

Datasheet

Multi-Color General Purpose or Audible Indicators



- Rugged, cost-effective, and easy-to-install multi-color indicators
- Illumination provides easy-to-see operator guidance and equipment status indication
- 1-, 2-, or 3-color models available
- Available in black or light gray housing
- Audible models available with standard, sealed, or omni-directional audible element
- Continuous, pulsed, and staccato tones available
- 18 V to 30 V dc operation
- Compact devices are completely self-contained - no controller needed
- Immune to EMI and RFI interference
- No assembly required

Non-Audible Models

Models ¹	# of LED Colors	LED Function ² — Lights Independently Selected			Connection ³	Inputs
		Color 1	Color 2	Color 3		
CL50GXXPQ	1	Green	-	-	Integral 4-pin Euro-style quick disconnect	PNP
CL50GXXNQ		Green	-	-		NPN
CL50XRXPQ		-	Red	-		PNP
CL50XRXNQ		-	Red	-		NPN
CL50GRXPQ	2	Green	Red	-		PNP
CL50GRXNQ		Green	Red	-		NPN
CL50GRYPQ	3	Green	Red	Yellow		PNP
CL50GRYNQ		Green	Red	Yellow		NPN

Audible Models

Standard Audible Models ¹	# of LED Colors	LED Function ²			Connection ³	Inputs
		Color 1	Color 2	Color 3		
CL50GXXAPQ	1	Green	-	-	Integral 5-pin Euro-style quick disconnect	PNP
CL50GXXANQ		Green	-	-		NPN
CL50XRAPQ		-	Red	-		PNP
CL50XRANQ		-	Red	-		NPN
CL50GRAPQ	2	Green	Red	-		PNP
CL50GRANQ		Green	Red	-		NPN
CL50GRYAPQ	3	Green	Red	Yellow		PNP
CL50GRYANQ		Green	Red	Yellow		NPN

¹ Models with black housing are listed. For gray housing, add the suffix "C" at the end of the cabled model number or before the "Q" of quick disconnect model numbers. For example, CL50GXXAPC or CL50GXXAPCQ.

² Contact Banner Engineering for other colors and color combinations.

³

- To order the 150 mm (6 in) PVC cable model with a Euro-style quick disconnect, replace the suffix "Q" with "QP" in the model number. For example, CL50GXXAPQP.
- To order the 2 m (6.5 ft) PVC cable model, omit the suffix "Q" in the model number. For example, CL50GXXAP.
- Models with a quick disconnect require a mating cordset.

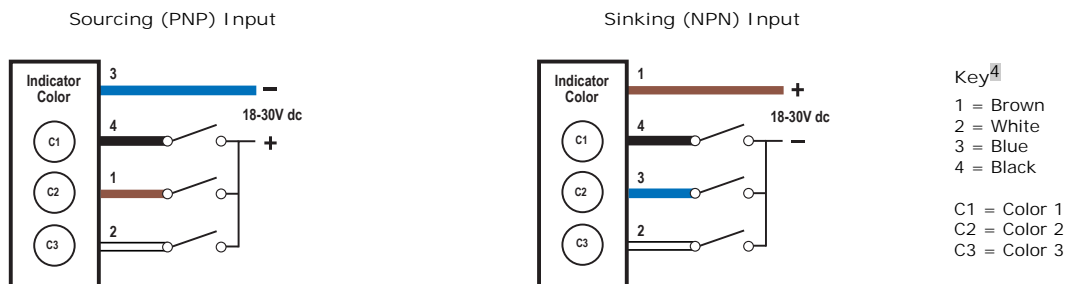


Sealed Audible Models ¹			# of LED Colors	LED Function ²			Connection ³	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50GXXALSPO	CL50GXXALS3PO	CL50GXXALS4PO	1	Green	-	-	Integral 5-pin Euro-style quick disconnect	PNP
CL50GXXALSNO	CL50GXXALS3NO	CL50GXXALS4NO		Green	-	-		NPN
CL50XRALSPO	CL50XRALS3PO	CL50XRALS4PO		-	Red	-		PNP
CL50XRALSNO	CL50XRALS3NO	CL50XRALS4NO		-	Red	-		NPN
CL50GRALSPO	CL50GRALS3PO	CL50GRALS4PO	2	Green	Red	-		PNP
CL50GRALSNO	CL50GRALS3NO	CL50GRALS4NO		Green	Red	-		NPN
CL50GRYALSPO	CL50GRYALS3PO	CL50GRYALS4PO	3	Green	Red	Yellow		PNP
CL50GRYALSNO	CL50GRYALS3NO	CL50GRYALS4NO		Green	Red	Yellow		NPN

