

LED Series Sealed High-Intensity Area Lights

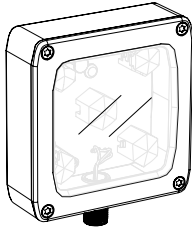


Datasheet

High-Power Lighting for use with PresencePLUS® and other Vision Systems

For the latest technical information about this product, including specifications, dimensions, and wiring, see <http://www.bannerengineering.com>.

Features



- Rugged, waterproof housing, rated IEC IP68
- Compact area light for PresencePLUS and other Vision systems
- Five extremely bright LEDs for illumination of targets from 0.15 meters to beyond 2 meters
- Smooth exterior for easy cleaning during washdown
- Optically isolated strobe signal
- Available with 316 stainless steel or nickel-plated aluminum housing and a choice of either acrylic or tempered optical glass windows
- Fixed or adjustable intensity, depending on model
- Selectable Active High or Active Low strobe option

Models

Nickel-Plated Aluminum Housing

Fixed-Intensity Models ¹			LED Color	Optional Ambient Light Filter Kit for Presence PLUS Cameras
Acrylic Window	Glass Window	Diffuse Window (acrylic)		
LEDRA70AP5-XQ	LEDRA70AG5-XQ	LEDRA70AD5-XQ	Red, 620 nm to 630 nm	FLTR
LEDWA70AP5-XQ	LEDWA70AG5-XQ	LEDWA70AD5-XQ	White, 5000 K to 8300 K	FLTB or FLTG
LEDBA70AP5-XQ	LEDBA70AG5-XQ	LEDBA70AD5-XQ	Blue, 465 nm to 485 nm	FLTB
LEDGA70AP5-XQ	LEDGA70AG5-XQ	LEDGA70AD5-XQ	Green, 520 nm to 535 nm	FLTG
LEDIA70AP5-XQ	LEDIA70AG5-XQ	LEDILA70AD5-XQ	Infrared, 850 nm	FLTI
--	LEDUV365A70AG5-XQ	--	UV, 365 nm	FLTB
LEDUV395A70AP5-XQ	LEDUV395A70AG5-XQ	LEDUV395A70D5-XQ	UV, 395 nm	

316 Stainless Steel Housing

Fixed-Intensity Models ²			LED Color	Optional Ambient Light Filter Kit for Presence PLUS Cameras
Acrylic Window	Glass Window	Diffuse Window (acrylic)		
LEDRA70SSP5-XQ	LEDRA70SSG5-XQ	LEDRA70SSD5-XQ	Red, 620 nm to 630 nm	FLTR
LEDWA70SSP5-XQ	LEDWA70SSG5-XQ	LEDWA70SSD5-XQ	White, 5000 K to 8300 K	FLTB or FLTG
LEDBA70SSP5-XQ	LEDBA70SSG5-XQ	LEDBA70SSD5-XQ	Blue, 465 nm to 485 nm	FLTB
LEDGA70SSP5-XQ	LEDGA70SSG5-XQ	LEDGA70SSD5-XQ	Green, 520 nm to 535 nm	FLTG
LEDIA70SSP5-XQ	LEDIA70SSG5-XQ	LEDIA70SSD5-XQ	Infrared, 850 nm	FLTI
--	LEDUV365A70SSG5-XQ	--	UV, 365 nm	FLTB
LEDUV395A70SSP5-XQ	LEDUV395A70SSG5-XQ	LEDUV395A70SSD5-XQ	UV, 395 nm	

¹ For models with adjustable intensity, replace "XQ" with "PQ" in the model number (for example, LEDRA70AP5-PQ).
² For models with adjustable intensity, replace "XQ" with "PQ" in the model number (for example, LEDRA70SSP5-PQ).



The following caution applies to UV, 365 nm models:



CAUTION:

Risk Group 1: UV Emitted from this product.

Minimize exposure to eyes or skin. Use appropriate shielding and eye protection. Risk Group 1 (RG 1) products are safe for most use applications, except for very prolonged exposures where direct ocular exposures may be expected.

- IEC 62471

The following caution applies to UV, 395 nm models:



CAUTION:

Risk Group 2: UV Emitted from this product.

Eye or skin irritation may result from exposure. Use appropriate shielding and eye protection. Risk Group 2 (RG 2) products generally do not pose a realistic optical hazard if aversion responses limit the exposure duration or where lengthy exposures are unrealistic.

- IEC 62471

Specifications

Supply Voltage and Current

Operating Voltage: 24 V dc \pm 10%
 Strobe Voltage: 5 V dc to 24 V dc at 15 mA max.
 Current Draw at Full Intensity: 500 mA max.
 Built-in constant current regulator for LEDs Adjustable intensity control varies intensity for "P" models

Light Source

Five high-intensity LEDs; see models table for wavelengths

Illumination

610 mm (24 in) diameter usable light pattern at 1 m

Strobe

Optically isolated

Connections

Integral 5-pin threaded M12/Euro-style male quick disconnect, accessory cordset required

Construction

Nickel-plated aluminum or stainless steel housing, depending on model; acrylic or glass window, depending on model

Useful Life

When operated within specifications, output will decrease less than 30% after 50,000 hours for visible and IR models; 20,000 hours for UV models

Operating Conditions

0 °C to +50 °C (+32 °F to +122 °F)
 95% maximum relative humidity (non-condensing)

