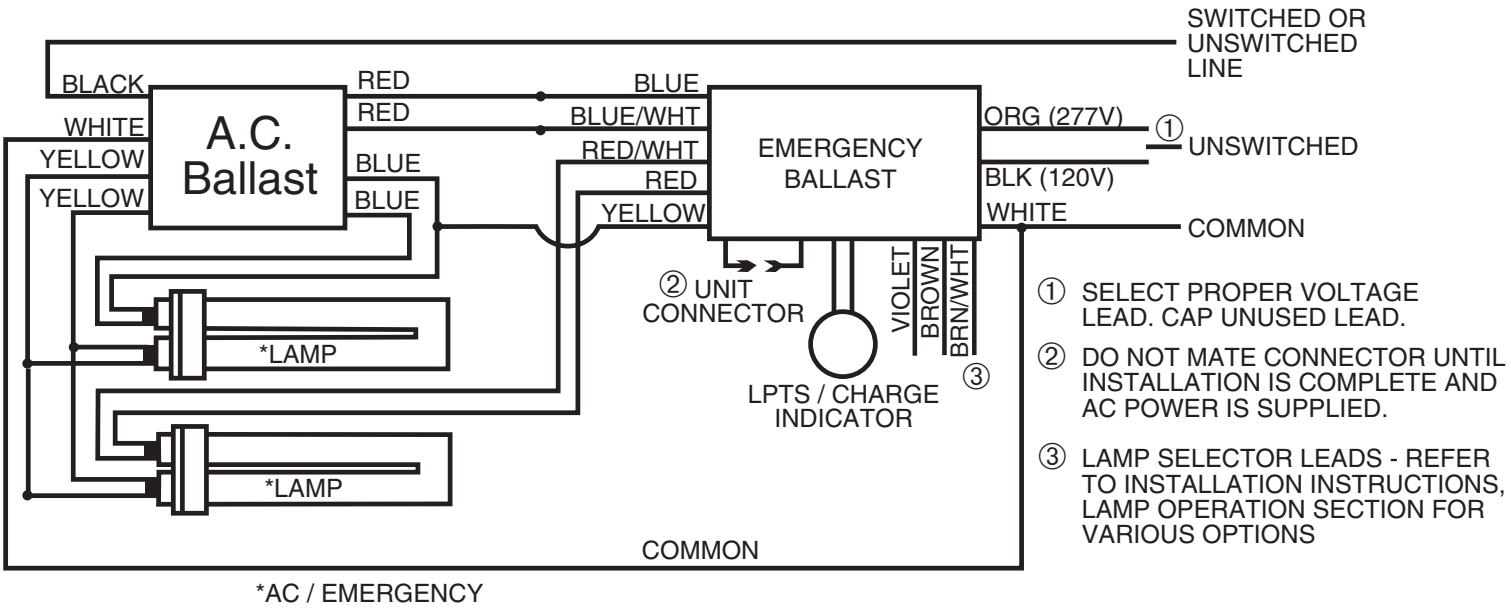
2LISBX_2LEO_160

NOTES

V52

V52

TWO COMPACT RAPID START BALLAST TWO LAMP OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

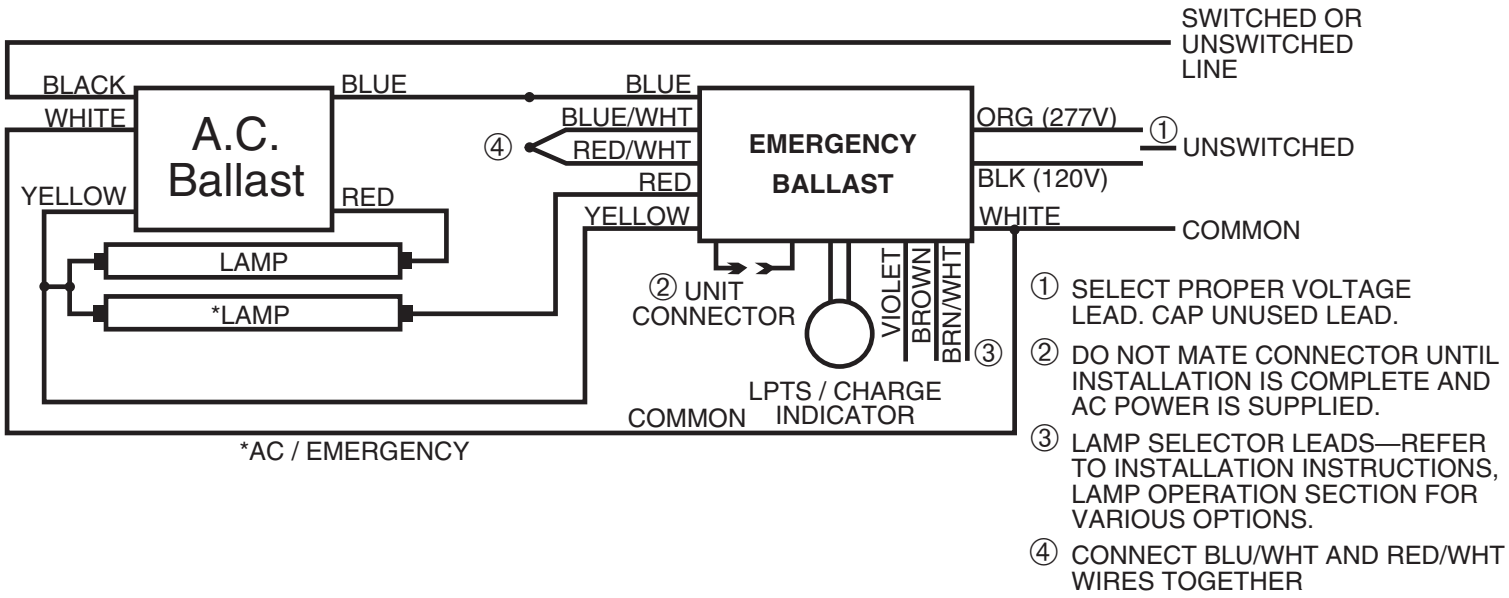
③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

2BXLRSB2LEO2_160

NOTES

V53 V53

TWO LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

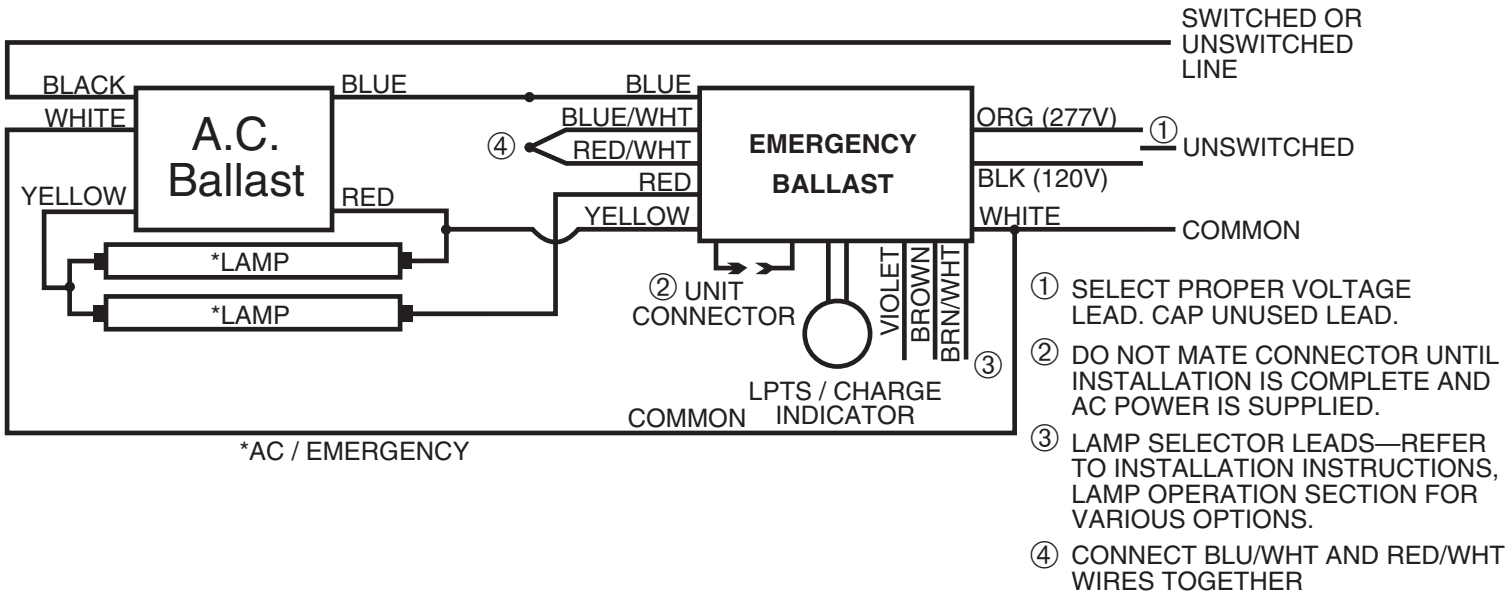
2LISBESI_160

NOTES

V54

V54

TWO LAMP INSTANT START BALLAST TWO LAMP OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

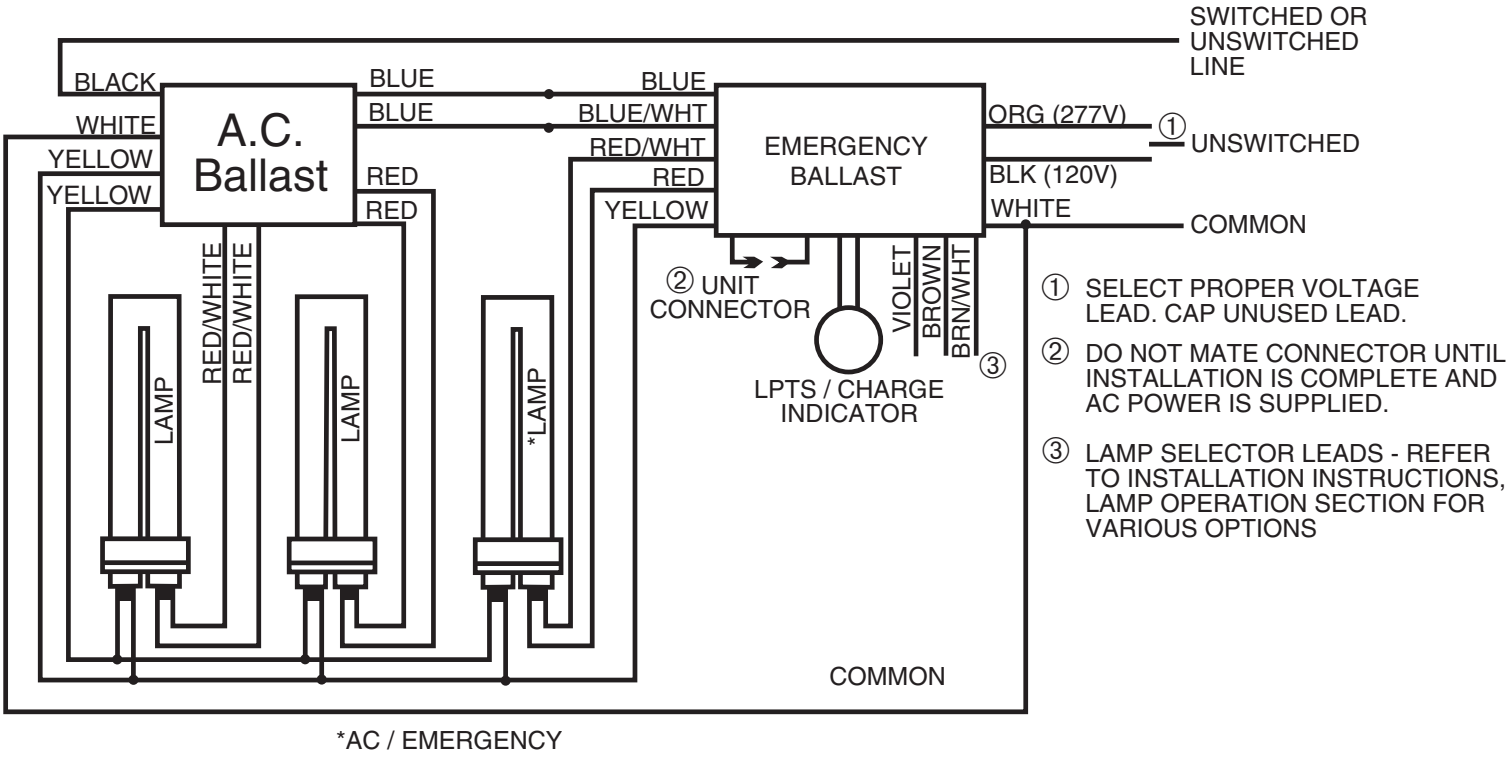
2LISBESI_2LEO_160

NOTES

V55

V55

THREE BIAX RAPID START BALLAST



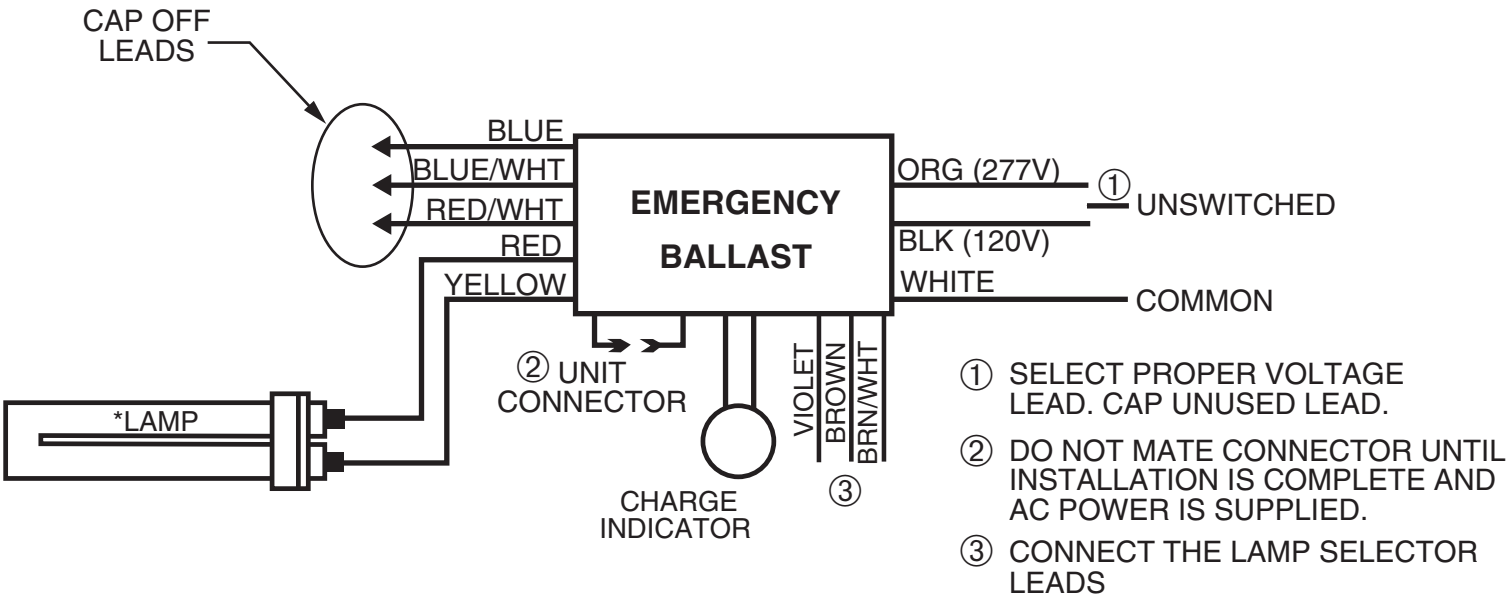
*AC / EMERGENCY

3BXLRSB_160

NOTES

V56 V56

ONE COMPACT LAMP EMERGENCY ONLY



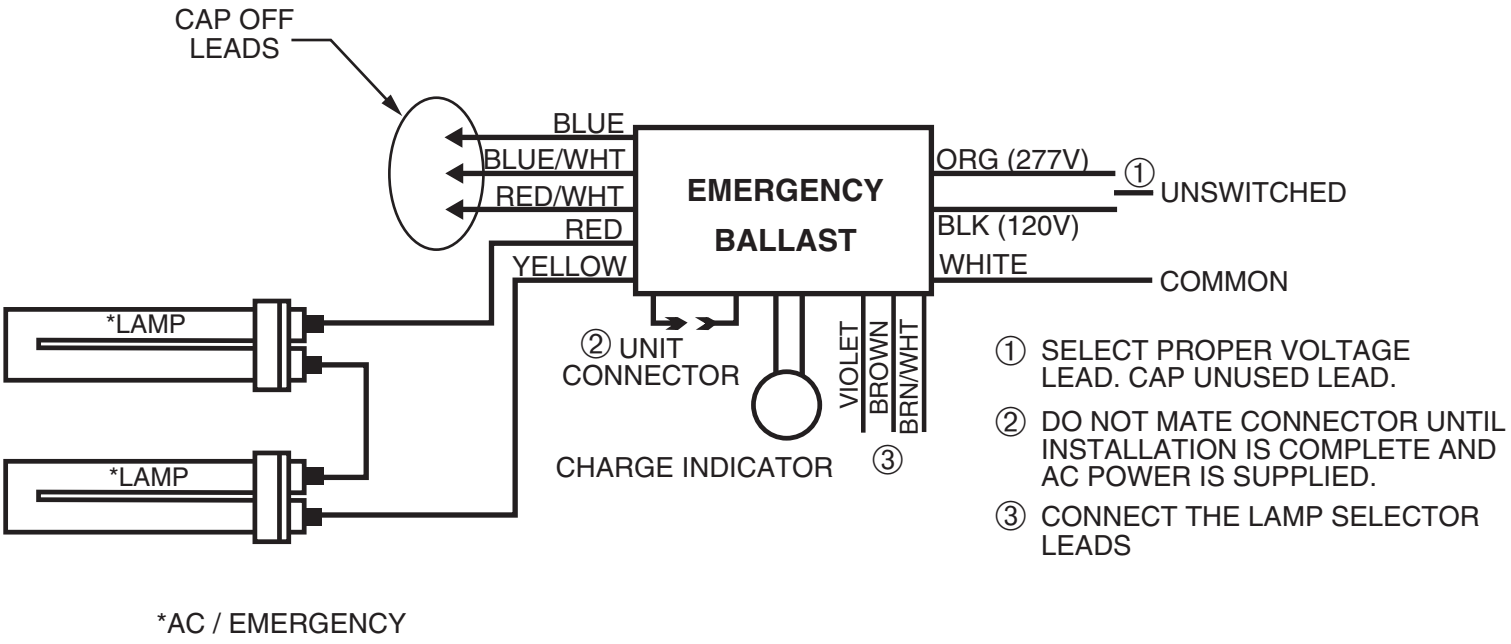
*AC / EMERGENCY

1CLEO_160

NOTES

V57 V57

TWO COMPACT LAMP EMERGENCY ONLY



*AC / EMERGENCY

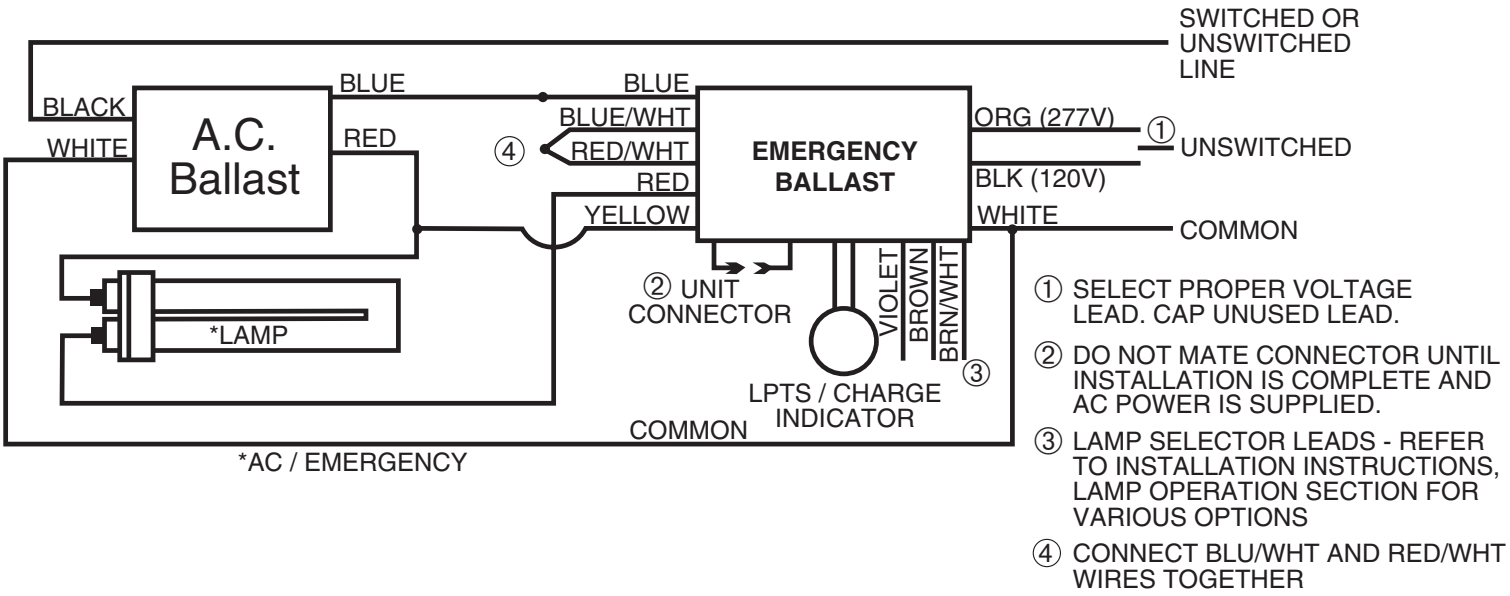
2CLEO_160_2

NOTES

V58

V58

ONE LAMP INSTANT START BIAX



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

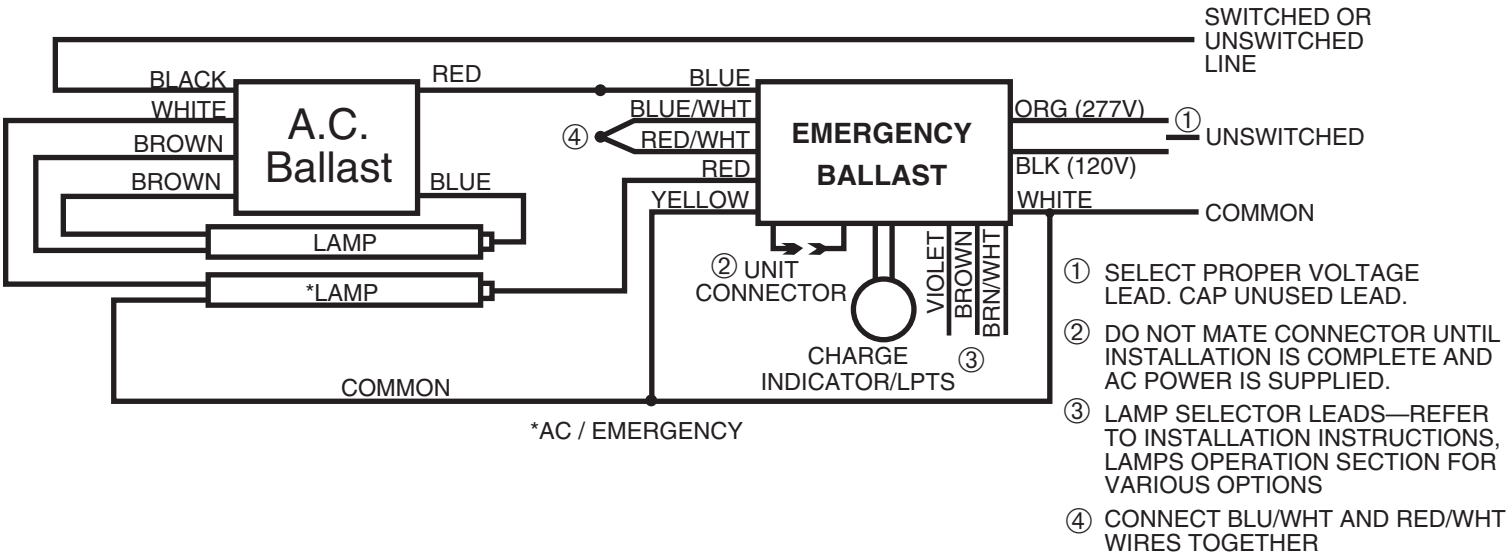
1LBX_160_2

NOTES

V59

V59

TWO LAMP SERIES LEAD BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

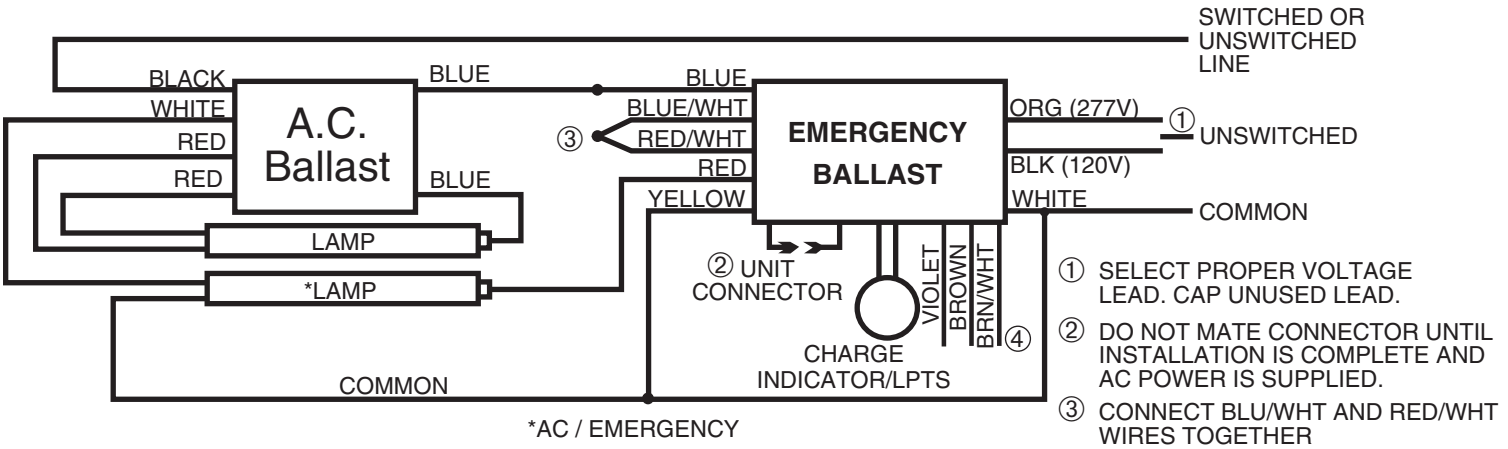
2LSL_160_2

NOTES

V60

V60

TWO LAMP SERIES LEAD BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

④ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

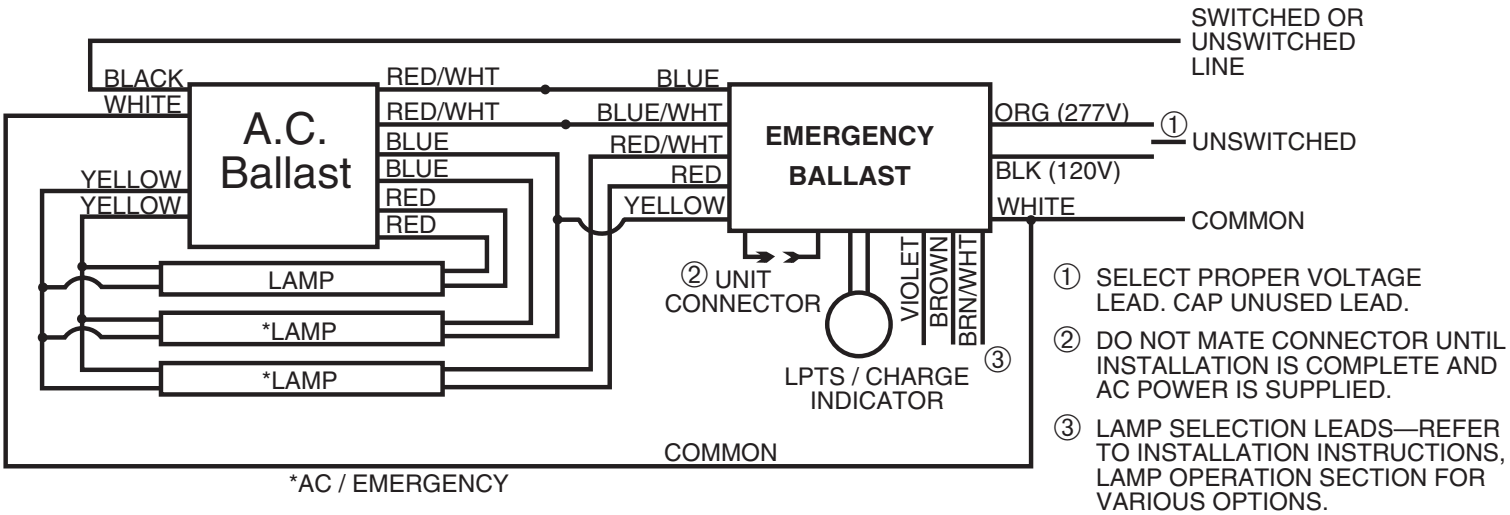
2LSL_160_3

NOTES

V61

V61

THREE LAMP RAPID START BALLAST WITH TWO LAMP OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

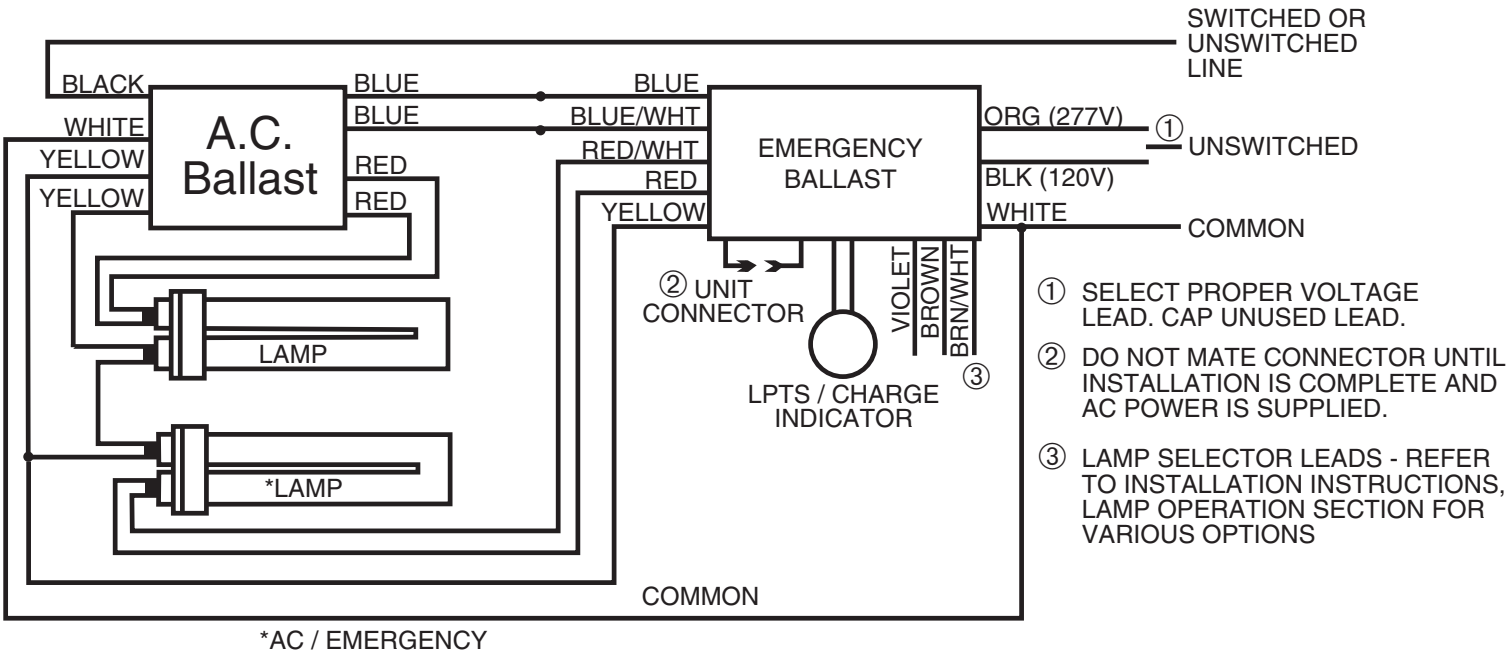
3LRSB3_160_2LEO

NOTES

V62

V62

TWO COMPACT RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

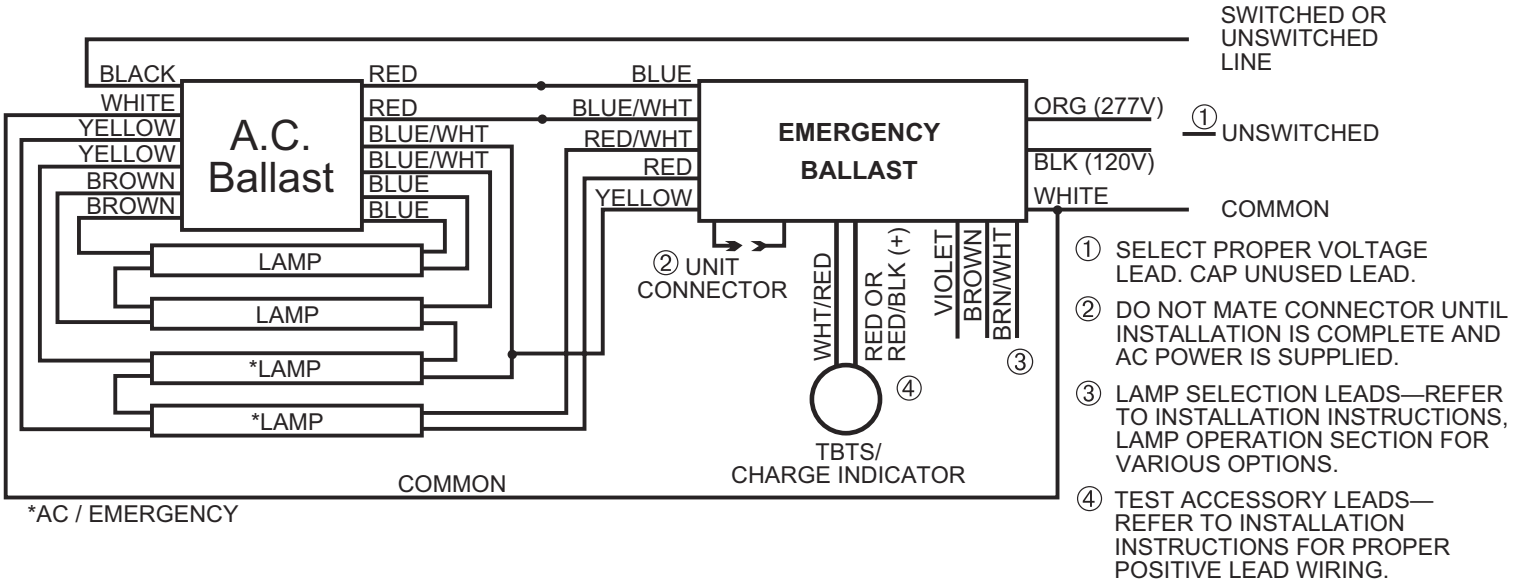
2BXLRSB_160

NOTES

V63

V63

FOUR LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS—REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POSITIVE LEAD WIRING.

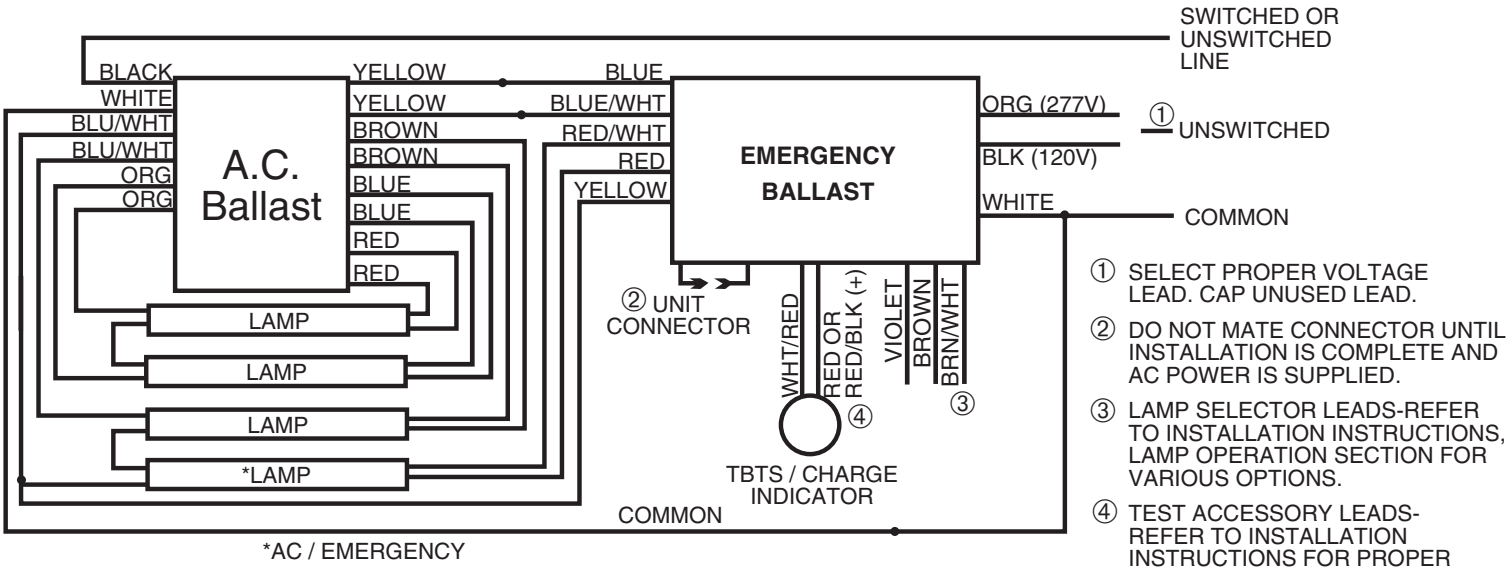
4LRSB_2LEO_2_160

NOTES

V64

V64

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS-REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

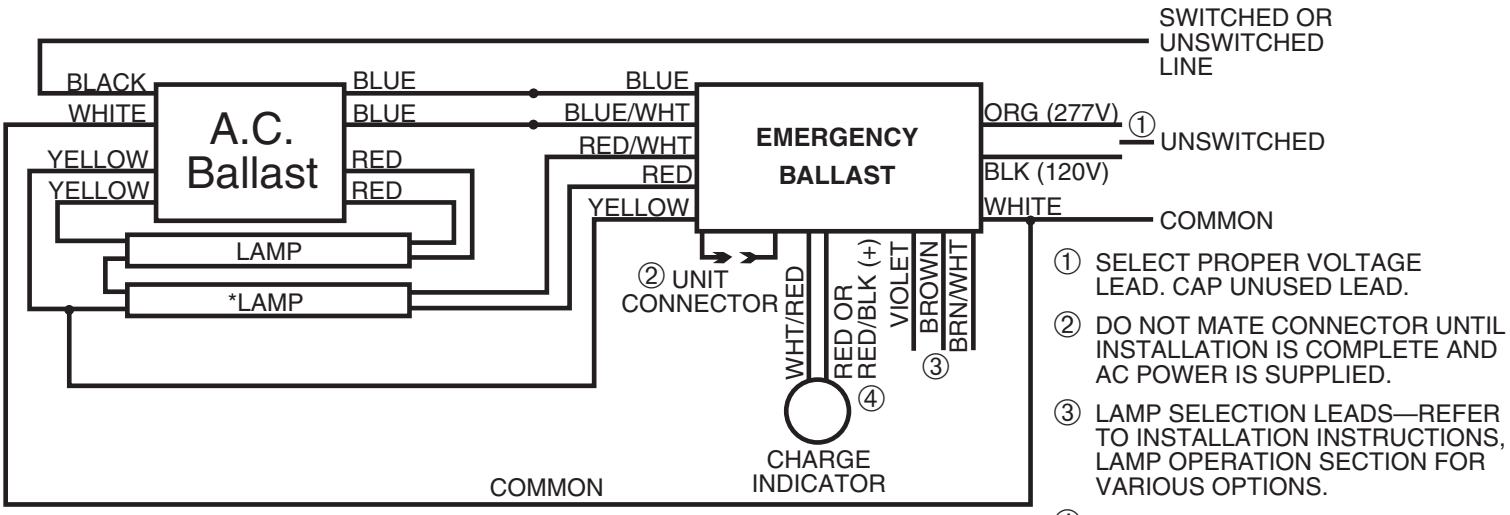
4LRSB3_160

NOTES

V65

V65

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

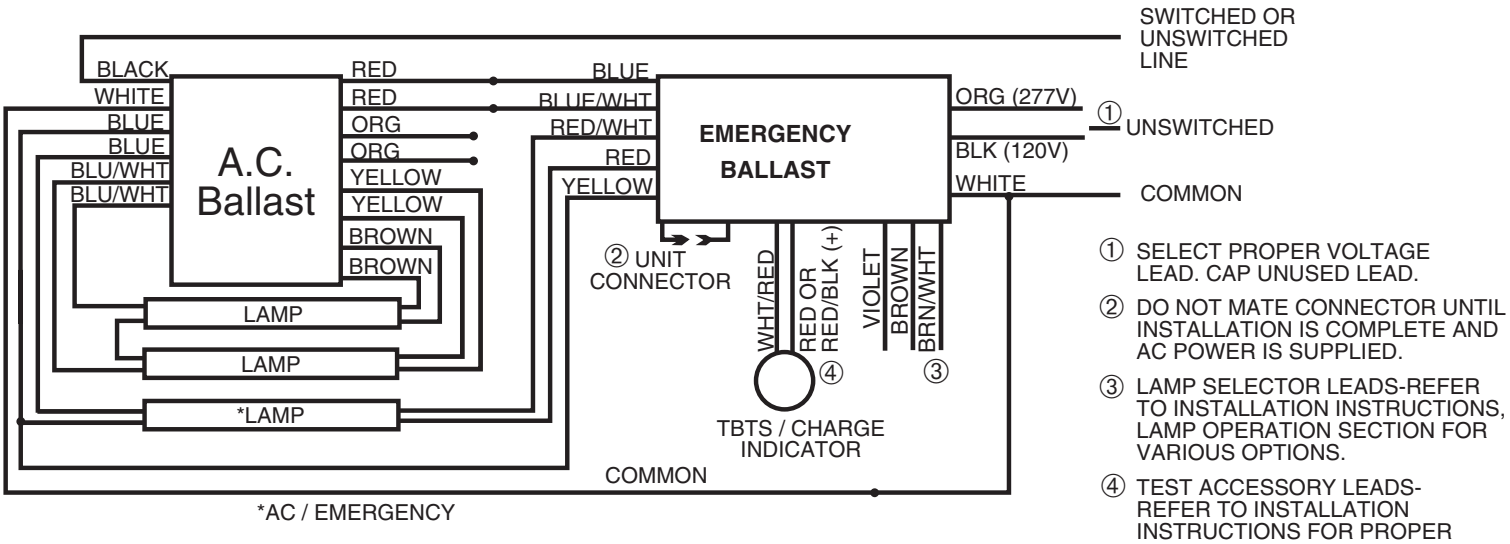
2LRSB_160_3

NOTES

V66

V66

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS-REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

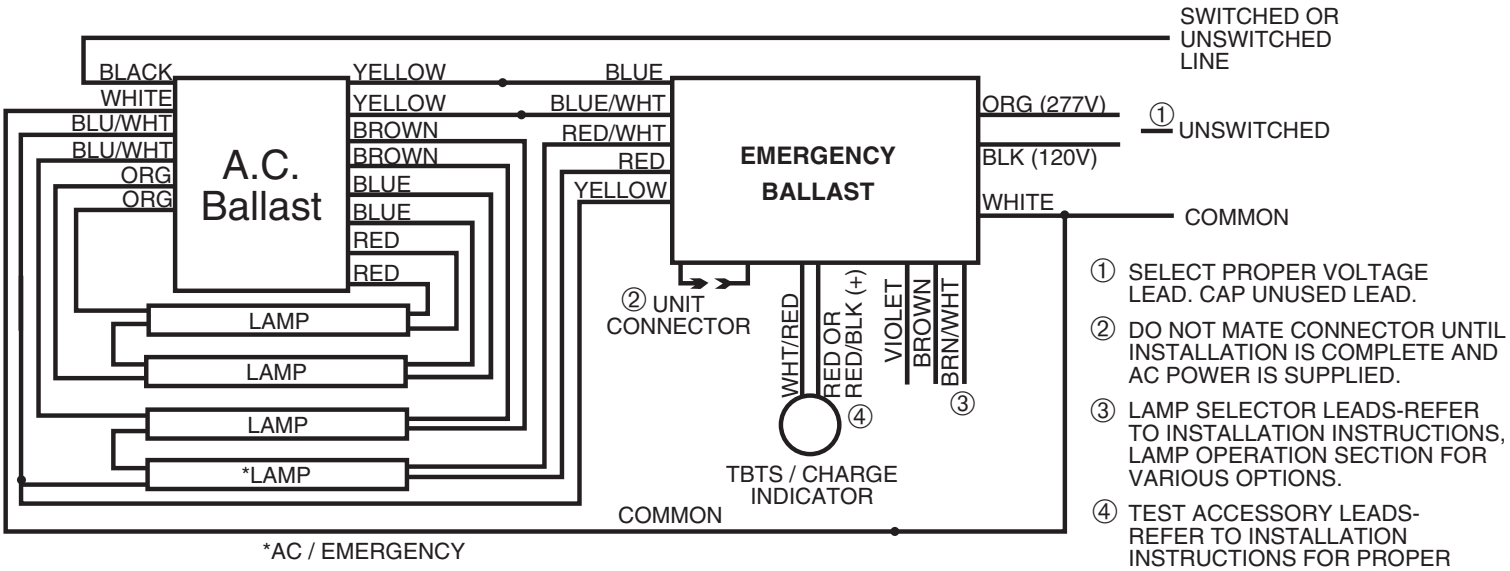
3LRSB4_160

NOTES

V67

V67

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS-REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

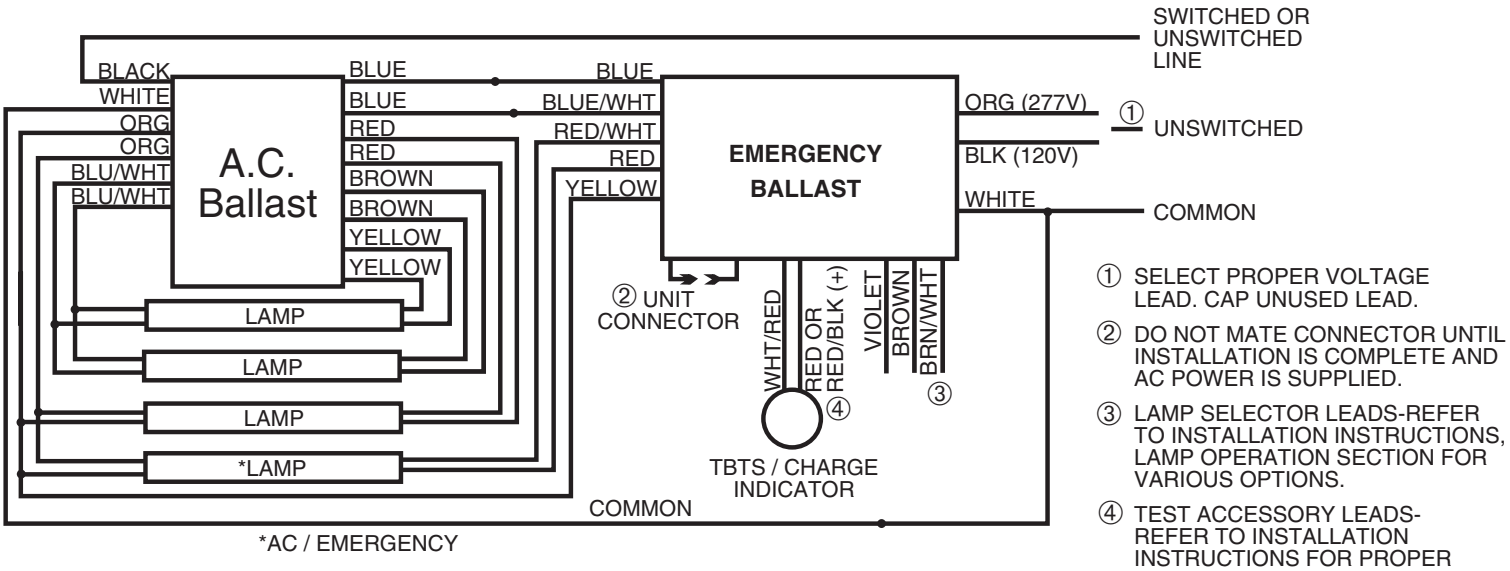
4LRSB3_160

NOTES

V68

V68

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS-REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

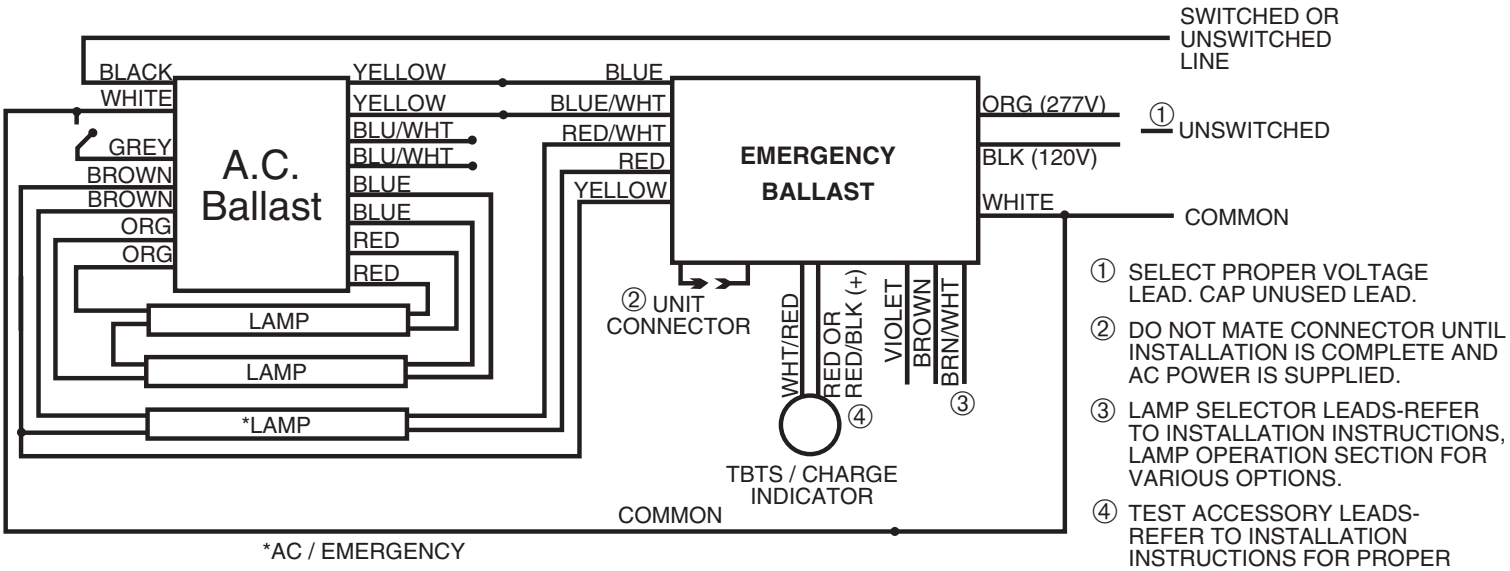
4LRSB4_160

NOTES

V69

V69

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS-REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