Omni-Directional Sealed Audible Models ¹			# of LED Colors	LED Function ²			Connection ³	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50GXXAOSPO	CL50GXXAOS3PO	CL50GXXAOS4PO	1	Green	-	-	Integral 5-pin Euro-style quick disconnect	PNP
CL50GXXAOSNO	CL50GXXAOS3NO	CL50GXXAOS4NO		Green	-	-		NPN
CL50XRXAOSPO	CL50XRXAOS3PO	CL50XRXAOS4PO		-	Red	-		PNP
CL50XRXAOSNO	CL50XRXAOS3NO	CL50XRXAOS4NO		-	Red	-		NPN
CL50GRXAOSPO	CL50GRXAOS3PO	CL50GRXAOS4PO	2	Green	Red	-		PNP
CL50GRXAOSNO	CL50GRXAOS3NO	CL50GRXAOS4NO		Green	Red	-		NPN
CL50GRYAOSPO	CL50GRYAOS3PO	CL50GRYAOS4PO	3	Green	Red	Yellow		PNP
CL50GRYAOSNO	CL50GRYAOS3NO	CL50GRYAOS4NO		Green	Red	Yellow		NPN

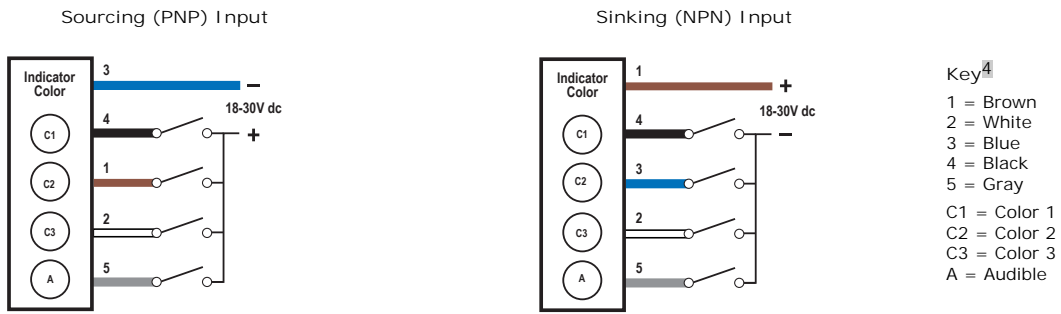
Omni-Directional Sealed Audible Models with Intensity Adjustment ¹			# of LED Colors	LED Function ²			Connection ³	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50GXXAOSIPO	CL50GXXAOS3IPO	CL50GXXAOS4IPO	1	Green	-	-	Integral 5-pin Euro-style quick disconnect	PNP
CL50GXXAOSINO	CL50GXXAOS3INO	CL50GXXAOS4INO		Green	-	-		NPN
CL50XRXAOSIPO	CL50XRXAOS3IPO	CL50XRXAOS4IPO		-	Red	-		PNP
CL50XRXAOSINO	CL50XRXAOS3INO	CL50XRXAOS4INO		-	Red	-		NPN
CL50GRXAOSIPO	CL50GRXAOS3IPO	CL50GRXAOS4IPO	2	Green	Red	-		PNP
CL50GRXAOSINO	CL50GRXAOS3INO	CL50GRXAOS4INO		Green	Red	-		NPN
CL50GRYAOSIPO	CL50GRYAOS3IPO	CL50GRYAOS4IPO	3	Green	Red	Yellow		PNP
CL50GRYAOSINO	CL50GRYAOS3INO	CL50GRYAOS4INO		Green	Red	Yellow		NPN

Wiring Diagram — Non-Audible Models



⁴ If there is an "X" in the model number, that corresponding wire will not be used.