Environmental Rating

Nickel-plated models: IEC IP68
 Stainless steel models: NEMA 4x; IEC IP68

Certifications



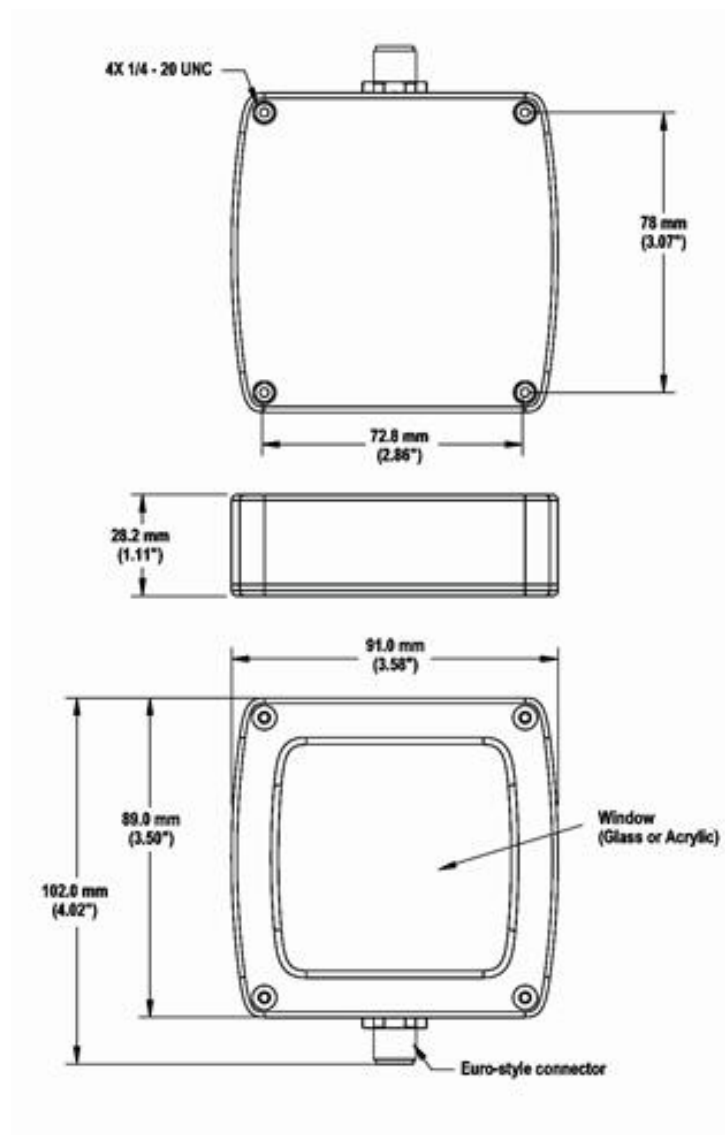
Light Adjustment (Adjustable Intensity Models Only)



Figure 1. Potentiometer Adjuster

1. Remove the plug as shown in the figure, using a small flat-blade screwdriver.
2. Adjust the light's intensity by turning the 270° Intensity potentiometer with the screwdriver. Apply power to the light and turn the potentiometer all the way clockwise for maximum intensity.
3. If the object to be sensed is too bright at maximum intensity, turn the potentiometer down a little at a time, testing with the object, until the correct brightness is achieved.
4. When adjustment is complete, reinsert the plug.

Dimensions



All measurements are listed in millimeters (inches), unless noted otherwise.

Wiring

Wire Purpose	Cable Wire Color ³	Continuous On Mode	Strobed Mode	PresencePlus Pro Controller Terminal Block
Power Wires	Brown (1)	+24 V dc	+24 V dc	Pin 01 ⁴
	Blue (3)	common	common	Pin 02
Strobe Polarity Control	Gray (5)	open	Active Low: open	Open — Active Low
			Active High: connect to common (Blue wire)	Pin 02 — Active High
Strobe Voltage Wires	White (2)	open	0 V dc = ON (Active Low)	Pin 04
			0 V dc = OFF (Active High)	
			+5 V dc to 24 V dc = OFF (Active Low)	
			+5 V dc to 24 V dc = ON (Active High)	

³ For Banner-supplied wire.

⁴ When connecting the light to a PresencePLUS Pro controller terminal block, the controller supply must be 24 V dc ± 10%.

Wire Purpose	Cable Wire Color ³	Continuous On Mode	Strobed Mode	PresencePlus Pro Controller Terminal Block
	Black (4)	open	Strobe common	Pin 02

Figure 2. Pinouts for Mating Cordsets

Accessories

The following describes available replacement window, cordset and bracket options for these lights.

Cordsets



NOTE: These 5-pin cordsets can also be used on 4-pin connector lights.

5-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20-506	1.83 m (6 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC20-515	4.57 m (15 ft)			
MQDC20-530	9.14 m (30 ft)			

5-Pin Threaded M12/Euro-Style Cordsets—Stainless Steel Nut				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC20SS-506	1.83 m (6 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC20SS-515	4.57 m (15 ft)			
MQDC20SS-530	9.14 m (30 ft)			

Brackets

SMBASCM

- 316 stainless steel column-mounting bracket with 430 stainless steel threaded insert
- Four ¼-20 stainless steel screws included



SMBAMS70AS

- 316 stainless steel right-angle bracket
- Articulated slots for 90+ degrees rotation
- Four ¼-20 stainless steel screws included



³ For Banner-supplied wire.

Replacement Window Kits

Model	Description
LEDA70SW-P	Clear acrylic
LEDA70SW-G	Clear glass
LEDA70SCDW-P	Clear diffuse acrylic
LEDA70SVDW-P	White diffuse acrylic

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