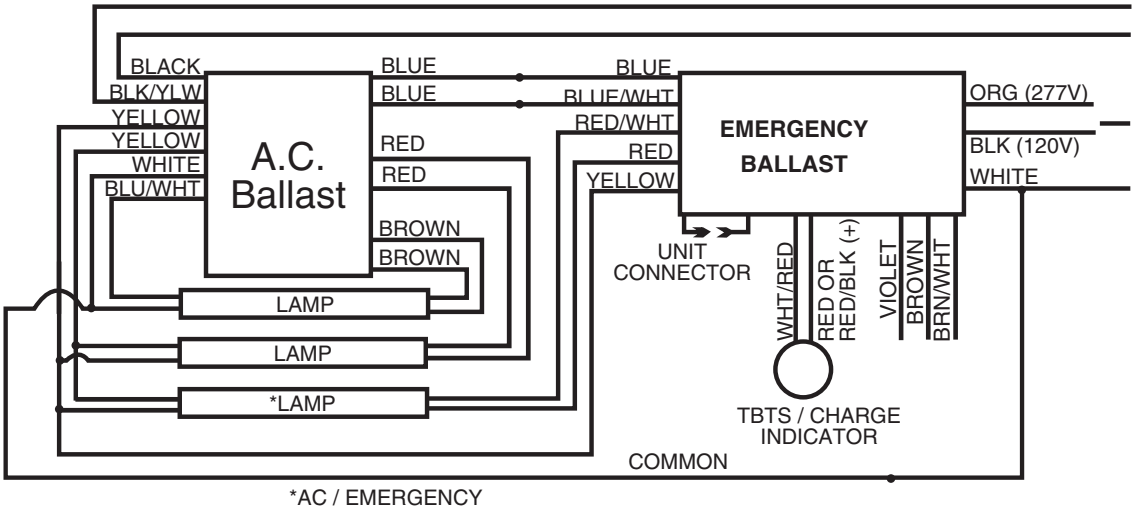
3LRSB5_160

NOTES

V70

V70

THREE LAMP RAPID START BALLAST



SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

LAMP SELECTOR LEADS-REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

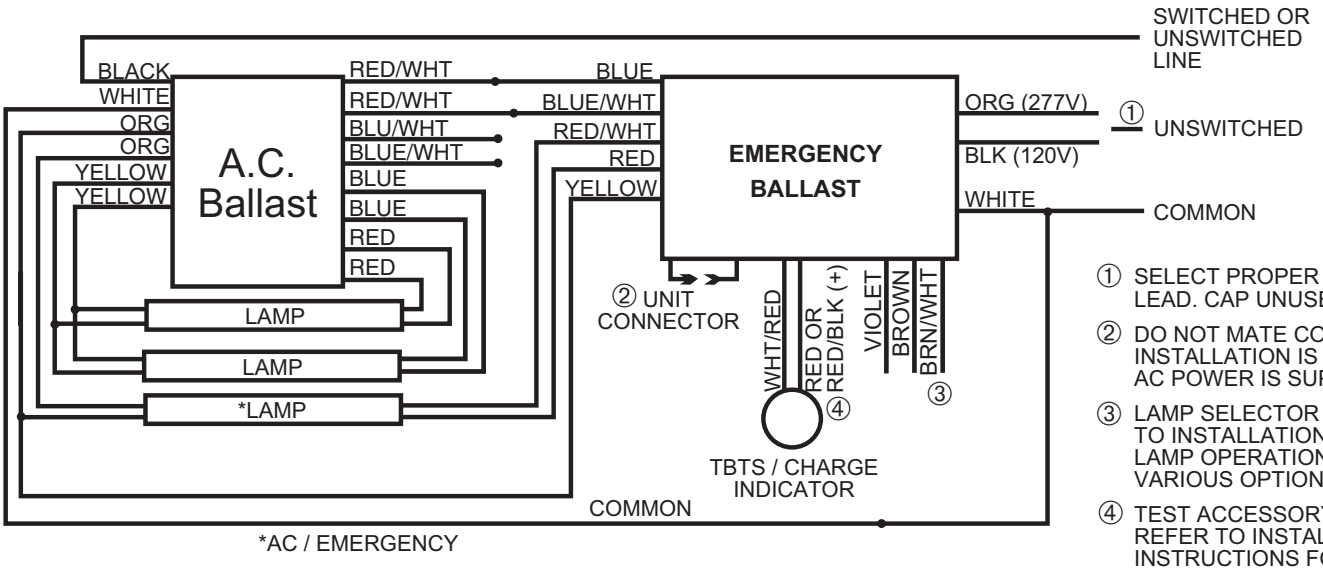
3LRSB4_160_1

NOTES

V71

V71

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS-REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

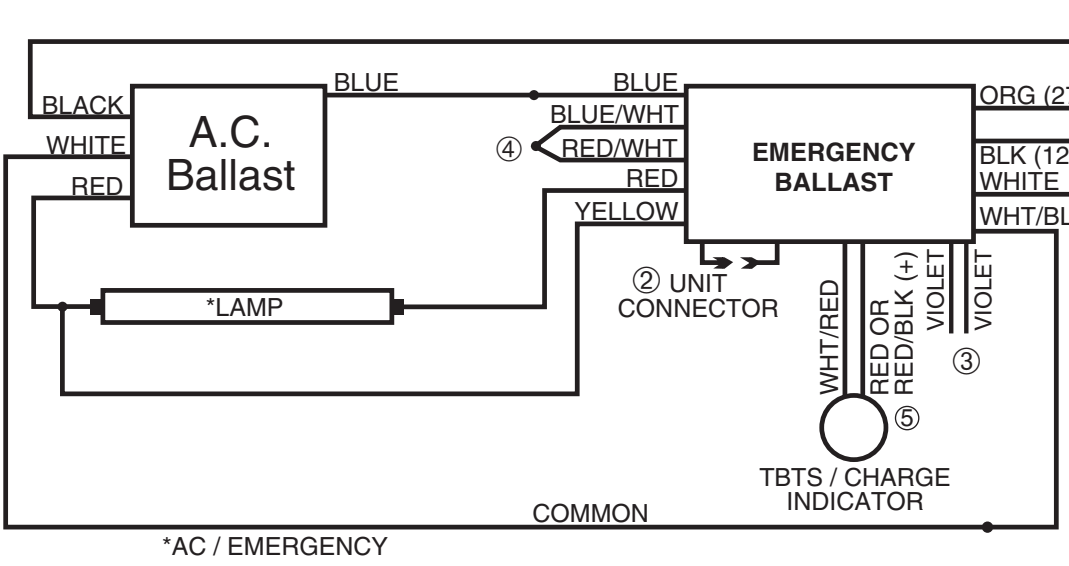
3LRSB6_160

NOTES

YY1

YY1

ONE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

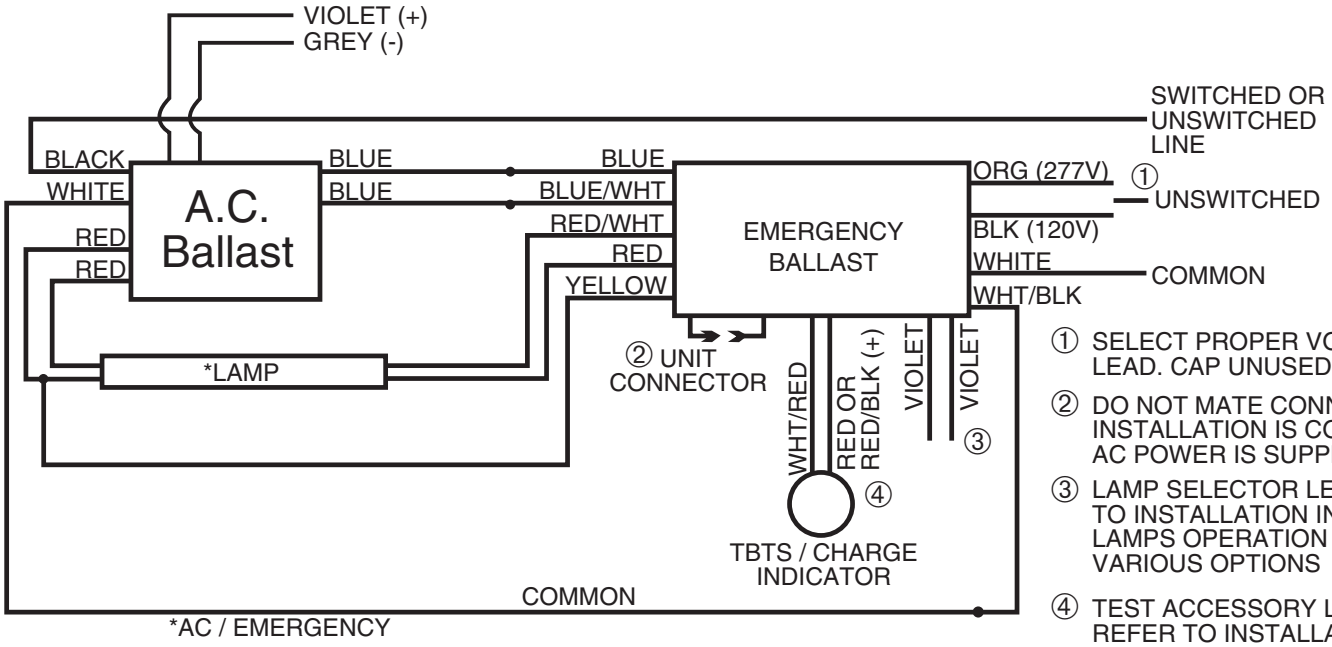
1LISB_D

NOTES

YY2

YY2

ONE LAMP RAPID START BALLAST FOR USE WITH OSRAM/DIMMING



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

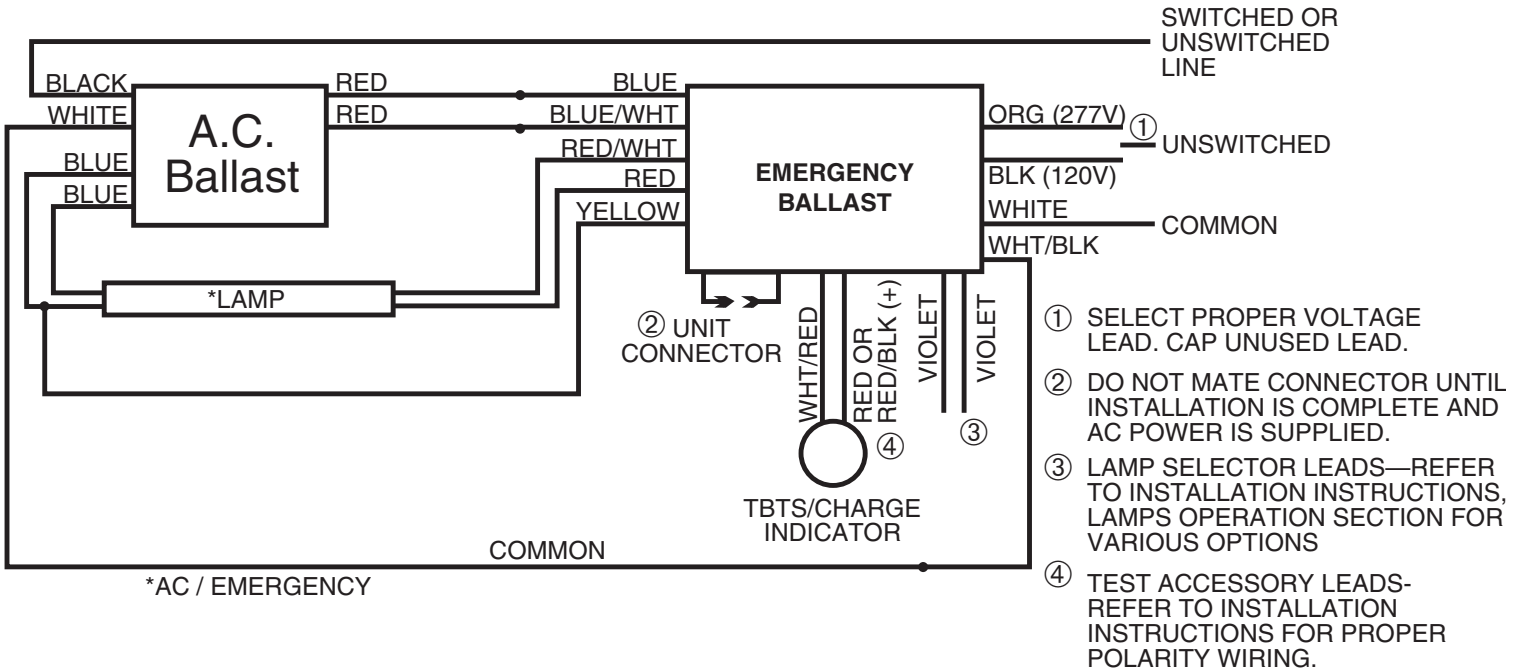
1LRSB_D

NOTES

YY3

YY3

ONE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

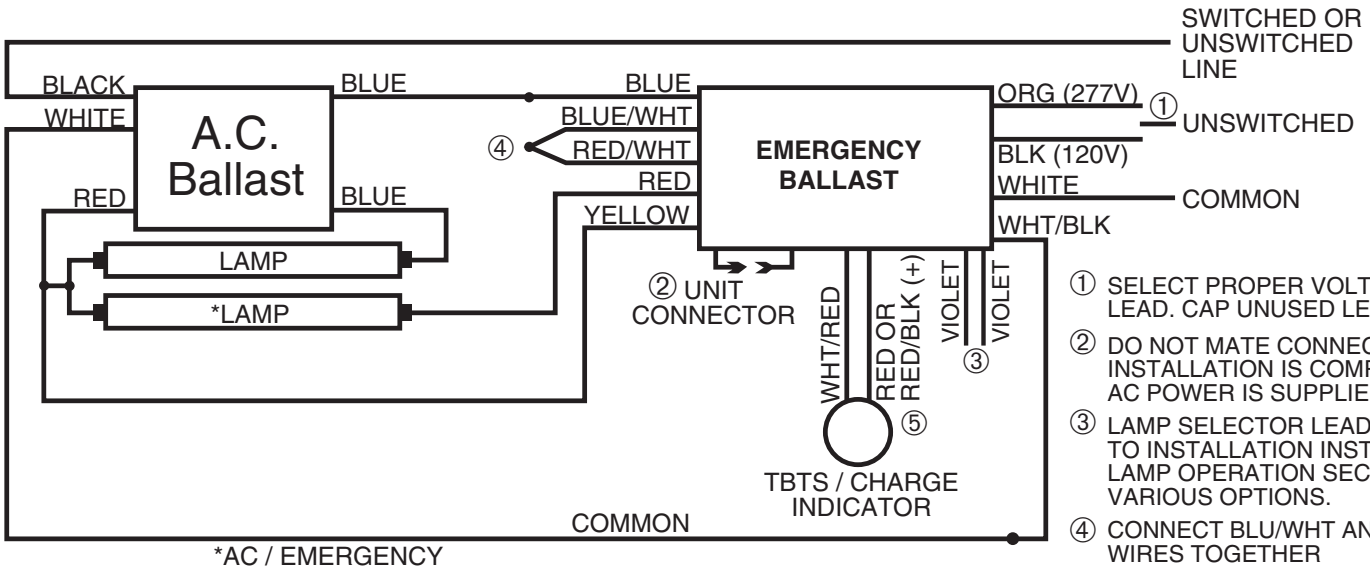
1LRSB_D_2

NOTES

YY4

YY4

TWO LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

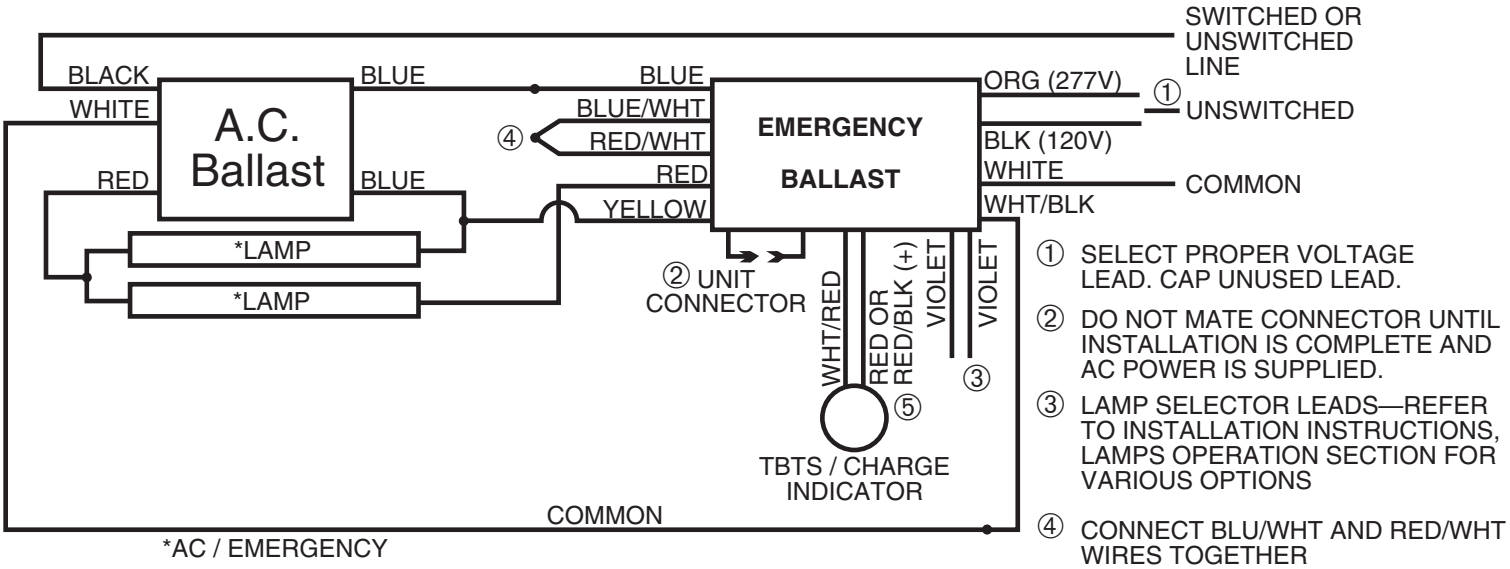
2LISB_2_D

NOTES

YY5

YY5

TWO LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

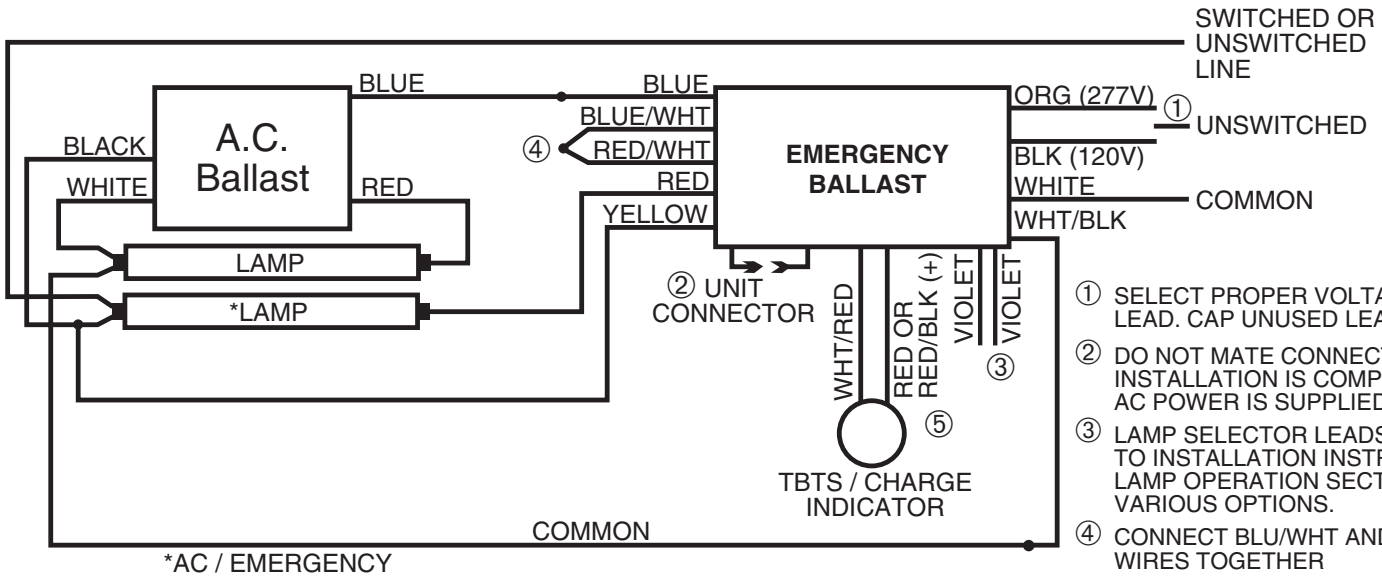
2LISB_2LEO_80_D

NOTES

YY6

YY6

TWO LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

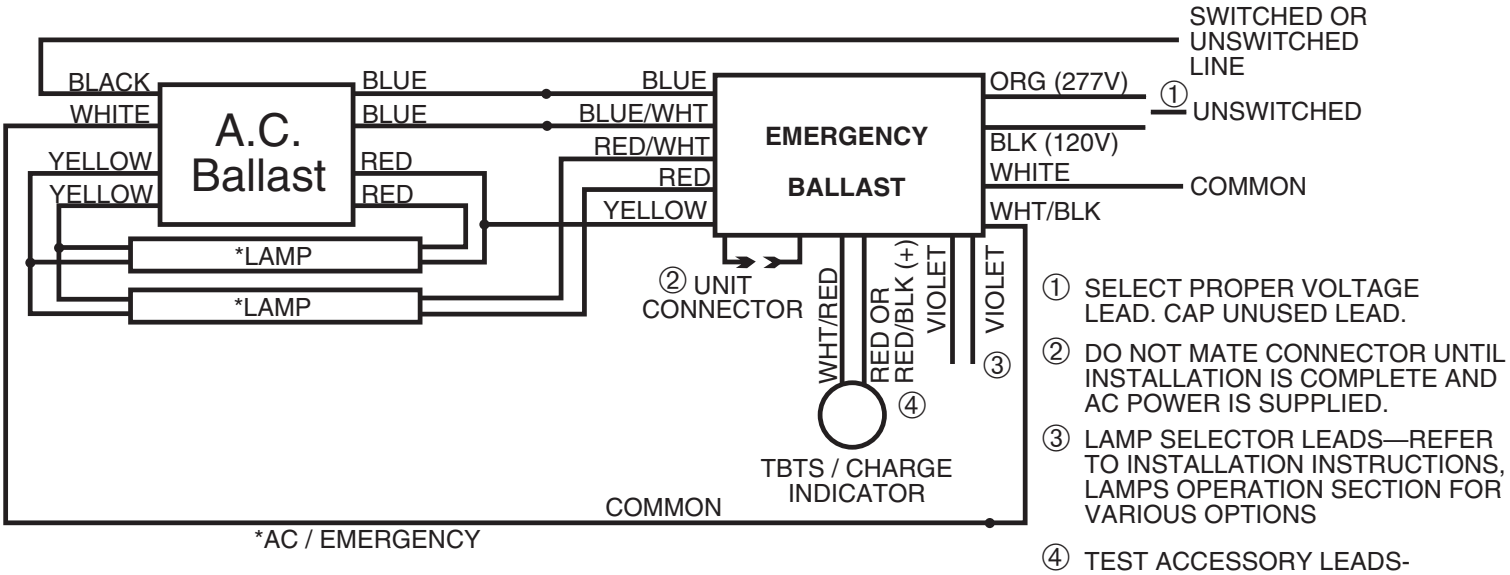
2LISB_D

NOTES

YY7

YY7

TWO LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

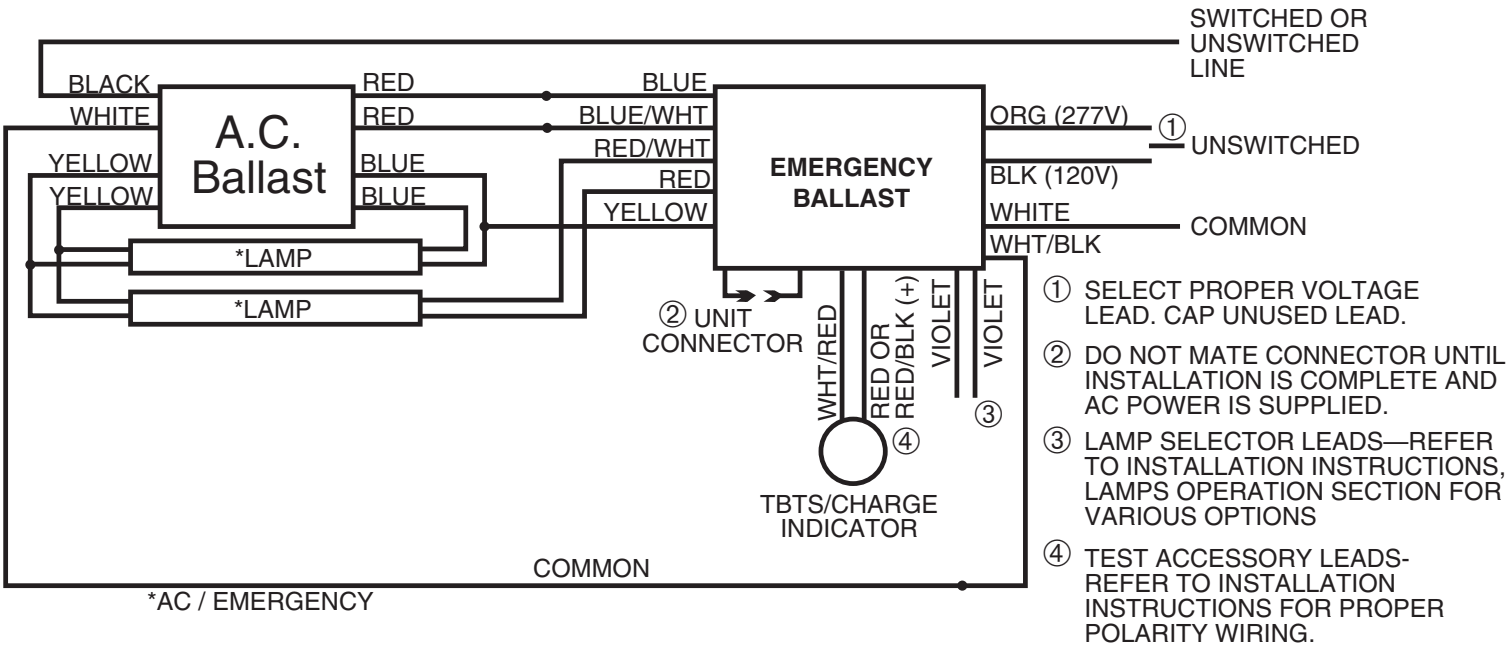
2LRSB_2LEO_80_D

NOTES

YY8

YY8

TWO LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

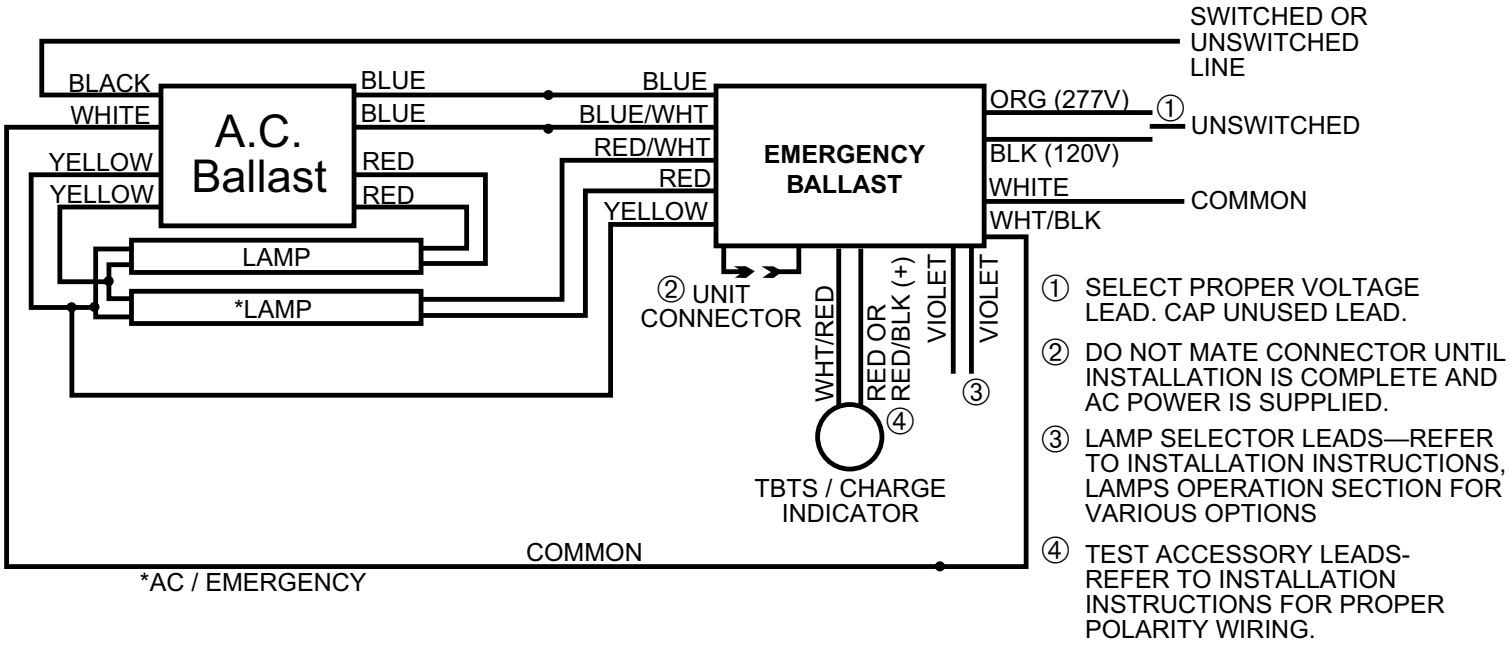
④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LRSB_2LEO_D_2

NOTES

YY9 YY9

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

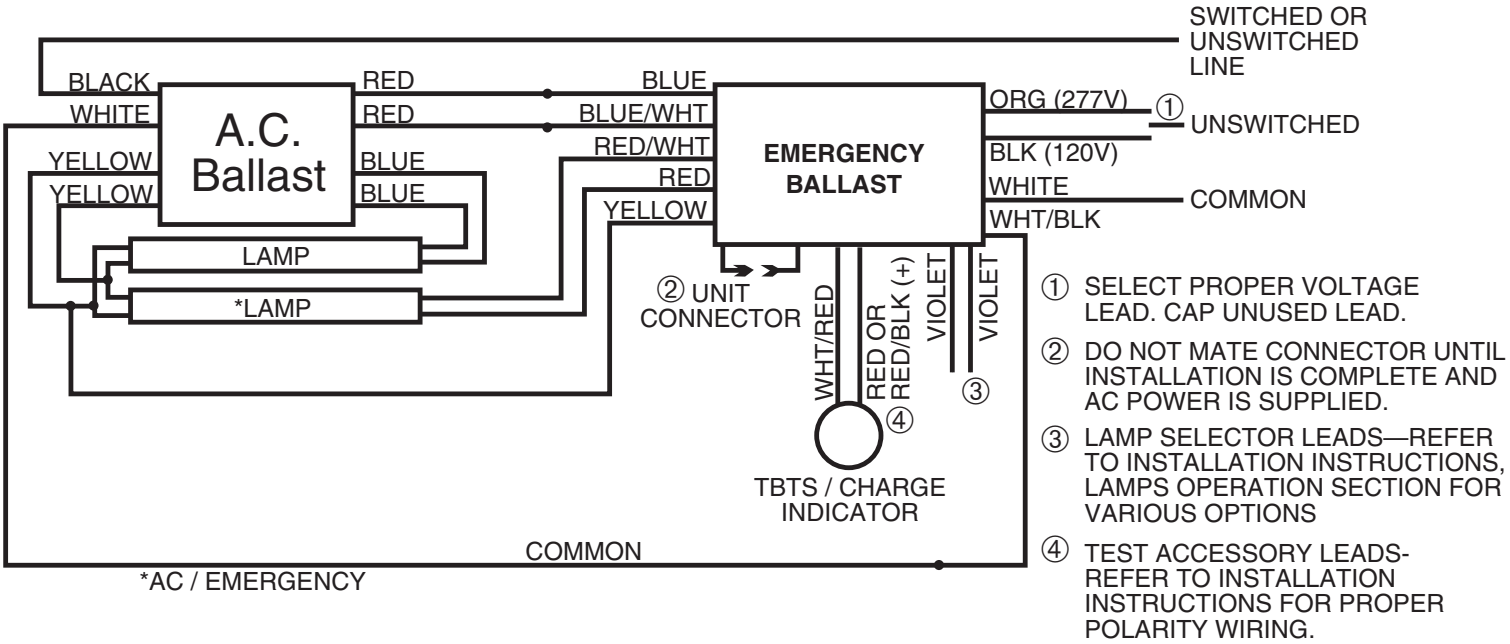
2LRSB_D

NOTES

YY10

YY10

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

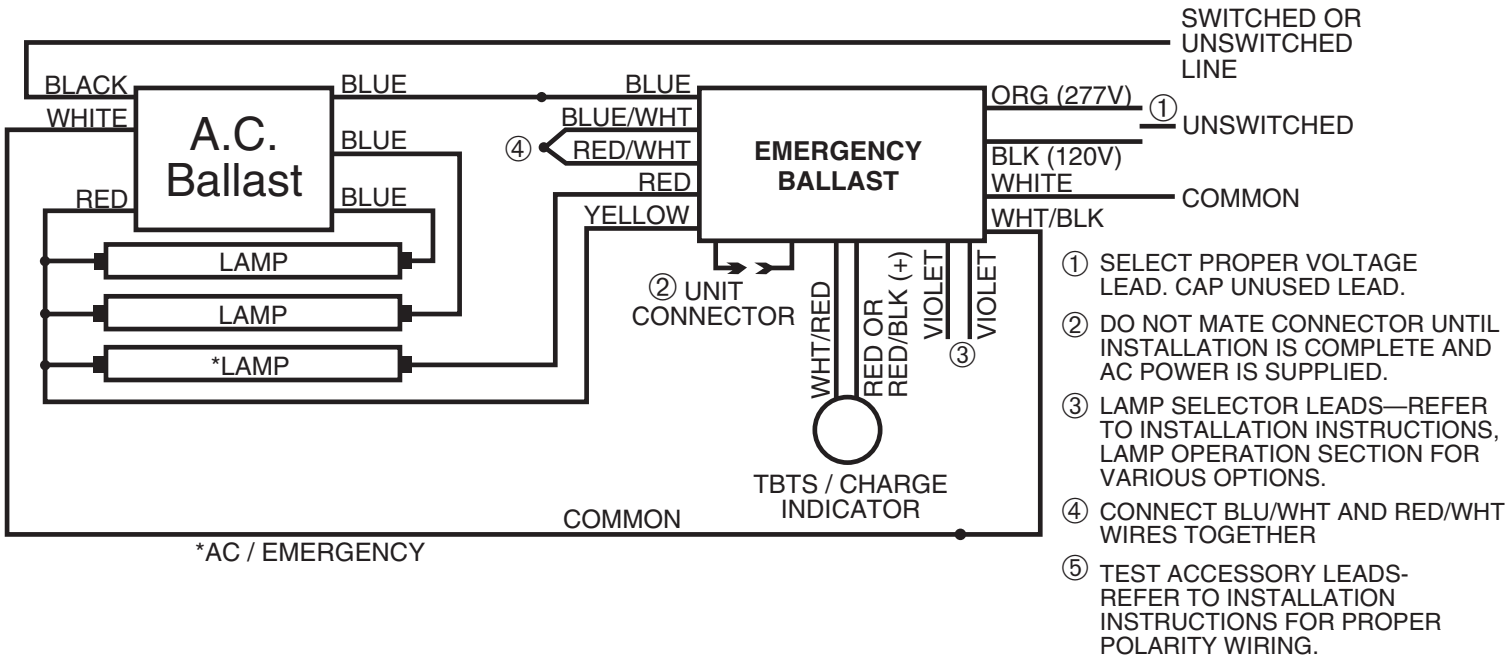
2LRSB_D_2

NOTES

YY11

YY11

THREE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

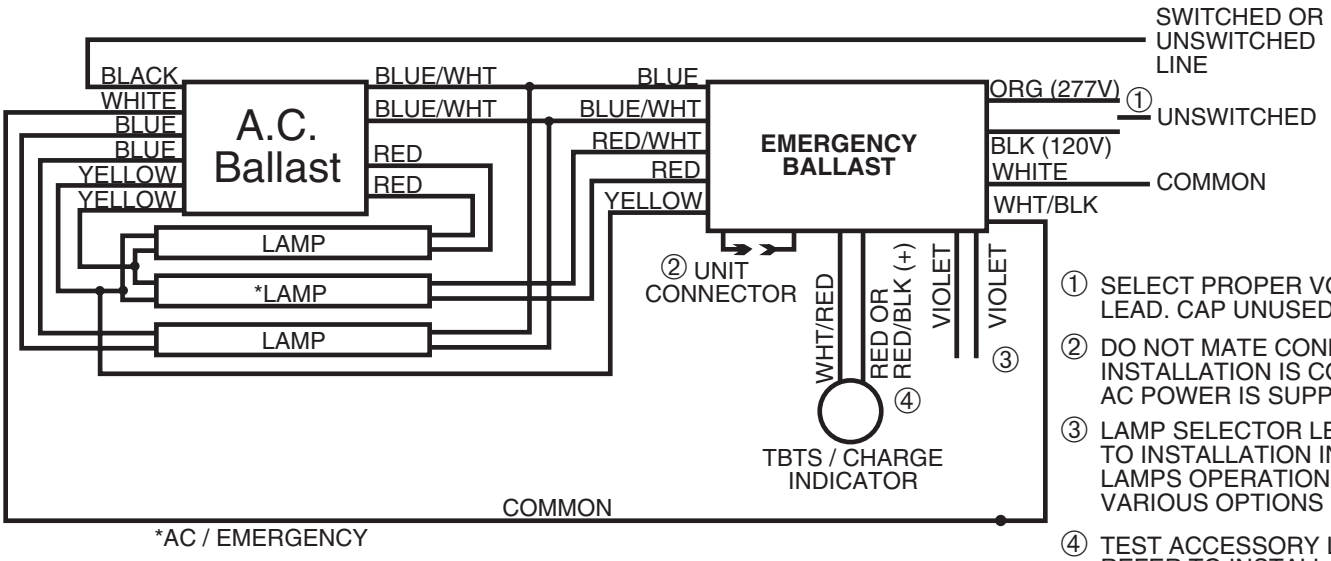
3LISB_D

NOTES

YY12

YY12

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

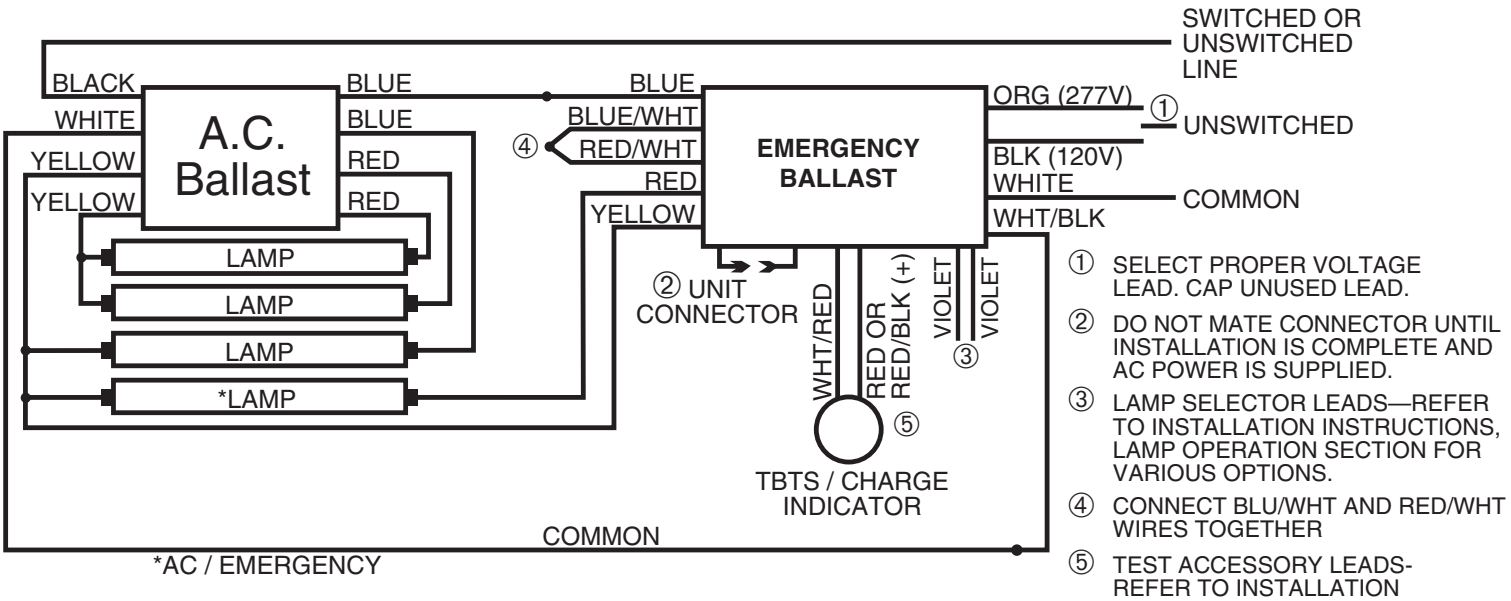
3LRSB_D

NOTES

YY13

YY13

FOUR LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

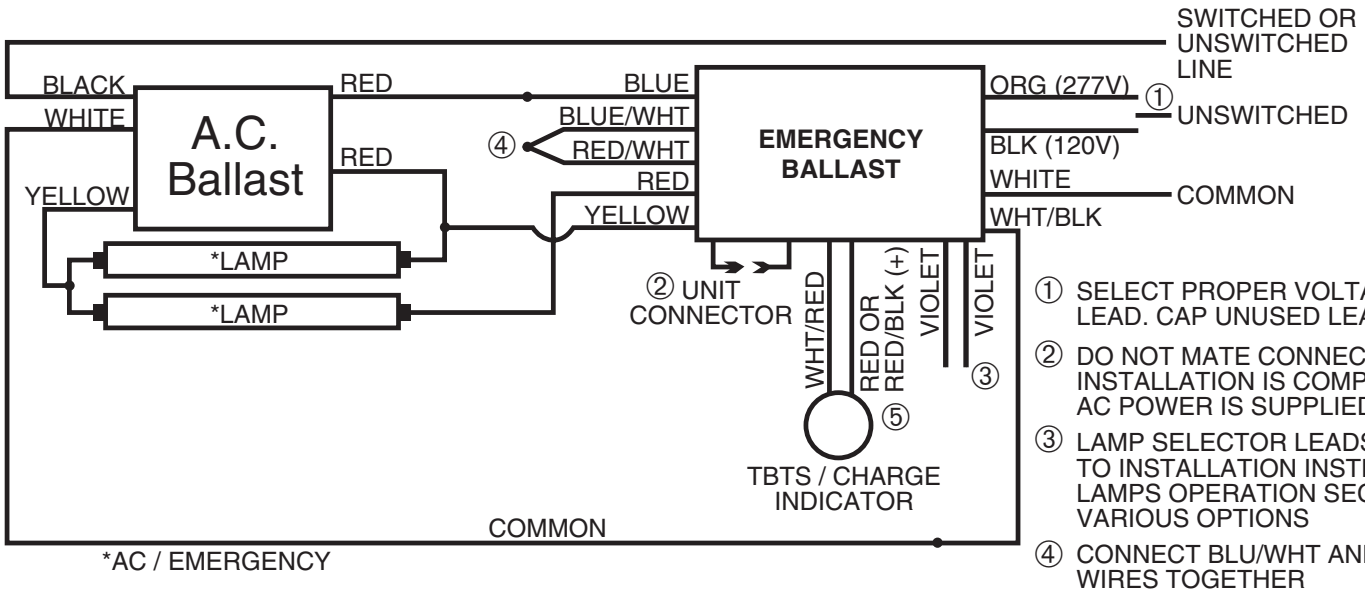
4LISB_D

NOTES

YY14

YY14

TWO LAMP INSTANT START BALLAST TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

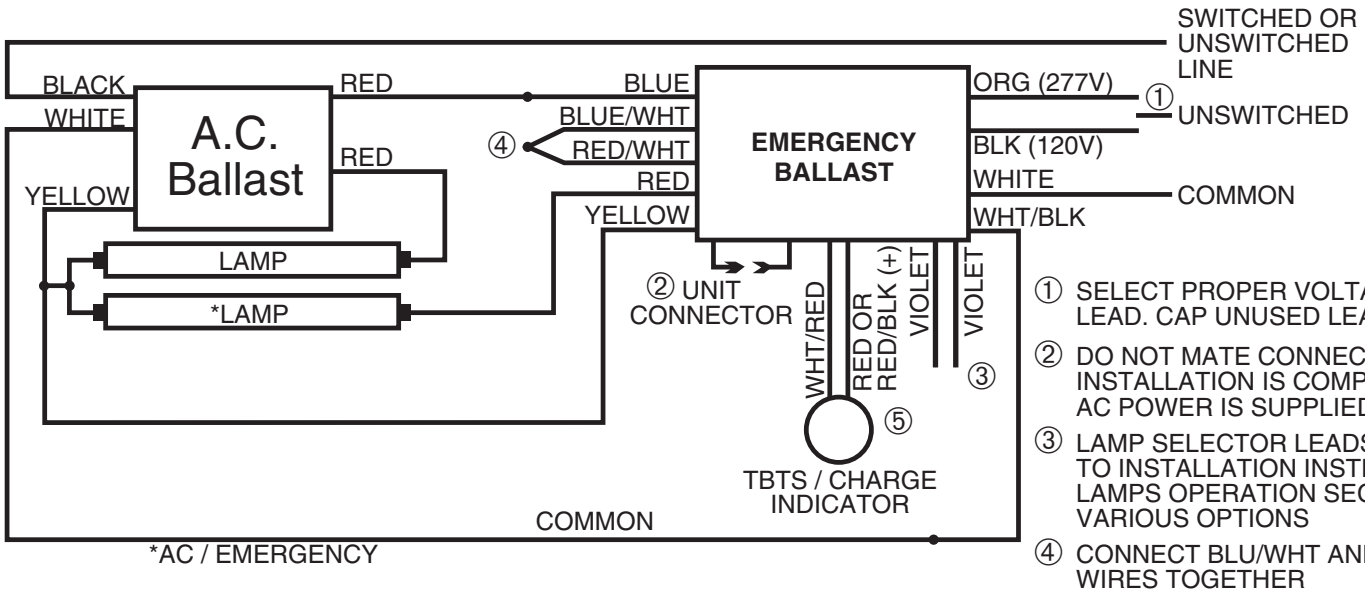
2LISFB2_80D_2LEO

NOTES

YY15

YY15

TWO LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

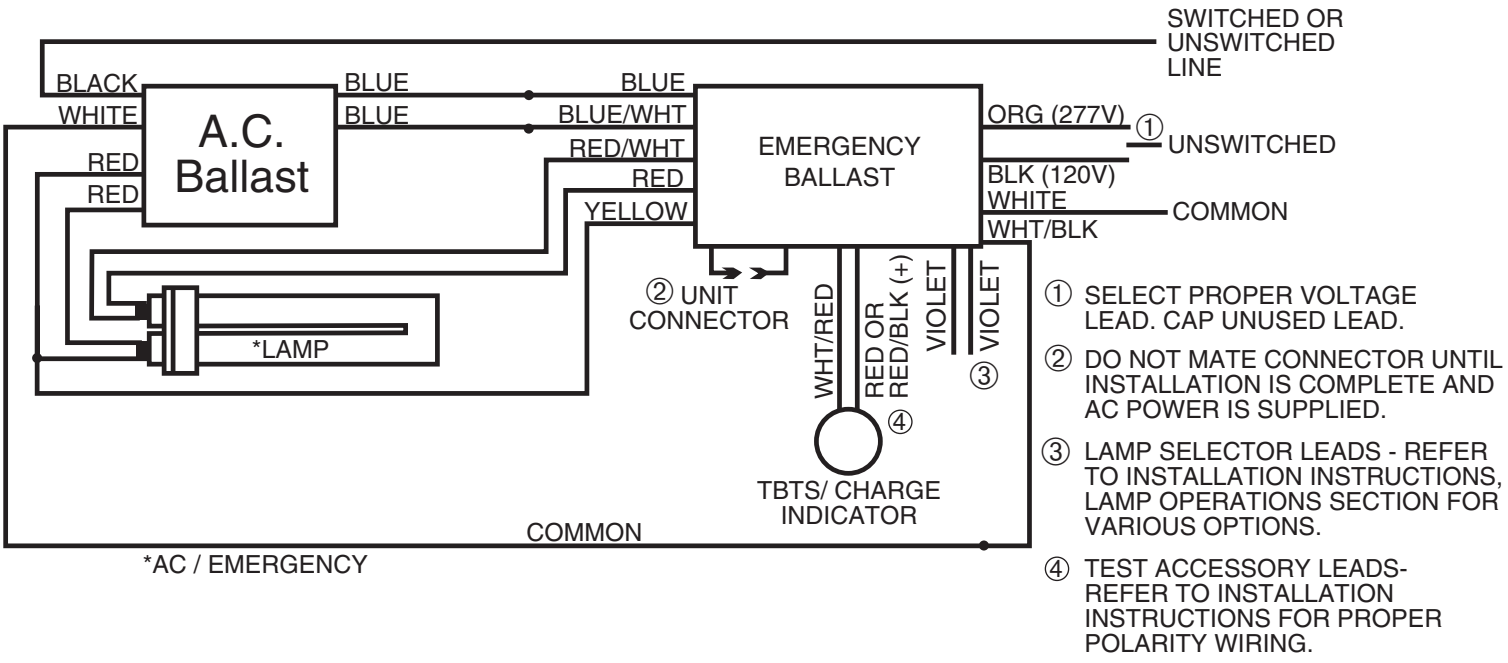
2LISFB2_80D

NOTES

YY16

YY16

ONE BIAX LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATIONS SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

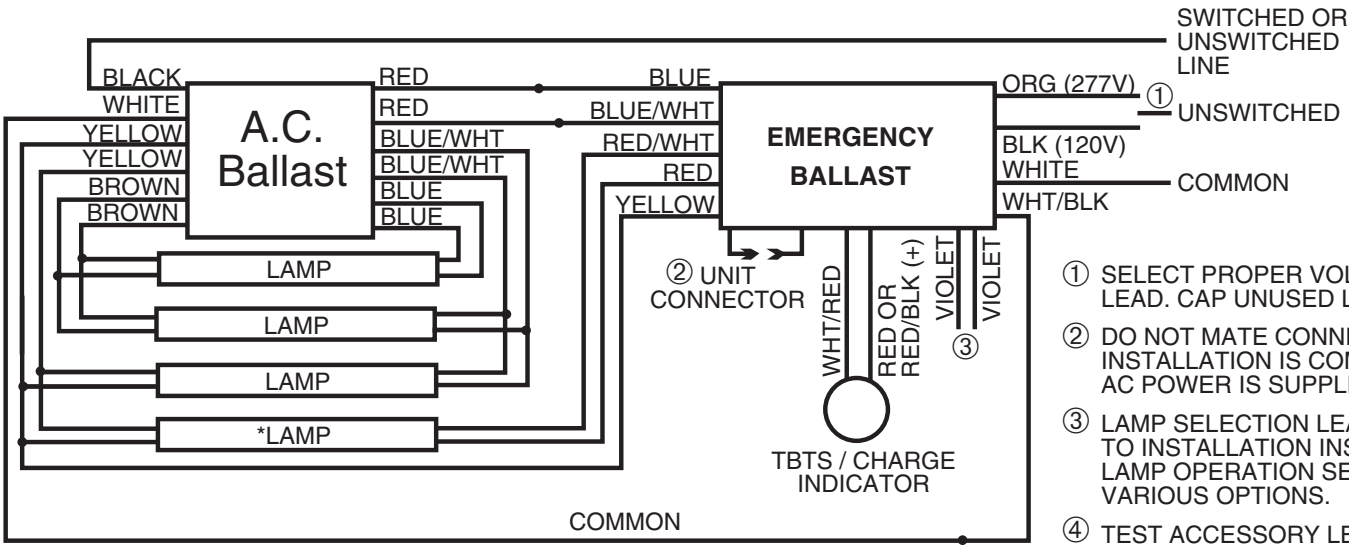
1BXLRSB_80_D

NOTES

YY17

YY17

FOUR LAMP RAPID START BALLAST



*AC / EMERGENCY

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

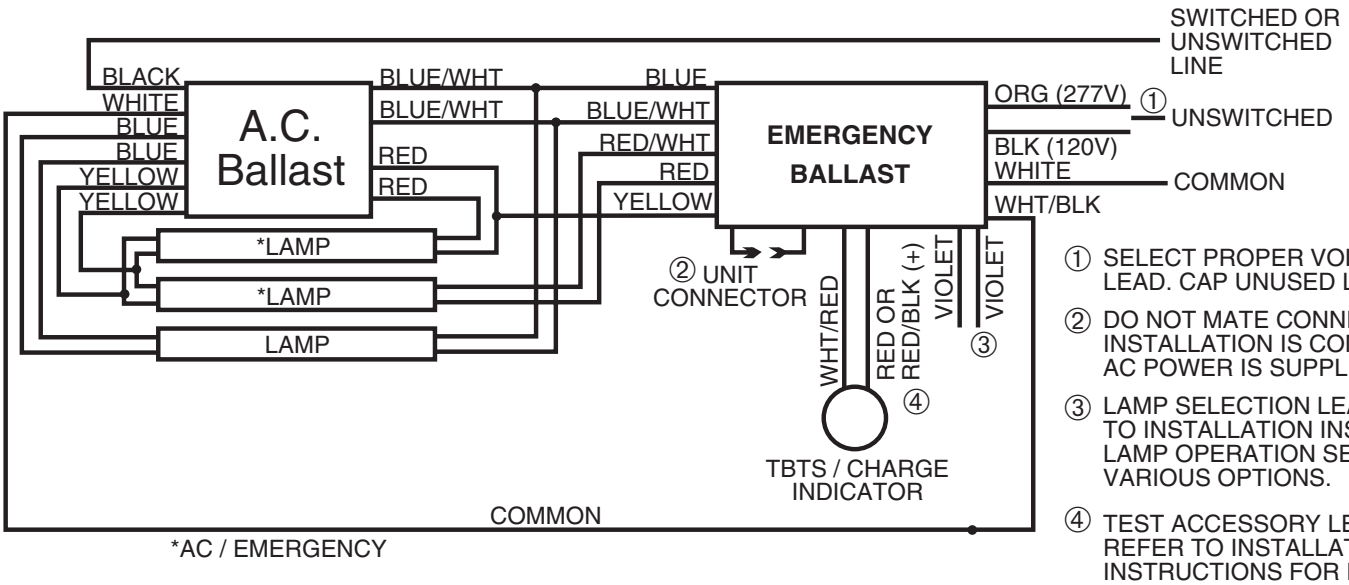
4LRSB_D

NOTES

YY18

YY18

THREE LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

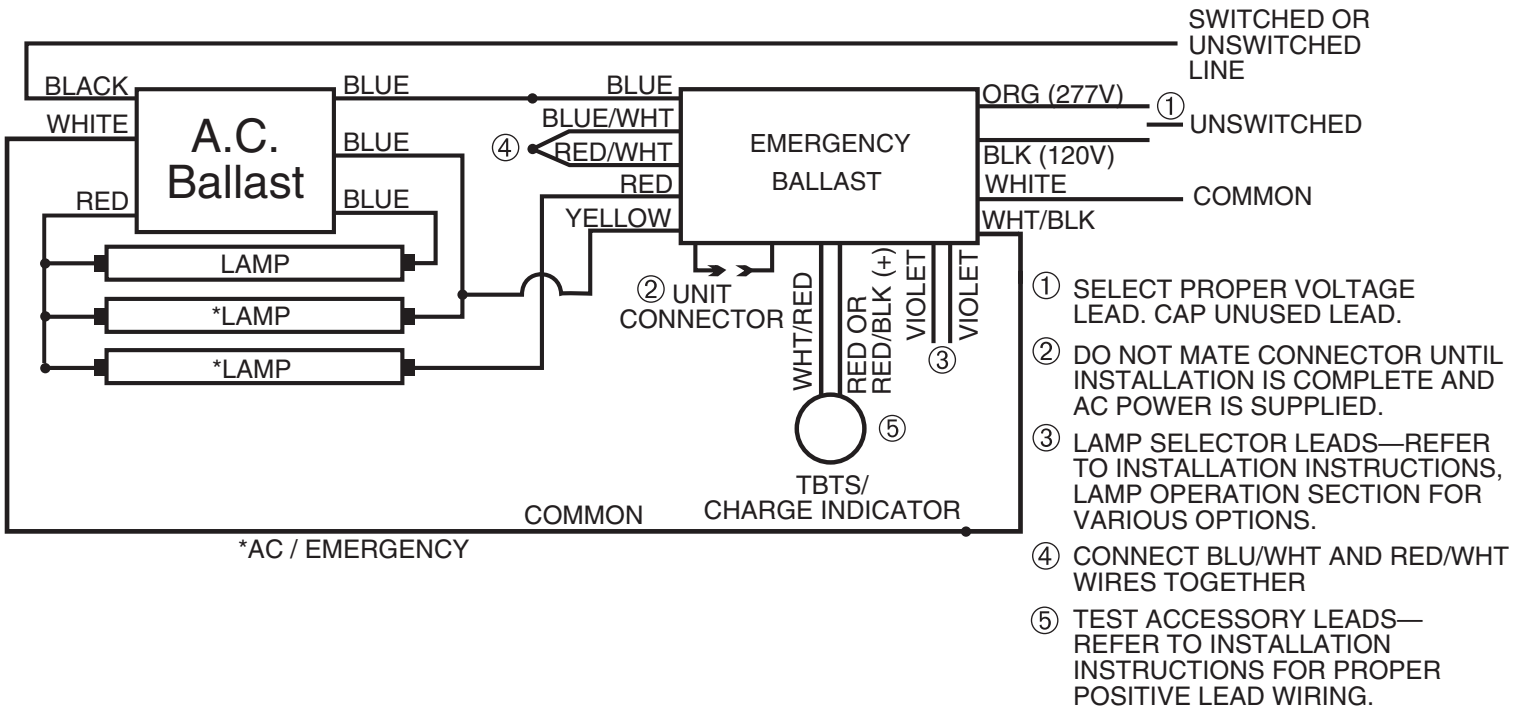
3LRSB_2LEO_80_D

NOTES

YY19

YY19

THREE LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS—REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POSITIVE LEAD WIRING.