Wiring Diagram — Audible Models



Functional Truth Table: PNP Models

LED Function	Pin 4 (Black Wire)	Pin 1 (Brown Wire)	Pin 2 (White Wire)	
Color 1 On	+V dc			Pin 3 (blue wire) connected to ground (-) . Alarm models: Alarm function is independent of light functions.
Color 2 On		+V dc		
Color 3 On			+V dc	
Color 3 On (color 3 inhibits color 1)	+V dc		+V dc	
Color 2 On (color 2 inhibits color 1)	+V dc	+V dc		
Color 3 On (color 3 inhibits color 2)		+V dc	+V dc	
Color 3 On (color 3 inhibits colors 1 & 2)	+V dc	+V dc	+V dc	

Functional Truth Table: NPN Models

LED Function	Pin 4 (Black Wire)	Pin 3 (Blue Wire)	Pin 2 (White Wire)	
Color 1 On	-V dc			Pin 1 (brown wire) connected to +V dc. Alarm models: Alarm function is independent of light functions.
Color 2 On		-V dc		
Color 3 On			-V dc	
Color 3 On (color 3 inhibits color 1)	-V dc		-V dc	
Color 2 On (color 2 inhibits color 1)	-V dc	-V dc		
Color 3 On (color 3 inhibits color 2)		-V dc	-V dc	
Color 3 On (color 3 inhibits colors 1 & 2)	-V dc	-V dc	-V dc	

Specifications

Supply Voltage and Current

18 V to 30 V dc (10% maximum ripple)

Indicators: at 100 mA maximum current at 18 V dc; 70 mA maximum current at 30 V dc

Standard Audible Alarm: 25 mA maximum current

Sealed Audible Alarm: 35 mA maximum current

Omni-Directional Sealed Audible Alarm: 45 mA maximum current

Indicators

Green, Red, Yellow; 1-3 colors, depending on model
LEDs or audible alarm are independently selected

Supply Protection Circuitry:

Protected against reverse polarity and transient voltage

Input Response Time

Indicator On/Off: 10 milliseconds (maximum)

Audible Adjustment

Standard Audible Alarm: Unscrew the cover (up to 1.5 turns maximum) to adjust the audible intensity. Do not exceed 1.5 turns or the cover may detach during operation. For maximum intensity, rotate the center plug 180° counterclockwise to remove it.

Sealed Audible Alarm and Omni-Directional Sealed Audible Alarm with Intensity Adjustment: Rotate the front cover until the desired intensity is reached

Omni-Directional Sealed Audible Alarm: No adjustment

Connections

Integral 4-pin or 5-pin M12/Euro-style QD, 150 mm (6 in) PVC cable with QD, or 2 m (6.5 ft) integral cable, depending on model

Vibration and Mechanical Shock

All models meet Mil. Std. 202F requirements method 201A (vibration: 10 Hz to 60 Hz max., double amplitude 0.06 in, maximum acceleration 10G). Also meets IEC 947-5-2; 30G 11 ms duration, half sine wave.

Operating Conditions

Non-Audible: -40 °C to +50 °C (-40 °F to +122 °F)

Standard and Sealed Audible: -20 °C to +50 °C (-4 °F to +122 °F)

Maximum Relative Humidity: 95% at +50 °C maximum relative humidity (non-condensing)

Audible Alarm

Standard Audible Alarm: 2.7 KHz ± 500 Hz oscillation frequency; maximum intensity 92 db at 1 meter (3.3 ft) (typical)

Sealed Audible Alarm: 2.9 KHz ± 250 Hz oscillation frequency; maximum intensity 94 db at 1 meter (3.3 ft) (typical)

Omni-Directional Sealed Audible Alarm: 2.1 KHz ± 250 Hz oscillation frequency; maximum intensity 99 db at 1m (3.3 ft) (typical)