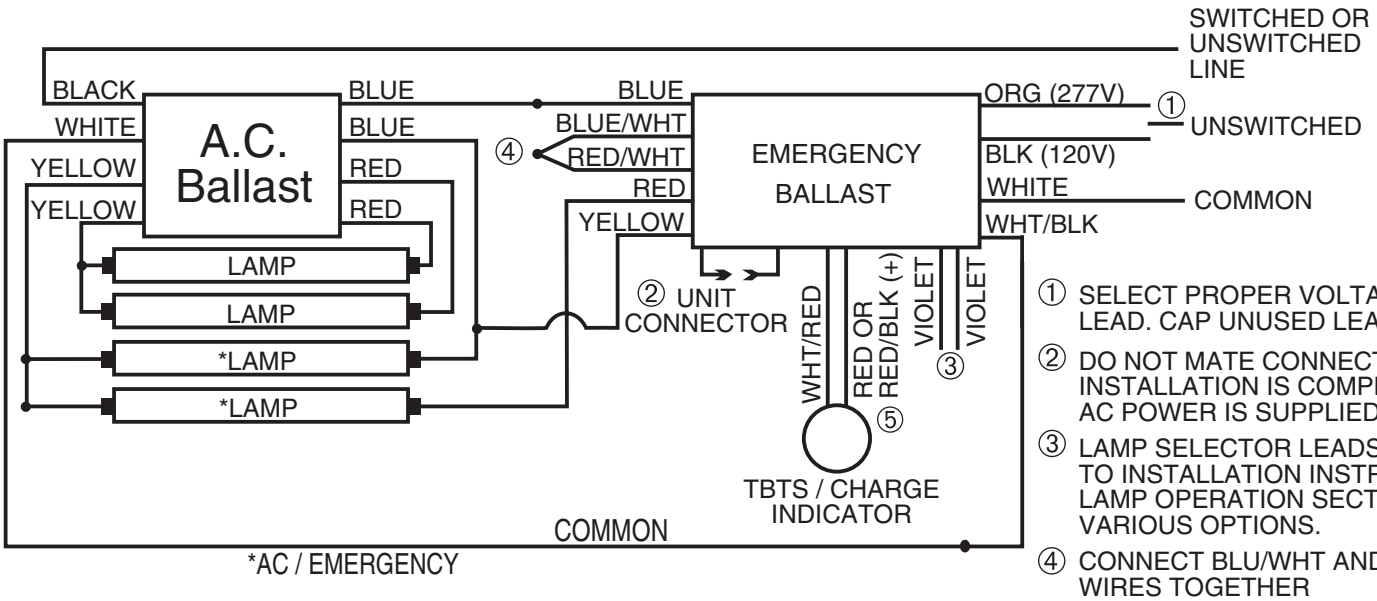
3LISB_2LEO_D

NOTES

YY20

YY20

FOUR LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS—REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POSITIVE LEAD WIRING.

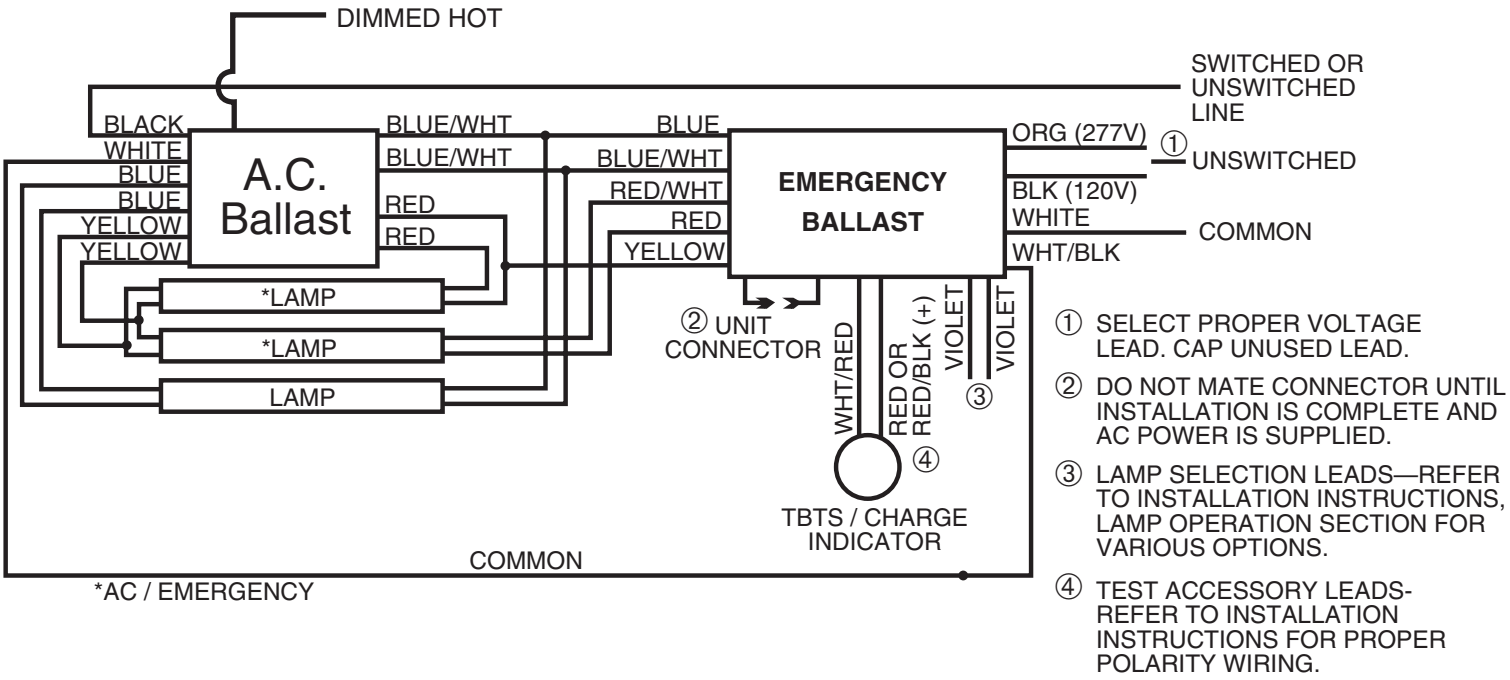
4LISB_2LEO_80D

NOTES

YY21

YY21

THREE LAMP RAPID START BALLAST WITH DIMMING LEAD TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

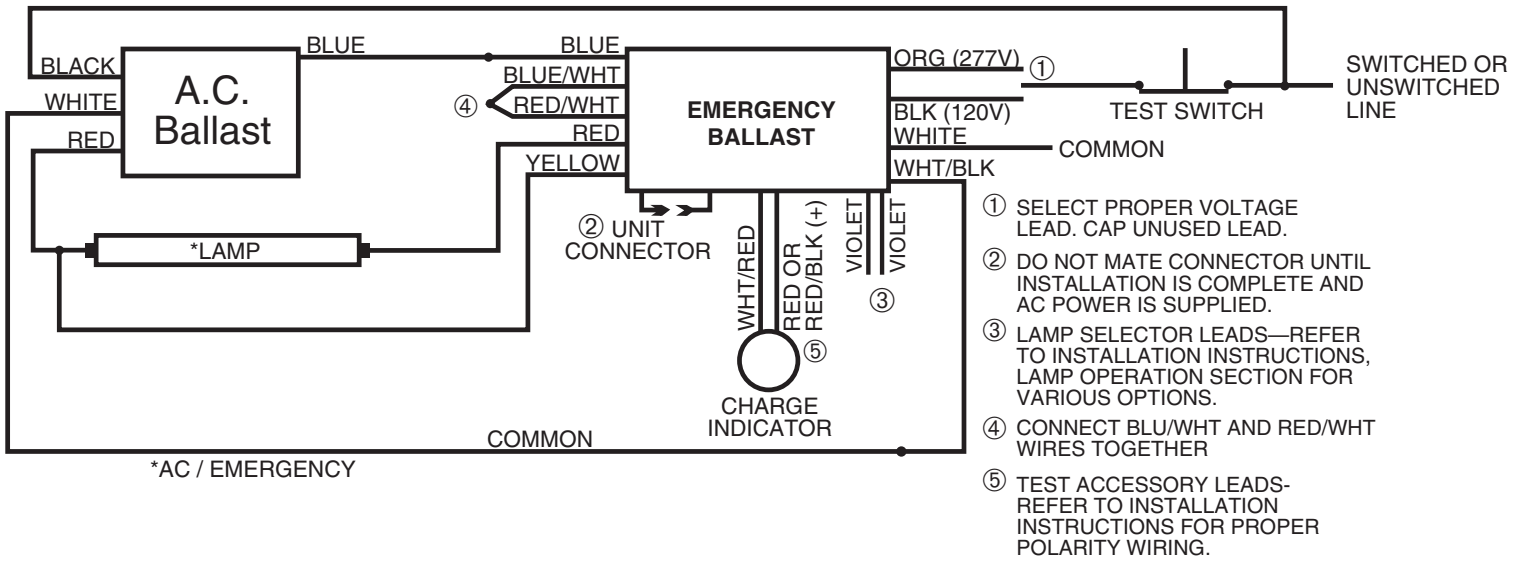
3LRSB_DM_2LEO_80_D

NOTES

YY22

YY22

ONE LAMP INSTANT START BALLAST WITH CHARGE INDICATOR AND TEST SWITCH



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

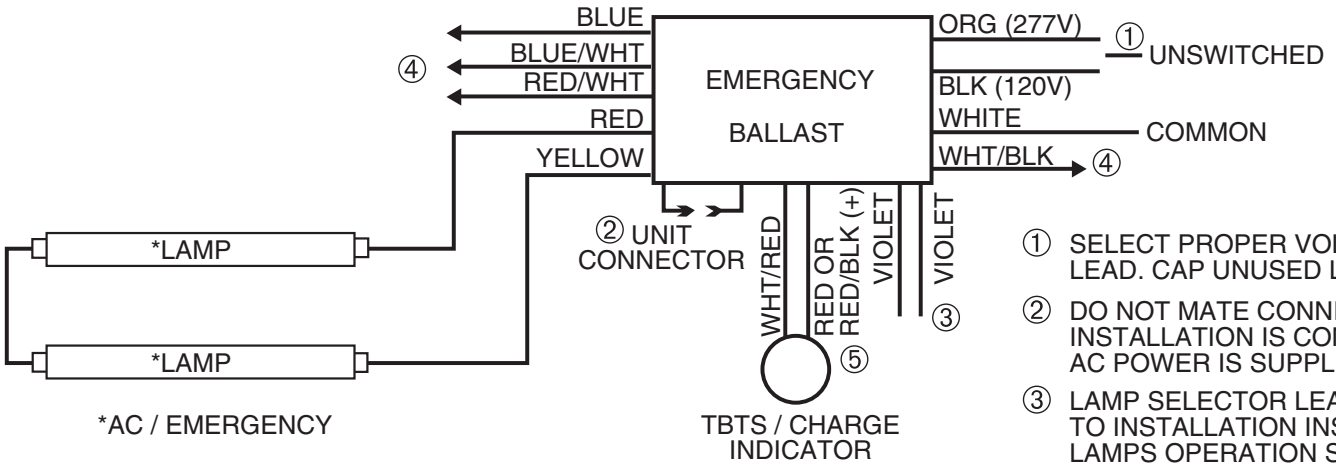
1LISB_CI_D

NOTES

YY23

YY23

TWO LAMP EMERGENCY ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

④ CAP UNUSED LEADS.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

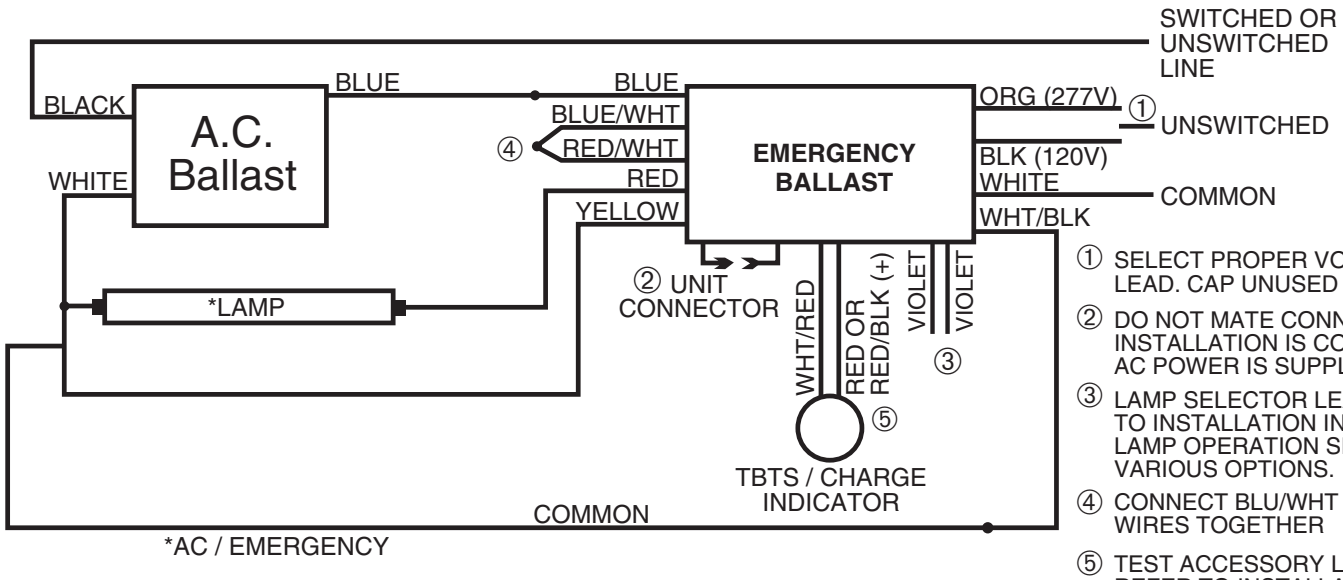
2LEO_80_D

NOTES

YY24

YY24

ONE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

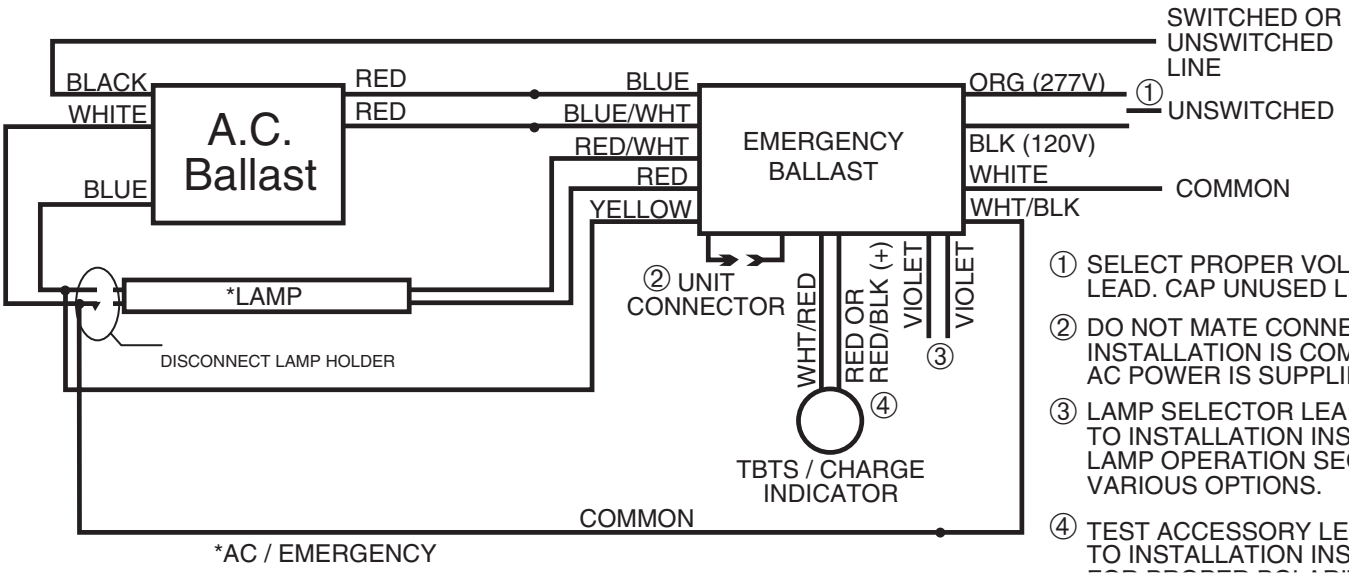
1LISB_D_2

NOTES

YY25

YY25

ONE LAMP LAG BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS

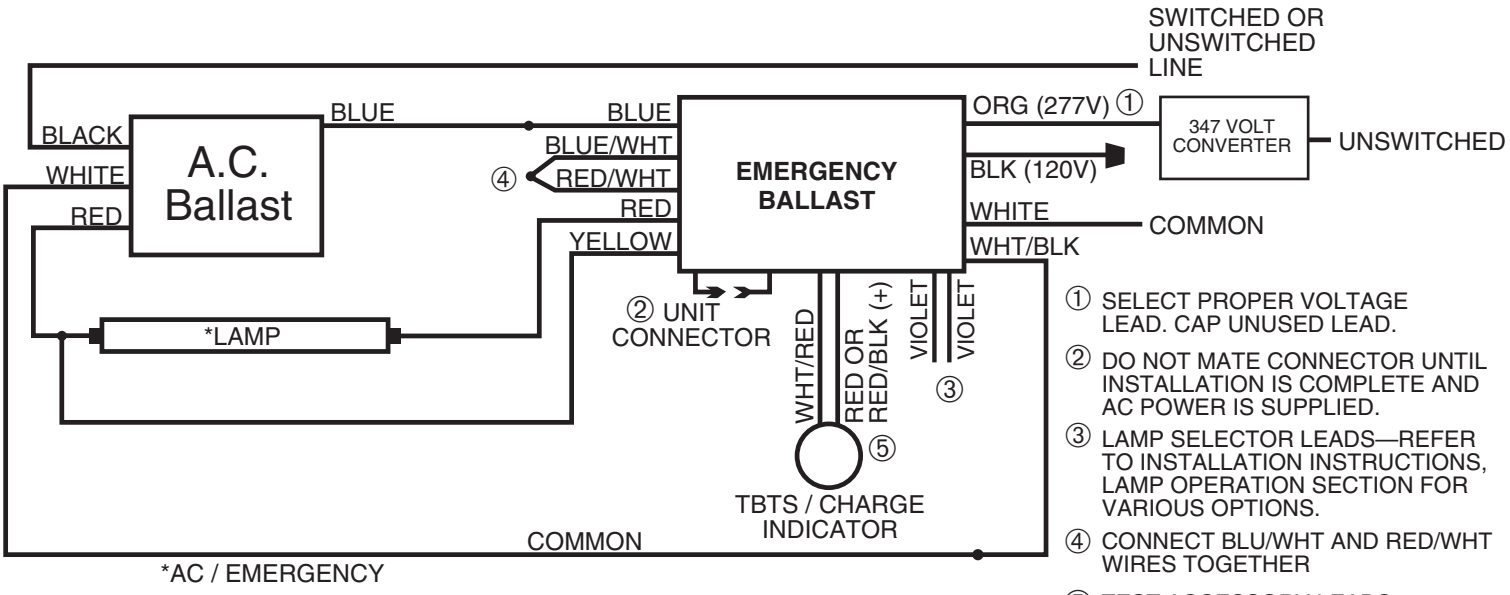
1LLAG_D

NOTES

YY26

YY26

ONE LAMP INSTANT START BALLAST WITH 347V CONVERTER



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

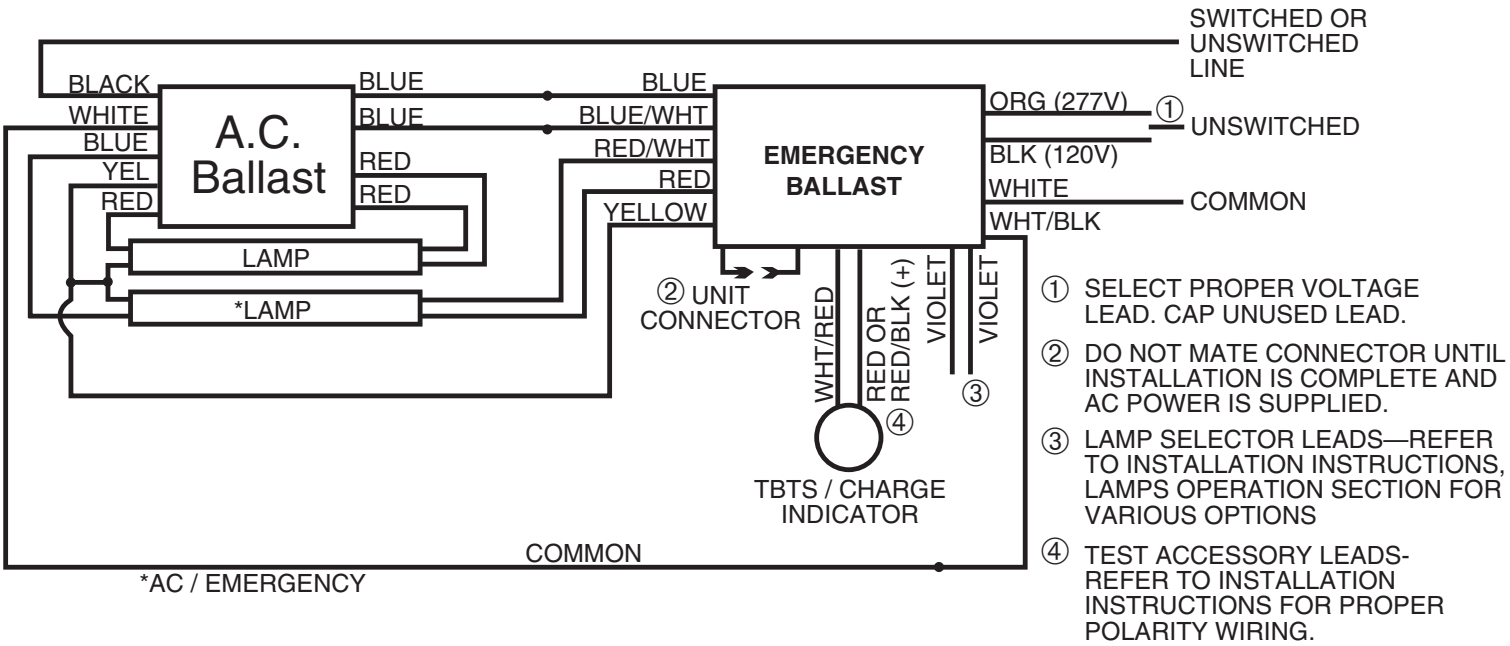
1LISB_347_D

NOTES

YY27

YY27

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

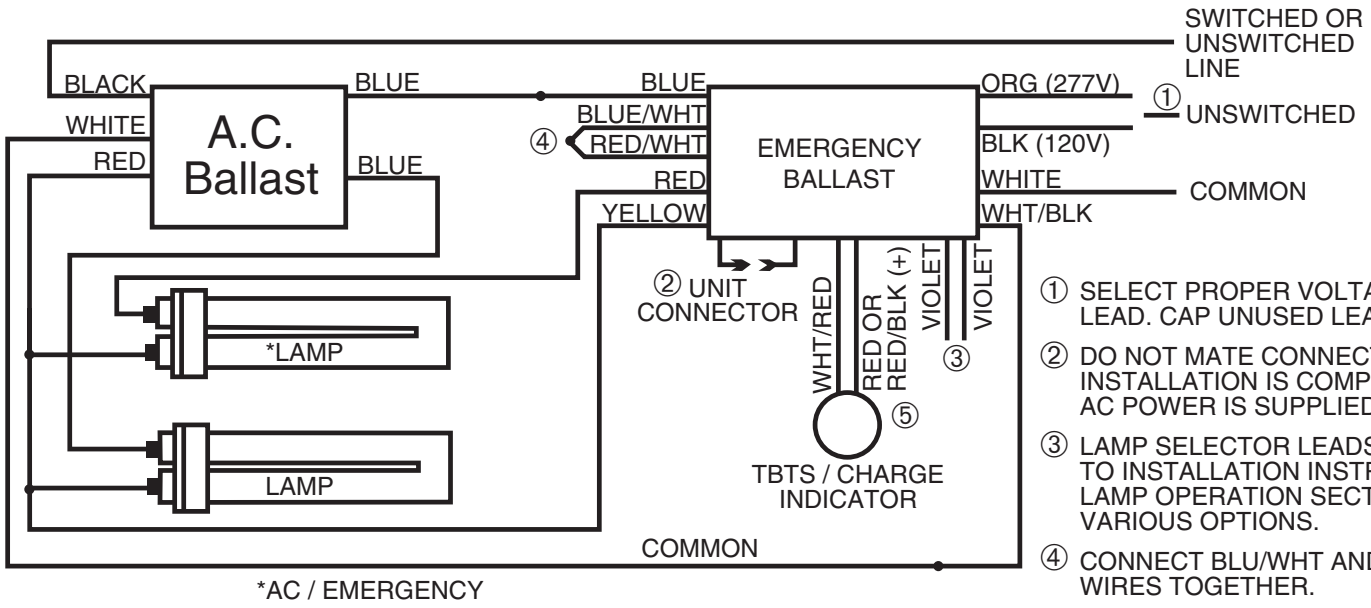
2LRSB_D_3

NOTES

YY28

YY28

TWO BIAX LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

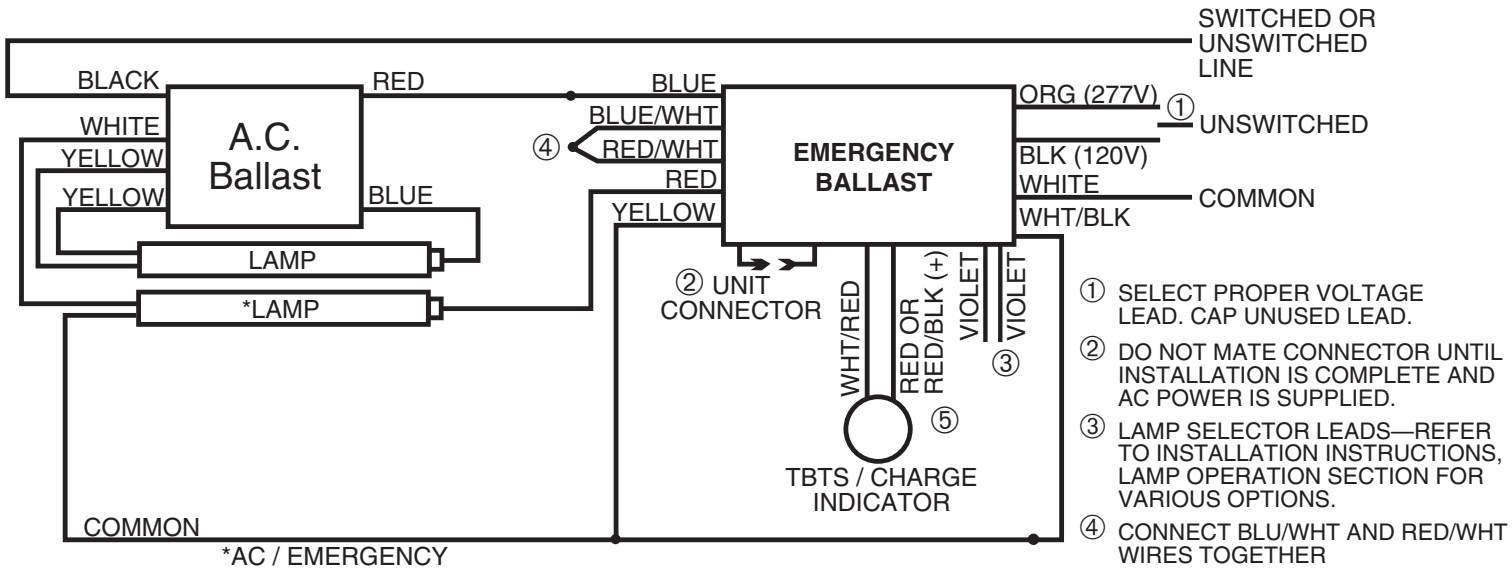
2LISBX_D

NOTES

YY29

YY29

TWO LAMP BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

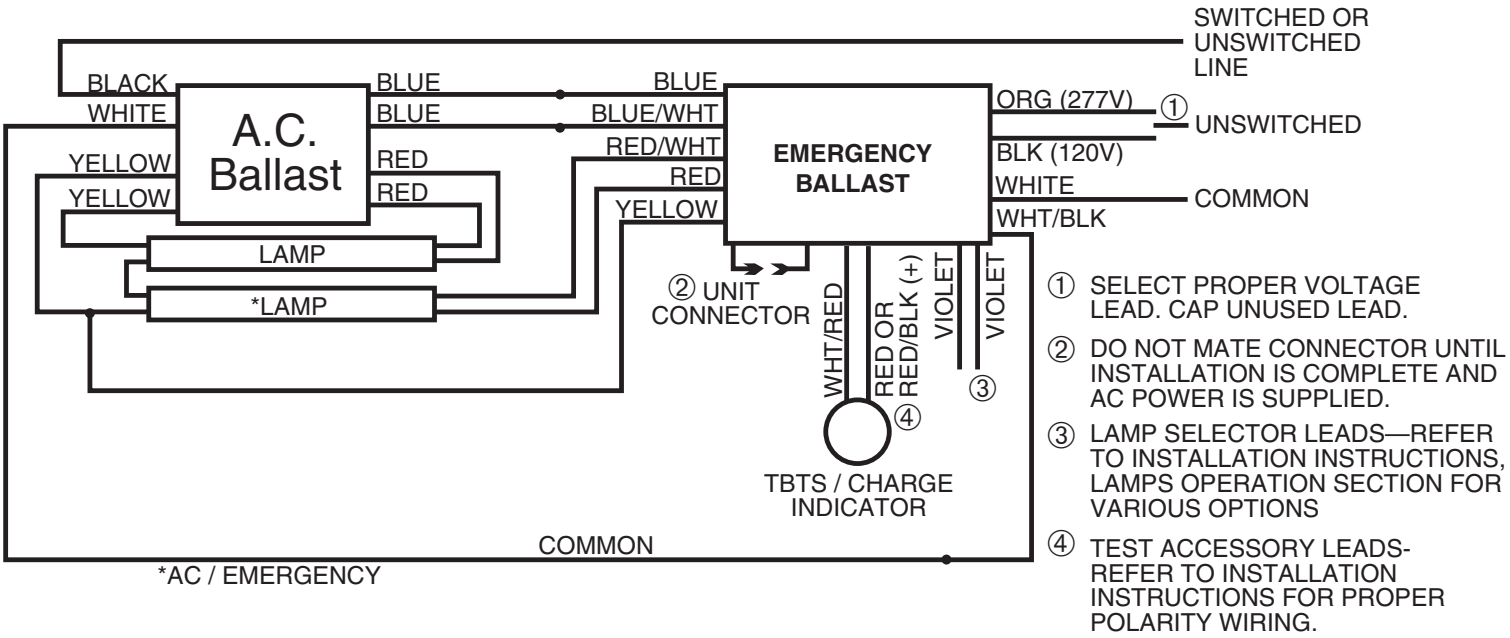
2LMB_D

NOTES

YY30

YY30

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

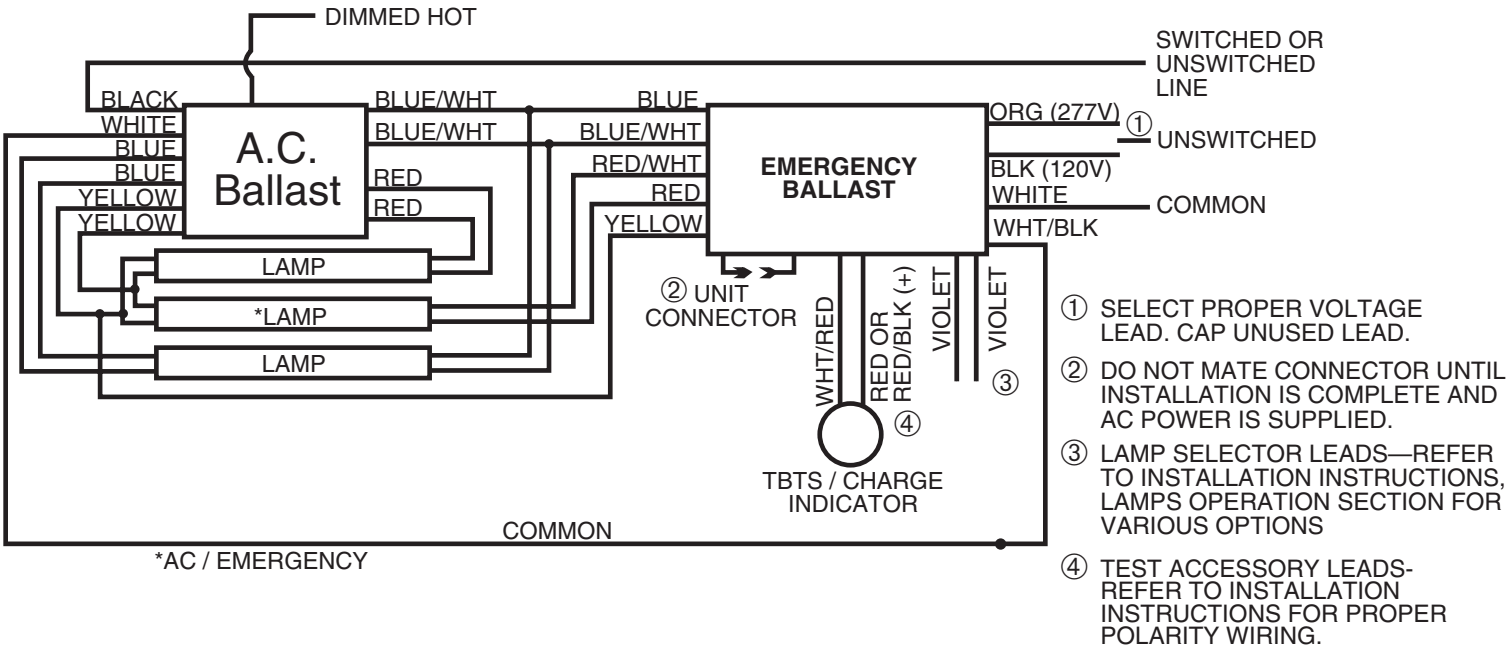
2LRSB_D_4

NOTES

YY31

YY31

THREE LAMP RAPID START BALLAST WITH DIMMING LEAD



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

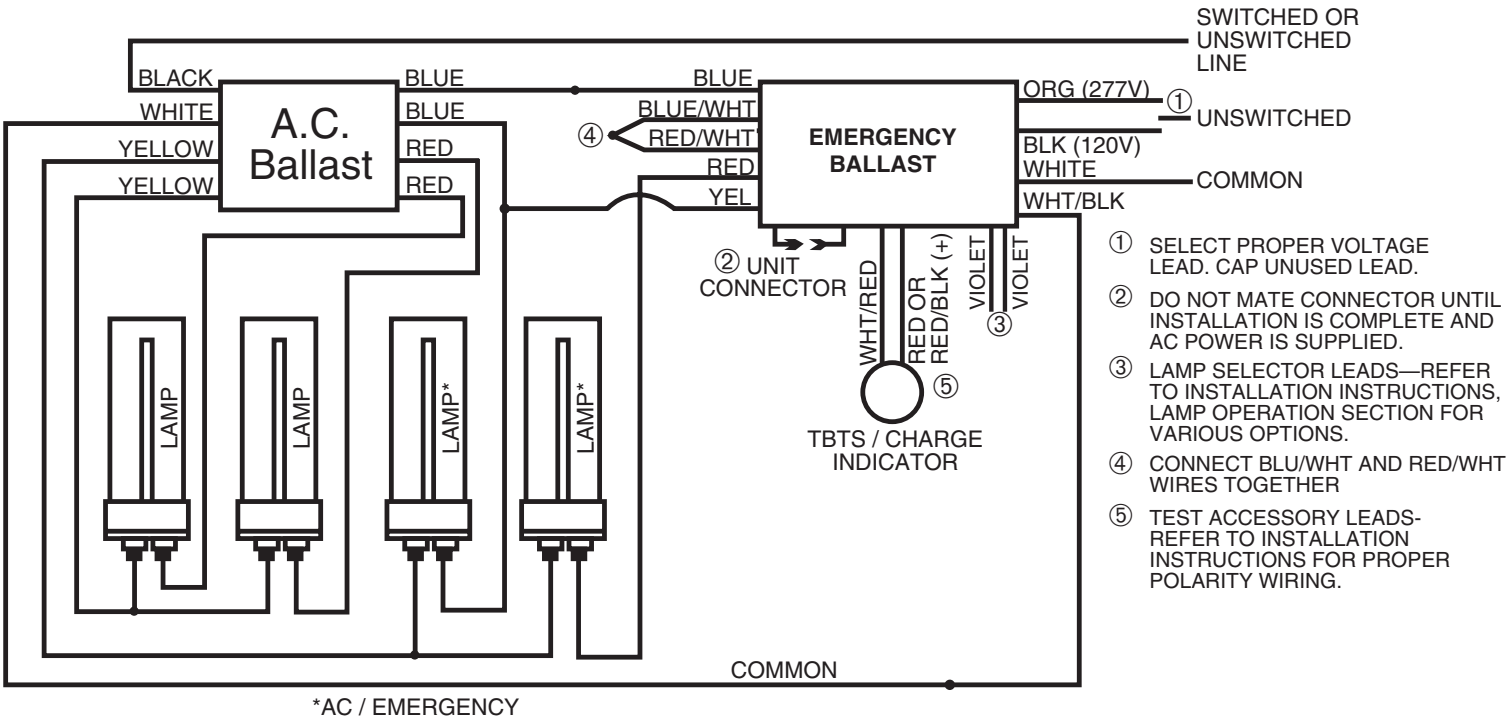
3LRSBDL_D

NOTES

YY32

YY32

FOUR U-BEND LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

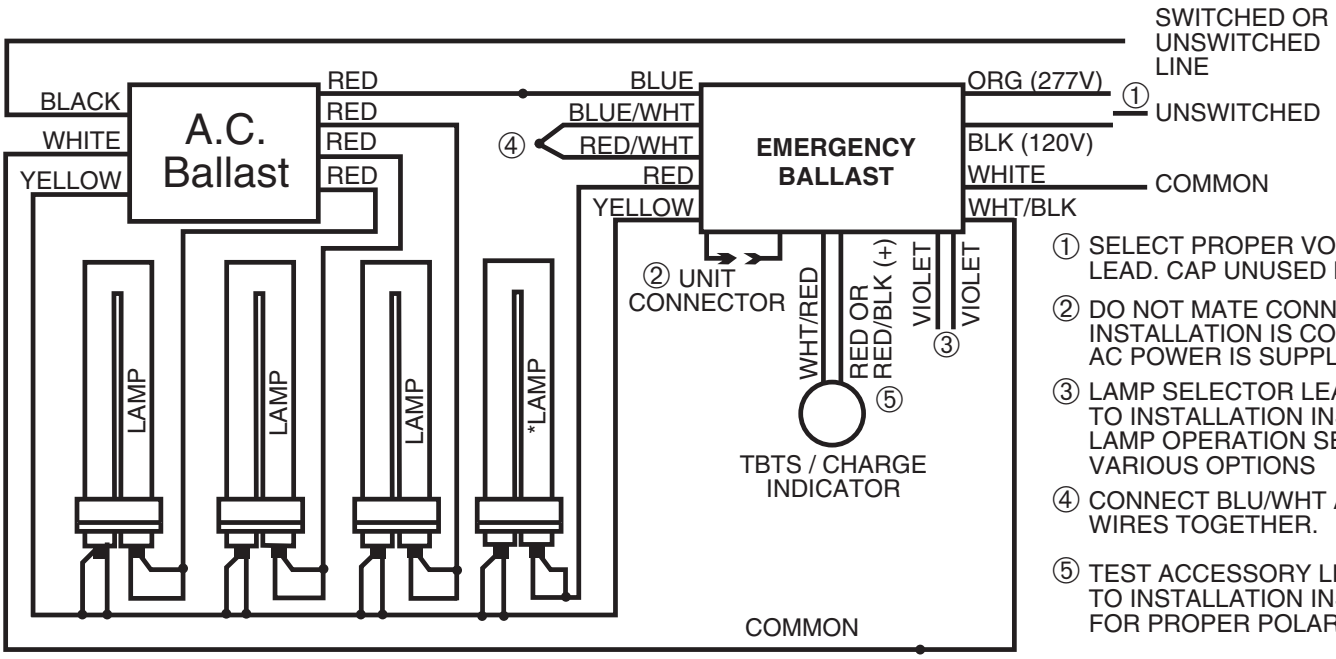
4ULISB_2LEO_D

NOTES

YY33

YY33

FOUR LAMP BIAX FULLHAM WORKHORSE BALLAST



*AC / EMERGENCY

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

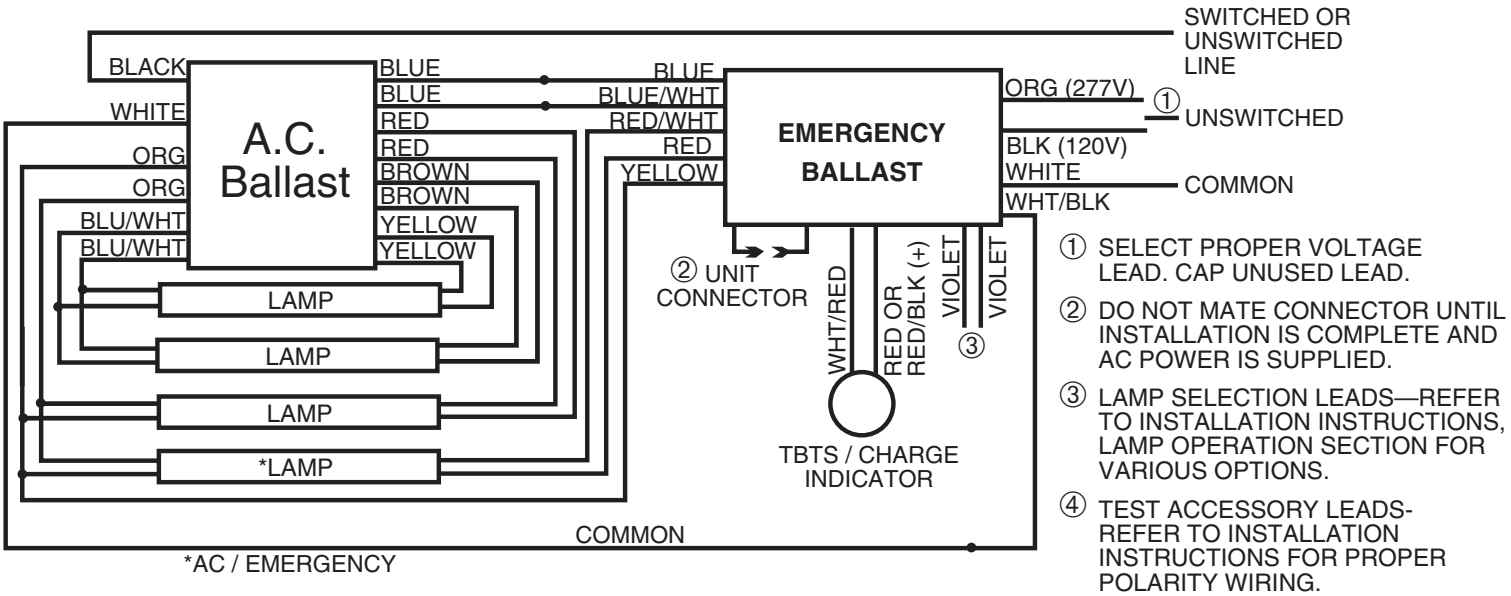
4LBFWB_160

NOTES

YY34

YY34

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

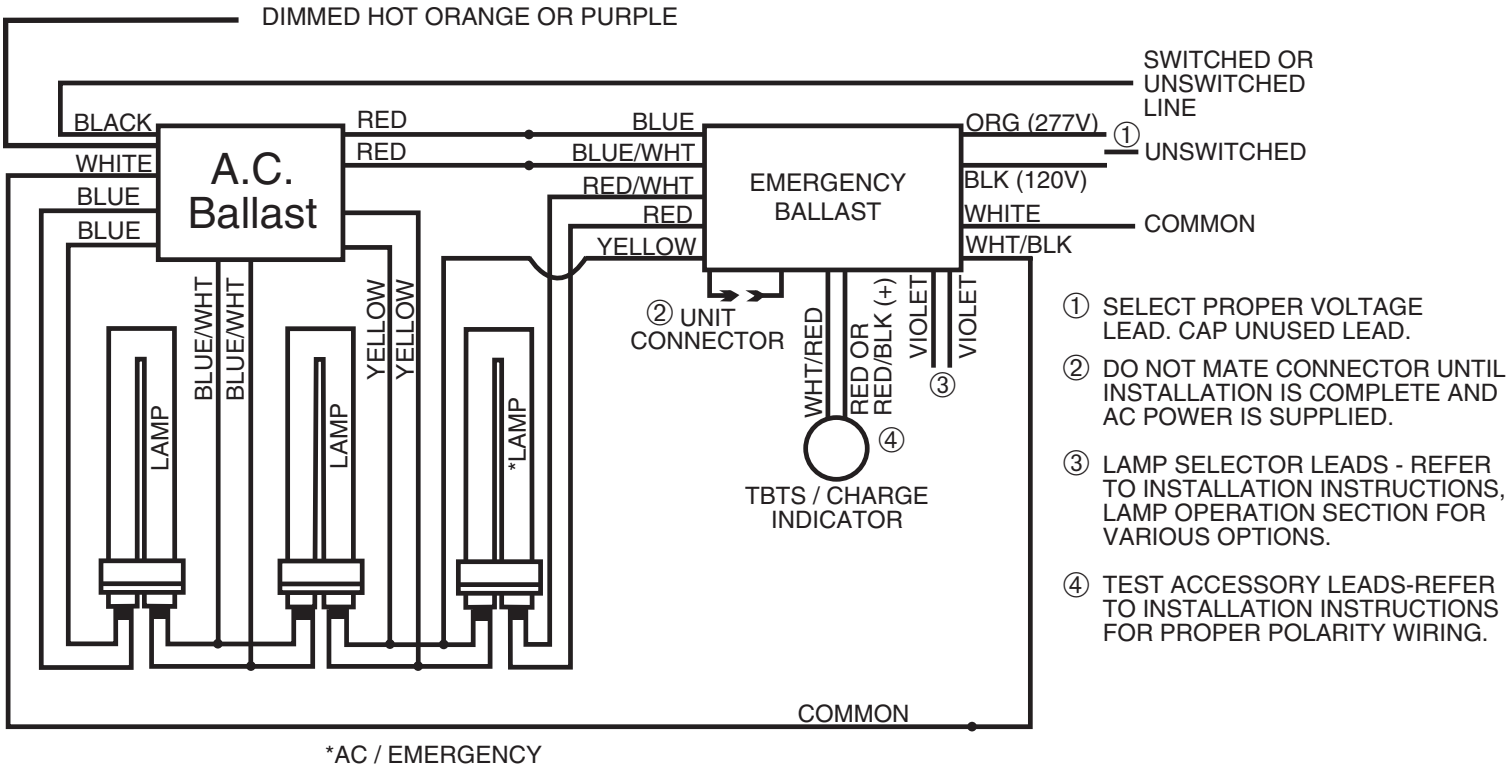
4LRSB_D_3

NOTES

YY35

YY35

THREE BIAX RAPID START BALLAST WITH DIMMING CONTROL



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

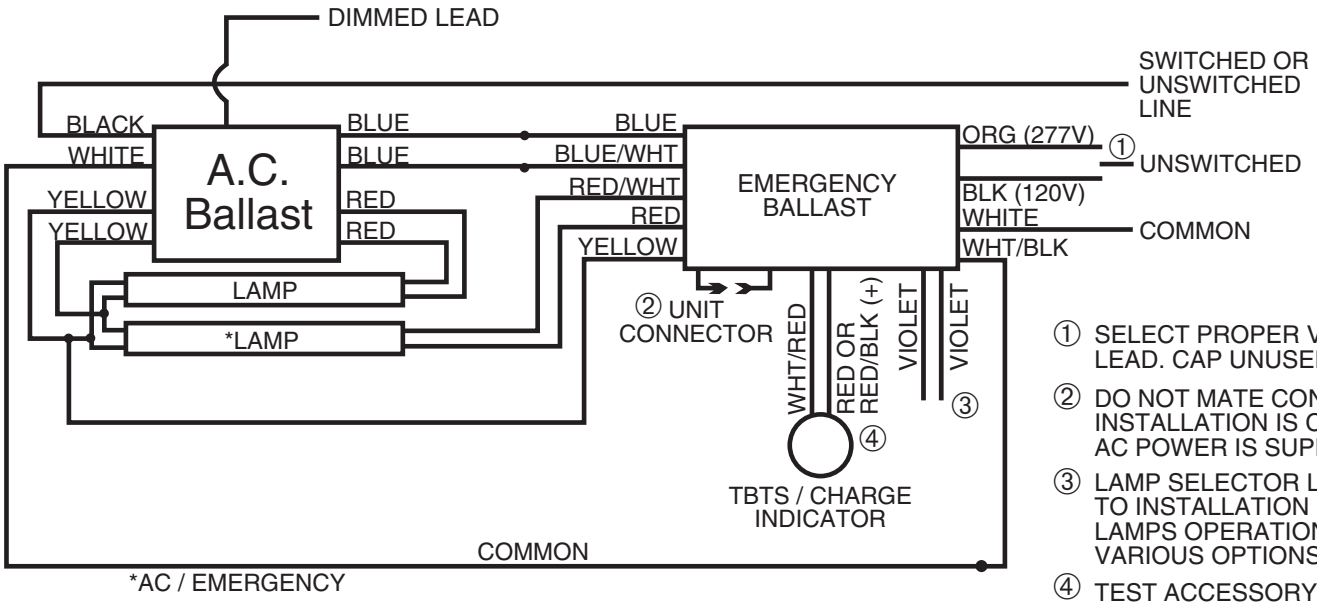
3BXLRSB_DM_80_D

NOTES

YY36

YY36

TWO LAMP RAPID START BALLAST WITH DIMMING LEAD



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

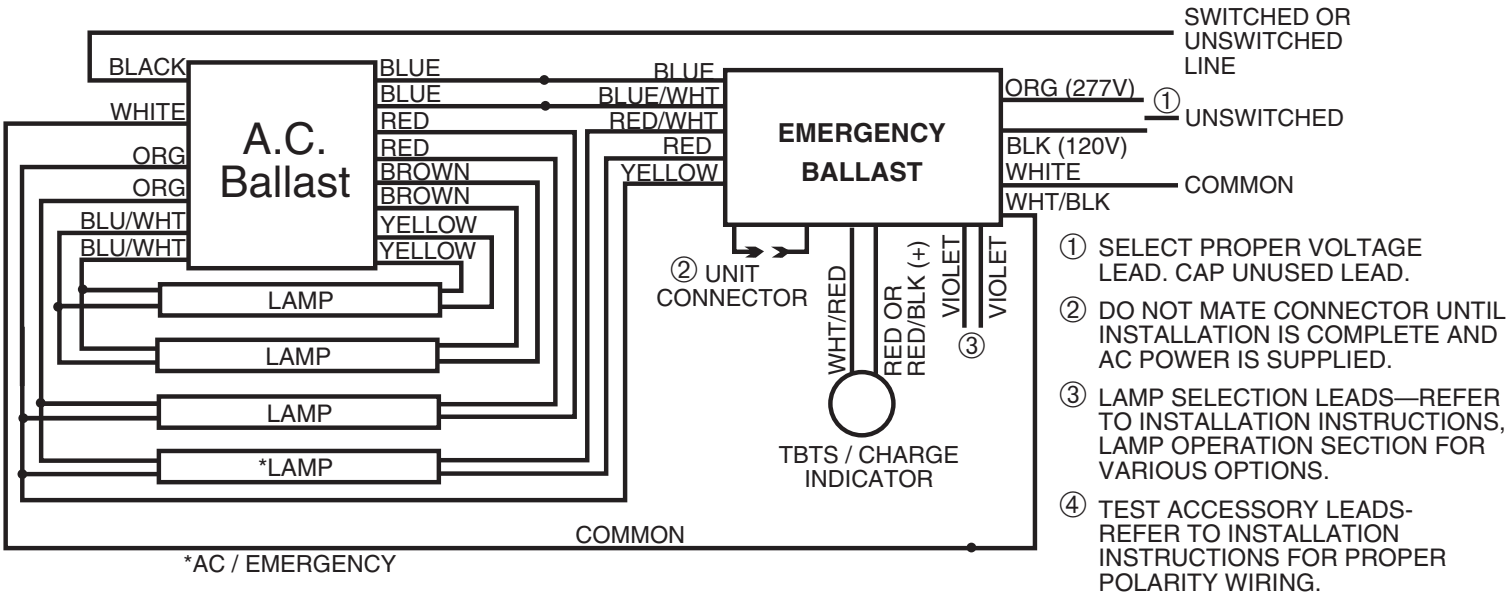
2LRSBDL_D

NOTES

YY37

YY37

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

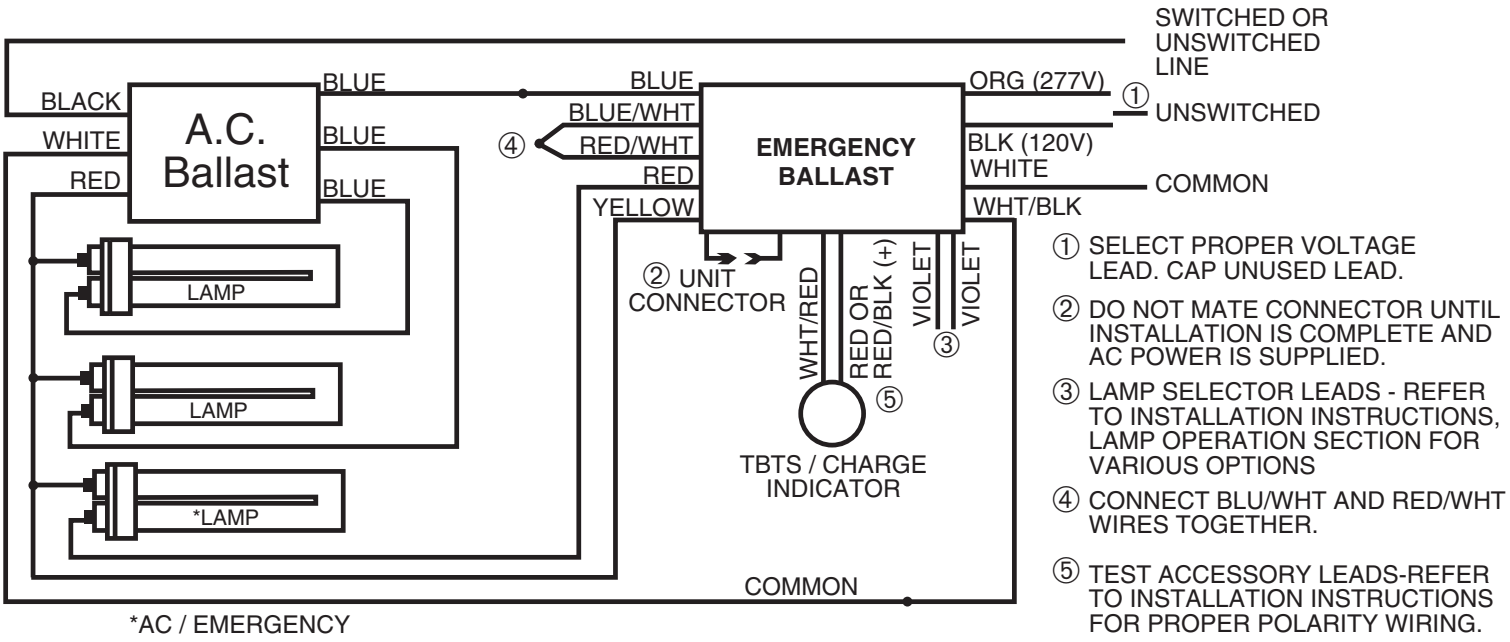
4LRSB_D_3

NOTES

YY38

YY38

THREE BIAX LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

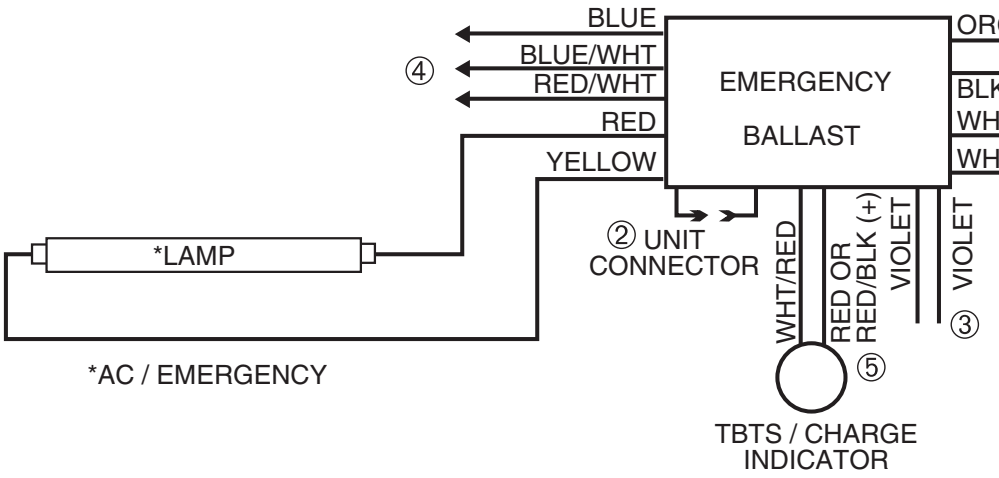
3LISBX_D

NOTES

YY39

YY39

ONE LAMP EMERGENCY ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

④ CAP UNUSED LEADS.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

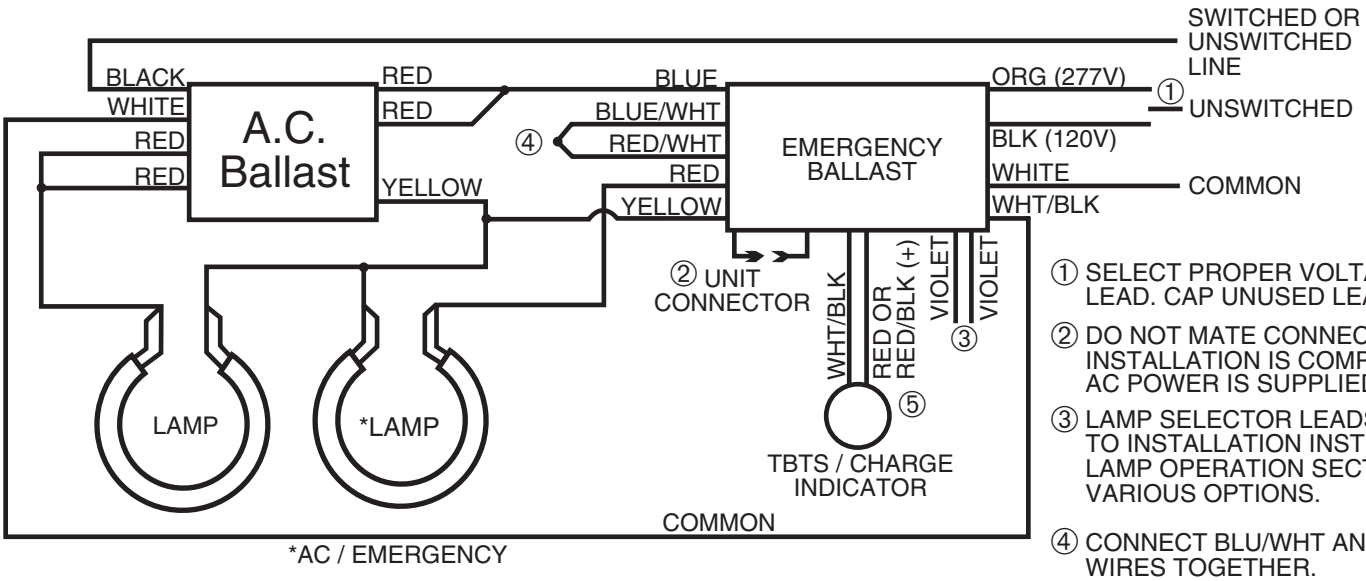
1LEO_80_D

NOTES

YY40

YY40

TWO LAMP CIRCLINE FULHAM BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

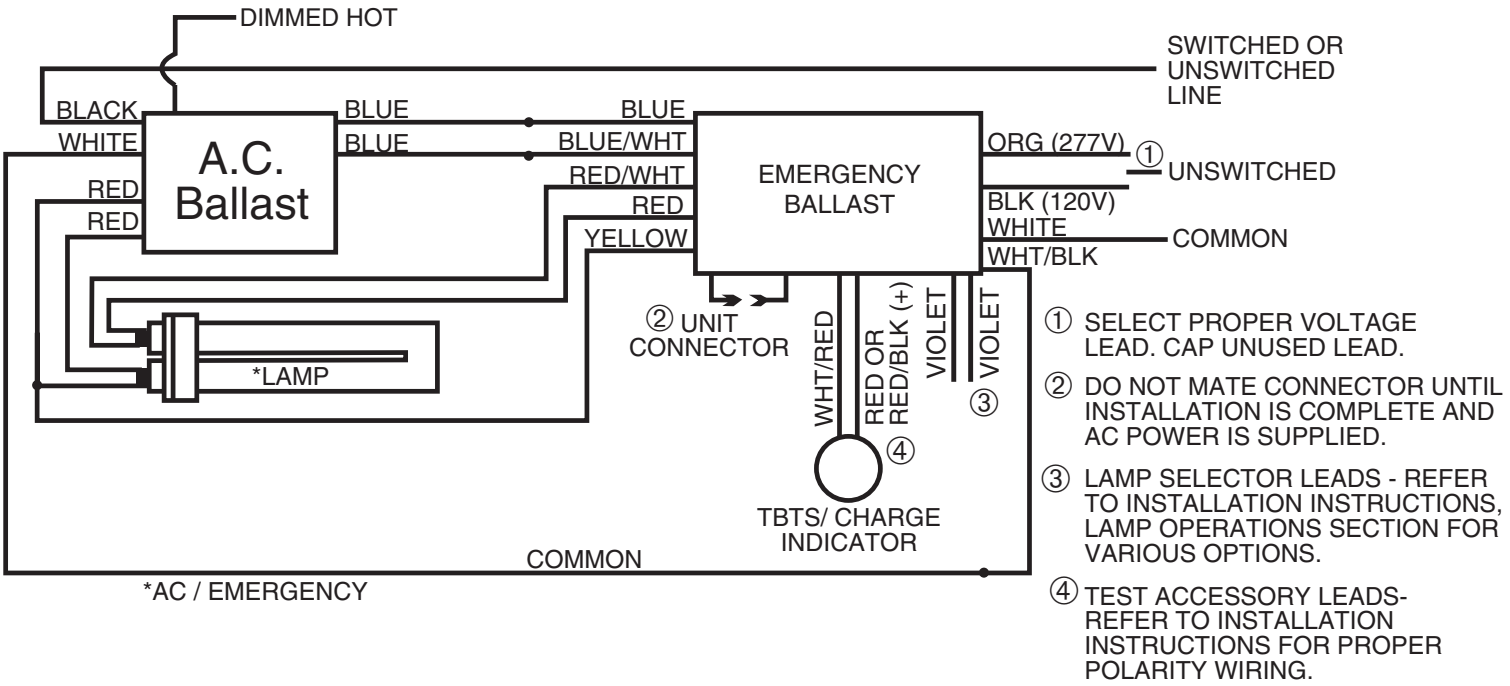
2LCFB_80

NOTES

YY41

YY41

ONE BIAX LAMP RAPID START BALLAST WITH DIMMING CONTROL



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATIONS SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

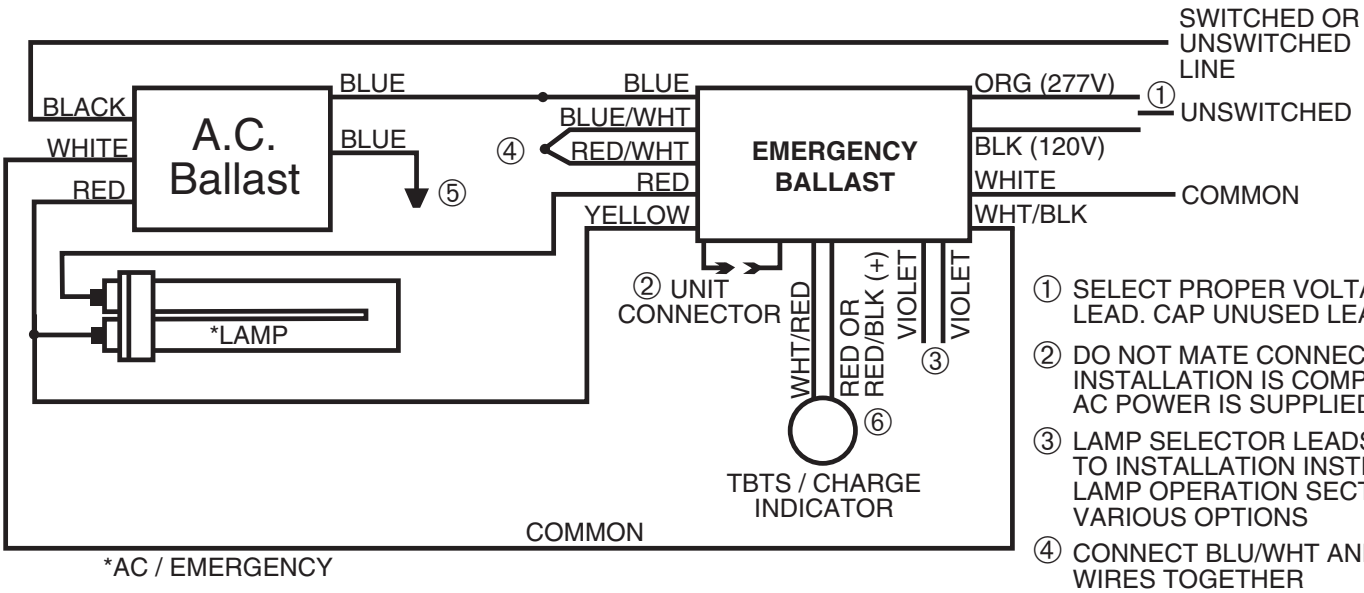
1BXLRSB_DM_80_D

NOTES

YY42

YY42

ONE LAMP BIAX



*AC / EMERGENCY

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ CAP UNUSED LEAD

⑥ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

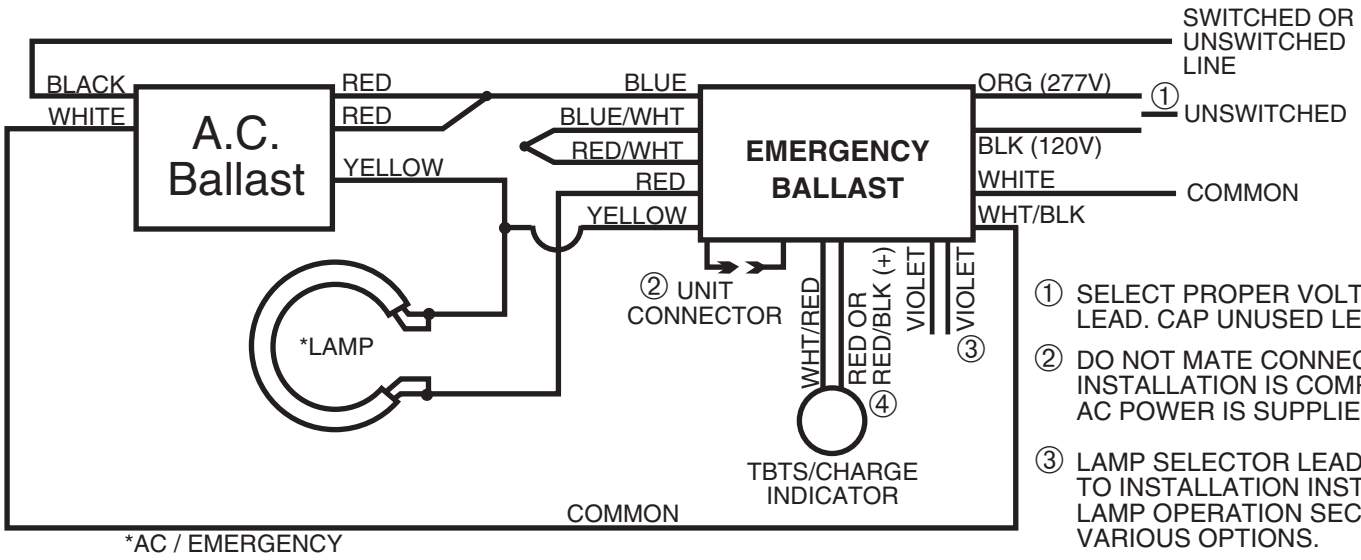
1LBX_80_D

NOTES

YY43

YY43

ONE LAMP CIRCLINE INSTANT START FULLHAM BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

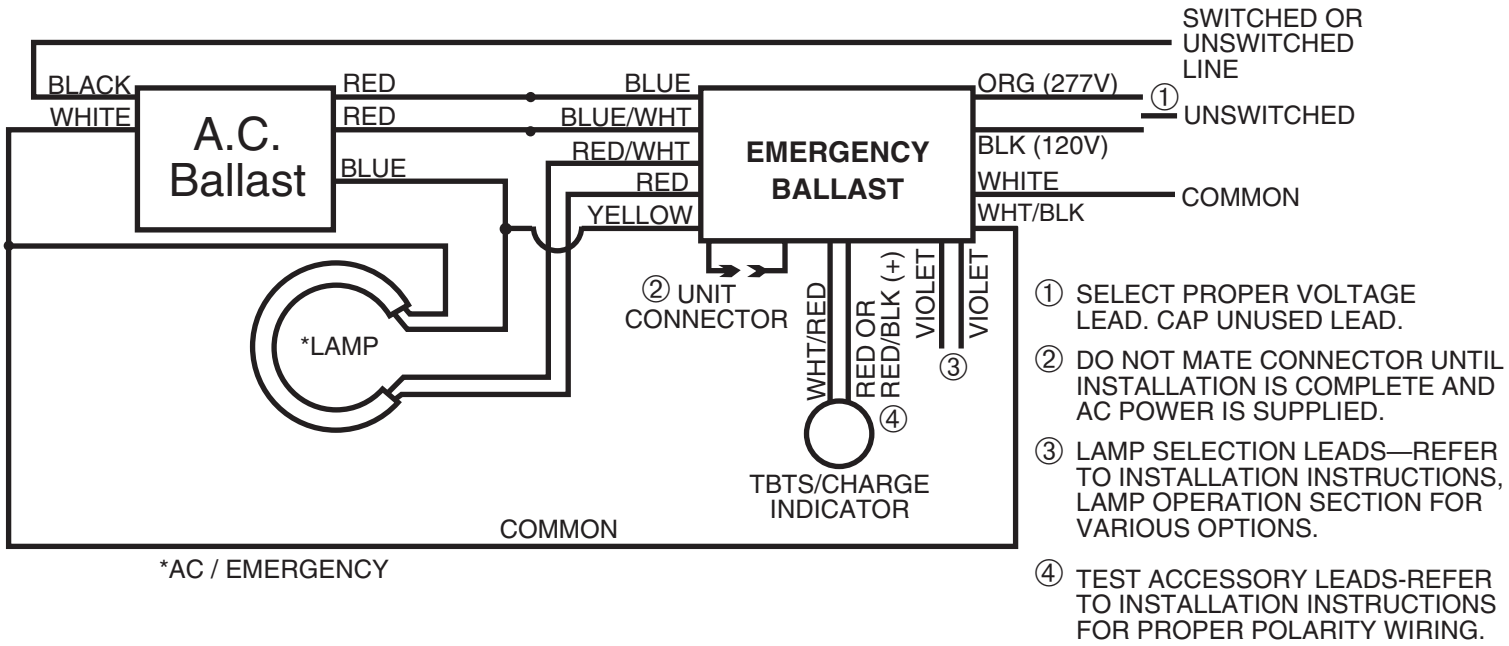
1LCISB_80F_D

NOTES

YY44

YY44

ONE LAMP CIRCLINE RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

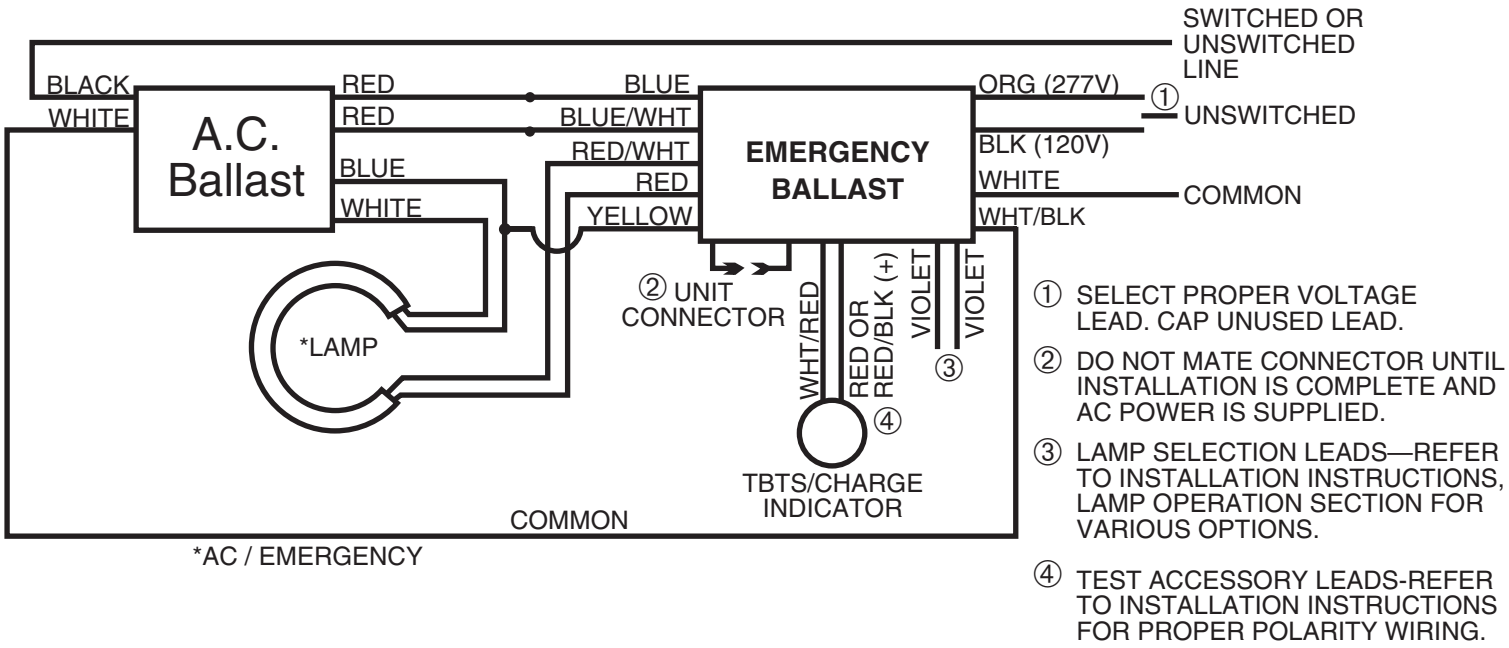
1LCRSB2_D

NOTES

YY45

YY45

ONE LAMP CIRCLINE RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

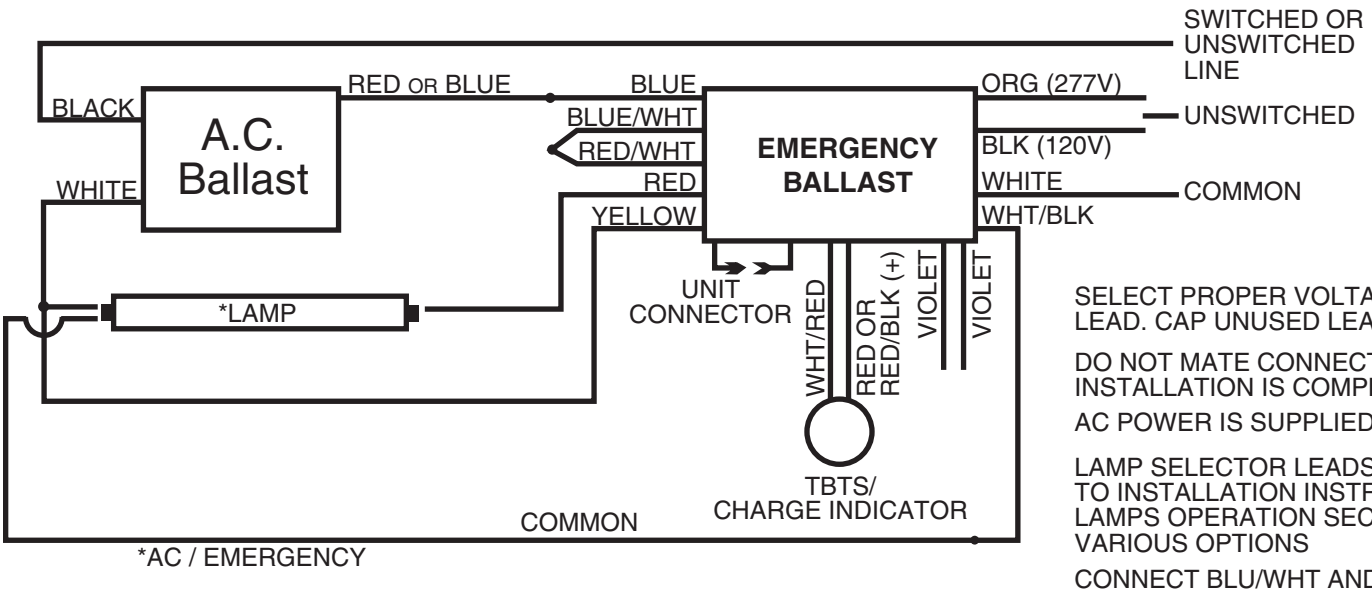
1LCRSB_80_D

NOTES

YY46

YY46

ONE LAMP MAGNETIC BALLAST



SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

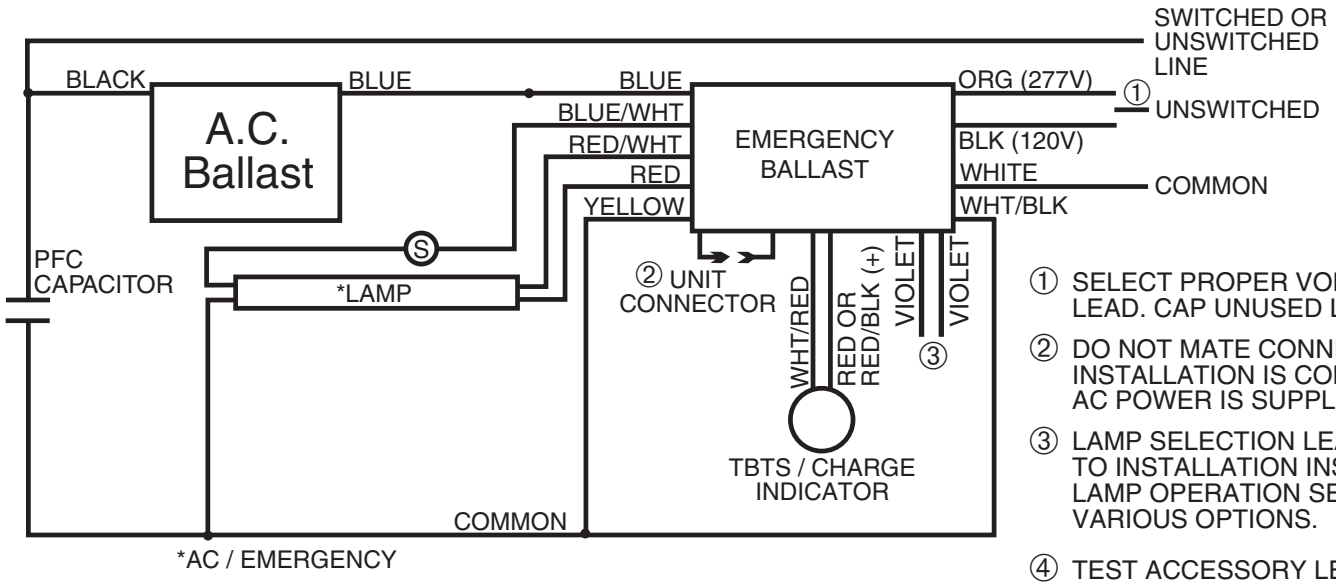
1LMB_80_D

NOTES

YY47

YY47

ONE LAMP PRE-HEAT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

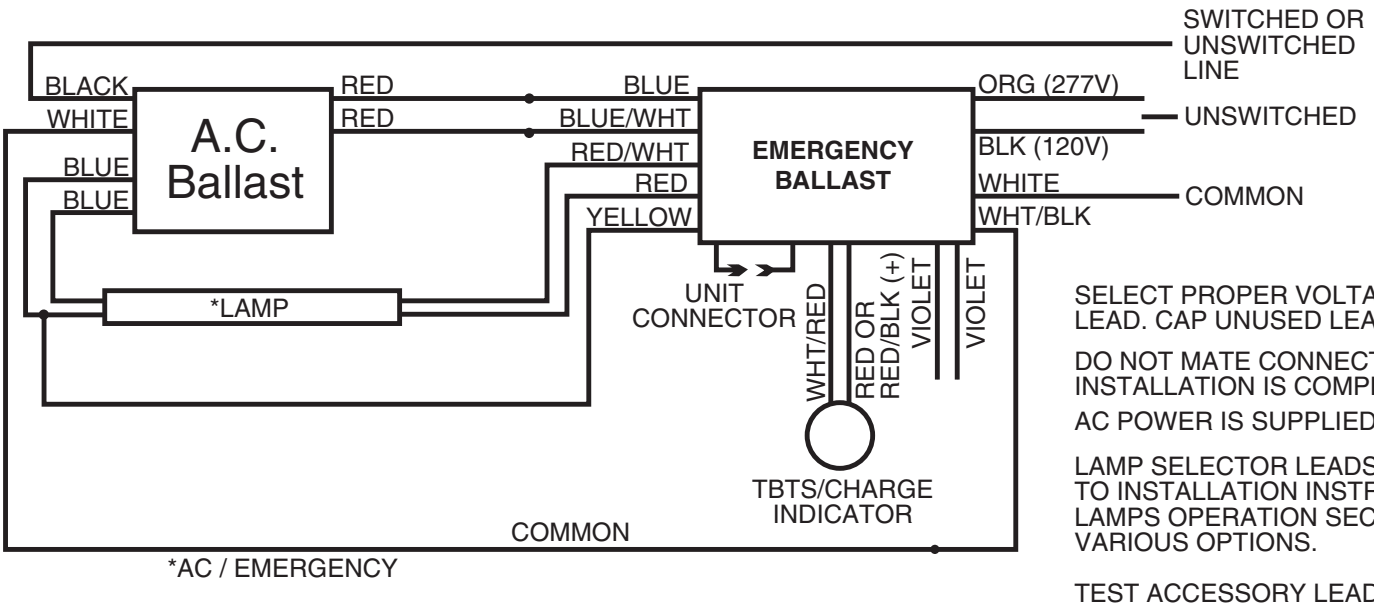
1LPHSB_80_D

NOTES

YY48

YY48

ONE LAMP RAPID START BALLAST



SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

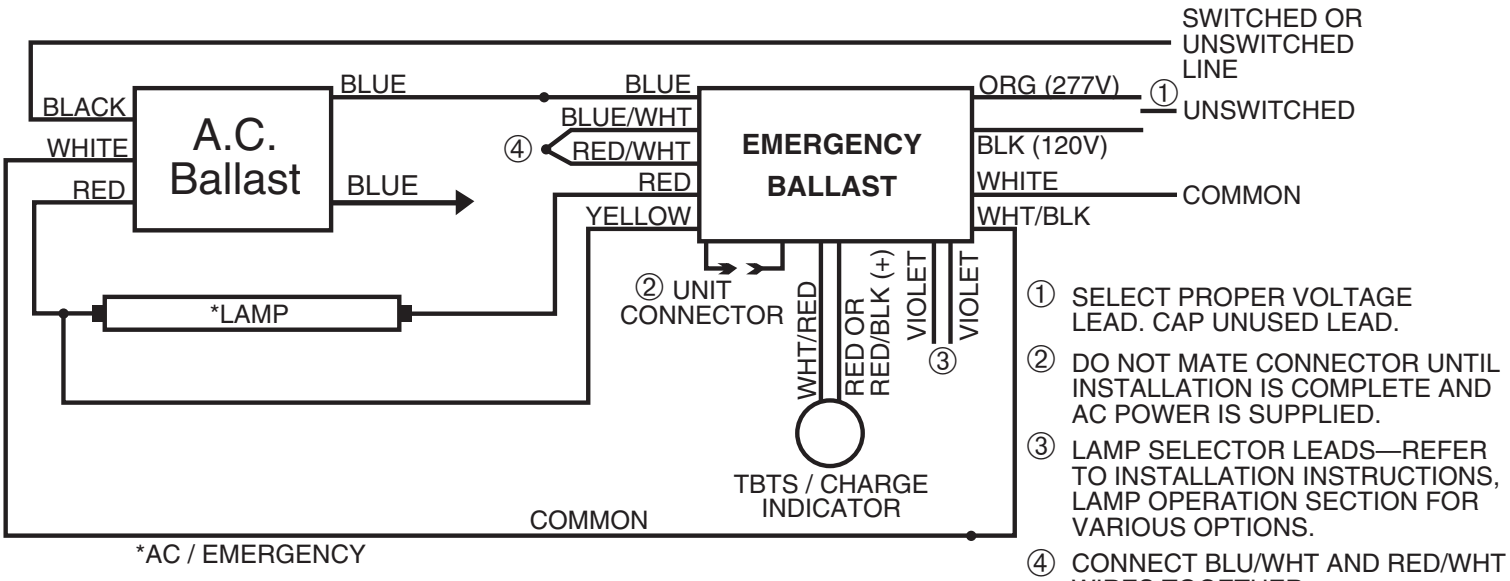
1LRSB_48ST_2_D

NOTES

YY49

YY49

ONE LAMP TRIAD BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

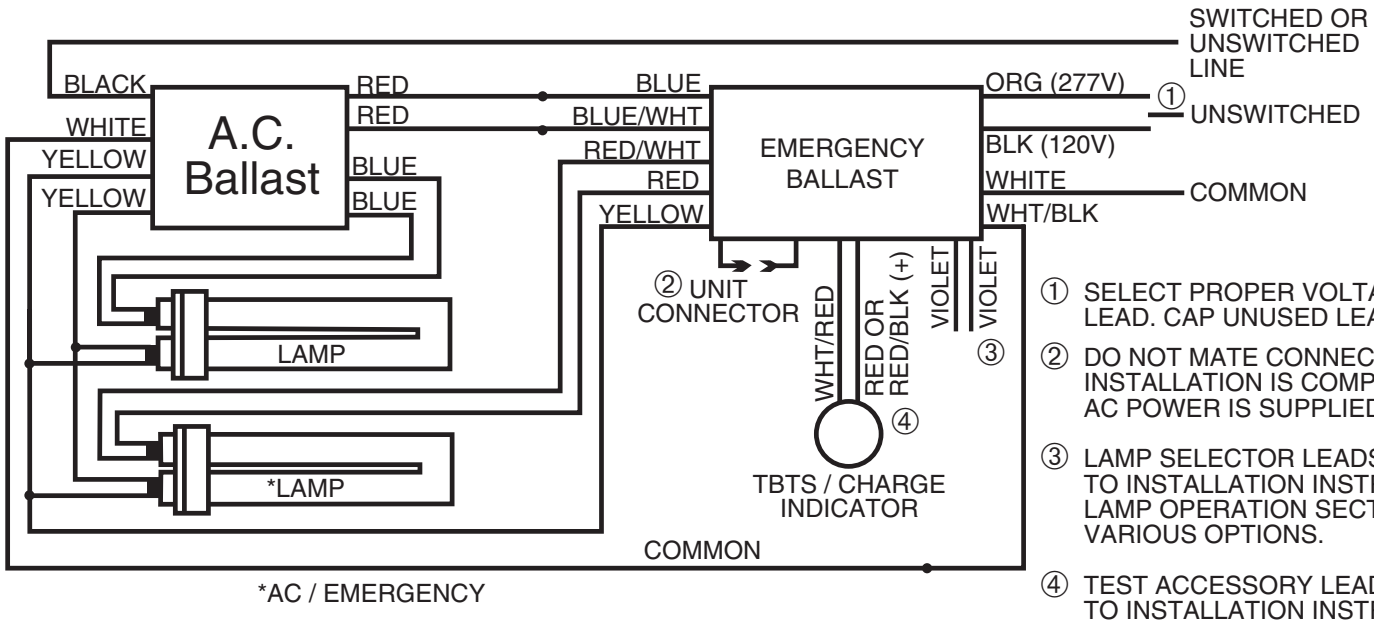
1LTB_80_D

NOTES

YY50

YY50

TWO BIAX RAPID START



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

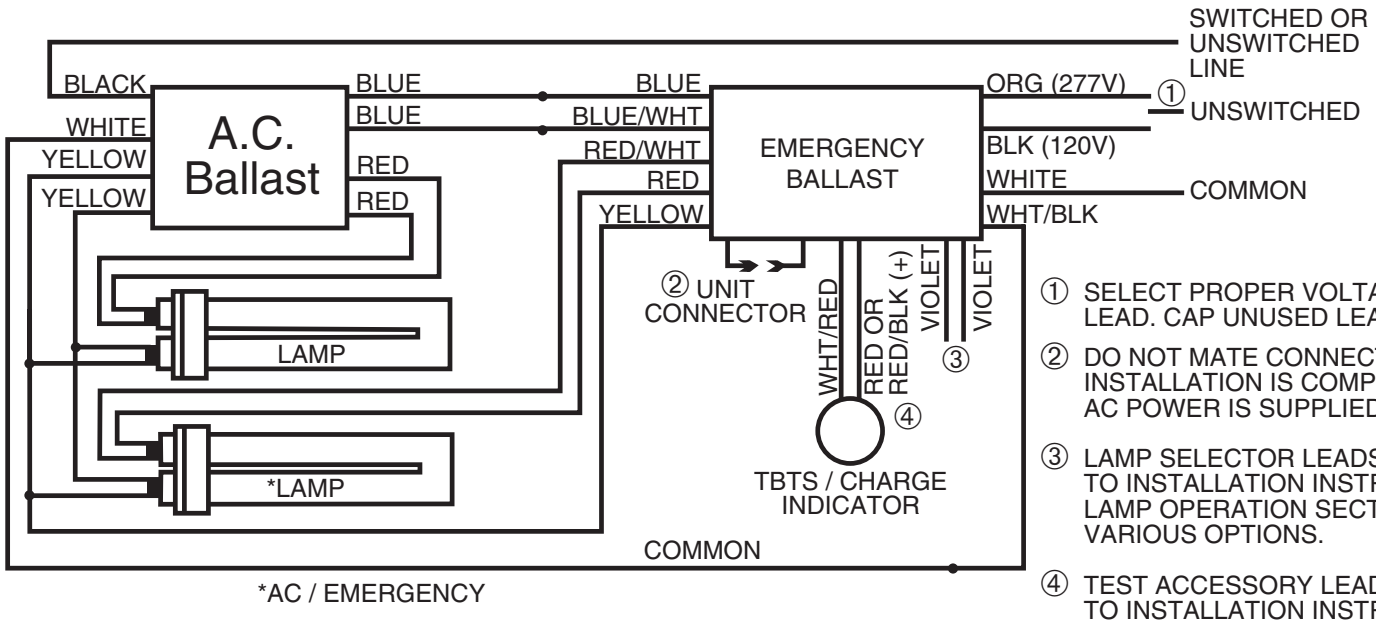
2BXLRSB2_80_D

NOTES

YY51

YY51

TWO BIAX LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

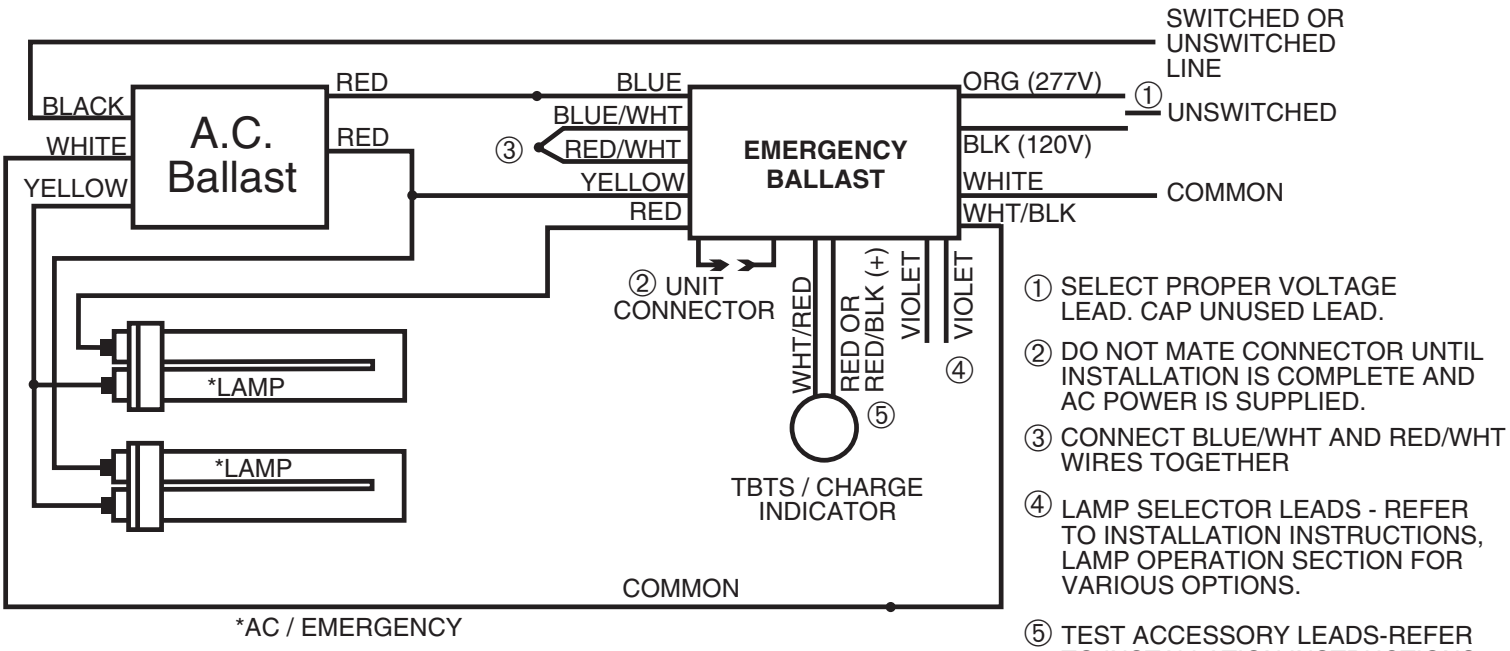
2BXLRSB_80_D

NOTES

YY52

YY52

TWO BIAX LAMP FULLHAM BALLAST TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ CONNECT BLUE/WHT AND RED/WHT WIRES TOGETHER

④ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

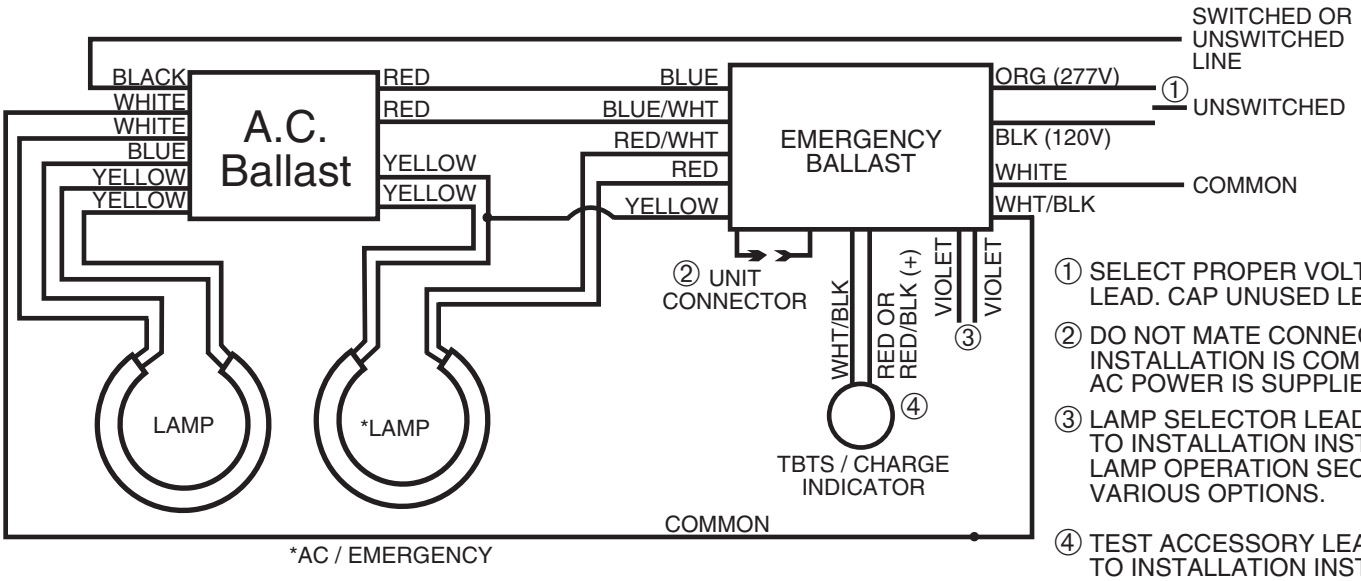
2LBXF_D

NOTES

YY53

YY53

TWO LAMP CIRCLINE RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

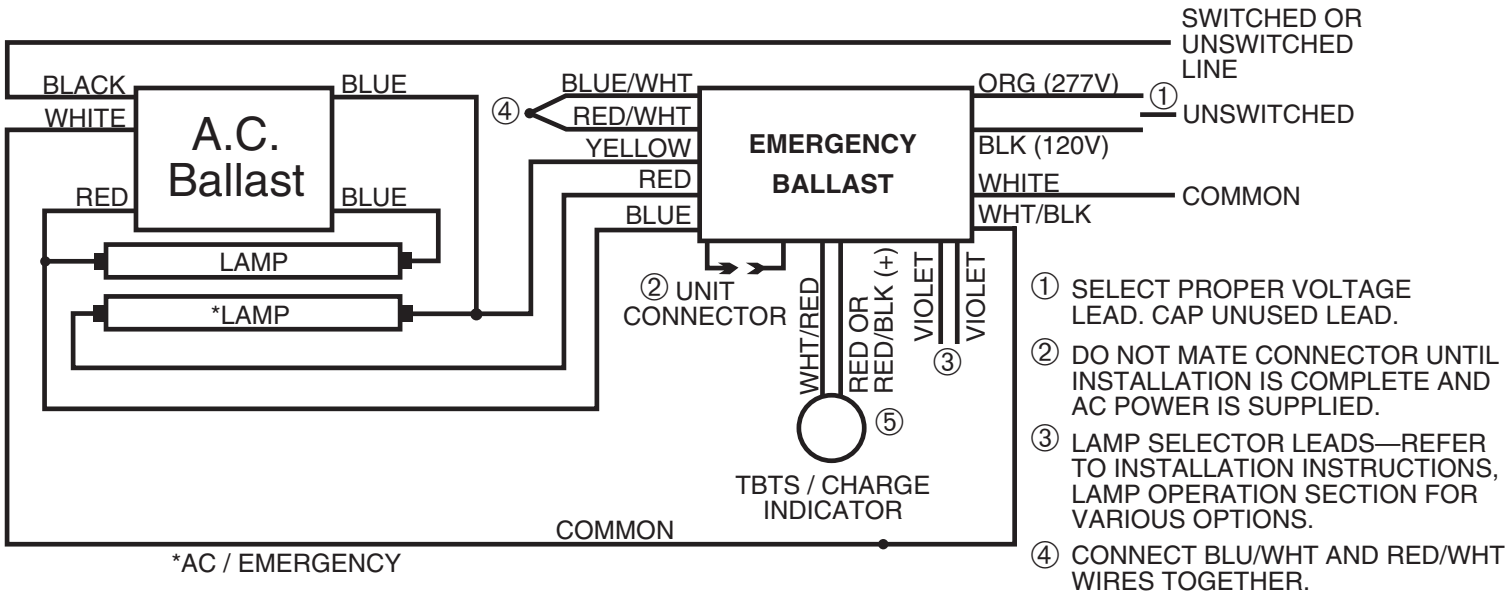
2LRSB_80_D

NOTES

YY54

YY54

TWO LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

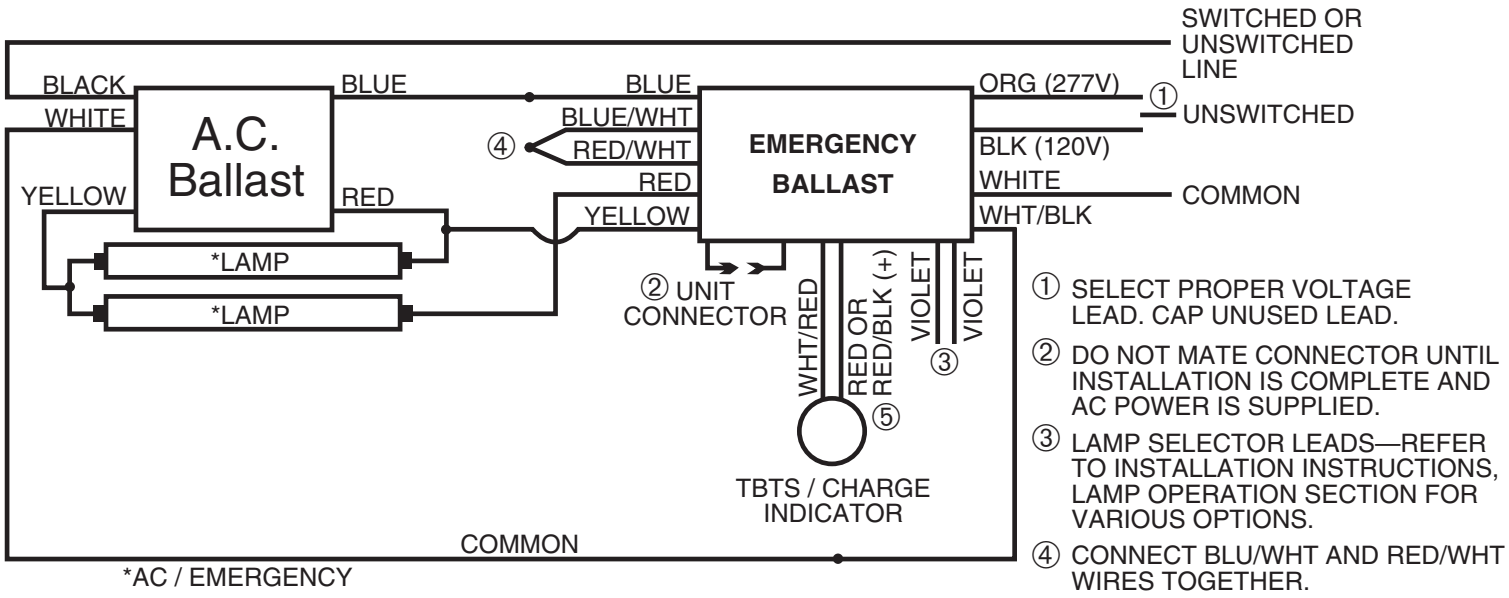
2LISB_80_3_D

NOTES

YY55

YY55

TWO LAMP INSTANT START BALLAST TWO LAMP OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

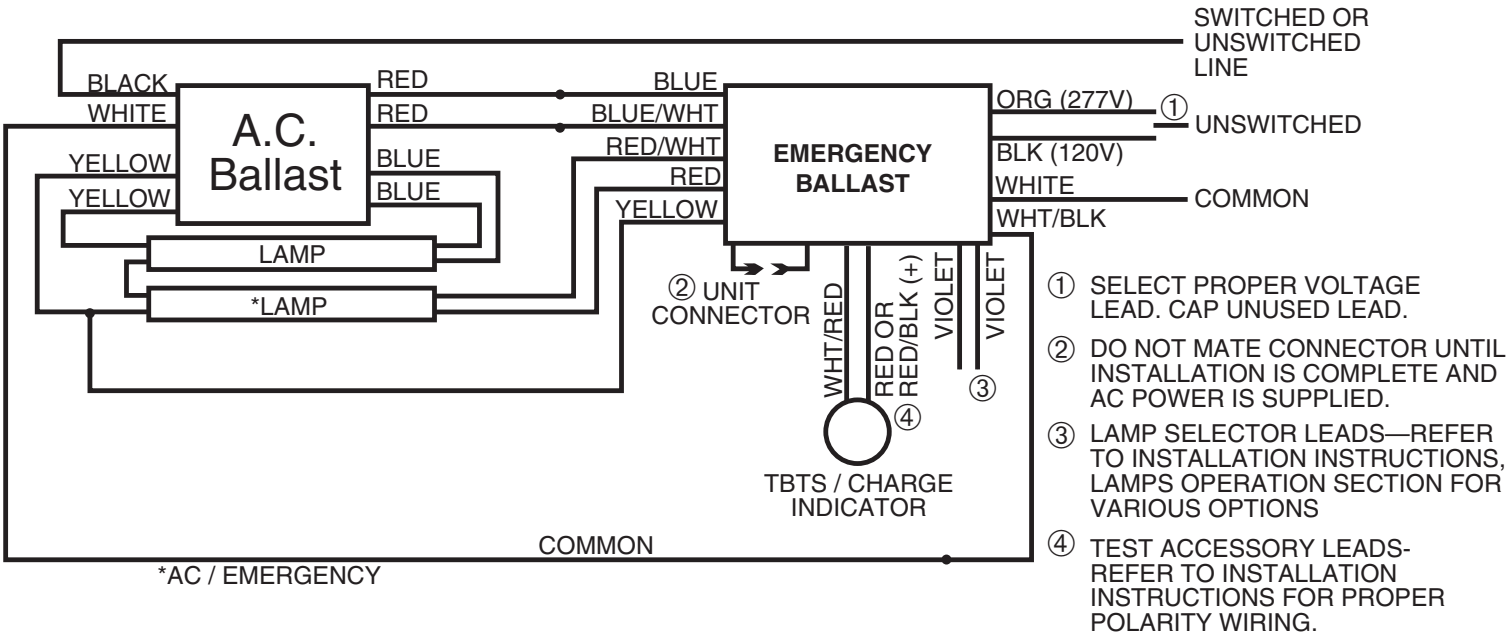
2LISBESI_2LEO_80_D

NOTES

YY56

YY56

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

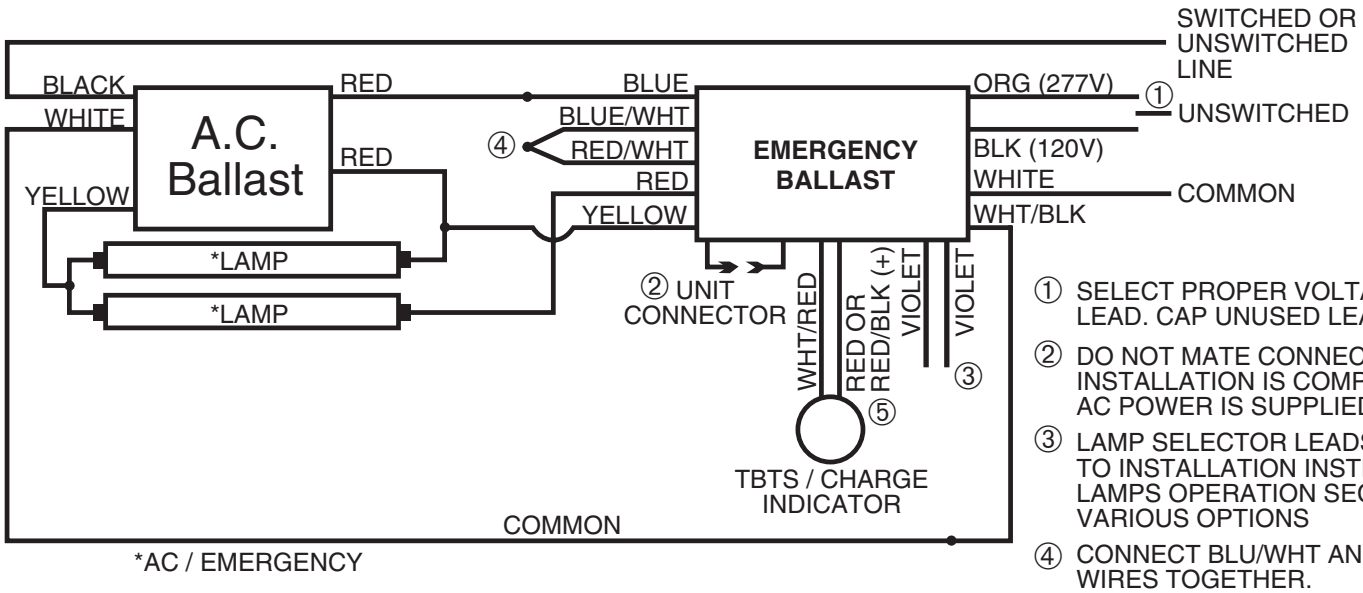
2LRSB_D_5

NOTES

YY57

YY57

TWO LAMP INSTANT START BALLAST TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

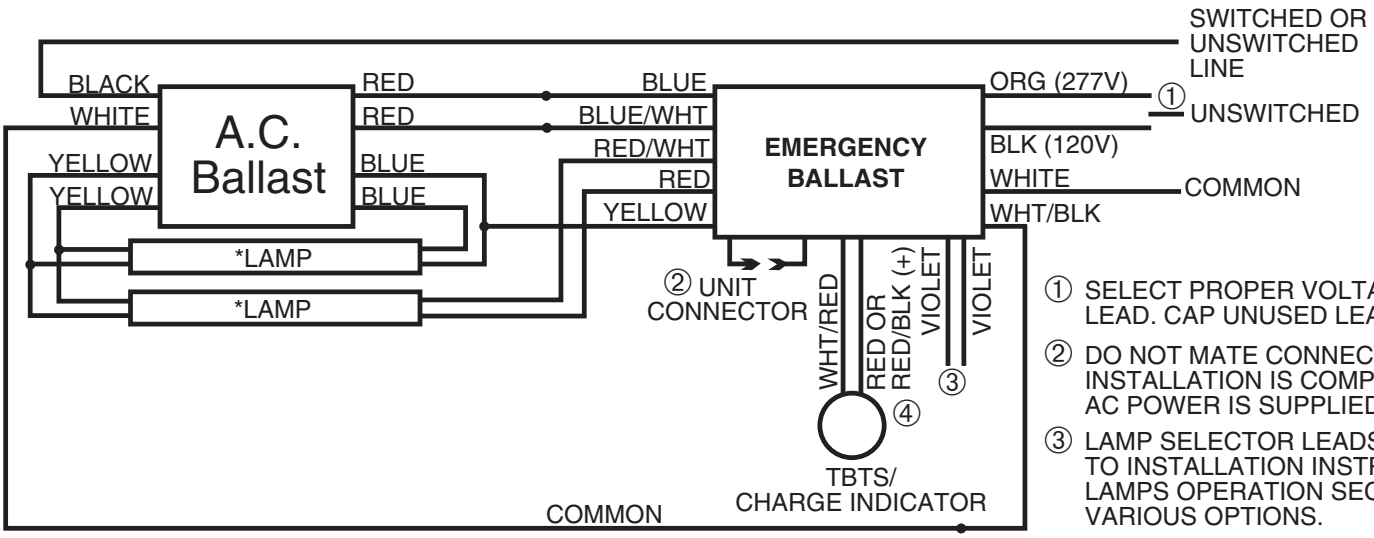
2LISFB2_80_2LEO_D

NOTES

YY58

YY58

TWO LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

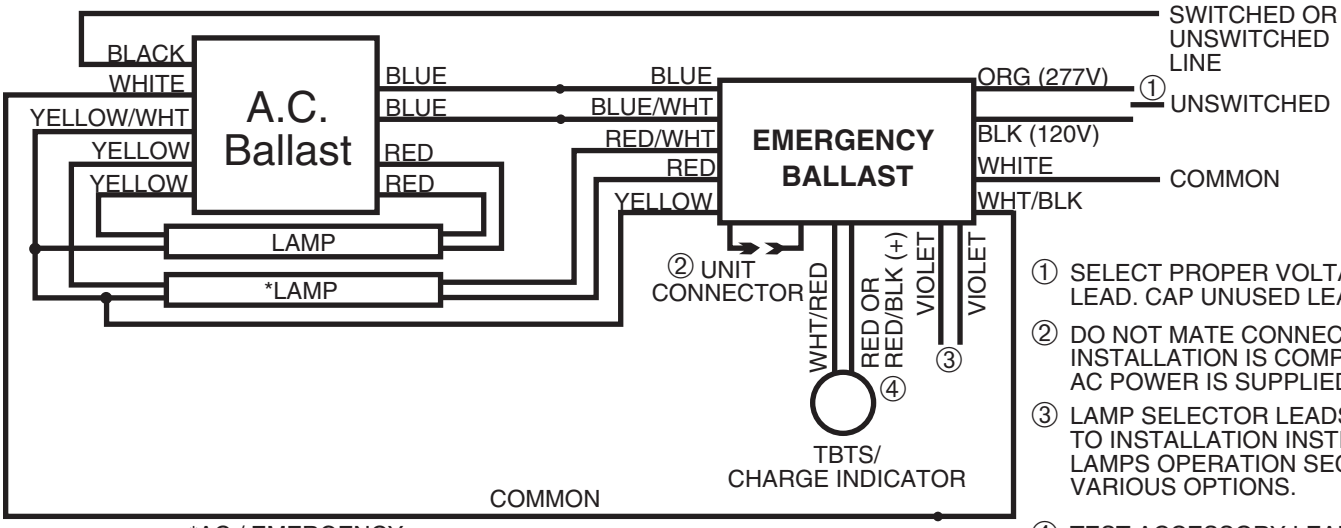
2LRSB_2LEO_48ST_2_D

NOTES

YY59

YY59

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

NOTE:
DIMMING WIRE IS NOT AFFECTED BY THE EM BALLAST

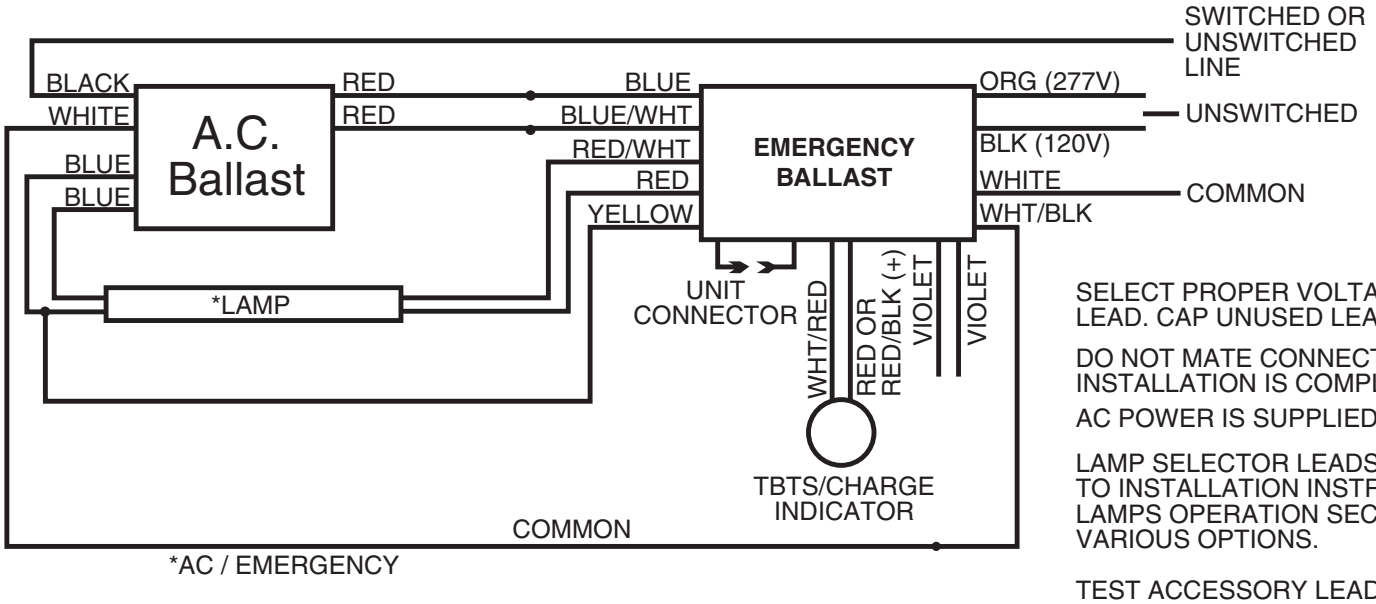
2LRSB_2LEO_SYL_D

NOTES

YY60

YY60

ONE LAMP RAPID START BALLAST



SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

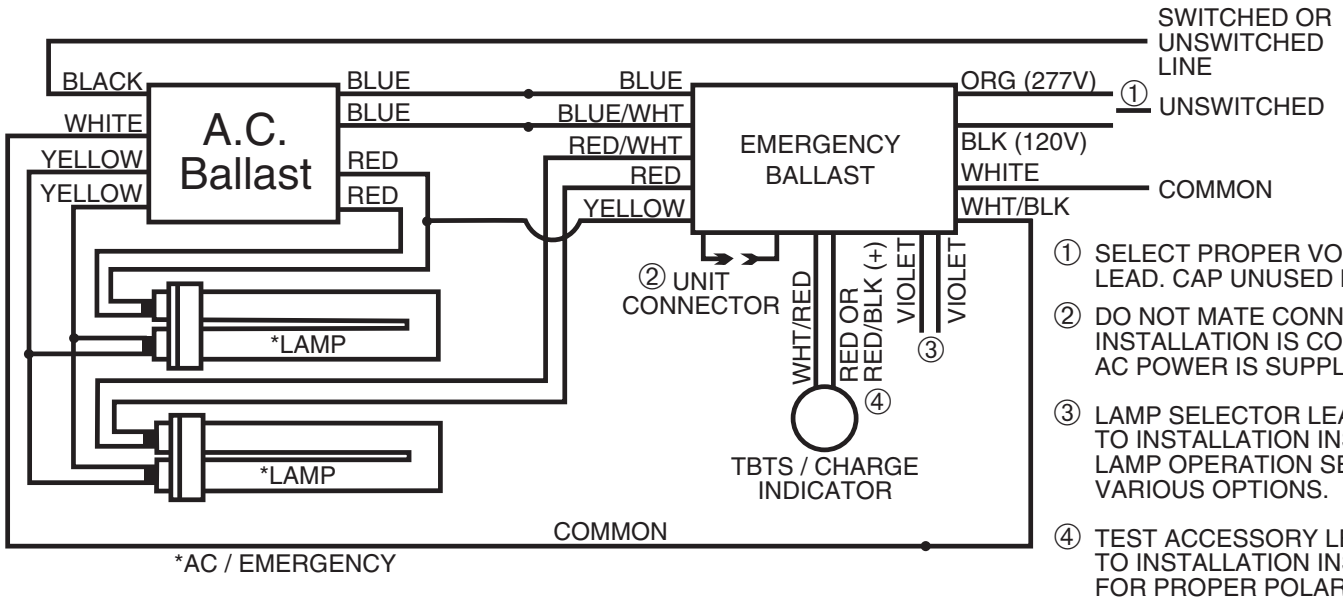
1LRSB_48ST_2_D

NOTES

YY61

YY61

TWO LAMP RAPID START BALLAST TWO LAMP OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

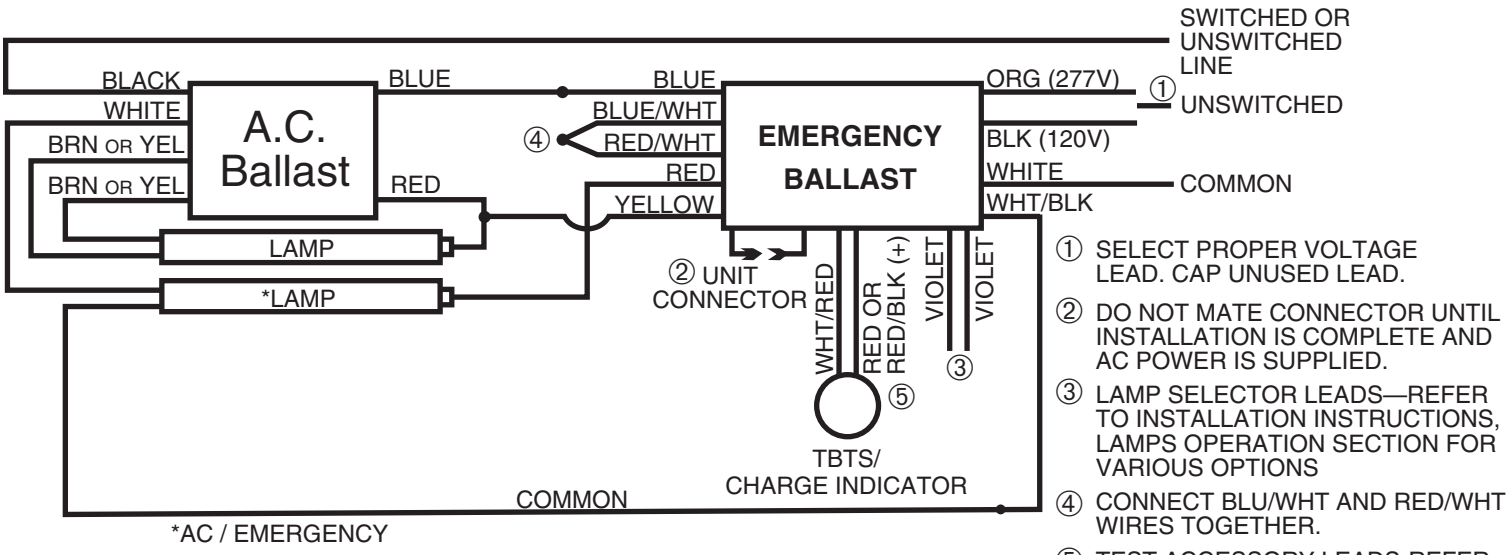
2LRSB_80_2_D

NOTES

YY62

YY62

TWO LAMP SERIES LEAD BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

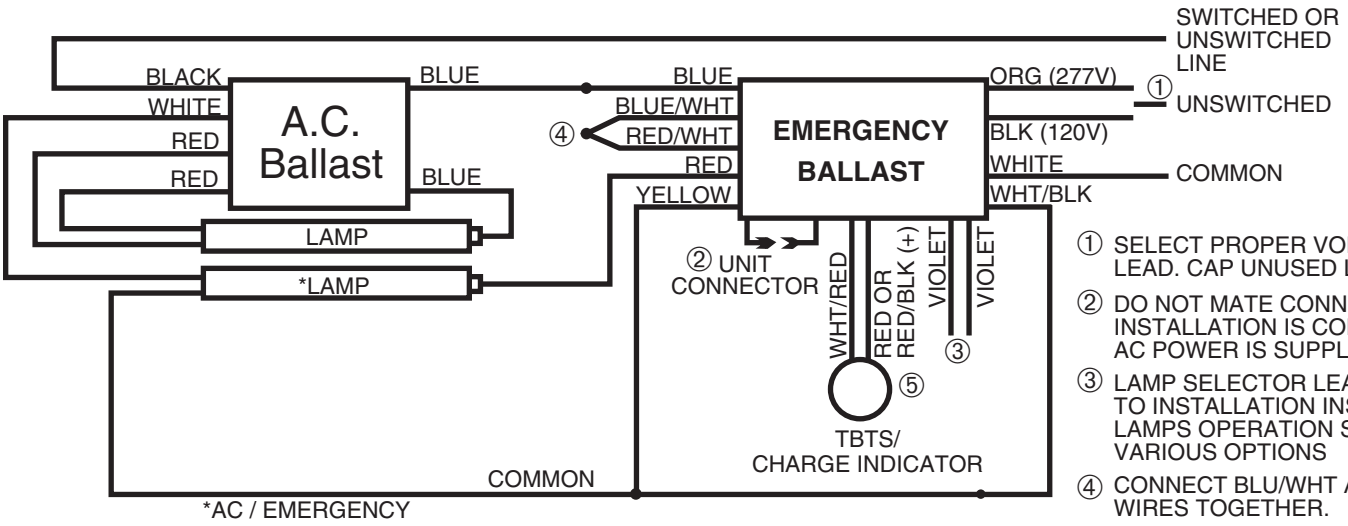
2LSL_2LEO_80_D

NOTES

YY63

YY63

TWO LAMP SERIES LEAD BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

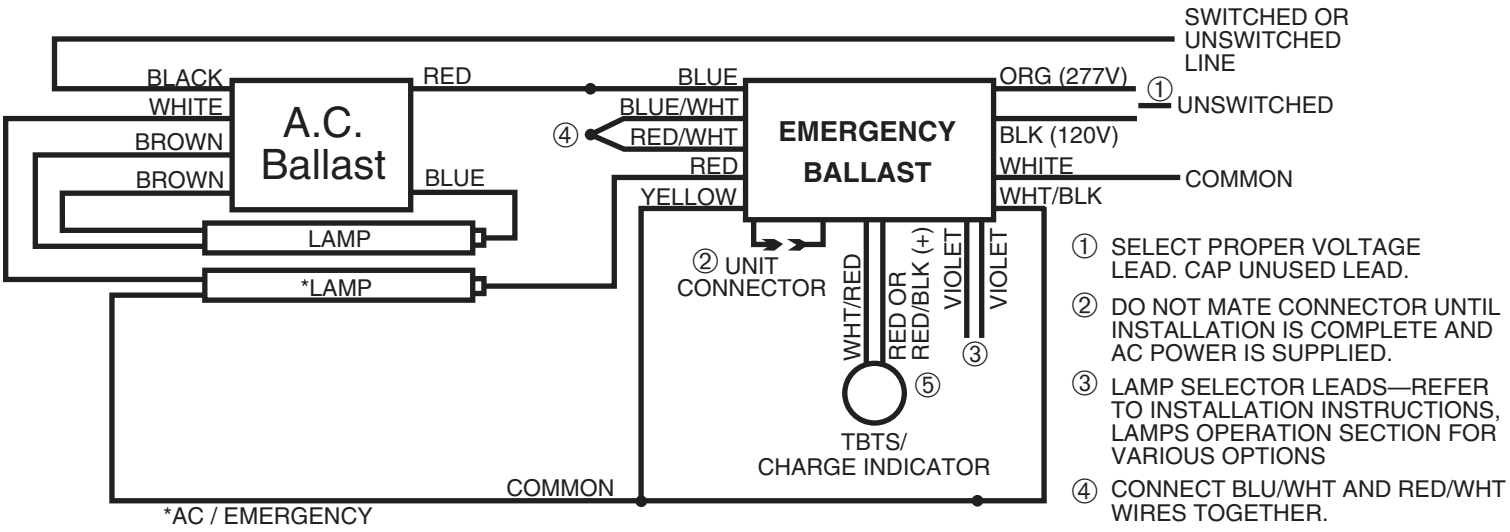
2LSL_80_2_D

NOTES

YY64

YY64

TWO LAMP SERIES LEAD BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

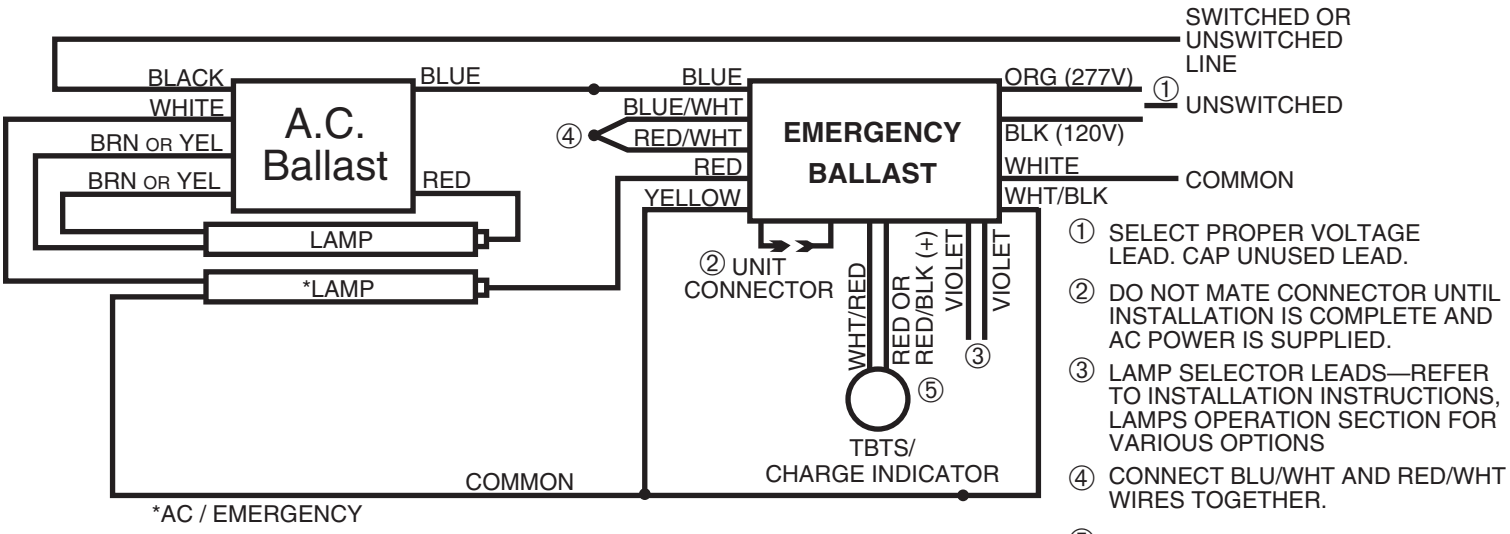
2LSL_80_3_D

NOTES

YY65

YY65

TWO LAMP SERIES LEAD BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

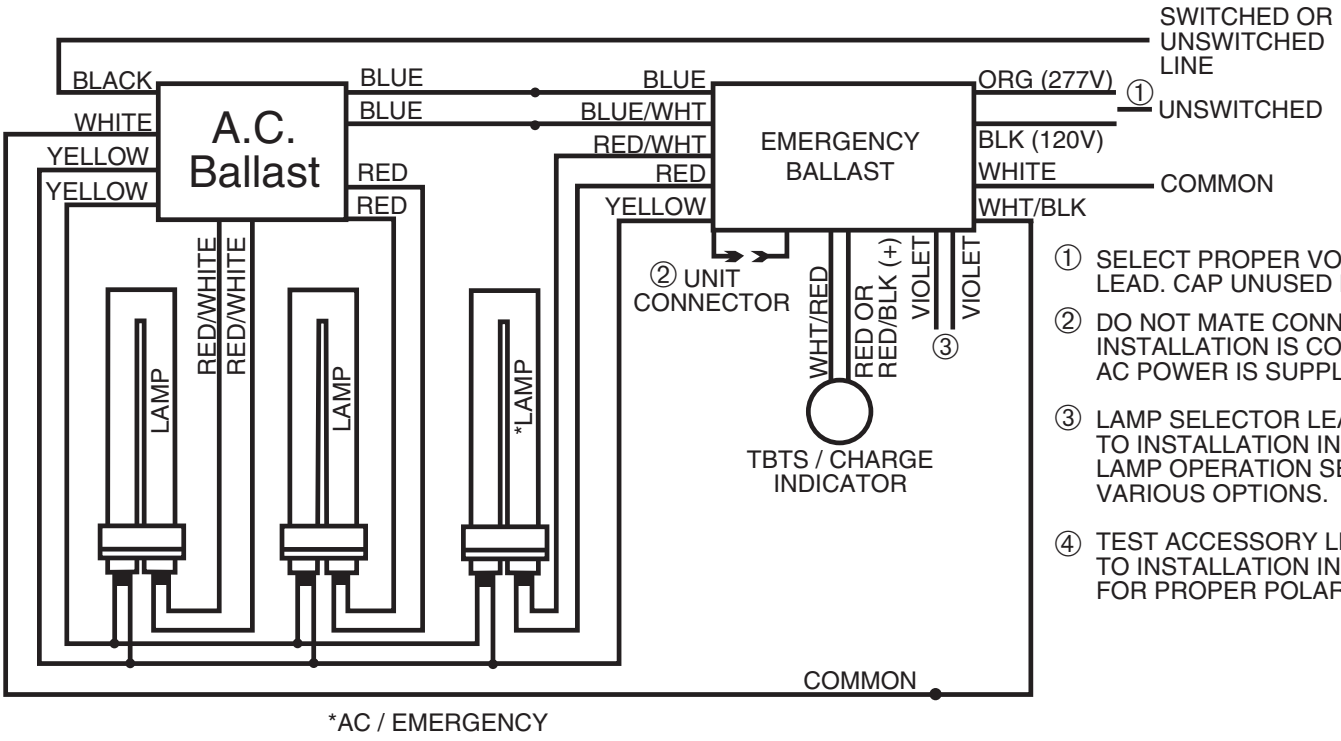
2LSL_80_D

NOTES

YY66

YY66

THREE BIAX RAPID START BALLAST



*AC / EMERGENCY

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

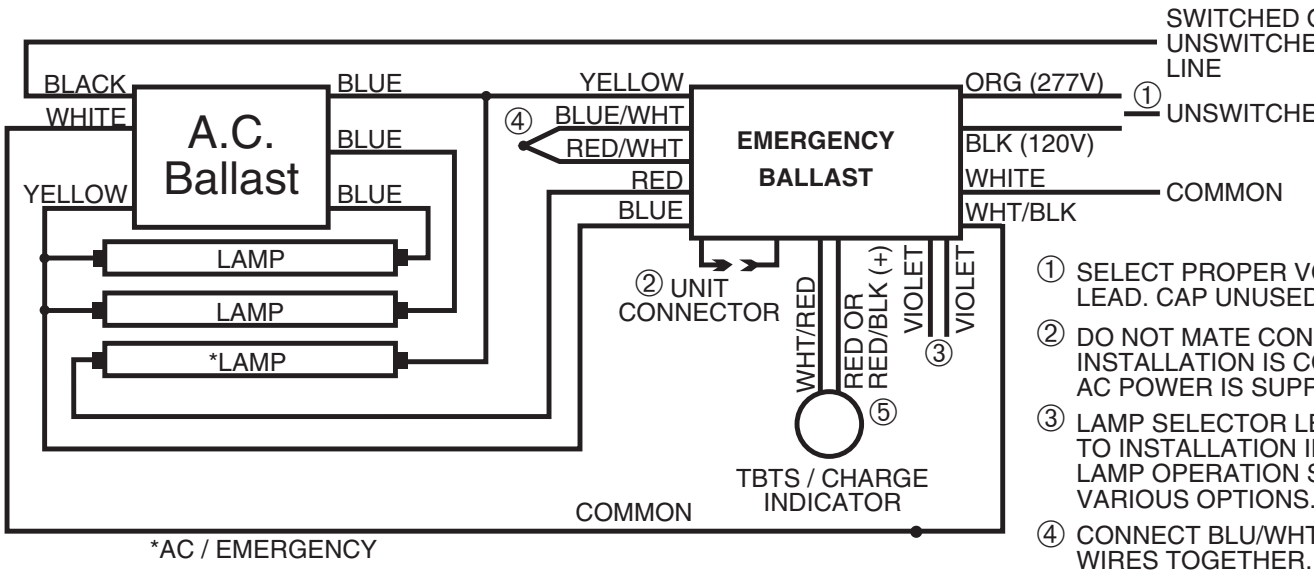
3BXLRSB_80_2

NOTES

YY67

YY67

THREE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

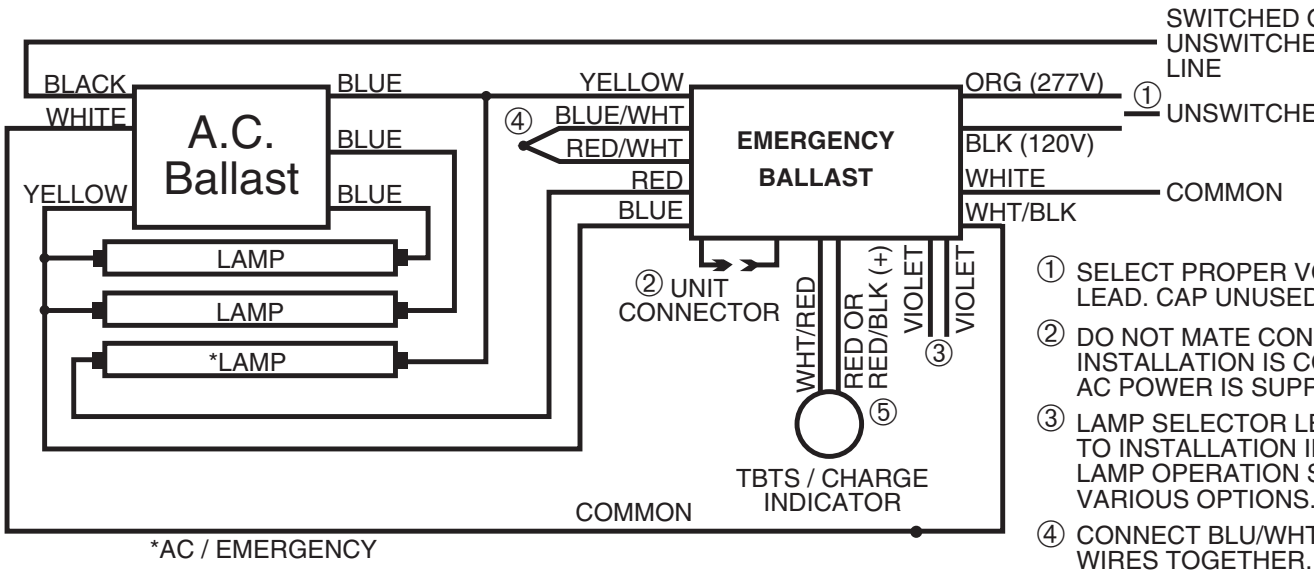
3LISB2_80_D

NOTES

YY68

YY68

THREE LAMP INSTANT START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

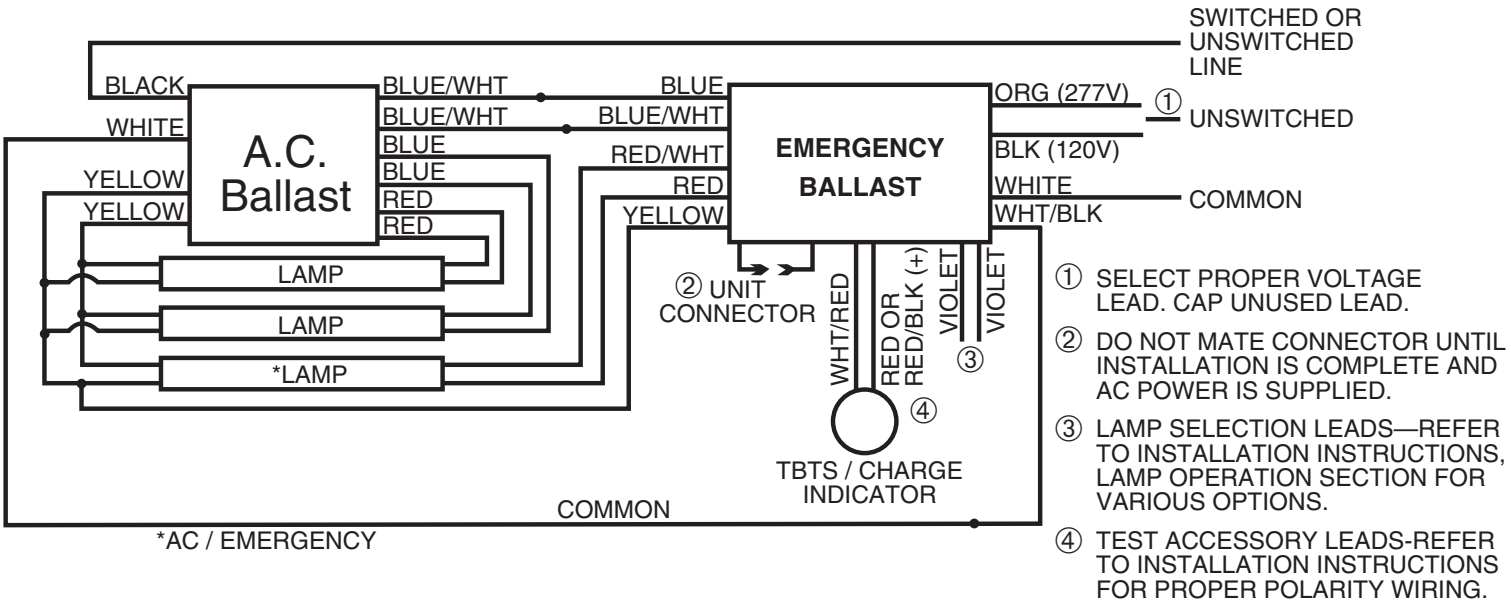
3LISB2_80_D

NOTES

YY69

YY69

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

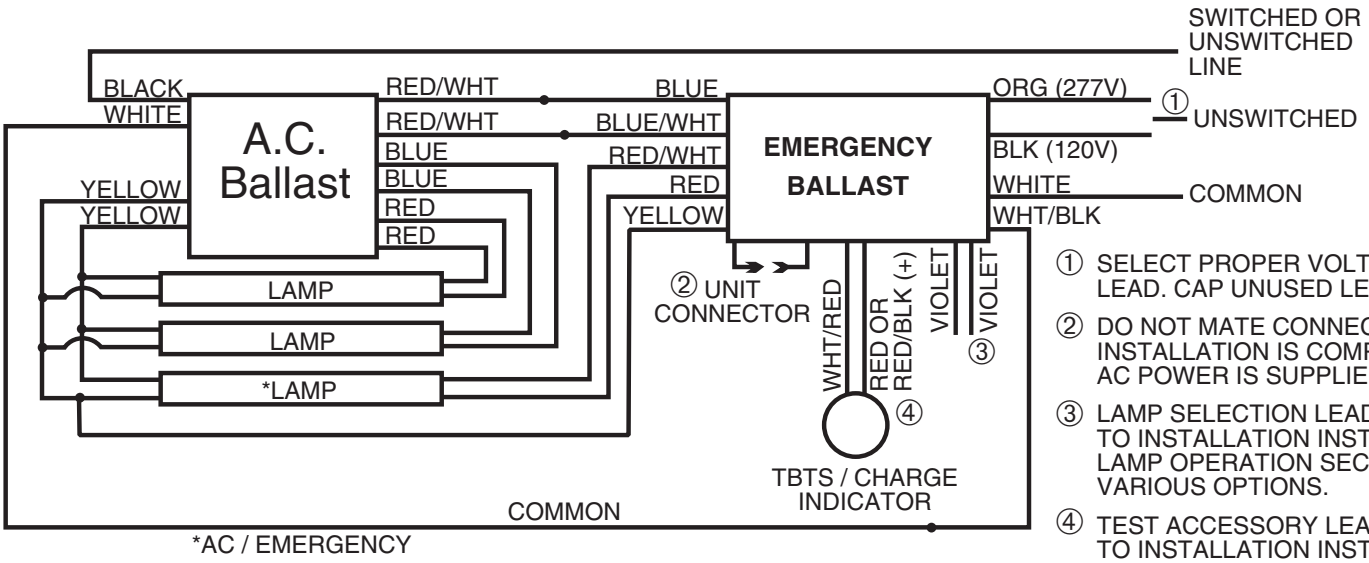
3LRSB2_80_D

NOTES

YY70

YY70

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

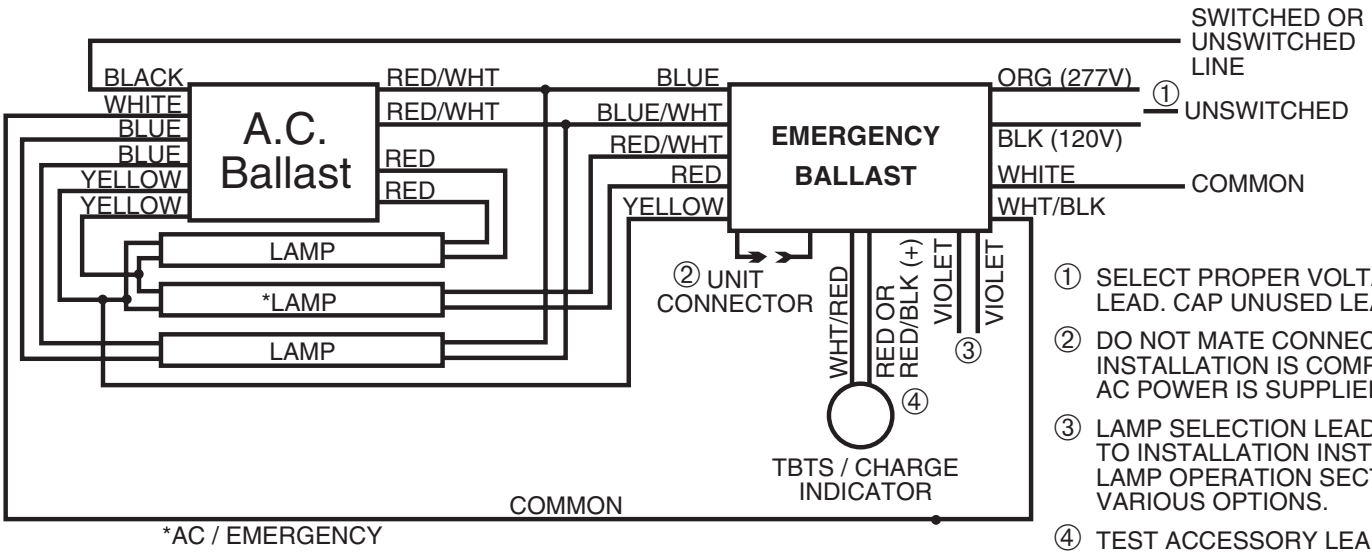
3LRSB3_80_D

NOTES

YY71

YY71

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

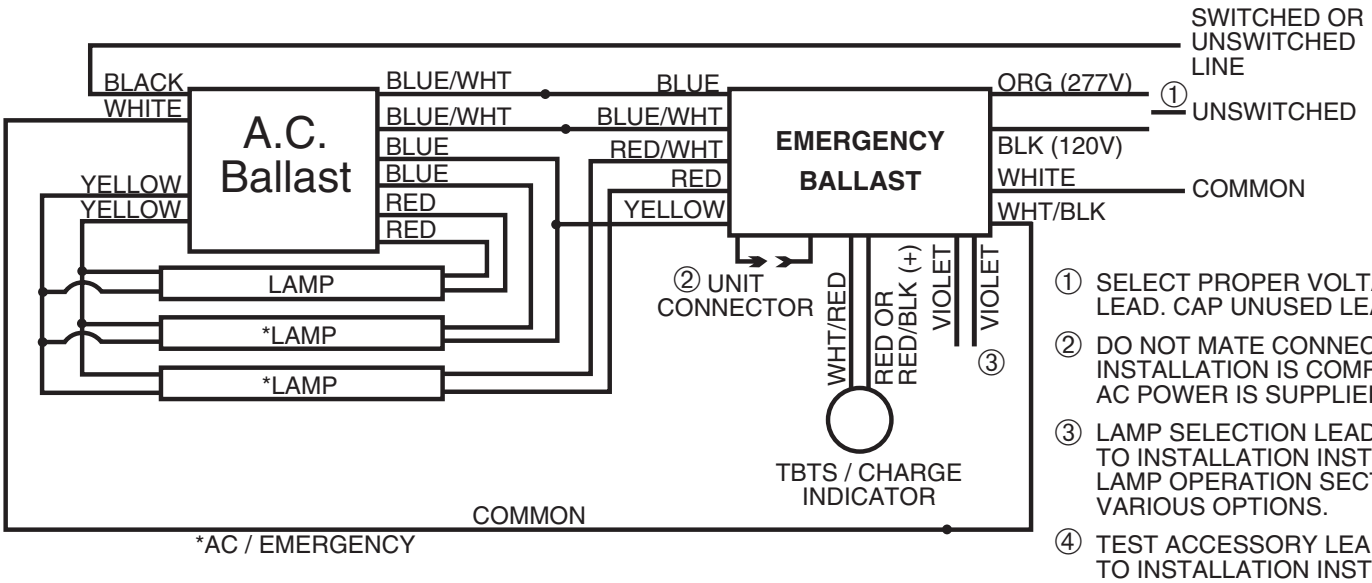
3LRSB4_80_D

NOTES

YY72

YY72

THREE LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

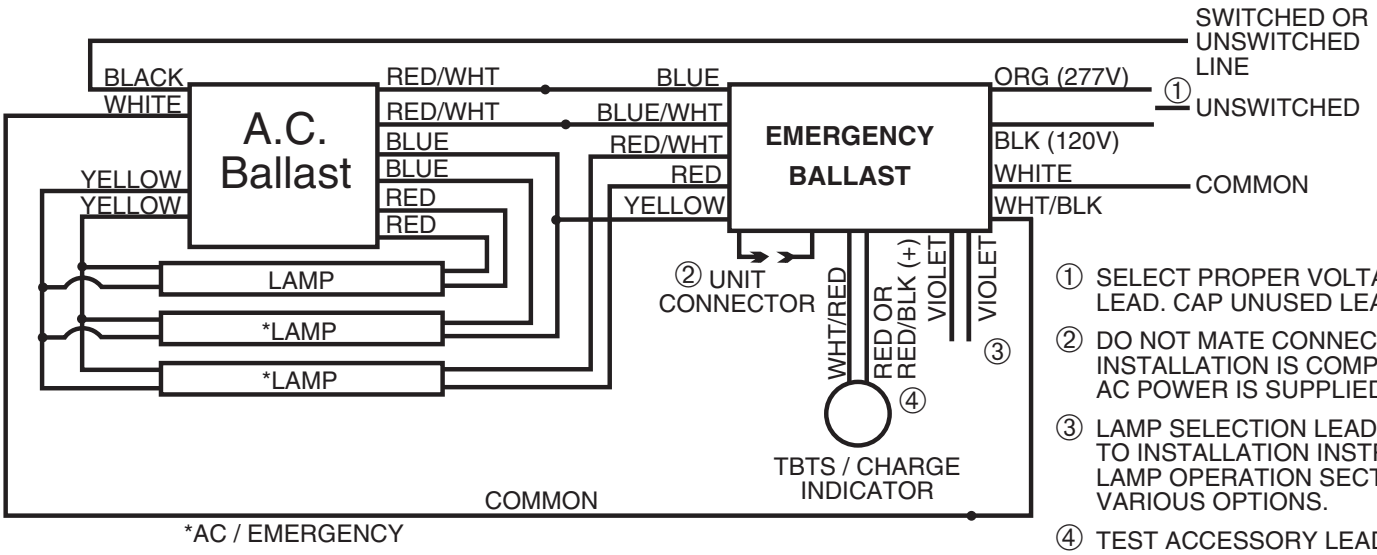
3LRSB_2LEO2_80_D

NOTES

YY73

YY73

THREE LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

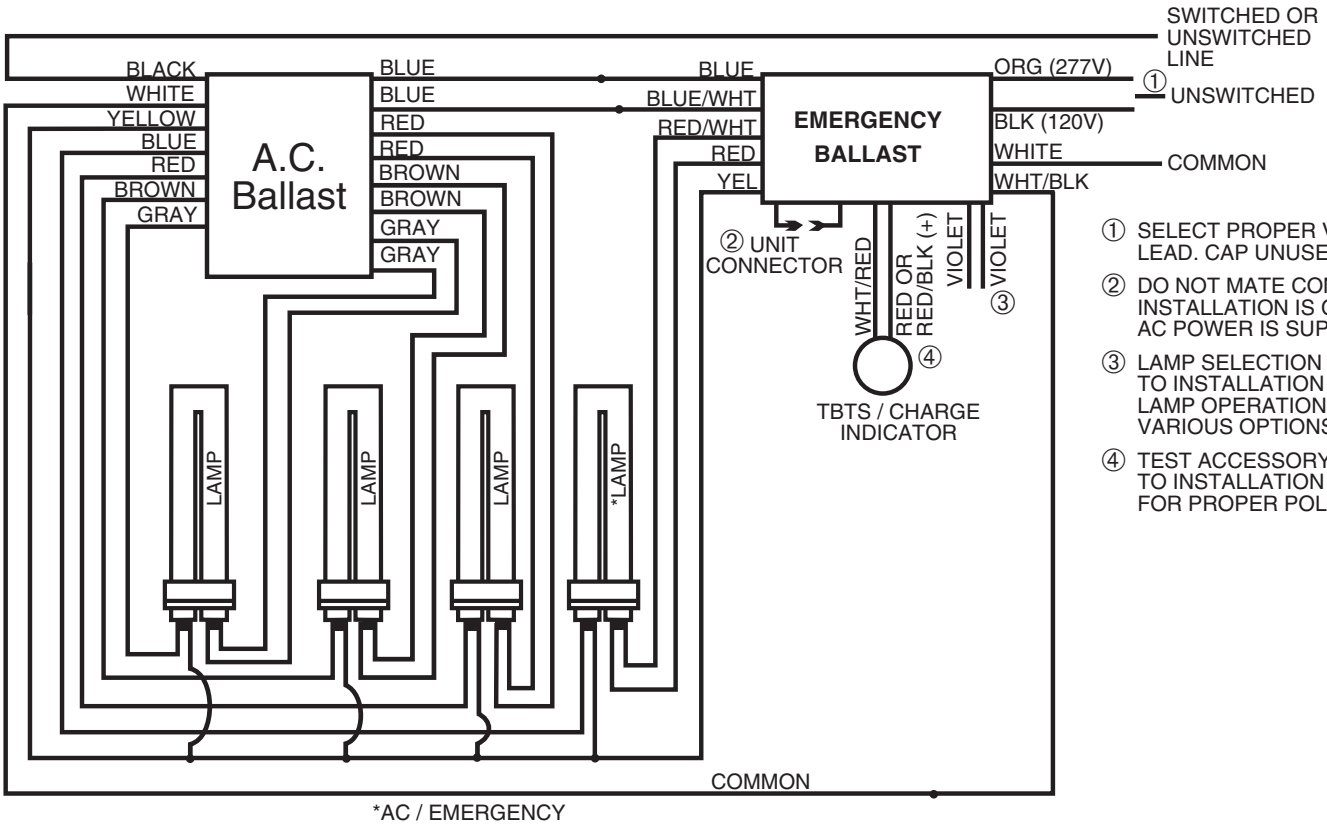
3LRSB_2LEO3_80_D

NOTES

YY74

YY74

FOUR LAMP BIAX RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

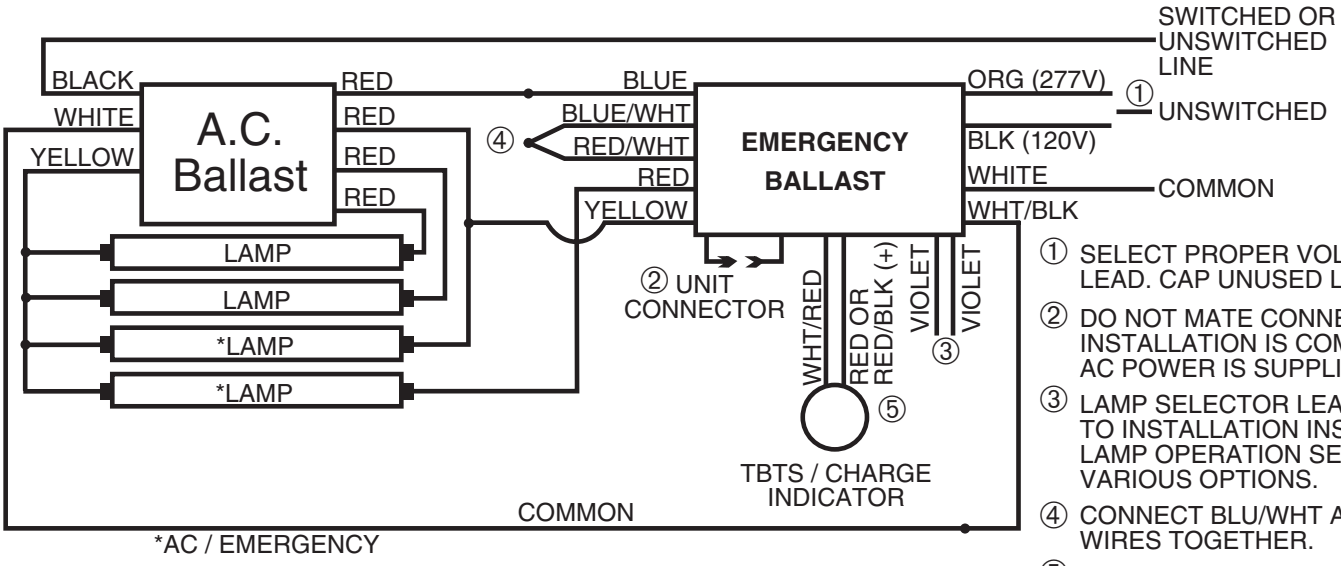
4LBRSB_80_D

NOTES

YY75

YY75

FOUR LAMP FULLHAM BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

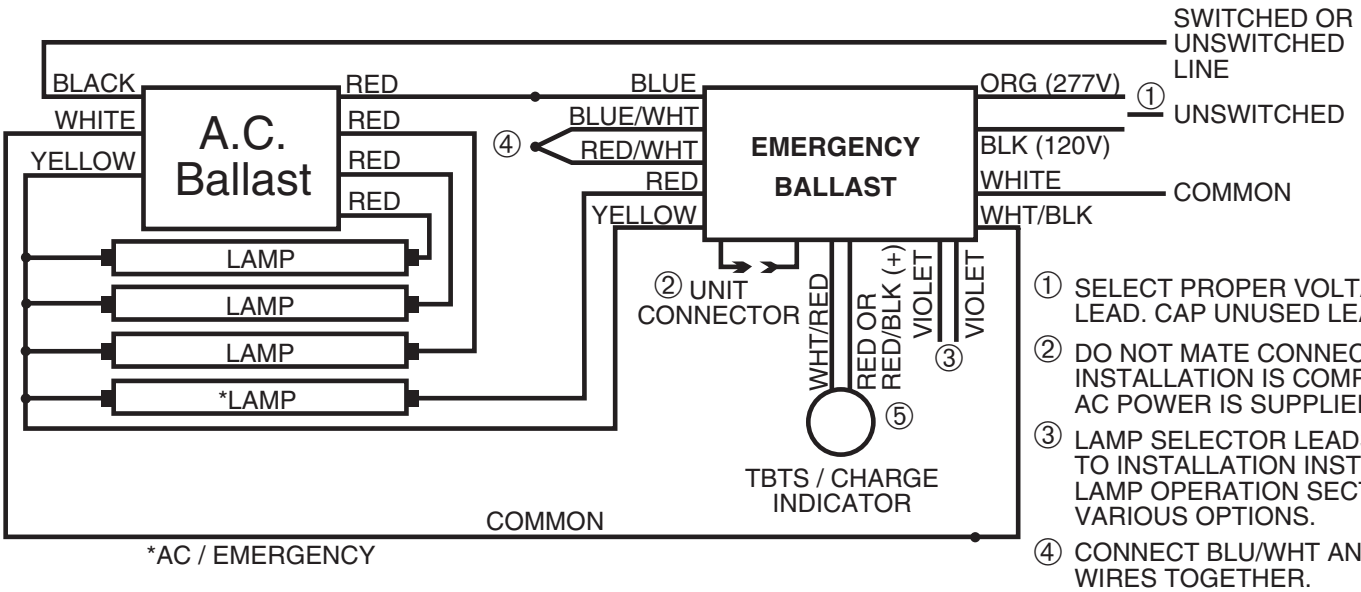
4LFB_80_2LEO_D

NOTES

YY76

YY76

FOUR LAMP FULLHAM BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

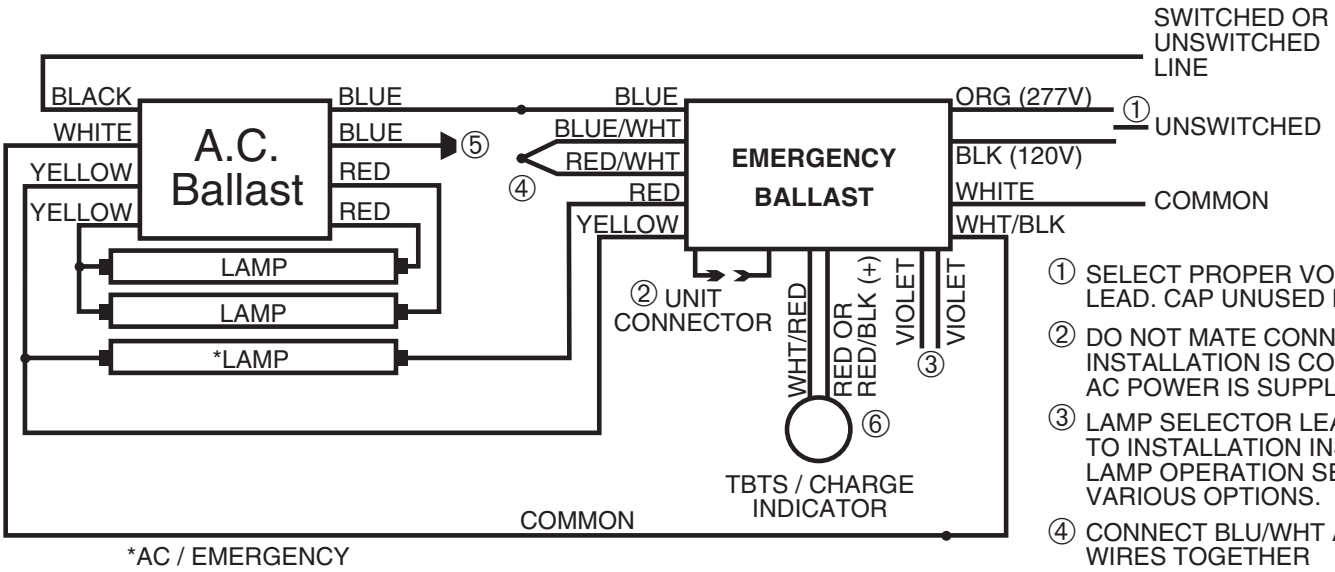
4LFB_80_D

NOTES

YY77

YY77

FOUR LAMP INSTANT START BALLAST WITH THREE LAMPS ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ CAP UNUSED LEAD.

⑥ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

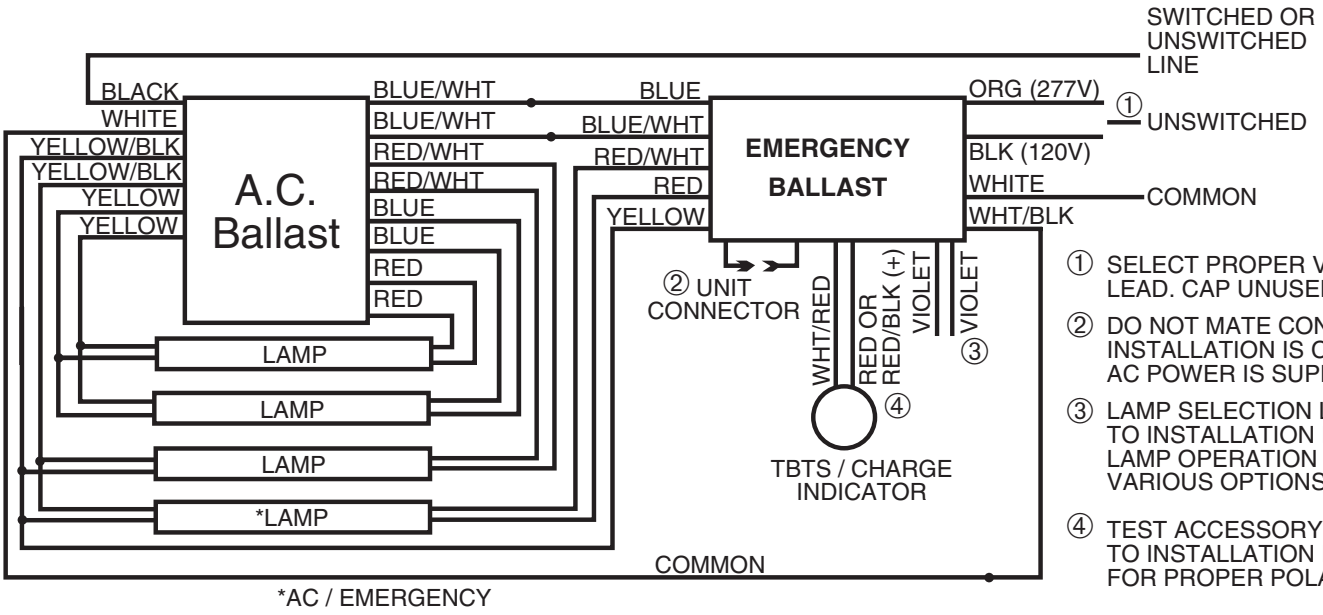
4LISB_80_2_D

NOTES

YY78

YY78

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

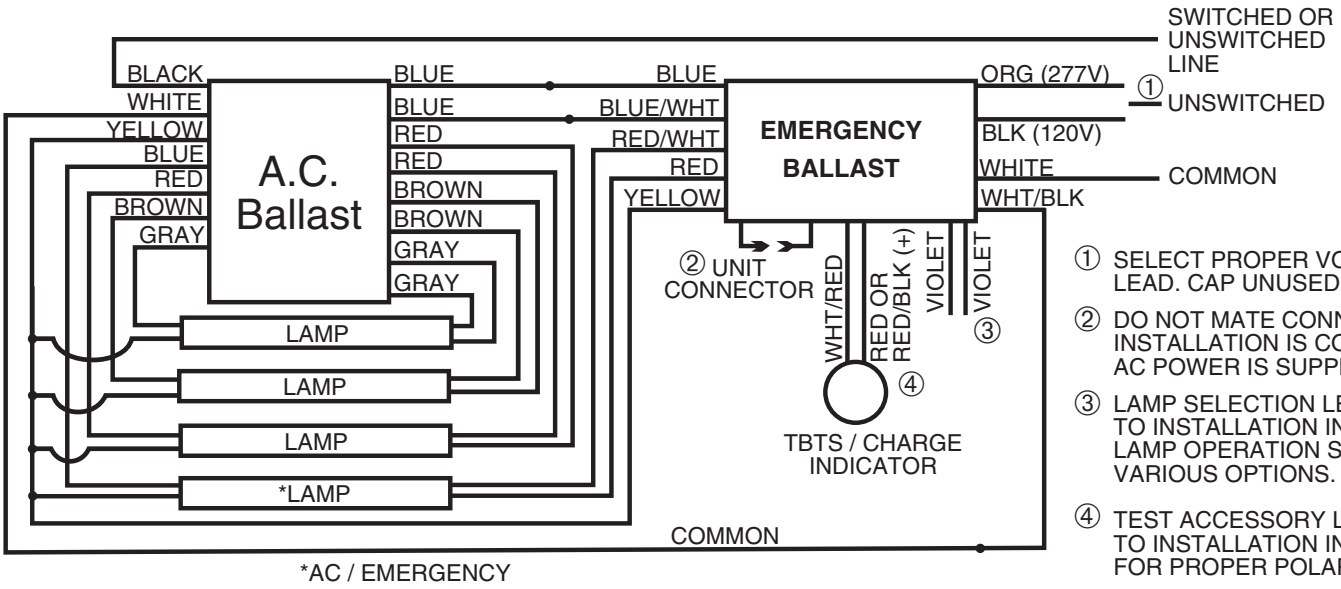
4LRSB2_80_D

NOTES

YY79

YY79

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

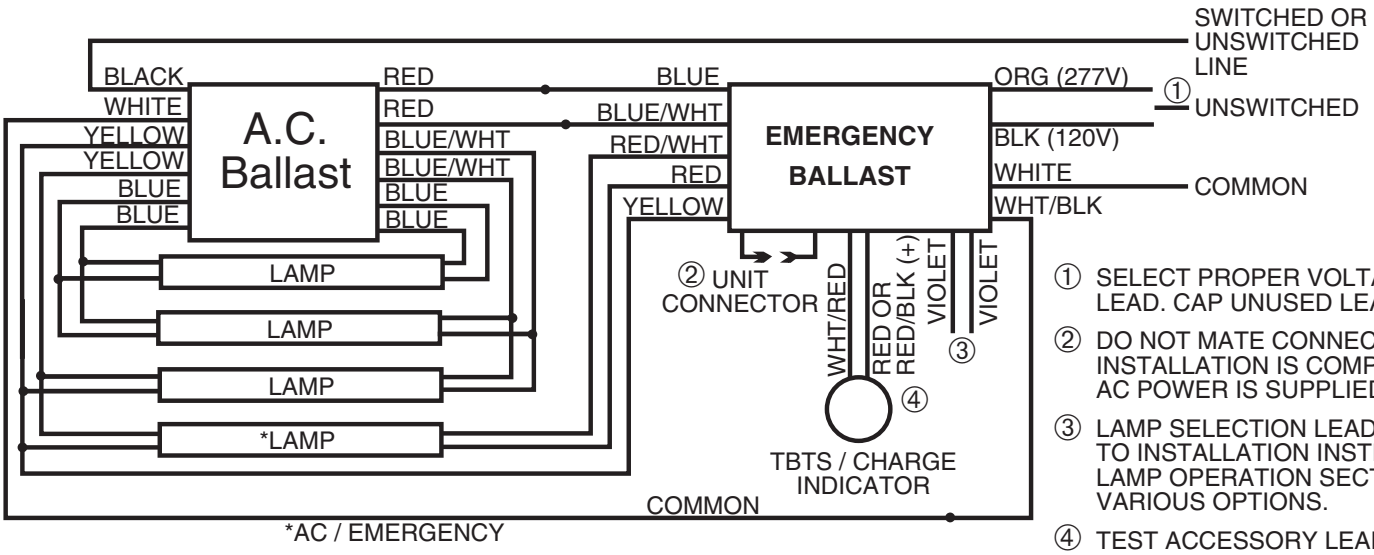
4LRSB3_80_D

NOTES

YY80

YY80

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

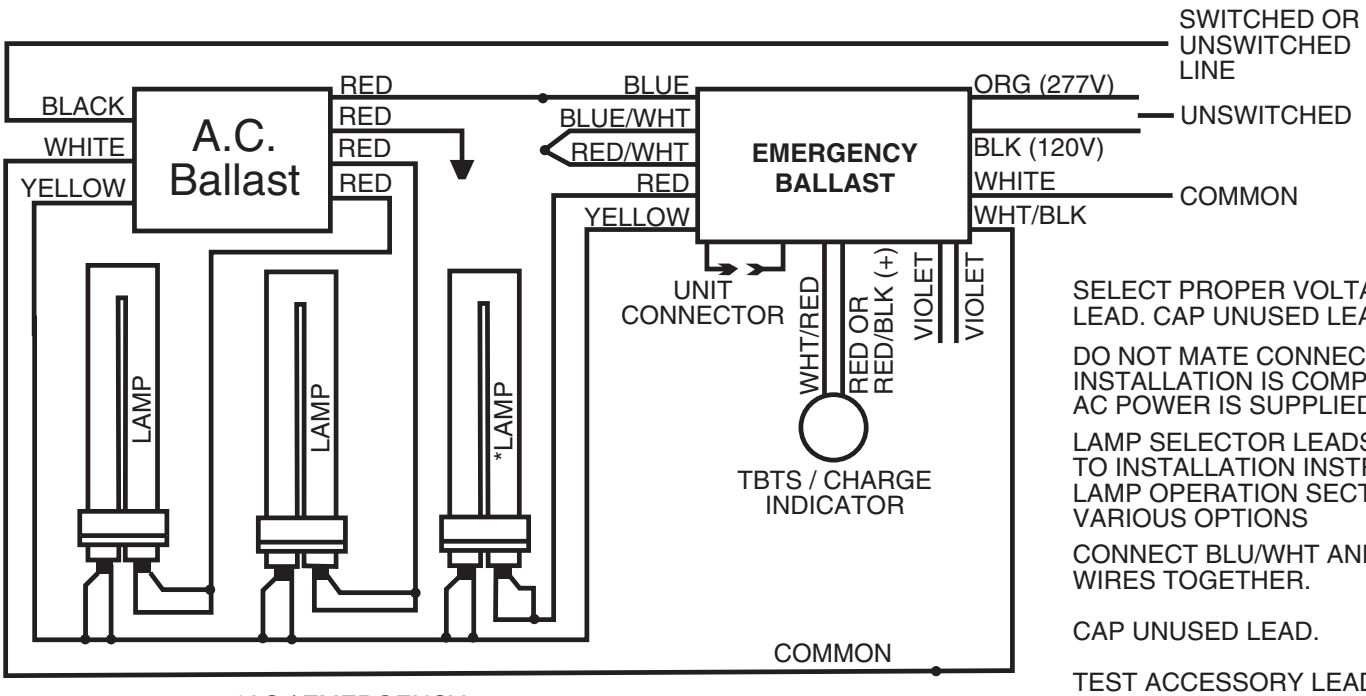
4LRSB4_80_D

NOTES

YY81

YY81

FULHAM WORKHORSE BALLAST



*AC / EMERGENCY

SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

CAP UNUSED LEAD.

TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

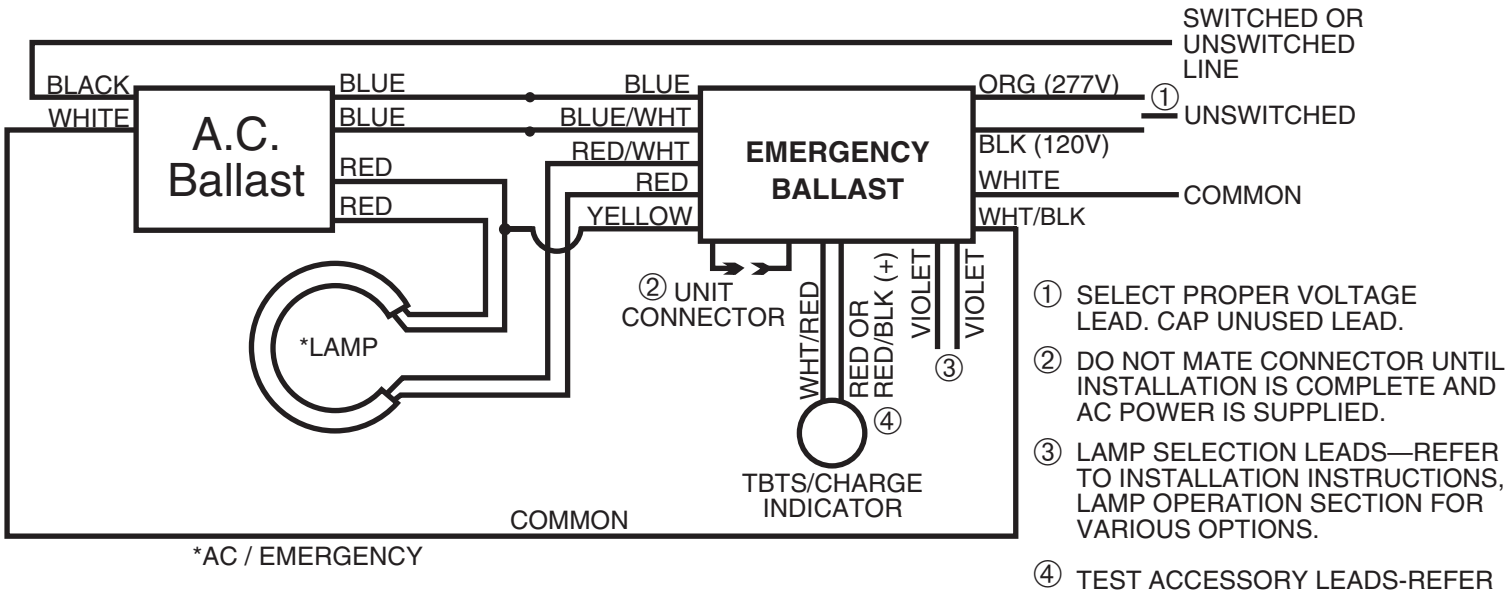
FWB_80_D

NOTES

YY82

YY82

ONE LAMP CIRCLINE RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

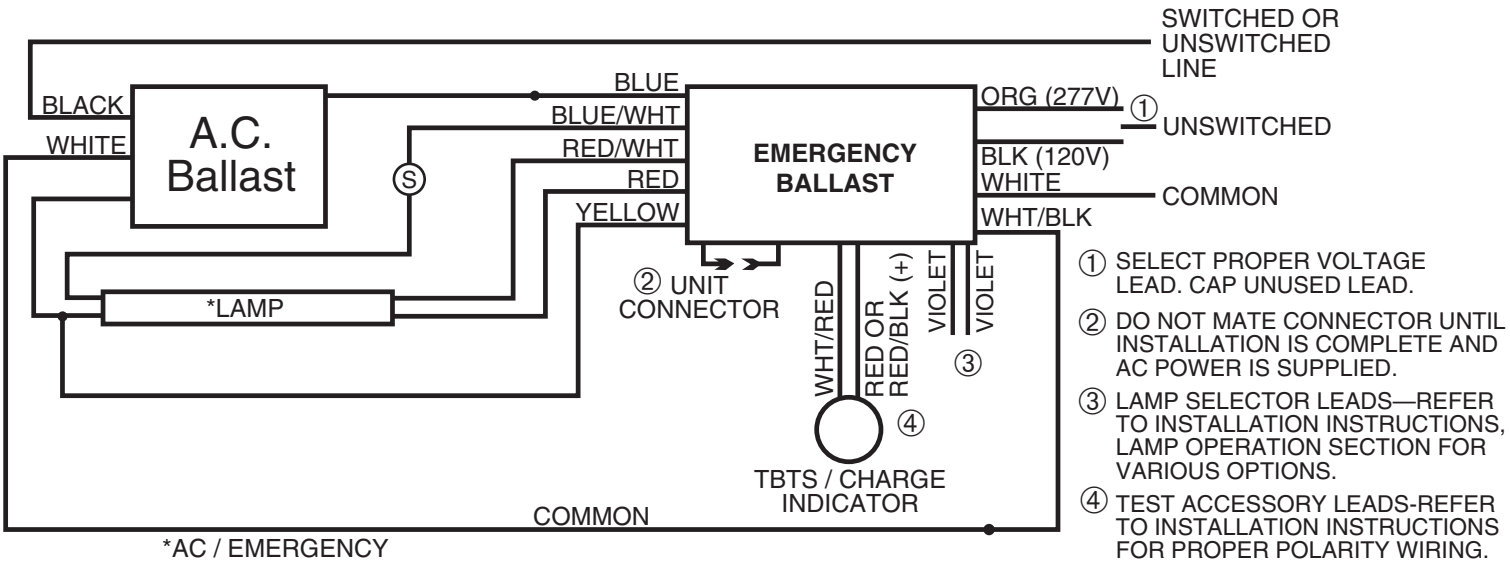
1LCRSB_80_2_D

NOTES

YY83

YY83

ONE LAMP EMERGENCY BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

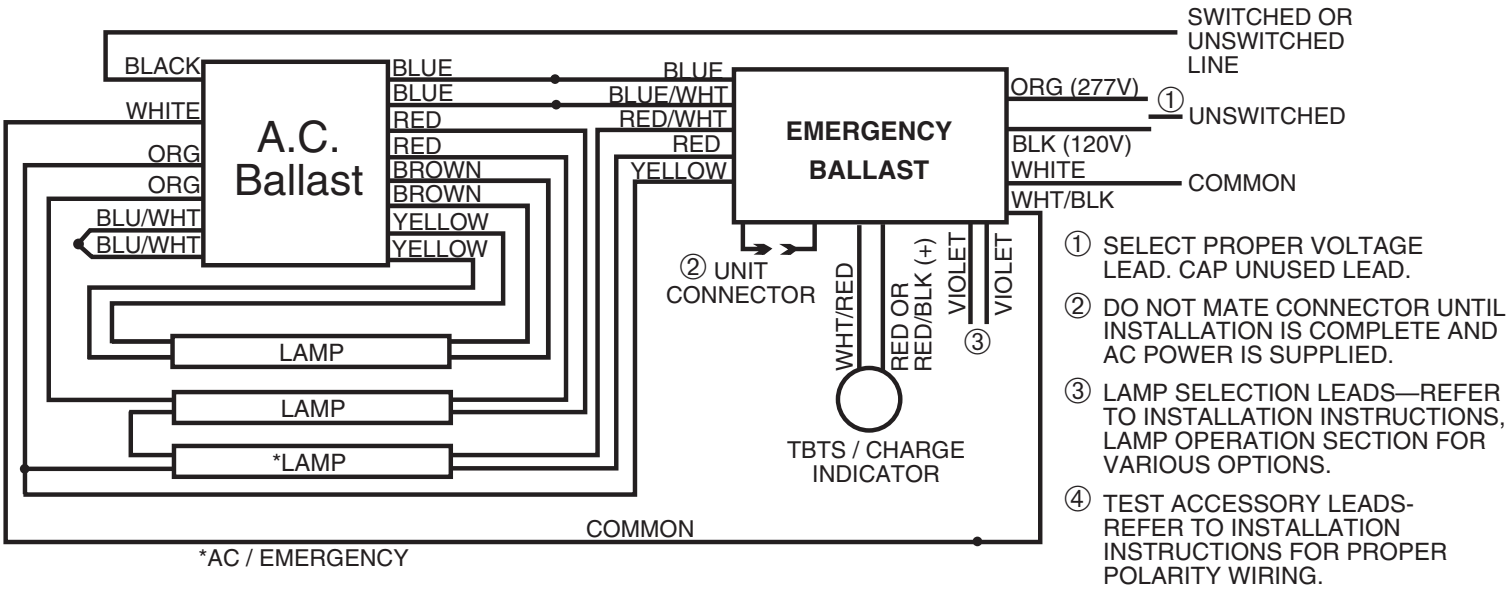
1LEB_D

NOTES

YY84

YY84

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

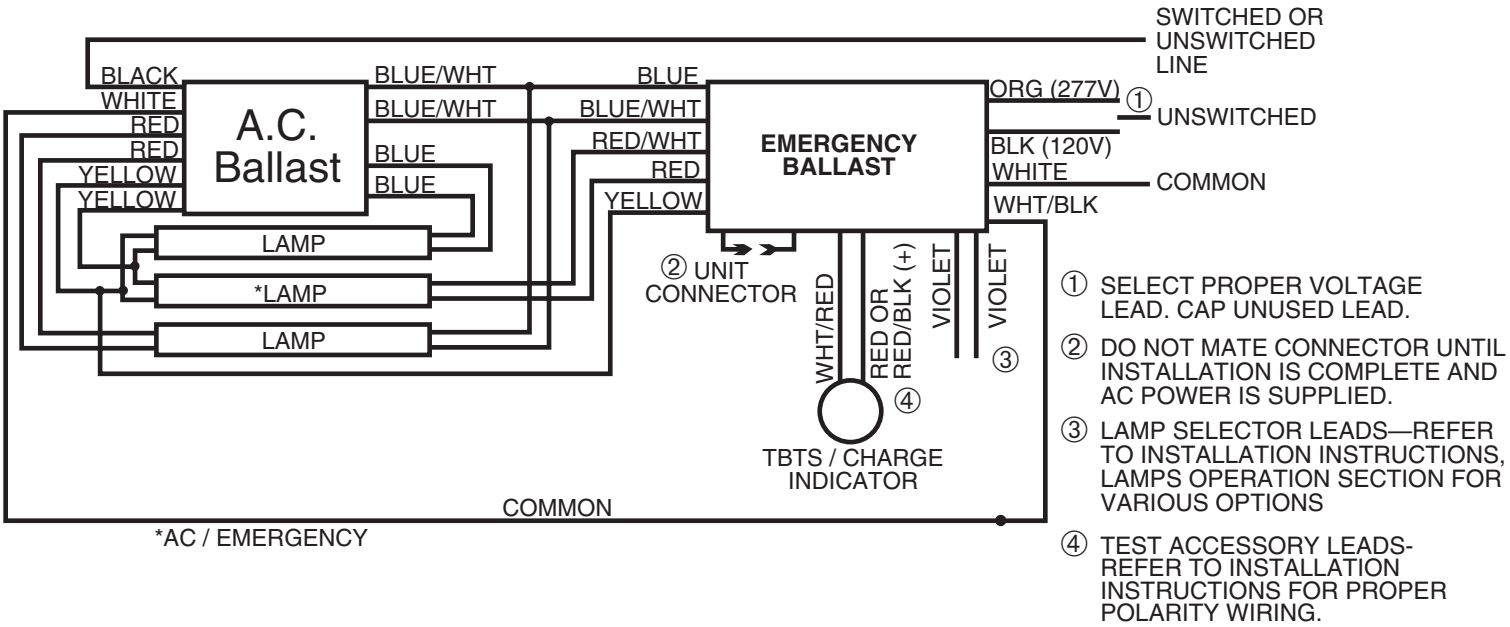
3_LRSB_D

NOTES

YY85

YY85

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

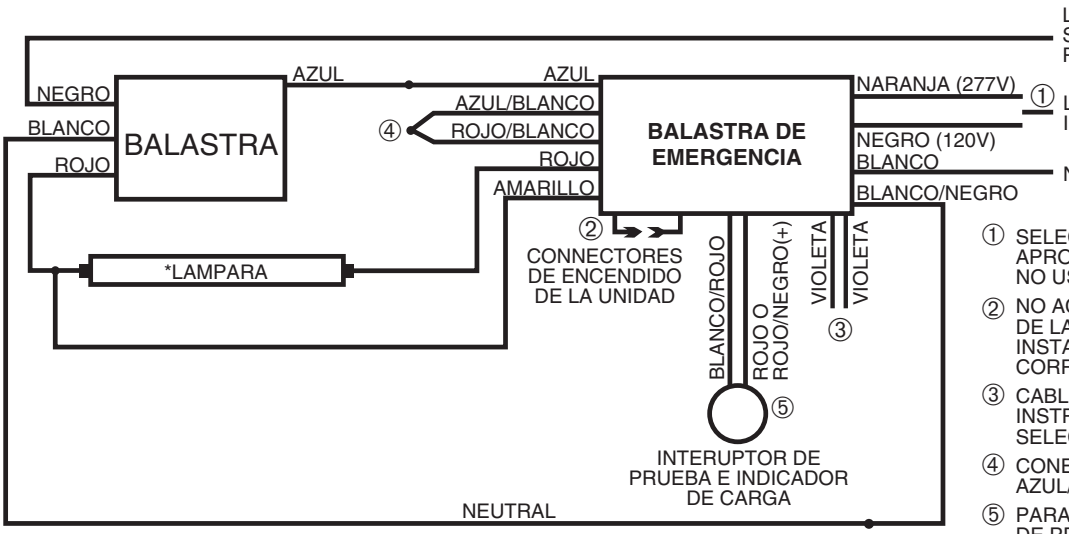
3LRSB_D_2

NOTES

YY86

YY86

INSTALACION CON UNA SOLO LAMPARA DE ENCENDIDO INSTANTANEO (INSTANT START LAMP)



*LAMPARA ENCENDIDO
INSTANTANEO OPERADA
EN FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CABLES SELECTOR DE LAMPARA - OBSERVE LAS INSTRUCCIONES DE INSTALCION, SECCION DE SELECCION, DE LAMPARA A OPERAR.

④ CONECTAR LOS SIGUIENTES CABLES JUNTOS AZUL/BLANCO Y ROJO/BLANCO.

⑤ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

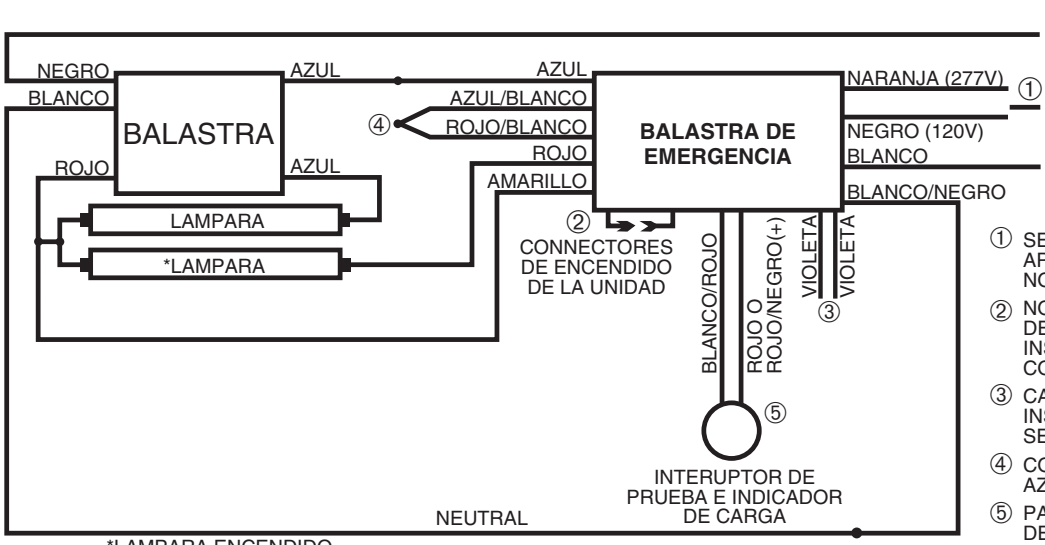
1LISB_D_SP

NOTES

YY87

YY87

INSTALACION CON DOS LAMPARAS DE ENCENDIDO INSTANTANEO



*LAMPARA ENCENDIDO
INSTANTANEO OPERADA
EN FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CABLES SELECTOR DE LAMPARA - OBSERVE LAS INSTRUCCIONES DE INSTALCION, SECCION DE SELECCION, DE LAMPARA A OPERAR.

④ CONECTAR LOS SIGUIENTES CABLES JUNTOS AZUL/BLANCO Y ROJO/BLANCO.

⑤ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

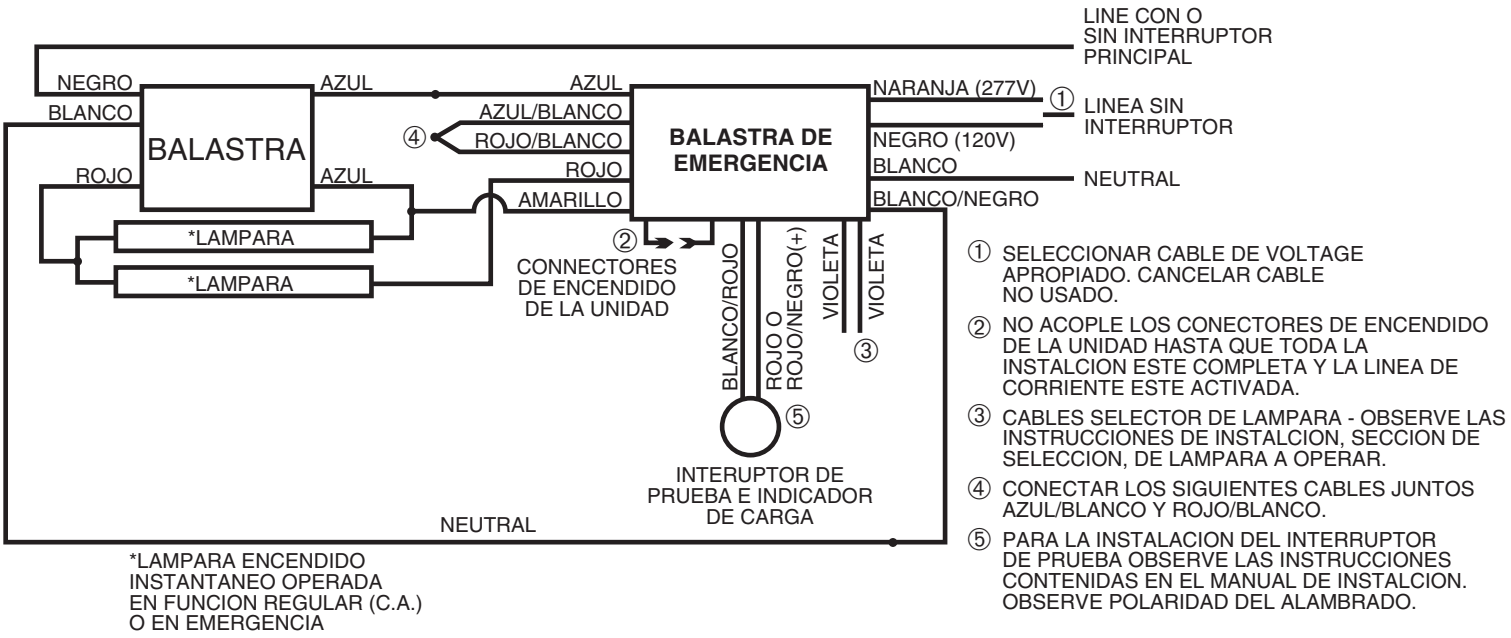
2LISB_2_D_SP

NOTES

YY88

YY88

INSTALACION CON DOS LAMPARAS DE ENCENDIDO INSTANTANEO CON OPERACION DE EMERGENCIA DE DOS LAMPARAS



① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CABLES SELECTOR DE LAMPARA - OBSERVE LAS INSTRUCCIONES DE INSTALCION, SECCION DE SELECCION, DE LAMPARA A OPERAR.

④ CONECTAR LOS SIGUIENTES CABLES JUNTOS AZUL/BLANCO Y ROJO/BLANCO.

⑤ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

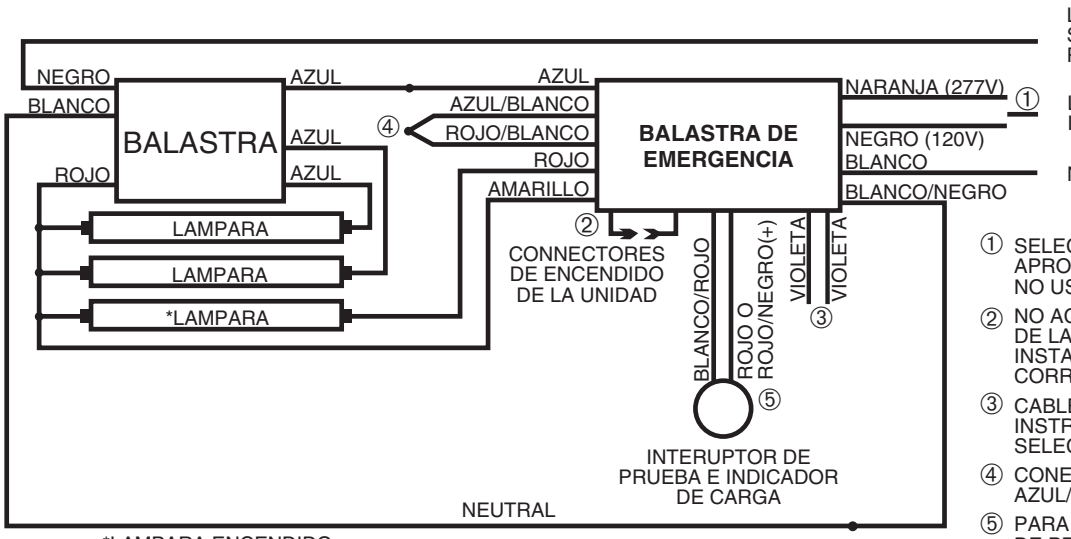
2LISB_2LEO_80_D_SP

NOTES

YY89

YY89

INSTALACION CON TRES LAMPARAS DE ENCENDIDO INSTANTANEO



*LAMPARA ENCENDIDO INSTANTANEO OPERADA EN FUNCION REGULAR (C.A.) O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CABLES SELECTOR DE LAMPARA - OBSERVE LAS INSTRUCCIONES DE INSTALCION, SECCION DE SELECCION, DE LAMPARA A OPERAR.

④ CONECTAR LOS SIGUIENTES CABLES JUNTOS AZUL/BLANCO Y ROJO/BLANCO.

⑤ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

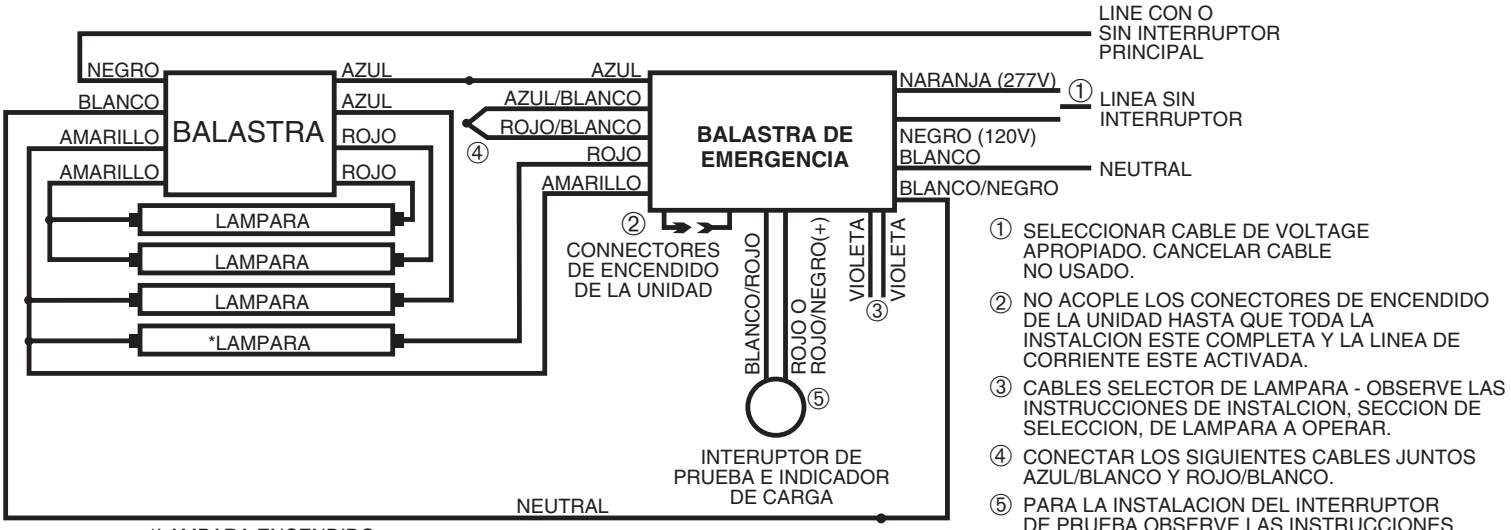
3LISB_D_SP

NOTES

YY90

YY90

INSTALACION CON CUATRO LAMPARAS DE ENCENDIDO INSTANTANEO



*LAMPARA ENCENDIDO
INSTANTANEO OPERADA
EN FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CABLES SELECTOR DE LAMPARA - OBSERVE LAS INSTRUCCIONES DE INSTALCION, SECCION DE SELECCION, DE LAMPARA A OPERAR.

④ CONECTAR LOS SIGUIENTES CABLES JUNTOS AZUL/BLANCO Y ROJO/BLANCO.

⑤ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

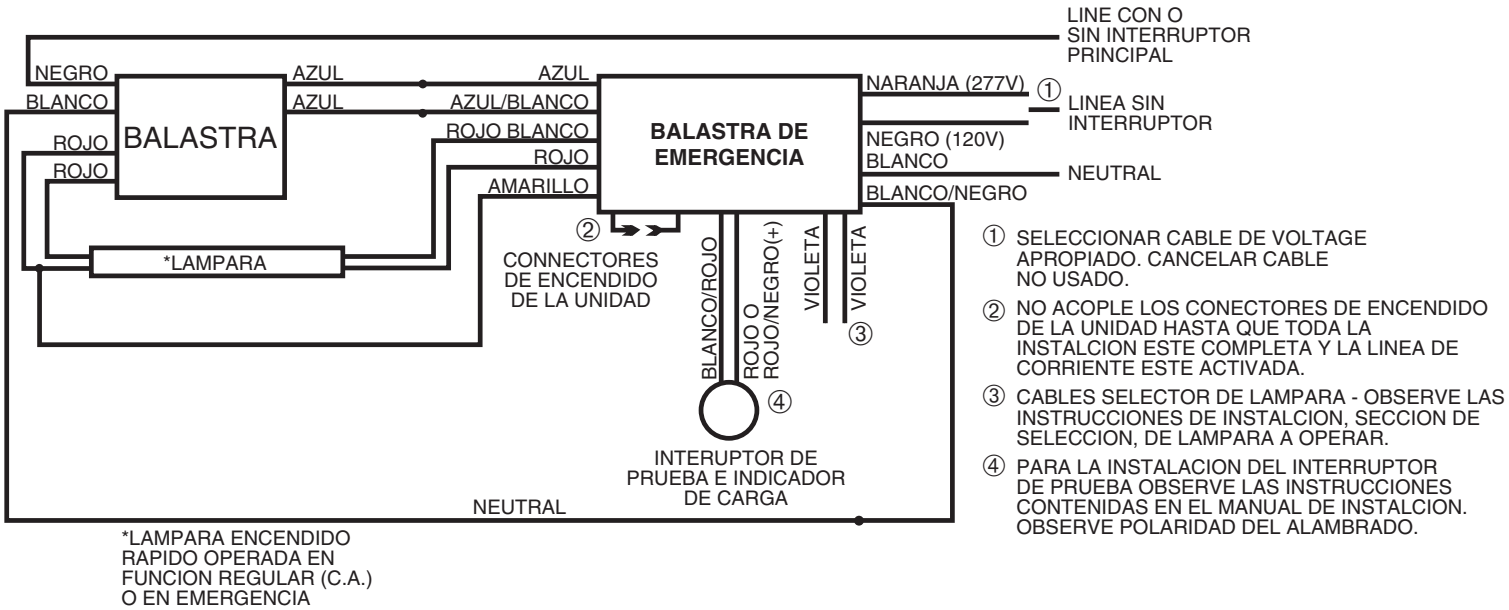
4LISB_D_SP

NOTES

YY91

YY91

INSTALACION CON UNA SOLA LAMPARA DE ENCENDIDO RAPIDO (RAPID START LAMP)



*LAMPARA ENCENDIDO RAPIDO OPERADA EN FUNCION REGULAR (C.A.) O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CABLES SELECTOR DE LAMPARA - OBSERVE LAS INSTRUCCIONES DE INSTALCION, SECCION DE SELECCION, DE LAMPARA A OPERAR.

④ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

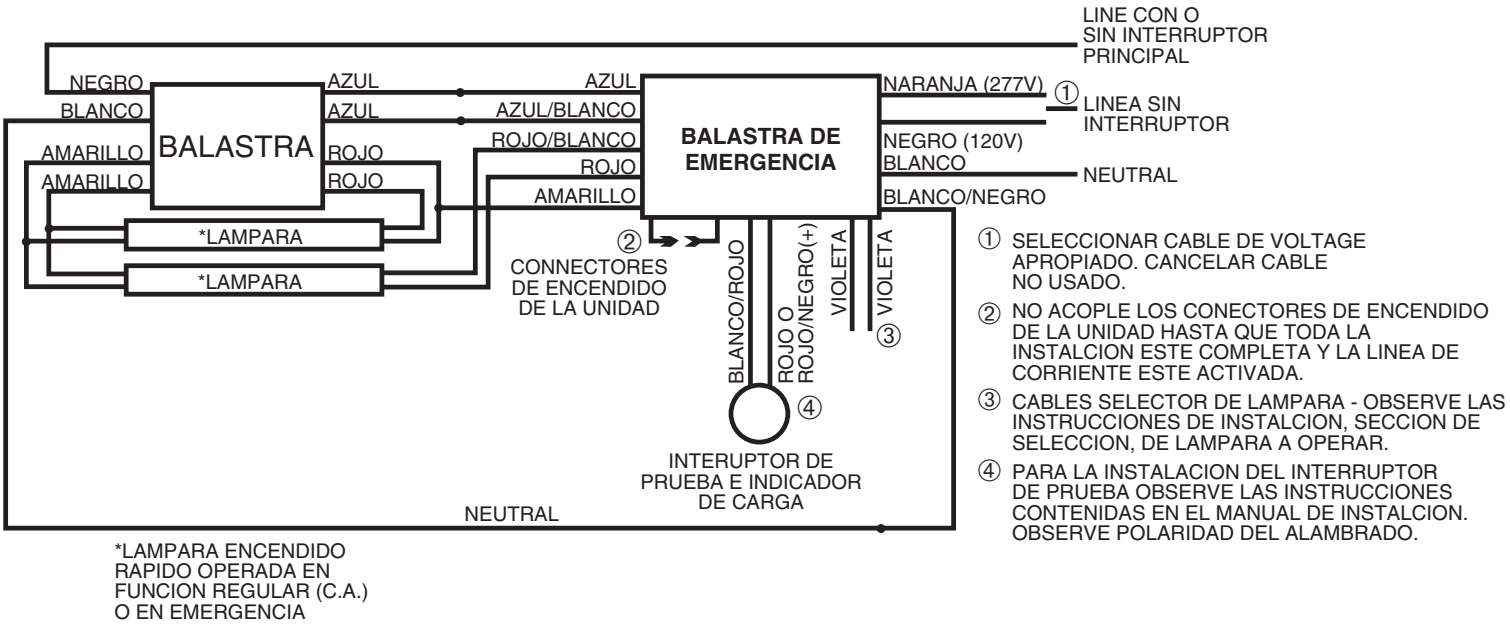
1LRSB_D_SP

NOTES

YY92

YY92

INSTALACION CON DOS LAMPARAS DE ENCENDIDO RAPIDO CON OPERACION DE EMERGENCIA DE DOS LAMPARAS



*LAMPARA ENCENDIDO
RAPIDO OPERADA EN
FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CABLES SELECTOR DE LAMPARA - OBSERVE LAS INSTRUCCIONES DE INSTALCION, SECCION DE SELECCION, DE LAMPARA A OPERAR.

④ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

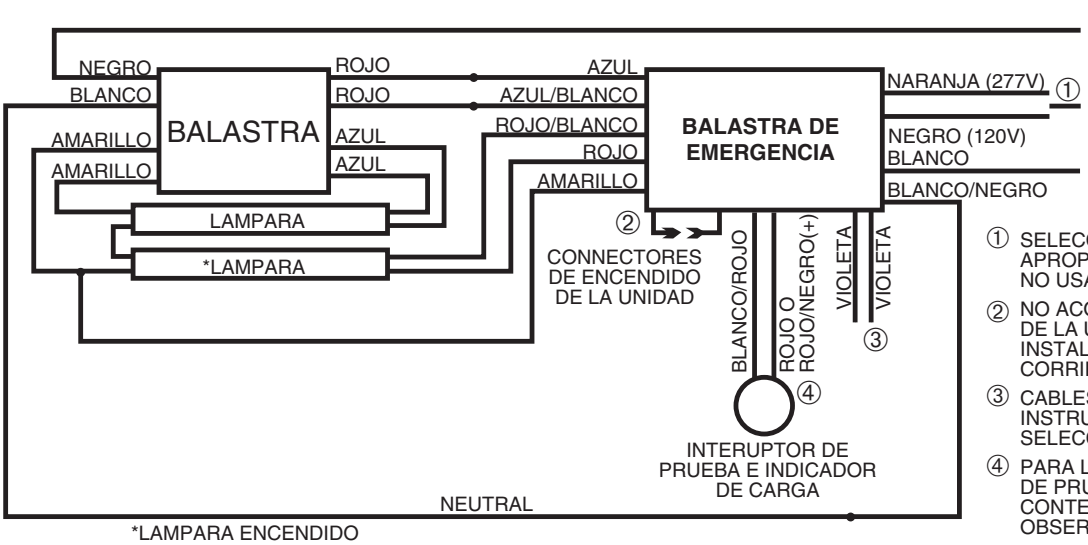
2LRSB_2LEO_80_D_SP

NOTES

YY93

YY93

INSTALACION CON DOS LAMPARAS DE ENCENDIDO RAPIDO



*LAMPARA ENCENDIDO RAPIDO OPERADA EN FUNCION REGULAR (C.A.) O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CABLES SELECTOR DE LAMPARA - OBSERVE LAS INSTRUCCIONES DE INSTALCION, SECCION DE SELECCION, DE LAMPARA A OPERAR.

④ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

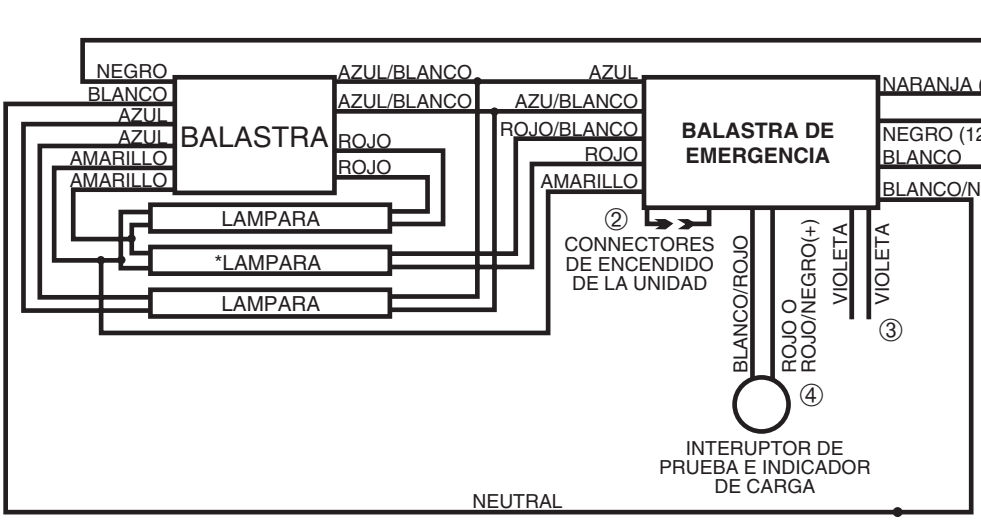
2LRSB_D_5_SP

NOTES

YY94

YY94

INSTALACION CON TRES LAMPARAS DE ENCENDIDO RAPIDO



*LAMPARA ENCENDIDO
RAPIDO OPERADA EN
FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CABLES SELECTOR DE LAMPARA - OBSERVE LAS INSTRUCCIONES DE INSTALCION, SECCION DE SELECCION, DE LAMPARA A OPERAR.

④ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

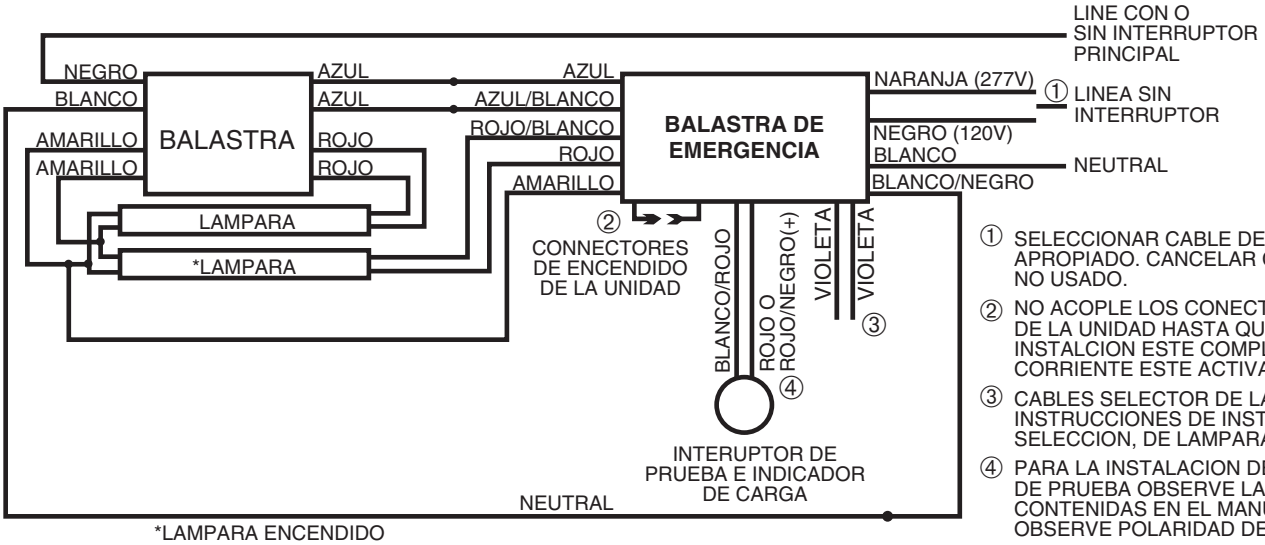
3LRSB_D_SP

NOTES

YY95

YY95

INSTALACION CON UNA SOLA LAMPARA DE ENCENDIDO RAPIDO



*LAMPARA ENCENDIDO
RAPIDO OPERADA EN
FUNCION REGULAR (C.A.)
O EN EMERGENCIA

① SELECCIONAR CABLE DE VOLTAGE APROPIADO. CANCELAR CABLE NO USADO.

② NO ACOPLE LOS CONECTORES DE ENCENDIDO DE LA UNIDAD HASTA QUE TODA LA INSTALCION ESTE COMPLETA Y LA LINEA DE CORRIENTE ESTE ACTIVADA.

③ CABLES SELECTOR DE LAMPARA - OBSERVE LAS INSTRUCCIONES DE INSTALCION, SECCION DE SELECCION, DE LAMPARA A OPERAR.

④ PARA LA INSTALACION DEL INTERRUPTOR DE PRUEBA OBSERVE LAS INSTRUCCIONES CONTENIDAS EN EL MANUAL DE INSTALCION. OBSERVE POLARIDAD DEL ALAMBRADO.

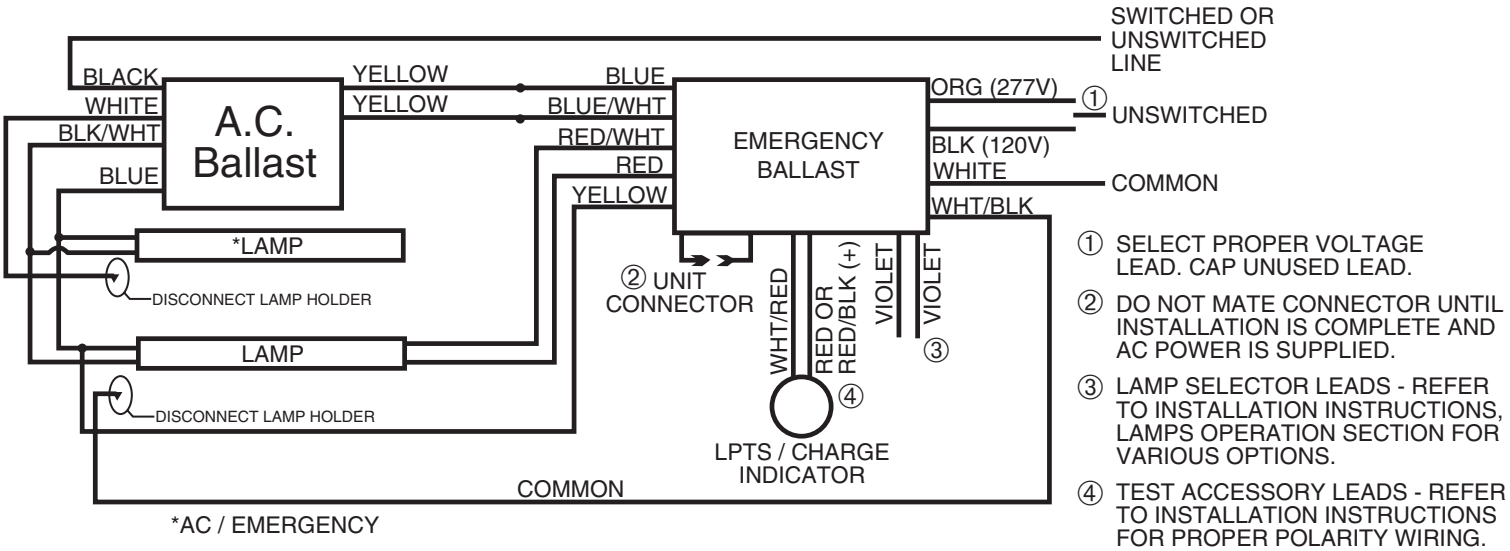
2LRSB_D_SP

NOTES

YY96

YY96

TWO LAMP LAG BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS - REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

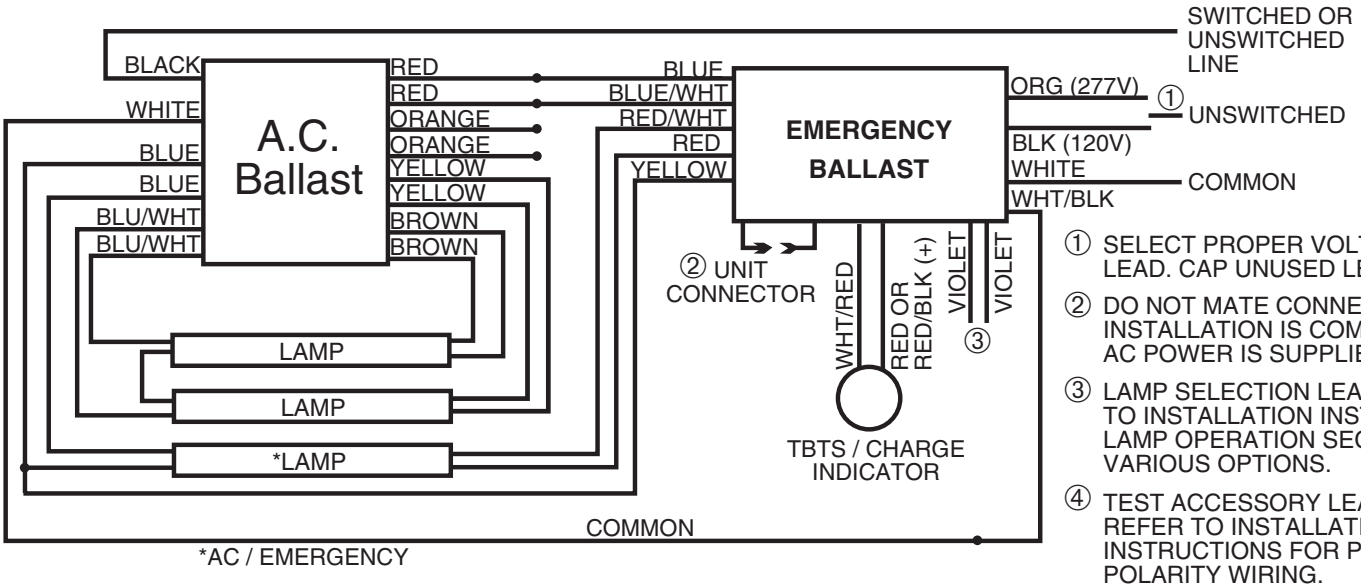
2LLAG_D

NOTES

YY97

YY97

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

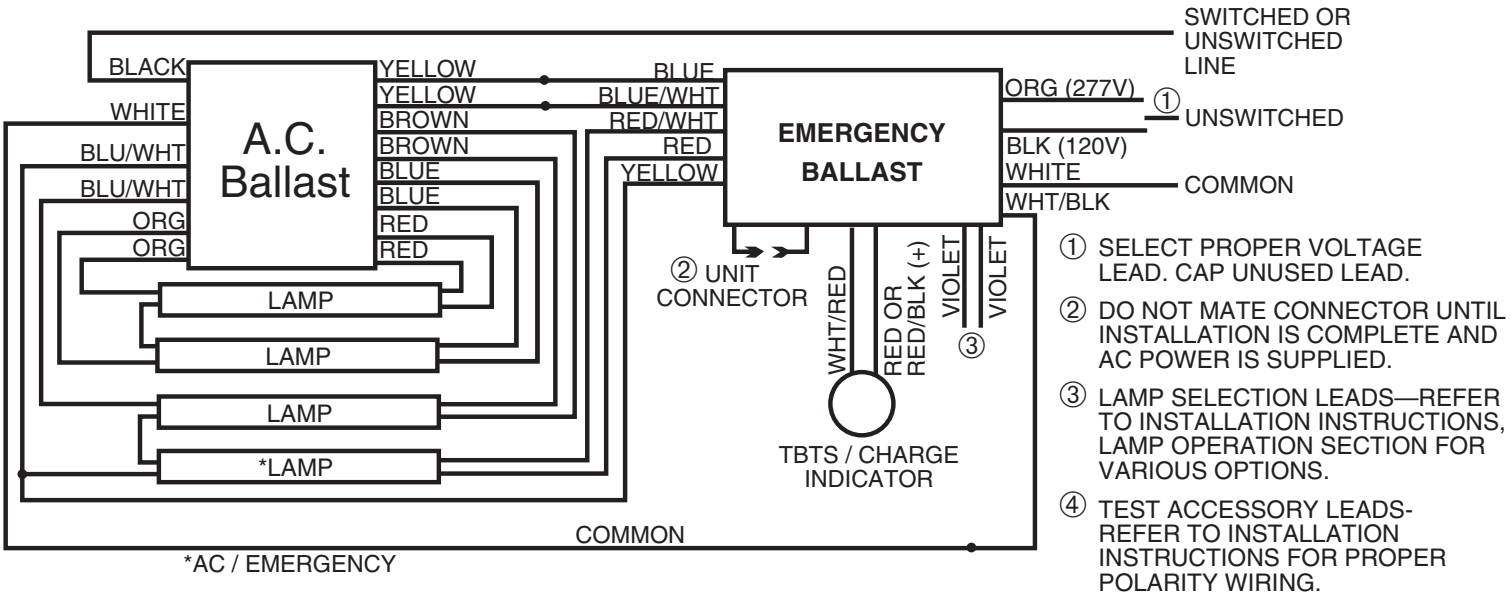
3_LRSB_D_3

NOTES

YY98

YY98

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

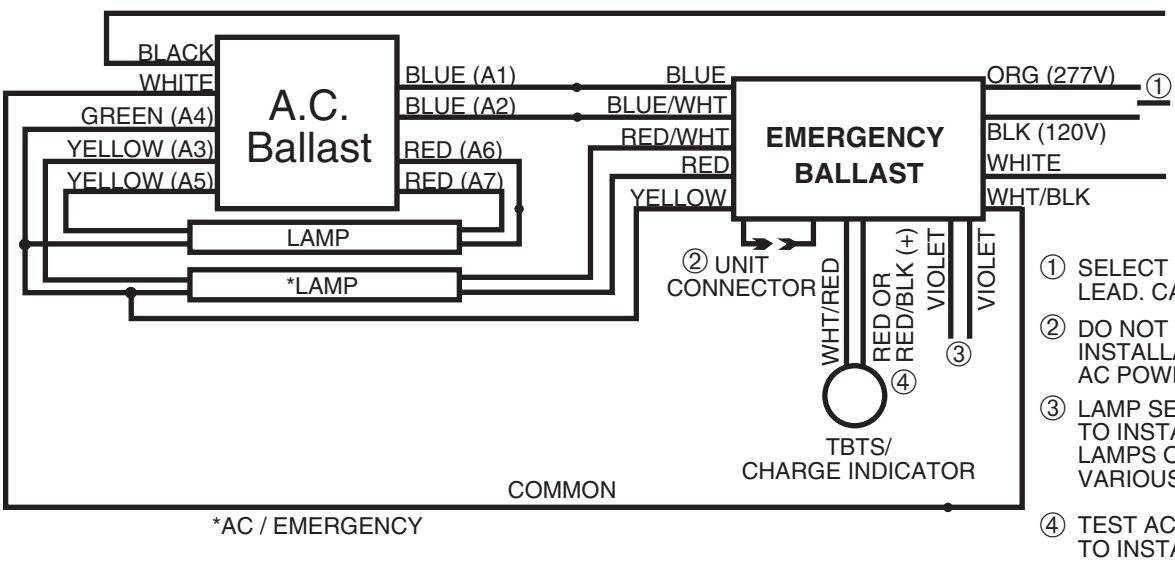
4LRSB_D_4

NOTES

YY99

YY99

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

NOTE:
DIMMING WIRE IS NOT AFFECTED BY THE EM BALLAST

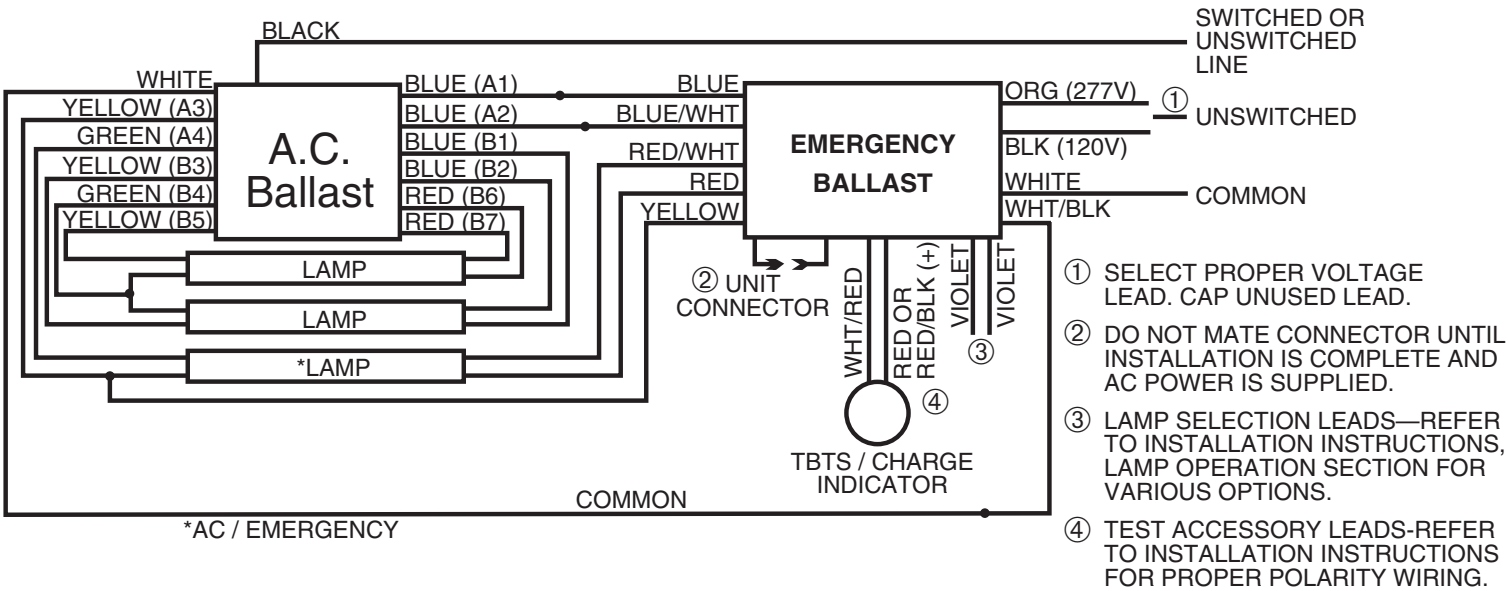
2LRSB_2LEO_SYL_D_2

NOTES

YY100

YY100

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

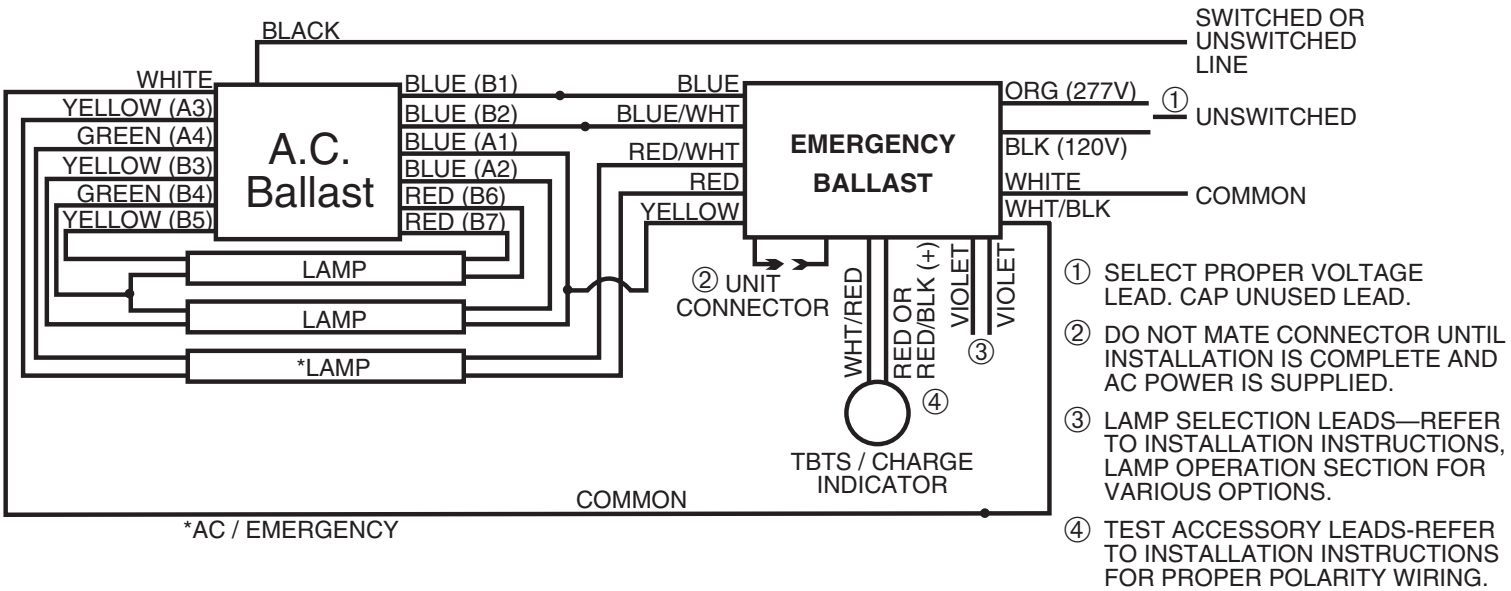
3LRSB5_80_D

NOTES

YY101

YY101

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

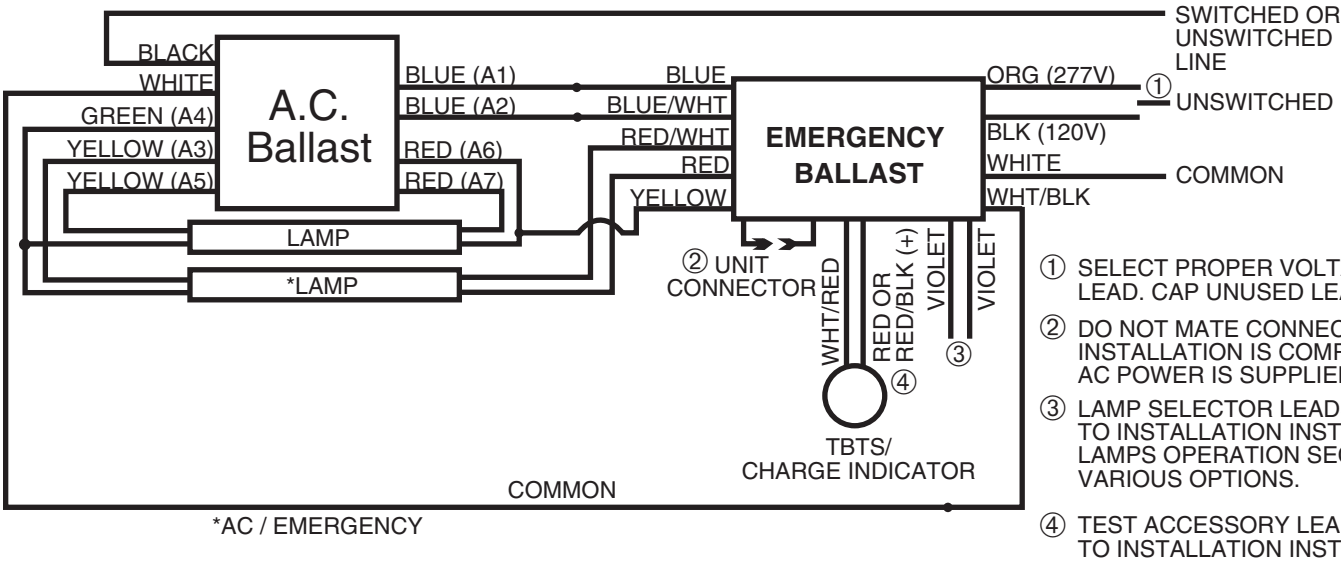
3LRSB6_80_D

NOTES

YY102

YY102

TWO LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

NOTE:
DIMMING WIRE IS NOT AFFECTED BY THE EM BALLAST

2LRSB_2LEO_SYL_D_3

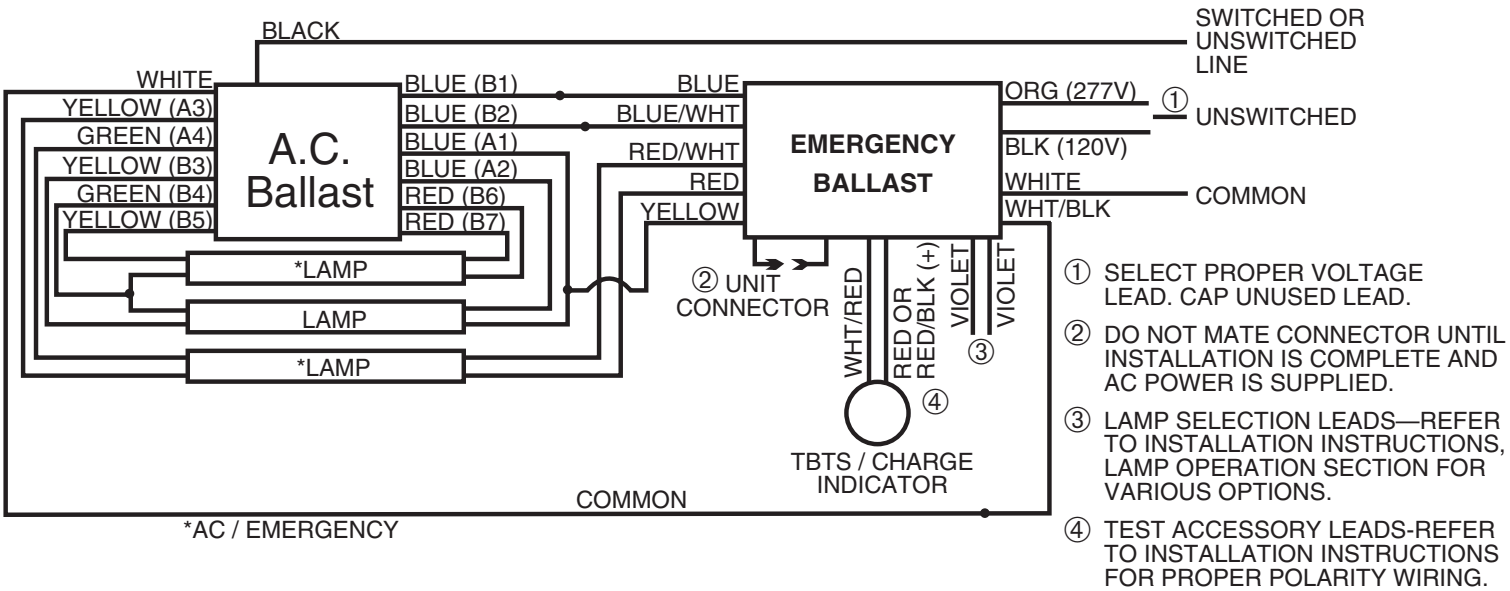
NOTES

-

YY103

YY103

THREE LAMP RAPID START BALLAST TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

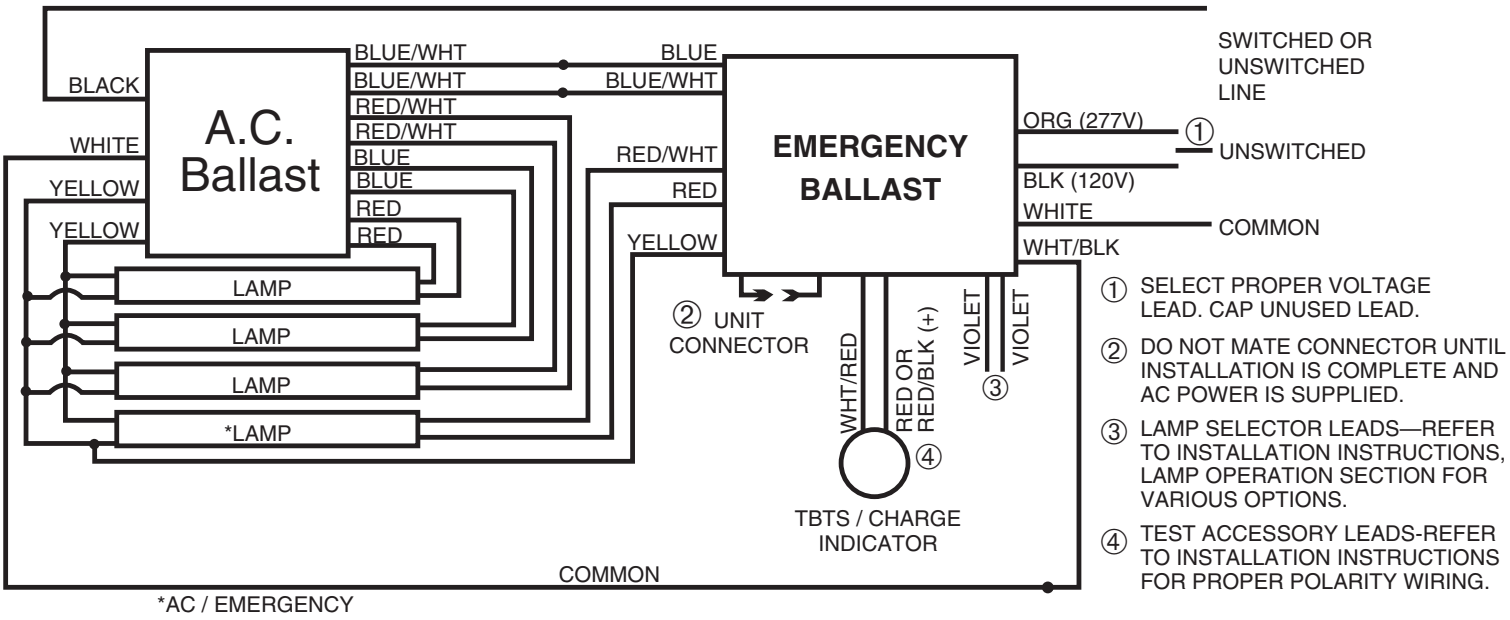
3LRSB_2LEO4_80_D

NOTES

YY104

YY104

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

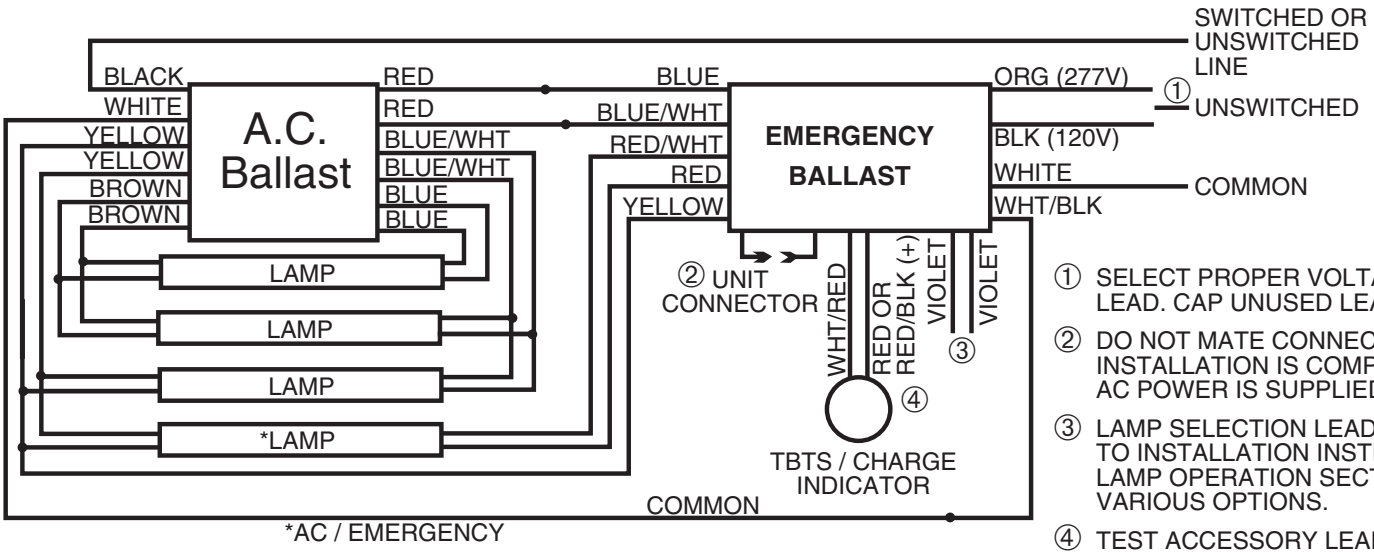
4LRSB_D_2

NOTES

YY105

YY105

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

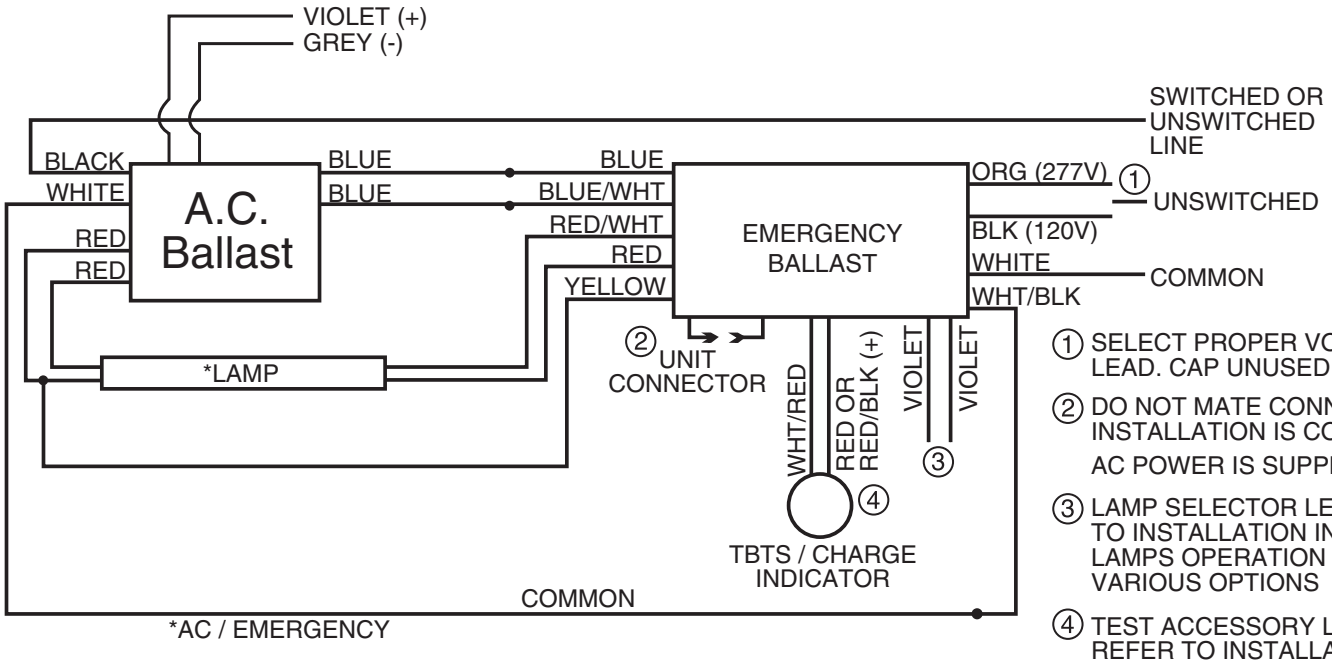
4LRSB5_80_D

NOTES

YY106

YY106

ONE LAMP RAPID START BALLAST FOR USE WITH OSRAM/DIMMING



1. SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.
2. DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.
3. LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS
4. TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

1LRSB_D_DIMMING_OSRAM

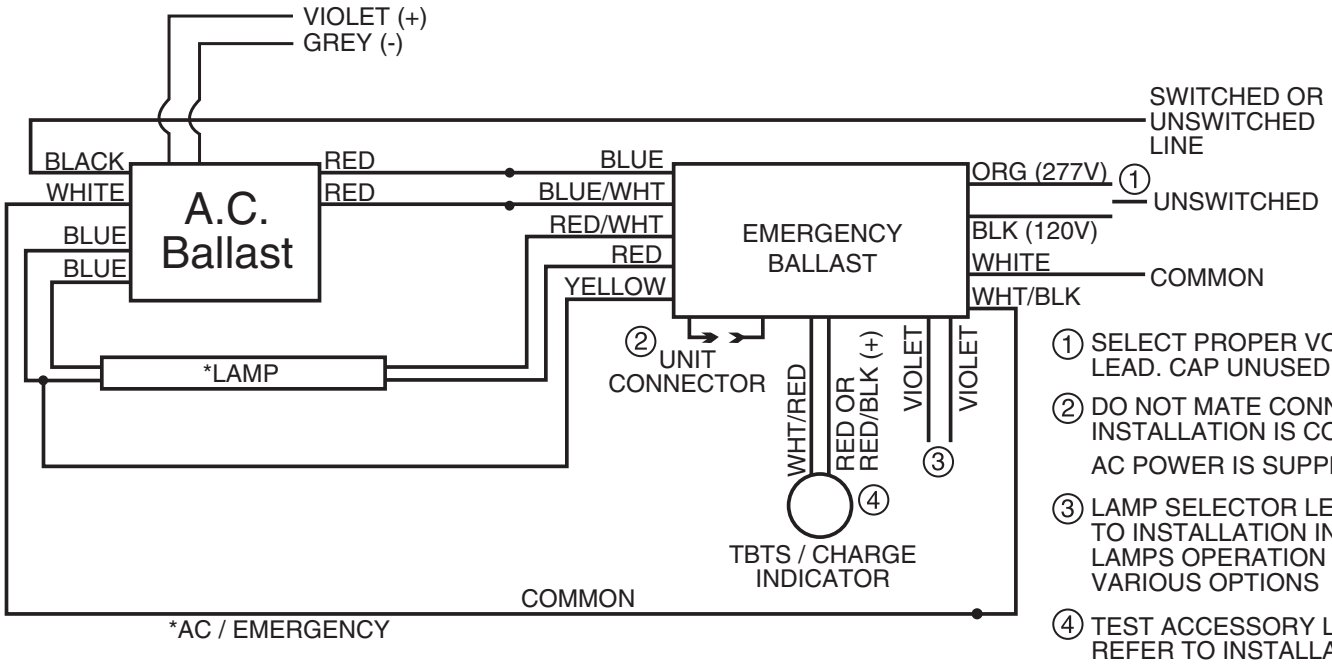
NOTES

FOR REVERSED REDS AND BLUES SEE **YY107**

YY107

YY107

ONE LAMP RAPID START BALLAST FOR USE WITH OSRAM/DIMMING



1. SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.
2. DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.
3. LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS
4. TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

1LRSB_D_DIMMING_OSRAM_A

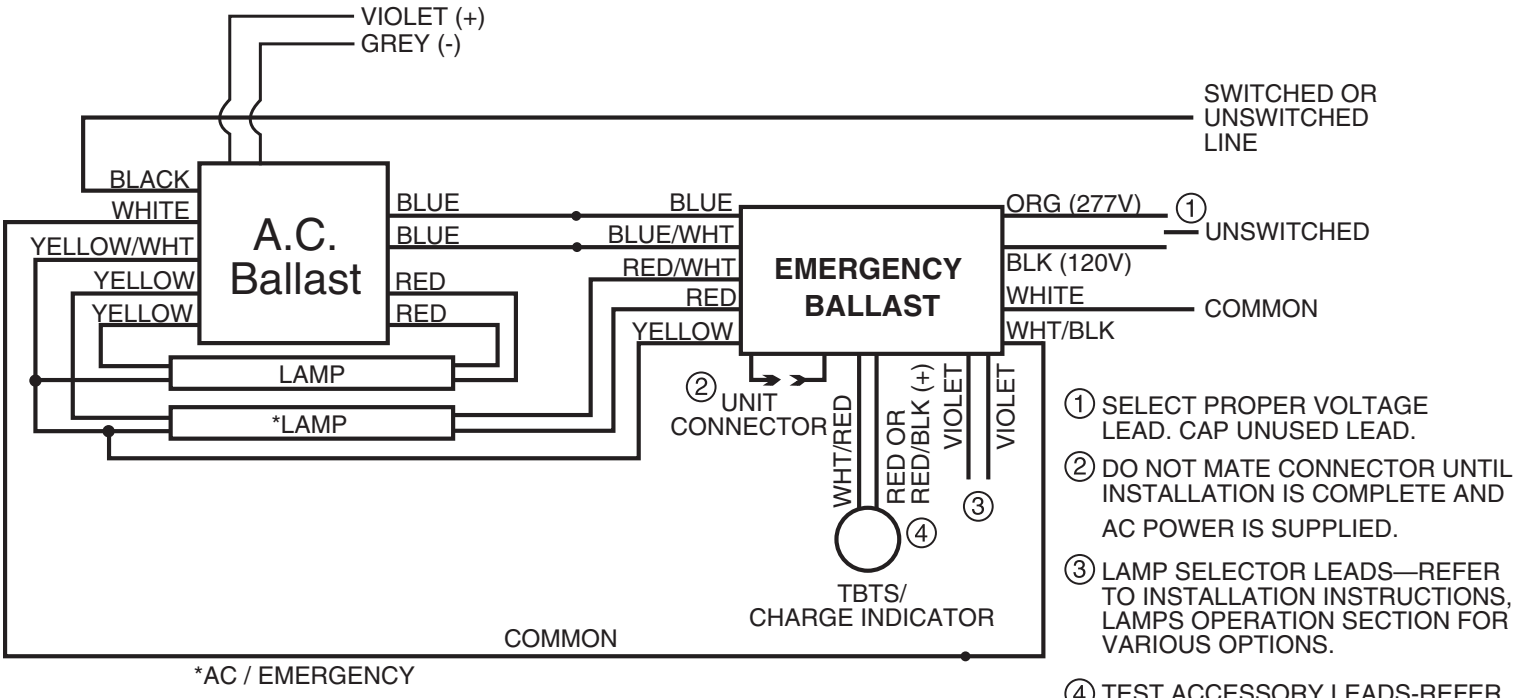
NOTES

FOR REVERSED REDS AND BLUES SEE **YY106**

YY108

YY108

TWO LAMP RAPID START BALLAST FOR USE WITH OSRAM/DIMMING



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LRSB_D_DIMMING_OSRAM

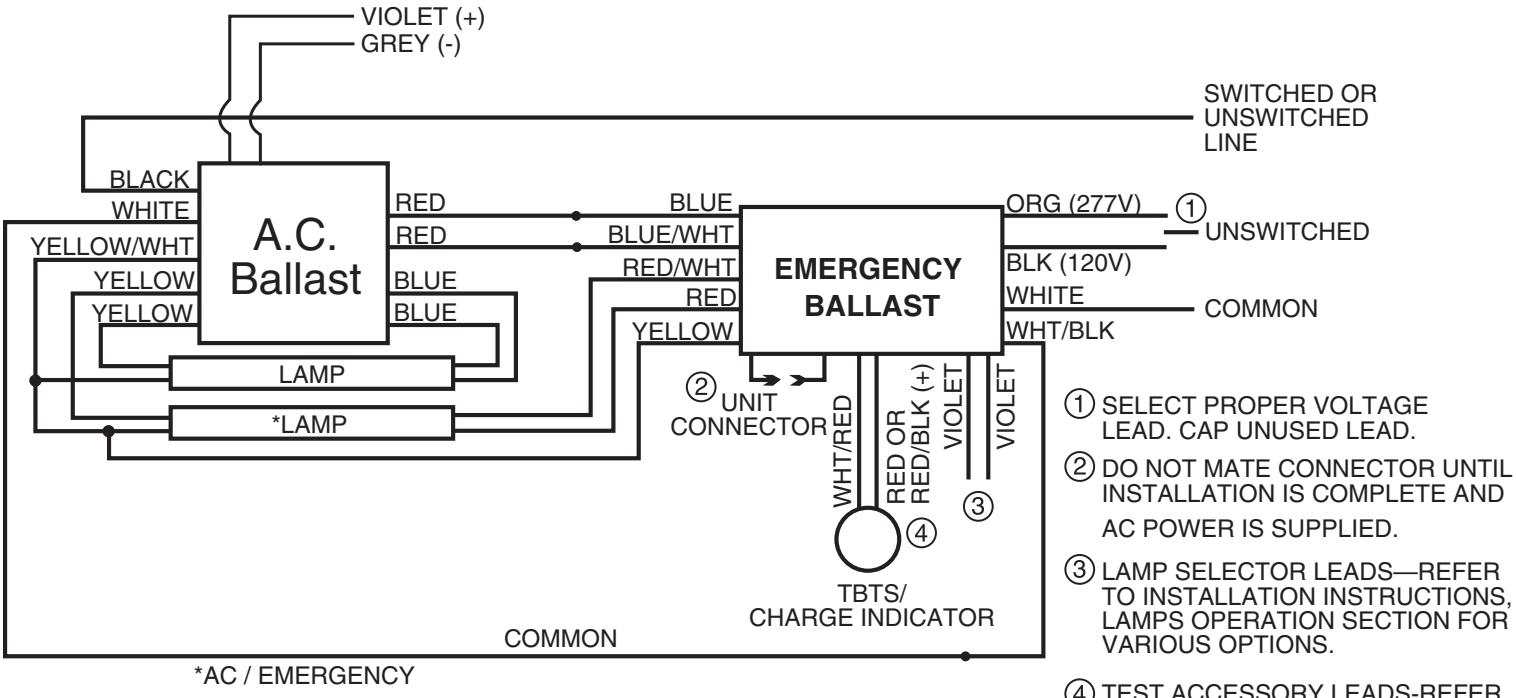
NOTES

FOR REVERSED REDS AND BLUES SEE **YY109**

YY109

YY109

TWO LAMP RAPID START BALLAST FOR USE WITH OSRAM/DIMMING



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

2LRSB_D_DIMMING_OSRAM

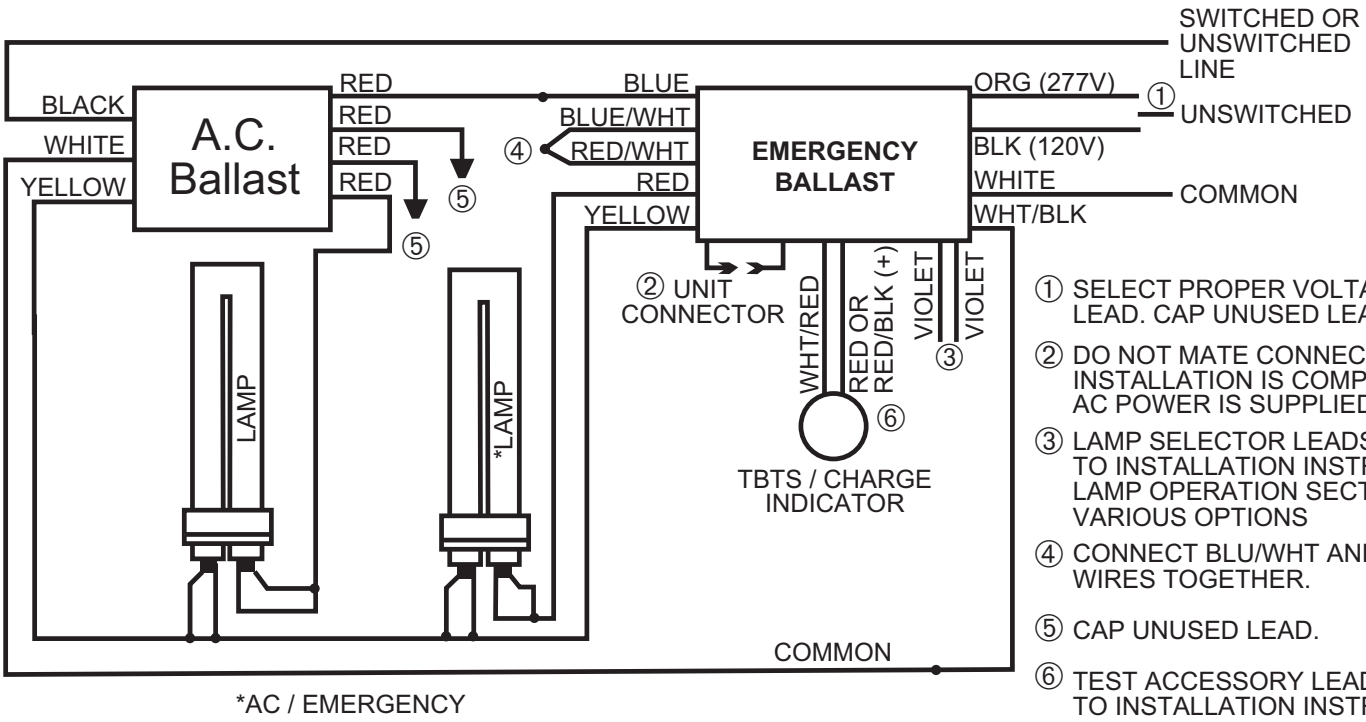
NOTES

FOR REVERSED REDS AND BLUES SEE **YY108**

YY110

YY110

FULHAM WORKHORSE BALLAST



*AC / EMERGENCY

① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS - REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER.

⑤ CAP UNUSED LEAD.

⑥ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

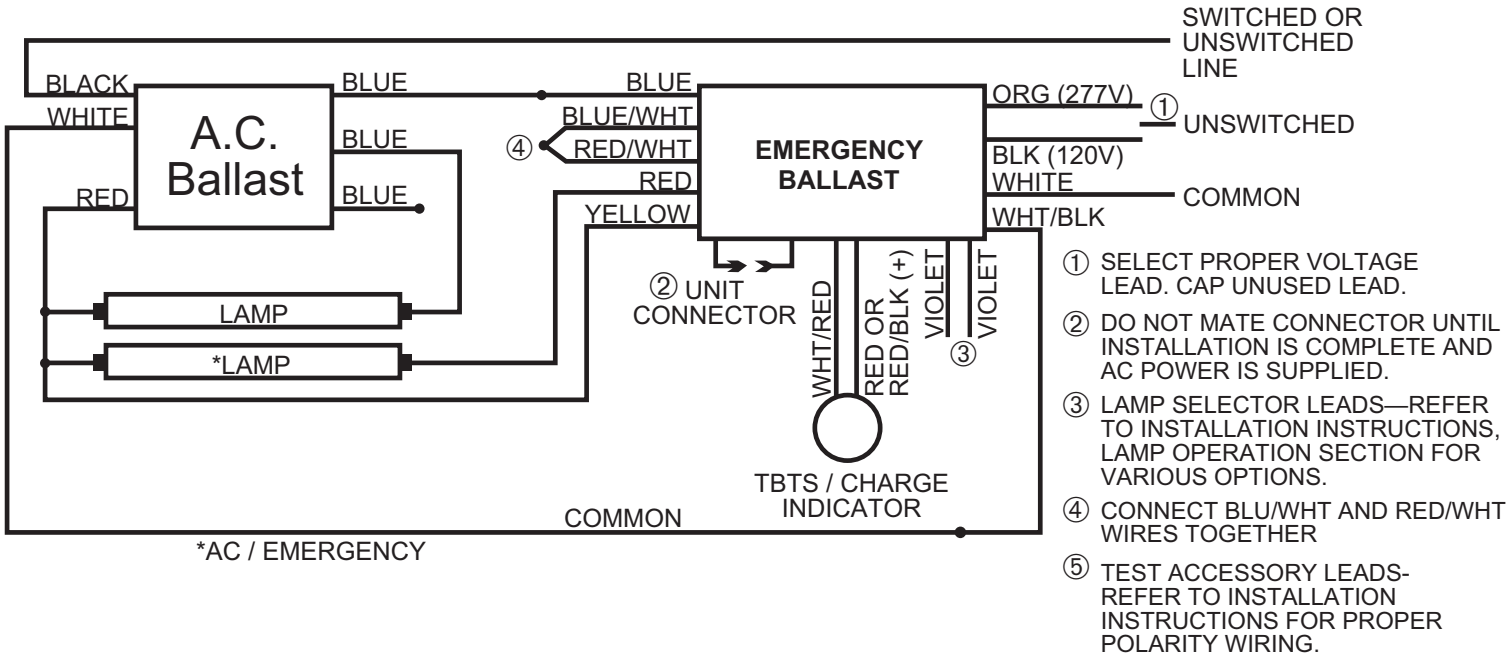
FWB_80_D_2

NOTES

YY111

YY111

THREE LAMP INSTANT START BALLAST WITH TWO LAMPS ONLY



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

⑤ TEST ACCESSORY LEADS-REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

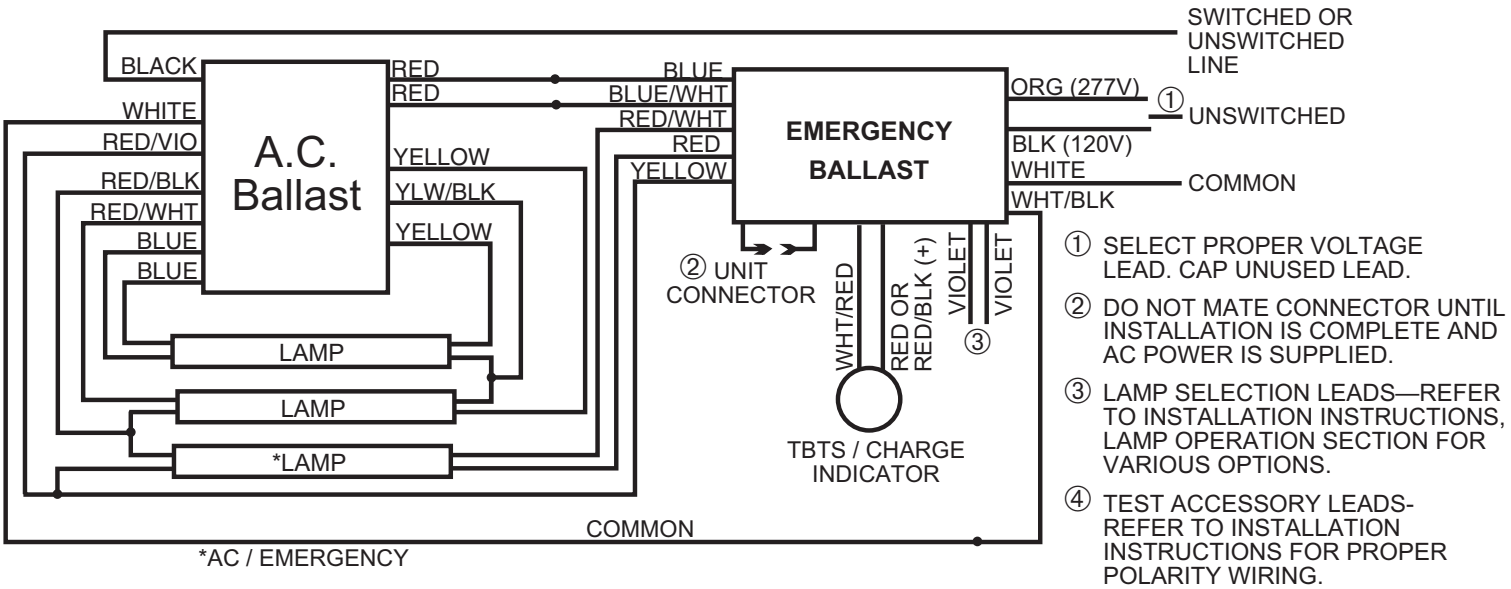
3LISB_D_3

NOTES

YY112

YY112

THREE LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

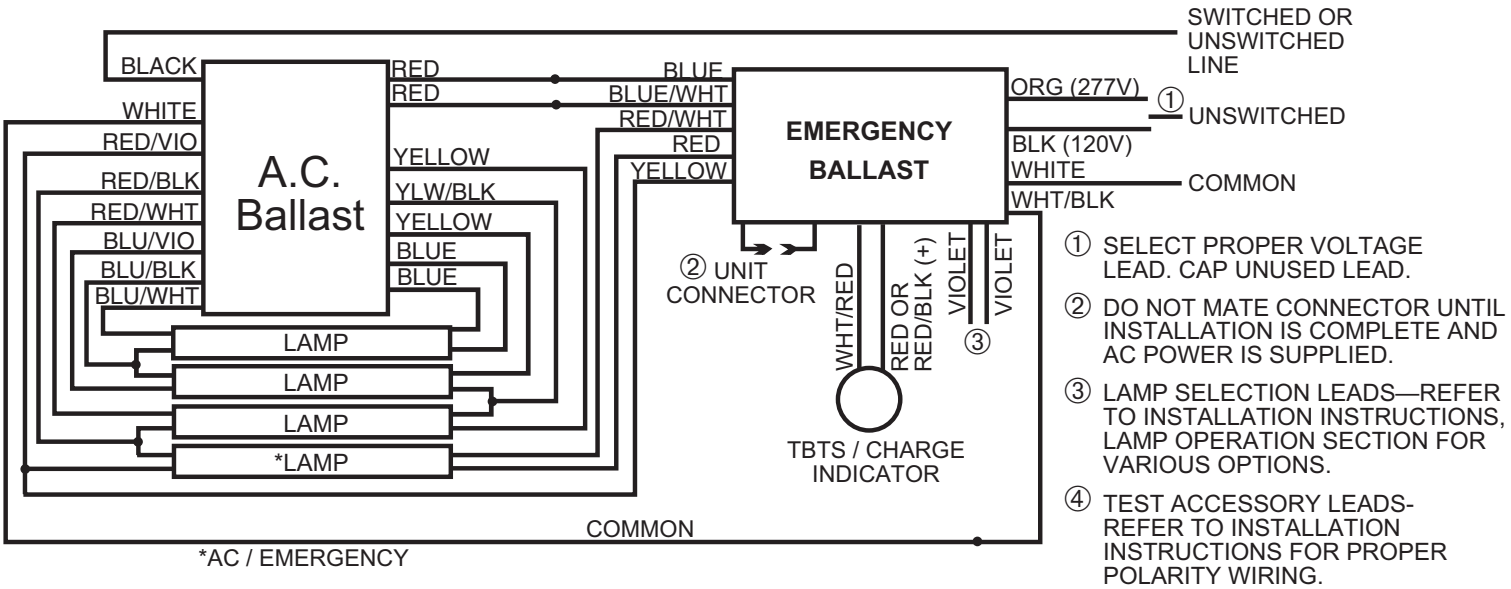
3_LRSB_D_4

NOTES

YY113

YY113

FOUR LAMP RAPID START BALLAST



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

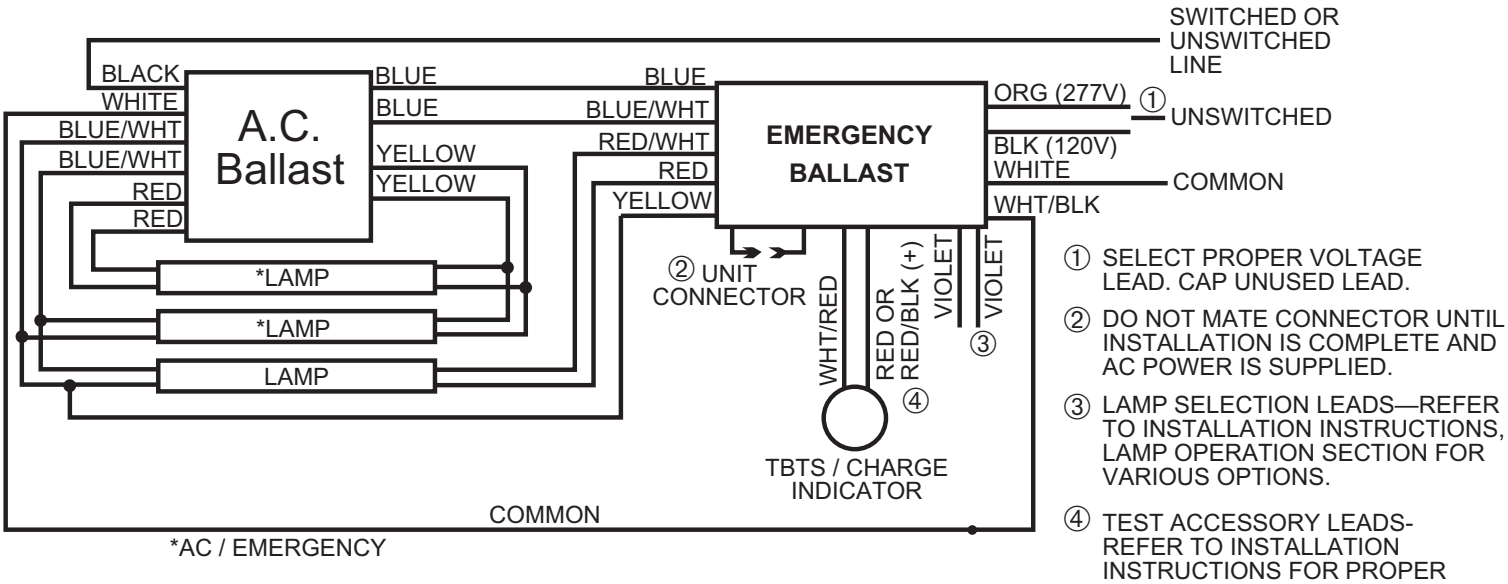
4_LRSB_D_5

NOTES

YY114

YY114

THREE LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.

② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.

③ LAMP SELECTION LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.

④ TEST ACCESSORY LEADS- REFER TO INSTALLATION INSTRUCTIONS FOR PROPER POLARITY WIRING.

3LRSB_2LEO5_80_D

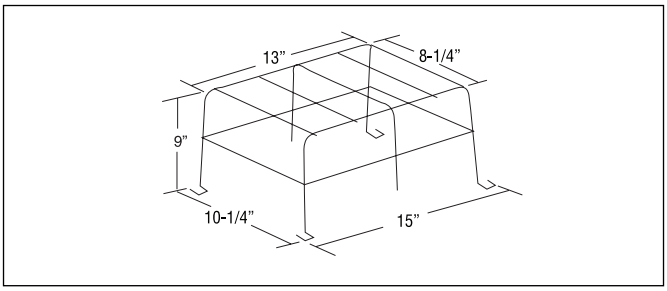
NOTES

EMERGI-LITE®

TYPE: _____

CATALOG #: _____

NOTES: _____

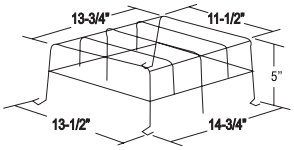


Wire Guards

Catalog Number WG1-E

Application

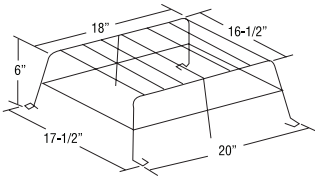
- JS Series (small cabinet)
- PS Series (surface or semi-recessed)
- EF24 or EF24R remote lighting fixture
- Premier™ Battery Unit
- Premier™ Exit Sign (wall mount)



Catalog Number WG2-E

Application

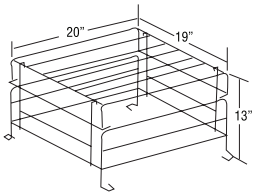
- JS Series (large cabinet)
- All A cabinets
- Premier™ Combo Series (wall mount)



Catalog Number WG3-E

Application

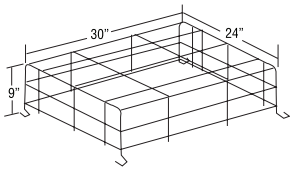
- IL Series
- All B and C cabinets



Catalog Number WG4-E

Application

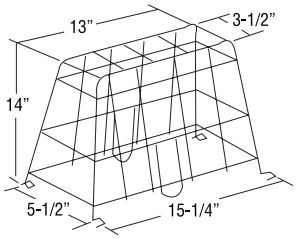
- All D cabinets
- KS Series (not for front mounted heads)



Catalog Number WG5-E

Application

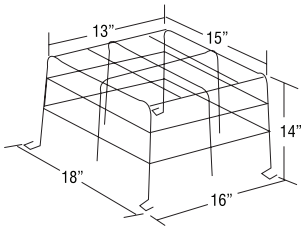
- X10 (end or ceiling mounted) AC and AC/DC or Self-Powered exit with no mounted heads
- ECL & ECLXN Series LED (end or ceiling mounted) AC and AC/DC or Self-Powered
- Preceptor™ Series LED (AC and AC/DC or Self-Powered) (end or ceiling mounted)
- Prestige™ DX Series LED and Thin Die Cast Series (end or ceiling mount)
- Premier™ Exit Sign (end or ceiling mount)



Catalog Number WG6-E

Application

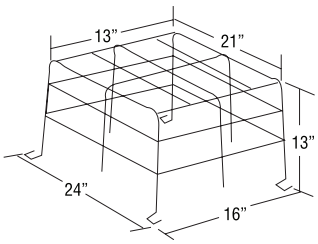
- Single EF22 head
- X10 mini systems (wall mounted) with front mounted EF9 head(s) (wall mounted)
- KS Series with front mounted heads



Catalog Number WG7-E

Application

- EF22D heads
- RS Series with cylinder EF32 heads



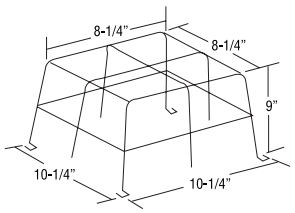
Thomas&Betts

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

Catalog Number WG8-E

Application

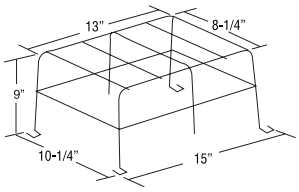
- Single remote EF9, EF11, EF16, EF18, EF28, or EF32 lighting head



Catalog Number WG9-E

Application

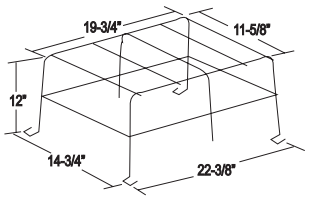
- Double or triple remote EF9, EF11, EF18, EF28 or EF32 lighting heads
- RS Series with EF9 or EF18 heads
- ECS-2 Series



Catalog Number WG10-E

Application

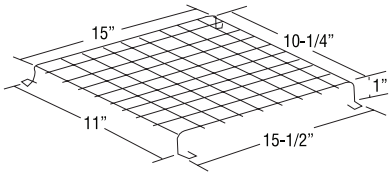
- JS Series with front mounted heads



Catalog Number WG11-E

Application

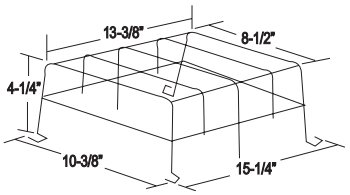
- Fully recessed PS Series
- GS Series
- EF15, EF20, EF21R, EF35 lighting fixtures
- Fully recessed Preceptor™ Series
- Prestige™ Thin Die Cast Exit Sign (wall mounted)



Catalog Number WG12-E

Application

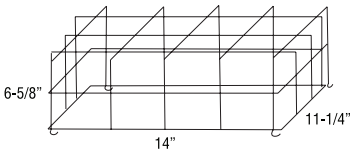
- X10 Series LED (AC and AC/DC or Self-Powered) (wall mount)
- ECL & ECLXN Series LED AC and AC/DC or Self-Powered (wall mount)
- Preceptor™ Series LED (AC and AC/DC or Self-Powered) (wall mount)
- Prestige™ DX Series LED AC and AC/DC or Self-Powered (wall mount)
- Remote EF13, EF14, or EF17 fixtures



Catalog Number WG13-E

Application

- PRO-2 Series
- Preceptor™ Series Self-Powered (wall mount)



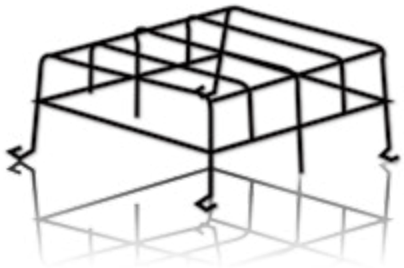
Thomas&Betts

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

TYPE: _____

CATALOG #: _____

NOTES: _____

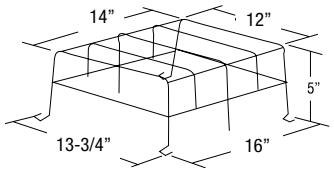


Wire Guards

Catalog Number WG1-E

Application

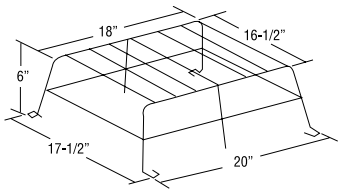
- JS Series (small cabinet)
- Premier™ Battery Unit
- Premier™ Exit Sign (wall mount)
- Prestige™ DX Series
- Preceptor™ Die-Cast Series
- Prestige™ Thin Die-Cast Series



Catalog Number WG2-E

Application

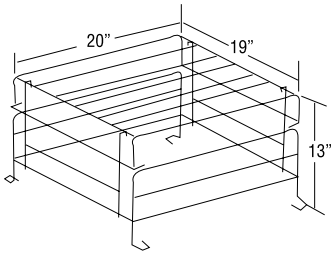
- JS Series (large cabinet)
- All A cabinets
- Premier™ Combo Series (wall mount)



Catalog Number WG3-E

Application

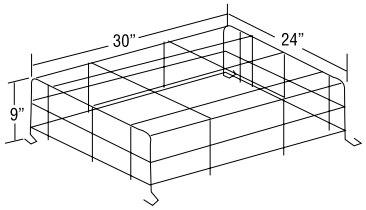
- IL Series
- All B and C cabinets
- KS Series



Catalog Number WG4-E

Application

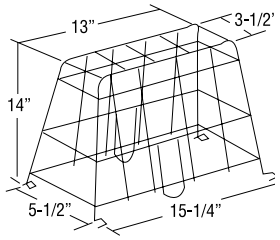
- All D cabinets
- KS Series (not for front mounted heads)



Catalog Number WG5-E

Application

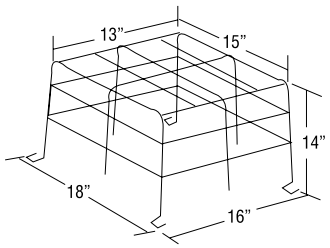
- X10 (end or ceiling mounted) AC and AC/DC or Self-Powered exit with no mounted heads
- ECL & ECLXN Series LED (end or ceiling mounted) AC and AC/DC or Self-Powered
- Preceptor™ Series LED (AC and AC/DC or Self-Powered) (end or ceiling mounted)
- Prestige™ DX Series LED and Thin Die-Cast Series (end or ceiling mount)
- Premier™ Exit Sign (end or ceiling mount)



Catalog Number WG6-E

Application

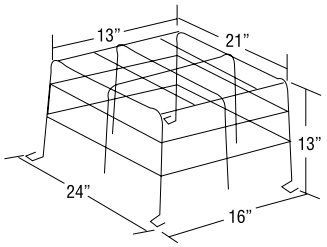
- Single EF23 head
- X10 mini systems (wall mounted) with front mounted EF9 head(s) (wall mounted)
- KS Series with front mounted heads
- RS Series



Catalog Number WG7-E

Application

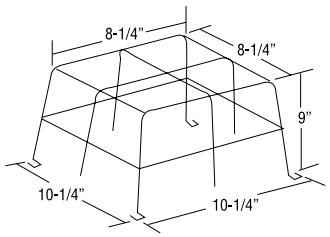
- EF23D heads
- RS Series



Catalog Number WG8-E

Application

- Single remote EF9, EF10, EF11
- EF16, EF18



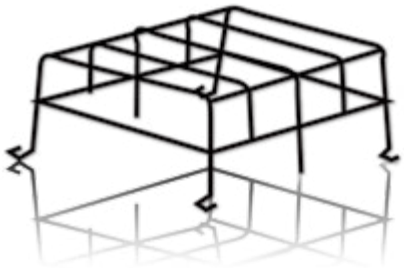
TYPE: _____

CATALOG #: _____

_____

NOTES: _____

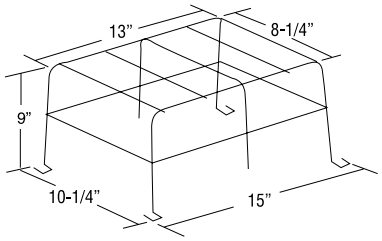
Wire Guards



Catalog Number WG9-E

Application

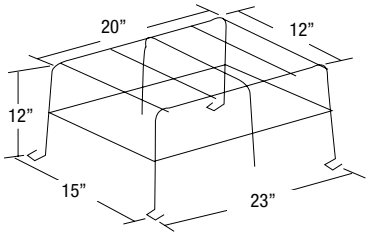
- Double or triple remote EF9, EF11, EF18, lighting heads
- RS Series with EF9 or EF18 heads
- ECS-2 Series



Catalog Number WG10-E

Application

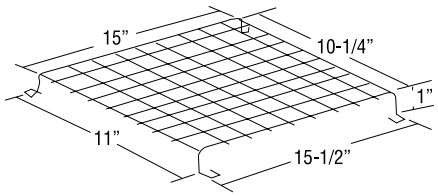
- JS Series with front mounted heads



Catalog Number WG11-E

Application

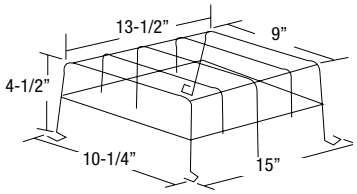
- GS Series
- EF15, EF20, EF21R, EF35 lighting fixtures
- Fully recessed Preceptor™ Series
- Prestige™ Thin Die Cast Exit Sign (wall mounted)



Catalog Number WG12-E

Application

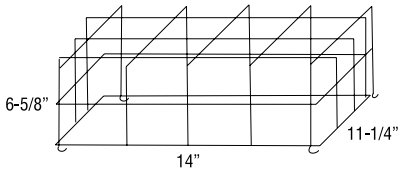
- X10 Series LED (AC and AC/DC or Self-Powered) (wall mount)
- ECL & ECLXN Series LED AC and AC/DC or Self-Powered (wall mount)
- Preceptor™ Series LED (AC and AC/DC or Self-Powered) (wall mount)
- Prestige™ DX Series LED AC and AC/DC or Self-Powered (wall mount)
- Remote EF13, EF14, or EF17 fixtures



Catalog Number WG13-E

Application

- PRO-2N Series
- Preceptor™ Series Self-Powered (wall mount)

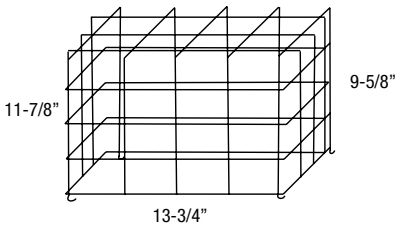


Catalog Number WG14-E

Application

Exit Signs (Ceiling Mount)

- Prestige™ Floor Proximity Series (6" & 8");
- Preceptor™ Die-Cast Series;
- Prestige™ Thin Die-Cast Series;
- X10 LED Series,
- Premier™ Exit Series;

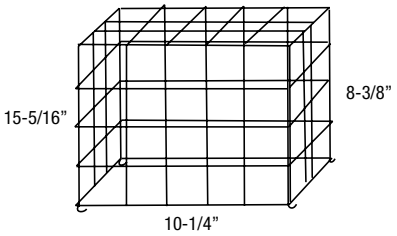


Catalog Number WG15-E

Application

Exit Signs (Ceiling Mount)

- Prestige™ Floor Proximity Series (6" & 8");
- Preceptor™ Die-Cast Series;
- Prestige™ Thin Die-Cast Series;
- X10 LED Series,
- Premier™ Exit Series;

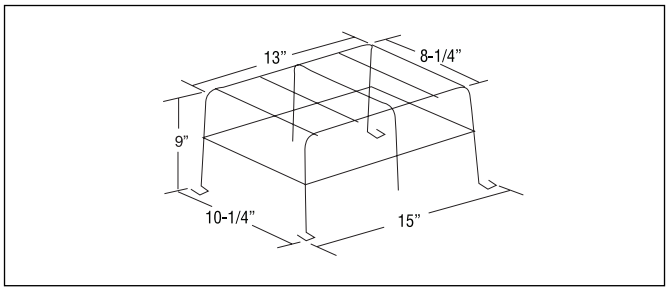


EMERGI-LITE®

TYPE: _____

CATALOG #: _____

NOTES: _____



Wire Size Guide

Determining Wire Size

The following information is provided to assist in designing proper emergency lighting systems effectively and economically by using the smallest permissible wire size for load circuits. When remote lighting fixtures and/or exit signs are connected to emergency lighting units, circuit runs must be of sufficient size to maintain a proper operating voltage to all lamps. The National Electrical Code limits voltage to drop to a maximum of 5% of nominal. The table below gives the maximum length or wire run based on systems voltage, wire gauge and total wattage on the run. To determine the maximum length of a wire run not listed, divide the value of the load in watts into the constant listed at the bottom of each row. Example, the maximum wire run for #10 wire on a 12 volt system, with a 54 watt load, is 3397 ÷ 54 or, or 62 feet.

Conversely, to determine the maximum load on a run of known length, divide the length into the constant. Example, a 36 foot run of #12 wire on a 6 volt systems can be loaded to, 534 ÷ 36, or 14 watts; on #10 wire, 23 watts.

Longer Wire Runs

The wiring distances give the maximum length of a battery circuit, assuming that the entire load is concentrated at the end of the circuit. If loads are uniformly spaced along the circuit path (equal watts, equal distances), the lengths in the table may be increased, based on number of fixtures on a given circuit, by means of the chart and formula below.

Number of Fixtures	2	3	4	5	6	N
Multiply by Feet	1.33	1.5	1.6	1.67	1.71	2n(n+1)

For example, a 36 foot long, 6 volt circuit has (3) 9 watt headsspaced 12 feet apart. According to the wire run table, # 8 wire must be used (at 50 feet for a 5% voltage drop.) but, by multiplying the 31 feet for #10 wire by 1.5, a $46^{1/2}$ foot wire run is acceptable, so #10 wire may be used and still meet the 5% voltage drop limitation.

Note: According to the National Electrical Code, Article 720-Y, the smallest permissible wire size for systems under 50 volts is the #12 wire gauge.

Total watts on wire run	Wiring Distance in Feet (Maximum Voltage Drop 5%)												
	6 volt wire size				12 volt wire size					24 volt wire size			
	#12	#10	#8	#6	#12	#10	#8	#6	#4	#12	#10	#8	#6
6	89	141	225	357	356	566	900	1431	+	1425	+	+	+
8	66	106	168	268	267	424	675	1073	1707	1068	1698	+	+
9	59	94	150	238	237	377	600	954	1517	949	1509	+	+
10	53	84	135	214	213	339	540	859	1366	854	1358	+	+
12	44	70	112	178	178	283	450	715	1138	712	1132	1801	+
16	33	53	84	134	133	212	337	536	853	534	849	1350	+
18	29	47	75	119	118	188	300	477	758	474	754	1200	1909
24	22	35	56	89	89	141	225	357	569	356	566	900	1431
25	21	33	54	85	85	135	216	343	546	341	543	864	1374
27	19	31	50	79	79	125	200	318	505	316	503	800	1272
30	17	28	45	71	71	113	180	286	455	284	452	720	1145
36	14	23	37	59	59	94	150	238	379	237	377	600	954
42	12	20	32	51	50	80	128	204	325	203	323	514	818
45	11	18	30	47	47	75	120	190	303	189	301	480	763
48	11	17	28	44	44	70	112	178	284	178	283	450	715
50	10	16	27	42	42	67	108	171	273	170	371	432	687
75	7	11	18	28	28	45	72	114	182	113	181	288	458
100	5	8	13	21	21	33	54	85	136	85	135	216	343
150	-	5	9	14	14	22	36	57	91	56	90	144	229
200	-	-	6	10	10	16	27	42	68	42	67	108	171
250	-	-	5	8	8	13	21	34	54	34	54	86	137
300	-	-	-	7	7	11	18	28	45	28	45	72	114
400	-	-	-	5	5	8	13	21	34	21	33	54	85
500	-	-	-	-	-	6	10	17	27	17	27	43	68
Constant	534	849	1350	2148	2137	3397	5403	8590	13660	8548	13588	21613	34363

Thomas&Betts

All information and specifications contained in this specsheet are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this specsheet may vary from actual products.
2013© Thomas & Betts Limited. All rights reserved.

Wire Size Guide

Determining Wire Size

The following information is provided to assist in designing proper emergency lighting systems effectively and economically by using the smallest permissible wire size for load circuits. When remote lighting fixtures and/or exit signs are connected to emergency lighting units, circuit runs must be of sufficient size to maintain a proper operating voltage to all lamps. The National Electrical Code limits voltage to drop to a maximum of 5% of nominal. The table below gives the maximum length or wire run based on systems voltage, wire gauge and total wattage on the run. To determine the maximum length of a wire run not listed, divide the value of the load in watts into the constant listed at the bottom of each row. Example, the maximum wire run for #10 wire on a 12 volt system, with a 54 watt load, is 3397 ÷ 54 or, or 62 feet.

Conversely, to determine the maximum load on a run of known length, divide the length into the constant. Example, a 36 foot run of #12 wire on a 6 volt systems can be loaded to, 534 ÷ 36, or 14 watts; on #10 wire, 23 watts.

WIRING DISTANCE IN FEET (MAXIMUM VOLTAGE DROP 5%)													
Total watts on wire run	6 volt wire size				12 volt wire size					24 volt wire size			
	#12	#10	#8	#6	#12	#10	#8	#6	#4	#12	#10	#8	#6
6	89	141	225	357	356	566	900	1431	+	1425	+	+	+
8	66	106	168	268	267	424	675	1073	1707	1068	1698	+	+
9	59	94	150	238	237	377	600	954	1517	949	1509	+	+
10	53	84	135	214	213	339	540	859	1366	854	1358	+	+
12	44	70	112	178	178	283	450	715	1138	712	1132	1801	+
16	33	53	84	134	133	212	337	536	853	534	849	1350	+
18	29	47	75	119	118	188	300	477	758	474	754	1200	1909
24	22	35	56	89	89	141	225	357	569	356	566	900	1431
25	21	33	54	85	85	135	216	343	546	341	543	864	1374
27	19	31	50	79	79	125	200	318	505	316	503	800	1272
30	17	28	45	71	71	113	180	286	455	284	452	720	1145
36	14	23	37	59	59	94	150	238	379	237	377	600	954
42	12	20	32	51	50	80	128	204	325	203	323	514	818
45	11	18	30	47	47	75	120	190	303	189	301	480	763
48	11	17	28	44	44	70	112	178	284	178	283	450	715
50	10	16	27	42	42	67	108	171	273	170	271	432	687
75	7	11	18	28	28	45	72	114	182	113	181	288	458
100	5	8	13	21	21	33	54	85	136	85	135	216	343
150	—	5	9	14	14	22	36	57	91	56	90	144	229
200	—	—	6	10	10	16	27	42	68	42	67	108	171
250	—	—	5	8	8	13	21	34	54	34	54	86	137
300	—	—	—	7	7	11	18	28	45	28	45	72	114
400	—	—	—	5	5	8	13	21	34	21	33	54	85
500	—	—	—	—	—	6	10	17	27	17	27	43	68
Constant	**534**	**849**	**1350**	**2148**	**2137**	**3397**	**5403**	**8590**	**13660**	**8548**	**13588**	**21613**	**34363**

Longer Wire Runs

The wiring distances give the maximum length of a battery circuit, assuming that the entire load is concentrated at the end of the circuit. If loads are uniformly spaced along the circuit path (equal watts, equal distances), the lengths in the table may be increased, based on number of fixtures on a given circuit, by means of the chart and formula below.

NUMBER OF FIXTURES	2	3	4	5	6	N
Multiply by Feet	1.33	1.5	1.6	1.67	1.71	2N/ (n+1)

For example, a 36 foot long, 6 volt circuit has (3) 9 watt heads spaced 12 feet apart. According to the wire run table, # 8 wire must be used (at 50 feet for a 5% voltage drop.) but, by multiplying the 31 feet for #10 wire by 1.5, a 461/2 foot wire run is acceptable, so #10 wire may be used and still meet the 5% voltage drop limitation.

Note: According to the National Electrical Code, Article 720-Y, the smallest permissible wire size for systems under 50 volts is the #12 wire gauge.

Lamp Data

General Information

All Emergi-Lite® Lighting Fixtures are furnished complete with lamps; however, **all fixtures and unit model numbers must include a lamp designation.** Unless otherwise noted, the standard lamp furnished with each lighting fixture is a 9W High Intensity Incandescent lamp of the designated voltage.

Example

FIXTURES	PART NUMBER
EF18 (ZD)	LSM 110-2Z (6V-9W)
EF18 (ZF)	12LSM 110-2Z (12V-9W)
EF18 (ZN)	24LSM 110-2Z (24V-9W)

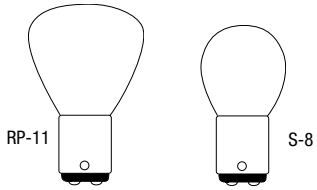
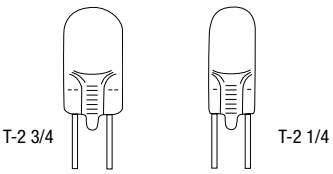
When an alternate lamp is required, refer to the lamp selection charts below, select the lamp type, the voltage and wattage required and add the symbol designation to the catalog number. Not all lighting fixtures and lamp types are compatible, always check individual lighting fixture "How to Order" information.

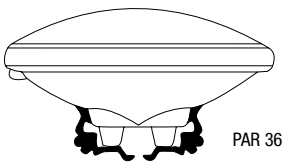
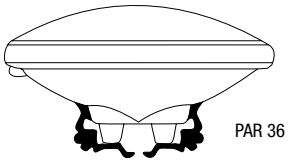
Example:

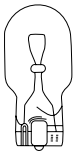
A Normally Furnished Lamp: EF18 (ZD)
(6V-9W Wedge Base Incandescent)

Lighting Head Requiring different Lamp: (6V-25W Sealed Beam Lamp)

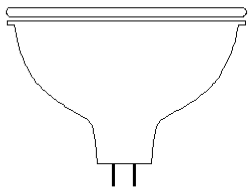
Change Catalog Number to: EF18 (UC)

LAMP TYPE	PART NUMBER	LAMP CODE	VOLTAGE (V)	POWER (W)	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BULB TYPE
High Intensity Tungsten (HIT) Lamps  Double Contact Bayonet Base	570.0010	IA	6	9	126	10	135	S-8
	570.0020	IM	6	13	188	15	88	S-8
	570.0037	IB	6	18	300	24	1130	S-8
	570.0038	IC	6	25	400	32	1134	RP-11
	570.0011	IE	12	9	126	10	138	S-8
	570.0022	IN	12	13	188	15	94	S-8
	570.0030	IF	12	18	276	22	139	S-8
	570.0031	IG	12	25	400	32	1076	S-8
	570.0058	II	24	9	75	6	304	C-2F
	570.0040	IJ	24	18	250	20	142	S-8
	570.0061	IK	24	25	400	32	1638	S-8
Bi-Pin Halogen Lamps 	580.0012	HA	6	6	113	9	784	T-2 1/4
	580.0013	HB	6	8	163	13	785	T-2 1/4
	580.0017	HC	6	10	200	16	787	T-2 1/4
	580.0011	HD	6	12	240	19	786	T-2 1/4
	580.0022	HE	6	20	400	32	788	T-2 1/4
	580.0014	HF	12	8	163	13	774	T-2 1/4
	580.0015	HG	12	12	276	22	783	T-2 1/4
	580.0016	HH	12	14	300	24	789	T-2 3/4
	580.0027	HI	12	20	314	25	782	T-2 3/4

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	CENTER-BEAM CANDLE POWER (CBCP)	LAMP #	BULB TYPE
Sealed Beam Halogen Lamps 	550.0022	XA	6	6	107	400	H7556	PAR 36
	550.0036	XB	6	8	155	550	H7551	PAR 36
	550.0037	XC	6	10	190	650	H7552	PAR 36
	550.0019	XD	6	12	225	850	H7553	PAR 36
	550.0021	XE	6	20	380	1,400	H7554	PAR 36
	550.0024	XF	12	8	130	550	H7555	PAR 36
	550.0025	XG	12	12	240	850	H7557	PAR 36
	550.0047	XH	12	37	700	70,000	H7616	PAR 36
	550.0012	XI	12	50	950	2,000	H7614	PAR 36
Sealed Beam Incandescent Lamps 	550.0018	UA	6	8	130	400	7613	PAR 36
	550.0030	UI	6	12	180	1,100	4042	PAR 36
	550.0016	UB	6	18	270	1,500	4014	PAR 36
	550.0017	UC	6	25	400	800	4510	PAR 36
	550.0035	UD	6	30	460	5,500	4515	PAR 36
	550.0026	UE	12	12	190	1,110	4044	PAR 36
	550.0027	UF	12	18	210	1,500	4414	PAR 36
	550.0023	UG	12	25	395	400	4446	PAR 36
	550.0034	UH	12	30	430	35,000	4416	PAR 36

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BULB TYPE
High Intensity Incandescent, Wedge Base  T-5	570.0012	ZP	6	5.4	68	5.4	939	T-5
	570.0026	ZL	6	7.2	100	8	927	T-5
	570.0016	ZD	6	9	150	12	908	T-5
	570.0025	ZF	12	9	138	11	915	T-5
	570.0028	ZG	12	12	150	12	912	T-5
	570.0029	ZH	12	18	264	21	921	T-5
	570.0045	ZN	24	9	113	9	EMS2209W	T-5
	570.0046	ZO	24	18	240	19	EMS2218W	T-5

Lamp Data
General Information

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	CENTER-BEAM CANDLE POWER (CBCP)	BEAM ANGLE (DEGREES)	BULB TYPE
MR16 Halogen Lamps 	580.0072	MH	6	5.4	34	73	36	MR16
	580.0074	MI	6	6	40	130	24	MR16
	580.0079	MJ	6	10	77	790	16	MR16
	580.0099	MO	12	10	86	200	36	MR16
	580.0080	MK	12	12	135	320	36	MR16
	580.0064	MG	12	20	270	525	36	MR16
	580.0075	MA	12	20-A	245	600	36	MR16
	580.0068	MW	12	20-H	417	950	36	MR16
	580.0083	MB	12	35	490	3300	24	MR16
	580.0076	MC	12	50	785	2800	24	MR16
	580.0089	MM	12	50-H	1550	5700	24	MR16
	580.0070	MS	24	12	95	280	36	MR16
	580.0077	MD	24	20	240	740	24	MR16
	580.0094	MN	24	20-A	195	890	24	MR16
	580.0084	ME	24	35	460	990	36	MR16
	580.0078	MF	24	50	875	3200	24	MR16
	580.0065	MT	120	20	100	240	36	MR16
	580.0066	MU	120	35	230	520	36	MR16
	580.0067	MV	120	50	460	1100	36	MR16
MR16 LED Lamps 	580.0097	LA	6	4	130	600	24	MR16
	580.0093	LG	12	4	170	440	30	MR16
	580.0104	LI	12	5	340	900	24	MR16
	580.0106	LJ	12	6	540	1800	25	MR16
	580.0098	LL	24	4	200	900	24	MR16
	580.0095	LV	120	4	200	900	24	MR16

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BULB TYPE
EXIT Signs, Hazardous Locations Incandescent Lamps	580.0086	XX6	6	15	210	17	JC6V-15W2KG4	Bi-Pin G4
	570.0071	XX12	12	25	220	18	13769	A19
	570.0118	XX24	24	25	220	18	24227-1	A19
	570.0136	AC	120	25	215	17	97478	A19

LAMP TYPE	PART NUMBER	VOLTAGE	WATTS	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BASE TYPE
EXIT Signs, 120VAC Incandescent	570.0013	145	15	150	12	15T6145	Candelabra Screw Base
	570.0024	120	20	90	7	20T61/2	Intermediate Screw Base
	570.0035	145	15	150	12	15T6	Intermediate Screw E17
	595.0010	120	7	330	26	PL7-T4	G23

Important: Lumen rating and candle power values are only for general reference.
The data was obtained from the manufacturer's catalogs, calculations or third-party laboratory measurements. Actual performance in the field may and will vary.

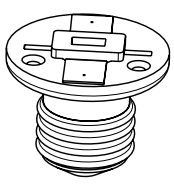
Explosion-Proof Incandescent Lamps

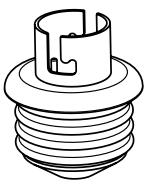
ITEM P/N	CATALOG SUFFIX	VOLTAGE	WATTS	LUMEN RATING	LAMP #
580.0086	XX6	6	15	225	JC-6V15W
570.0071	XX12	12	25	378	–
570.0118	XX24	24	25	345	–
570.0136	AC	120	25	215	–
540.0180	XX120	120	5	–	Red LED

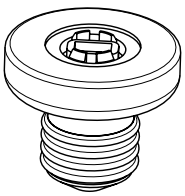
MSA Incandescent Lamp Adapter

For HIT, DCBB or Bi-Pin Halogen Lamps

DC lamp plus adapter for medium Edison screw base socket. This device converts any incandescent fixture into an emergency fixture.


MSA Bi-Pin


MSA Double Contact


MSA Wedge Base

120 Volt AC Exit Lamps

LAMP TYPE	CATALOG	WATTS	LAMP #	BASE
Incandescent	570.0013	15	15T6145	Candelabra Screw Base
Incandescent	570.0024	20	20T61/2	Intermediate Screw Base
Incandescent	570.0035	15	15T6	Intermediate Screw Base
Fluorescent	595.0010	7	PL7-T4	G23

How to Order (example)

PRODUCT CODE	LAMP SYMBOL
MSA	HB

Note:
Lumen figures based on information supplied by lamp manufacturers.
Lamp drawings shown are for shape comparison only, not actual size.

Lamp Data

General Information

All Emergi-Lite® Lighting Fixtures are furnished complete with lamps; however, **all fixtures and unit model numbers must include a lamp designation.** Unless otherwise noted, the standard lamp furnished with each lighting fixture is a 9W High Intensity Incandescent lamp of the designated voltage.

Example

FIXTURES	PART NUMBER
EF18 (ZD)	LSM 110-2Z (6V-9W)
EF18 (ZF)	12LSM 110-2Z (12V-9W)
EF18 (ZN)	24LSM 110-2Z (24V-9W)

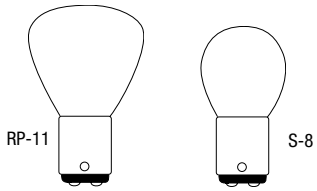
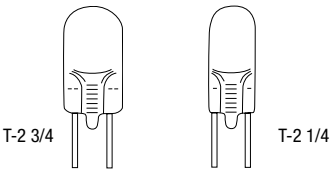
When an alternate lamp is required, refer to the lamp selection charts below, select the lamp type, the voltage and wattage required and add the symbol designation to the catalog number. Not all lighting fixtures and lamp types are compatible, always check individual lighting fixture "How to Order" information.

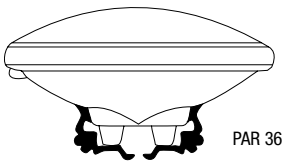
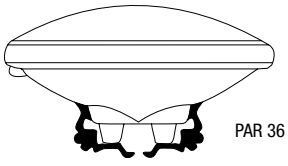
Example:

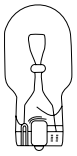
A Normally Furnished Lamp: EF18 (ZD)
(6V-9W Wedge Base Incandescent)

Lighting Head Requiring different Lamp: (6V-25W Sealed Beam Lamp)

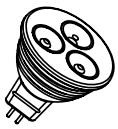
Change Catalog Number to: EF18 (UC)

LAMP TYPE	PART NUMBER	LAMP SUFFIX	VOLTAGE (V)	POWER (W)	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BULB TYPE
High Intensity Tungsten (HIT) Lamps  Double Contact Bayonet Base	570.0010	IA	6	9	126	10	135	S-8
	570.0020	IM	6	13	188	15	88	S-8
	570.0037	IB	6	18	300	24	1130	S-8
	570.0038	IC	6	25	400	32	1134	RP-11
	570.0011	IE	12	9	126	10	138	S-8
	570.0022	IN	12	13	188	15	94	S-8
	570.0030	IF	12	18	276	22	139	S-8
	570.0031	IG	12	25	400	32	1076	S-8
	570.0058	II	24	9	75	6	304	C-2F
	570.0040	IJ	24	18	250	20	142	S-8
	570.0061	IK	24	25	400	32	1638	S-8
Bi-Pin Halogen Lamps 	580.0012	HA	6	6	113	9	784	T-2 1/4
	580.0013	HB	6	8	163	13	785	T-2 1/4
	580.0017	HC	6	10	200	16	787	T-2 1/4
	580.0011	HD	6	12	240	19	786	T-2 1/4
	580.0022	HE	6	20	400	32	788	T-2 1/4
	580.0014	HF	12	8	163	13	774	T-2 1/4
	580.0015	HG	12	12	276	22	783	T-2 1/4
	580.0016	HH	12	14	300	24	789	T-2 3/4
	580.0027	HI	12	20	314	25	782	T-2 3/4

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	CENTER-BEAM CANDLE POWER (CBCP)	LAMP #	BULB TYPE
Sealed Beam Halogen Lamps 	550.0022	XA	6	6	107	400	H7556	PAR 36
	550.0036	XB	6	8	155	550	H7551	PAR 36
	550.0037	XC	6	10	190	650	H7552	PAR 36
	550.0019	XD	6	12	225	850	H7553	PAR 36
	550.0021	XE	6	20	380	1,400	H7554	PAR 36
	550.0024	XF	12	8	130	550	H7555	PAR 36
	550.0025	XG	12	12	240	850	H7557	PAR 36
	550.0047	XH	12	37	700	22,000	H7616	PAR 36
	550.0012	XI	12	50	950	2,000	H7614	PAR 36
Sealed Beam Incandescent Lamps 	550.0018	UA	6	8	130	400	7613	PAR 36
	550.0030	UI	6	12	180	1,100	4042	PAR 36
	550.0016	UB	6	18	270	1,500	4014	PAR 36
	550.0017	UC	6	25	400	800	4510	PAR 36
	550.0035	UD	6	30	460	5,500	4515	PAR 36
	550.0026	UE	12	12	190	1,110	4044	PAR 36
	550.0027	UF	12	18	210	1,500	4414	PAR 36
	550.0023	UG	12	25	395	400	4446	PAR 36
	550.0034	UH	12	30	430	13,000	4416	PAR 36

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BULB TYPE
High Intensity Incandescent, Wedge Base  T-5	570.0012	ZP	6	5.4	68	5.4	939	T-5
	570.0026	ZL	6	7.2	100	8	927	T-5
	570.0016	ZD	6	9	150	12	908	T-5
	570.0025	ZF	12	9	138	11	915	T-5
	570.0028	ZG	12	12	150	12	912	T-5
	570.0029	ZH	12	18	264	21	921	T-5
	570.0045	ZN	24	9	113	9	EMS2209W	T-5
	570.0046	ZO	24	18	240	19	EMS2218W	T-5

Lamp Data
General Information

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	CENTER-BEAM CANDLE POWER (CBCP)	BEAM ANGLE (DEGREES)	BULB TYPE
MR16 Halogen Lamps	580.0072	MH	6	5.4	34	73	36	MR16
	580.0074	MI	6	6	40	130	24	MR16
	580.0079	MJ	6	10	77	790	16	MR16
	580.0099	MO	12	10	86	200	36	MR16
	580.0080	MK	12	12	135	320	36	MR16
	580.0064	MG	12	20	270	525	36	MR16
	580.0075	MA	12	20-A	245	600	36	MR16
	580.0068	MW	12	20-H	417	950	36	MR16
	580.0083	MB	12	35	490	3300	24	MR16
	580.0076	MC	12	50	785	2800	24	MR16
	580.0089	MM	12	50-H	1550	5700	24	MR16
	580.0070	MS	24	12	95	280	36	MR16
	580.0077	MD	24	20	240	740	24	MR16
	580.0094	MN	24	20-A	195	890	24	MR16
	580.0084	ME	24	35	460	990	36	MR16
	580.0078	MF	24	50	875	3200	24	MR16
	580.0065	MT	120	20	100	240	36	MR16
	580.0066	MU	120	35	230	520	36	MR16
	580.0067	MV	120	50	460	1100	36	MR16
MR16 LED Lamps 	580.0097	LA	6	4	199	600	24	MR16
	580.0093	LG	12	4	220	440	30	MR16
	580.0104	LI	12	5	340	900	24	MR16
	580.0106	LJ	12	6	540	1800	25	MR16
	580.0098	LL	24	4	220	900	24	MR16
	580.0100	LM	24	6	590	1900	24	MR16
	580.0113	LW	120	4	235	110	22	MR16-Wires
	580.0095	LV	120	4	204	900	24	MR16

LAMP TYPE	PART NUMBER	CATALOG SUFFIX	VOLTAGE	WATTS	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BULB TYPE
EXIT Signs, Hazardous Locations Incandescent Lamps	580.0086	XX6	6	15	210	17	JC6V-15W2KG4	Bi-Pin G4
	570.0071	XX12	12	25	220	18	13769	A19
	570.0118	XX24	24	25	220	18	24227-1	A19
	570.0136	AC	120	25	215	17	97478	A19

LAMP TYPE	PART NUMBER	VOLTAGE	WATTS	AVERAGE LUMEN	TOTAL CANDLE POWER (CP)	LAMP #	BASE TYPE
EXIT Signs, 120VAC Incandescent	570.0013	145	15	150	12	15T6145	Candelabra Screw Base
	570.0024	120	20	90	7	20T61/2	Intermediate Screw Base
	570.0035	145	15	150	12	15T6	Intermediate Screw E17
	595.0010	120	7	330	26	PL7-T4	G23

Important: Lumen rating and candle power values are only for general reference.
The data was obtained from the manufacturer's catalogs, calculations or third-party laboratory measurements. Actual performance in the field may and will vary.

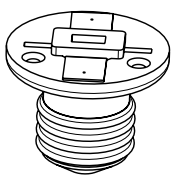
Explosion-Proof Incandescent Lamps

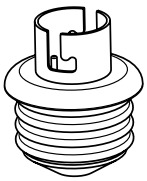
ITEM P/N	CATALOG SUFFIX	VOLTAGE	WATTS	LUMEN RATING	LAMP #
580.0086	XX6	6	15	225	JC-6V15W
570.0071	XX12	12	25	378	–
570.0118	XX24	24	25	345	–
570.0136	AC	120	25	215	–
540.0180	XX120	120	5	–	Red LED

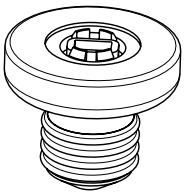
MSA Incandescent Lamp Adapter

For HIT, DCBB or Bi-Pin Halogen Lamps

DC lamp plus adapter for medium Edison screw base socket. This device converts any incandescent fixture into an emergency fixture.


MSA Bi-Pin


MSA Double Contact


MSA Wedge Base

120 Volt AC Exit Lamps

LAMP TYPE	CATALOG	WATTS	LAMP #	BASE
Incandescent	570.0013	15	15T6145	Candelabra Screw Base
Incandescent	570.0024	20	20T61/2	Intermediate Screw Base
Incandescent	570.0035	15	15T6	Intermediate Screw Base
Fluorescent	595.0010	7	PL7-T4	G23

How to Order (example)

PRODUCT CODE	LAMP SYMBOL
MSA	HB

Note:
Lumen figures based on information supplied by lamp manufacturers.
Lamp drawings shown are for shape comparison only, not actual size.

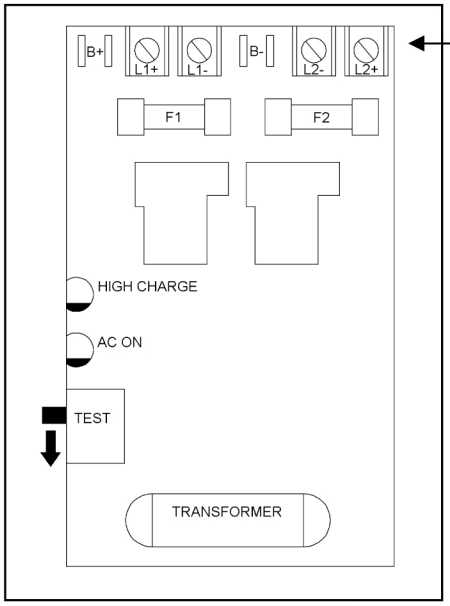
EMERGI-LITE

READ INSTRUCTIONS FIRST • BE SURE POWER IS OFF
Install wiring to remote heads in accordance with section 46 of the Canadian Electrical Code, part 1

TEST & MAINTENANCE
INSTALLATION INSTRUCTIONS

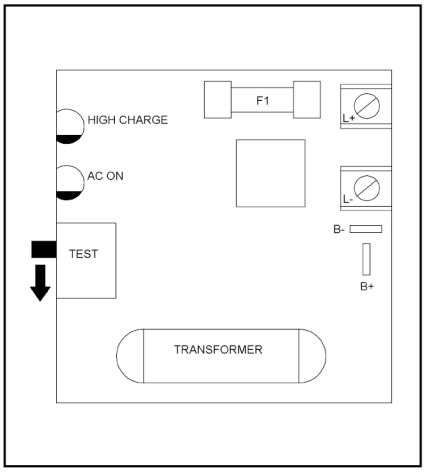
NOTE: Circuit feeding unit must be protected by lock-on breaker. If breaker feeding this unit does not have a lock-on device – WARRANTY WILL BE VOIDED.

1. Mount unit in desired location. Keyhole mounting slots are provided on the rear of the cabinet.
2. Connect the battery female connector(s) to the male connector(s) which is on the charger module.
   - Red to Positive (B+).
   - Blue (or black) to Negative (B-).
3. Connection to the AC power line.
   A. If to be connected to a 120 V, 60 Hz outlet:
      - Plug line cord into outlet, if it's already installed to the unit.
      - See line cord installation instruction, if line cord is in a separate kit.
   B. If to be hard wired:
      - Turn Off the unswitched AC power supply from the main breaker.
      - Connect AC input to transformer leads as follows:
        - 120VAC operation: WHITE to neutral AC input, BLACK to 120 VAC input wire.
        - 347 VAC operation: WHITE to neutral AC input, RED to 347 VAC input wire.
      - Make sure to cap off the unused (red or black) wire with a wirenut.
      - Turn the AC power back ON.
4. The AC ON pilot light will come on.
5. The high charge pilot light will come on.
6. After the unit has been operating for at least 30 seconds depress test switch. The AC ON pilot light will go out and the emergency lights will come on.
7. All units are equipped with a low voltage battery protection circuit. This "LVD" disconnects the lamp load when the battery is discharged at 80% of its nominal voltage.
8. Building and licensing in many areas of Canada require you to keep records showing you have checked this emergency lighting unit on a regular basis. Using the following guidelines and the space on the reverse side will make this an easy job.



High Power Charger

Note:
Make sure to separate lamp load evenly on both circuits.



Low Power Charger

ALL SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL

EMERGI-LITE

DELIBERATE AC SHUTDOWN
If the AC input power is intentionally turned off for more than 72 hours, disconnect one battery lead to prevent damage to battery. Isolate loose battery lead so that it cannot be inadvertently shorted.

BATTERY REPLACEMENT
A battery has reached the end of its useful life when it cannot light lamps for full time rating despite normal charger operation. To replace battery, first disconnect AC power to unit, open unit, disconnect battery leads, then remove it and install new battery. Make sure the red lead connected to battery positive is also connected to charger positive (+) terminal.
After unit has been on charge for 24 hours at nominal AC voltage, check that battery voltage is within limits.
Refer to markings on battery or unit model for correct replacement type.

LAMP REPLACEMENT
It is important to replace burned lamp with a new lamp with the same voltage and wattage. Higher wattage will cause battery to discharge faster (less time) or overload relay. Lower wattage may not provide adequate light output.

TESTING
Once every 3 months the unit should be checked and then tested for at least 30 seconds by using the test switch or disconnecting the plug or pulling the fuse or breaker. Before testing, the amber pilot light should be on and the red high charge lamp (when supplied) will "wink on" occasionally. After the power has been restored the high charge light will stay on for several minutes then start to "wink" indicating the battery is up to full charge. Once every year the unit should be tested under simulated power failure or electrical fault condition for the time period required by the national Building Code, i.e. 30 m – 1 hr – 2 hrs. After power has been restored, unit will go on high charge for up to 24 hours. If a power failure has occurred recently and the unit worked properly, it is not necessary to perform the simulated failure. Indicate on the charts the date of the failure.

TEST CHART
Use below chart to record tests.
1. Day of the test
2. Initial of inspector

CAUTION
The battery in this unit will hold charge until the date shown on the carton. After this date the unit must be plugged in and battery connected to charger for at least 24 hours to recharge battery. Battery shall then be disconnected. Shelf life will then be good for six months before recharging again. If the unit is not placed into service or re-charged by the date shown on the carton, warranty will be void. The AC power supply shall be unswitched, otherwise warranty will be void. This unit is designed to operate between 10°C and 30°C (50°F and 86°F). Operating temperatures outside those limits will void warranty.

TYPE: Sr. No.:						Location:							Full Test
Date:	J	F	M	A	M	J	J	A	S	O	N	D	
20_____													
20_____													
20_____													
20_____													
20_____													
20_____													
20_____													
20_____													
20_____													
20_____													

ALL SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL

EMERGENCY LIGHTING General Test Procedure

1. **Inspect the battery unit for any signs of physical damage:**
   - Are there signs of impact damage to one corner of the enclosure, indicating drop damage?
   - Are there dents in the enclosure, indicating impact damage?
   - Damage from shipping or handling would not be covered by warranty.
   - Has the charger broken free from its mounts and sustained damage?
   - Have the batteries come loose and been damaged or caused damage?

2. **If unit is malfunctioning:**
   - Is the test switch intact, or broken?
   - Do the red and yellow LED indicators light when the AC power is on and the battery is connected?
   - Are there signs that the transformer or charger have overheated?
   - Has the lamp load been connected to the DC output correctly? One side of the load should be connected to the positive (L+), and one side to the negative (L-) output.
   - Have any of the output fuses been blown?
   - With AC power to the charger on, and the battery connected, does the relay click when the test switch is activated? If not, there may be a problem with the relay or the relay control portion of the charger.
   - Are both leads from the charger connected to the battery? If the leads have been connected to the battery backwards, components on the charger may be damaged and the charger may have overheated in some cases. This would not be covered under warranty.
   - Are the battery terminals free of any corrosion?

3. **If changing the charger is required:**
   - Disconnect the AC power and the battery from the charger.
   - Disconnect any wiring going to the DC output connectors.
   - Disconnect any transformer wires that are plugged into the circuit board.
   - Remove the four (4) #8 self-tapping screws holding the circuit in place. If the transformer appears to be faulty (confirmed by testing for continuity on the primary and secondary windings) then remove it also by undoing the two #8-32 nuts. If the transformer appears to be ok, then try replacing only the charge circuit first.
   - Average time to remove and replace a charger is **10** minutes.

4. Inspecting and testing the battery(s):

- Check the date stamped on the battery type sticker.
- If the date is less than **one** (1) year from the current date, the battery would still be under warranty.
- If the date is more than one year from the current date, the battery would not be under warranty unless the unit had the extended battery warranty. Contact the unit's manufacturer for the pro-rata cost of replacement batteries. They will require the date of manufacture to calculate this.
- With AC power on, and the battery(s) connected to the charger, measure the voltage across the battery terminals with a digital voltmeter. The RED charge indicator should be out or pulsating on and off, not on steady during this measurement. Check to see if the voltage is within specs. **Note:** The charger output voltage can only be measured with the charger connected to a battery. Placing the voltmeter leads across the charger leads only, will result in false readings.
- With the voltmeter still across the battery, and a lamp load connected to the DC output, press the test switch or disconnect the AC supply and monitor the voltage on the battery.
- Does the voltage drop rapidly until the lights shut off (LVD point)?
- Or, does the voltage drop initially and then level off and continue dropping slowly?
- A rapid voltage drop would indicate weak batteries from age, sulfation from lack of charge, or a misadjusted charger causing the batteries to be under or over charged.
- Are the battery terminals showing any signs of corrosion? Acid leakage from overcharging or excessive battery age will cause terminal and connector corrosion, resulting in poor battery/charger performance. Replacement of the battery may be required if this is the case.
- Average time to test the batteries is **5** minutes.

5. If replacement of the battery(s) is required:

- Disconnect the RED and BLUE leads going to the battery from the charger, making sure to not let them touch anything.
- Disconnect the AC supply to the unit by unplugging the cord, or turning off the breaker if the unit is hardwired on the AC input.
- Remove the battery(s) from the unit.
- If unsure as to which replacement battery is required, contact the unit manufacturer with the **model number** and **age** of the unit.
- Always replace any corroded connectors on the charger before installing new batteries.
- If sending batteries back to the supplier for inspection or warranty, make sure they are packaged securely, to prevent any short-circuiting of the terminals. The batteries used in most emergency light units are not classified as dangerous goods, and do not require any special documentation for shipping.
- If not sending the battery(s) back for warranty, make sure they are properly disposed of at your nearest **battery recycler**. The batteries used are either of the **lead-acid** type or **nicad** (nickel-cadmium) type.
- Average time to replace batteries is **5** minutes.