Omni-Directional Sealed Audible Alarm with Intensity Adjustment: 2.1 KHz ± 250 Hz oscillation frequency; maximum intensity 95 dB at 1m (3.3 ft) (typical)

Construction

Bases and Covers: ABS

Light Segment: Polycarbonate

Environmental Rating

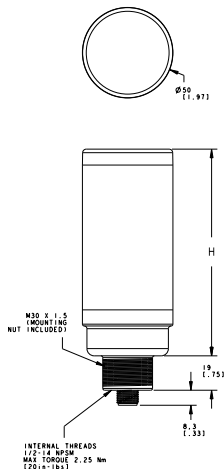
Non-Audible and Sealed Audible: IEC IP67

Standard Audible: IEC IP50

Certifications



Dimensions



Column Light Height (H)			
Non-Audible	Standard Audible*	Sealed Audible	Omni-Directional Sealed Audible
114.2mm (4.5 in)	145.3mm (5.7 in)	168.2mm (6.6 in)	182.2mm (7.2 in)
*Column Light (H) with top unscrewed approximately 3.5 mm to allow sound to escape			

Accessories

Cordsets

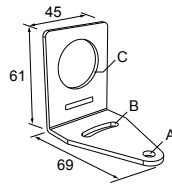
4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.50 m (1.5 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC1-506	1.83 m (6 ft)			
MQDC1-515	4.57 m (15 ft)			
MQDC1-530	9.14 m (30 ft)			
MQDC1-506RA	1.83 m (6 ft)	Right-Angle		
MQDC1-515RA	4.57 m (15 ft)			
MQDC1-530RA	9.14 m (30 ft)			

Mounting Brackets

SMB30A

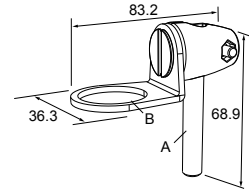
- Right-angle bracket with curved slot for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor
- 12-ga. stainless steel



Hole center spacing: A to B=40
Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5

SMB30FA

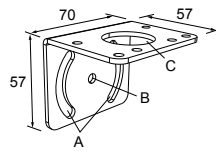
- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available



Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50
Hole size: B= ø 30.1

SMB30MM

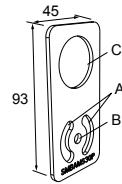
- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor



Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 x 7, B = ø 6.4, C = ø 30.1

SMBAMS30P

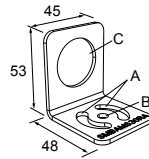
- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90° + rotation
- 12-ga. 300 series stainless steel



Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

SMBAMS30RA

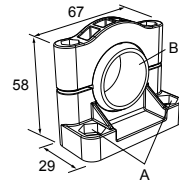
- Right-angle SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90° + rotation
- 12-ga. (2.6 mm) cold-rolled steel



Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 x 7.0, B=ø 6.5, C=ø 31.0

SMB30SC

- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included



Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0



All measurements are listed in millimeters [inches], unless noted otherwise.

LMB Sealed Right-Angle Bracket

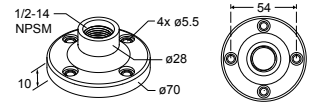
Model	Description	Construction	
LMB30RA	Direct-Mount Models: Bracket kit with base, 30 mm adapter, set screw, fasteners, o-rings, and gaskets	Black polycarbonate	
LMB30RAC		Gray polycarbonate	
LMBE12RA	Pipe-Mount Models: Bracket kit with base, ½-14 pipe adapter, set screw, fasteners, o-rings, and gaskets. For use with stand-off pipe (listed and sold separately)	Black polycarbonate	
LMBE12RAC		Gray polycarbonate	

Elevated Mount System

Model	Features	Components
SA-M30TE12 - Black Acetal	<ul style="list-style-type: none"> • Streamlined black acetal or white UHMW stand-off pipe adapter/cover • Connects between 30 mm light base and ½ in. NPSM/DN15 pipe • Mounting hardware included 	
SA-M30TE12C - White UHMW		

Model			Features	Components
Polished 304 Stainless Steel	Black Anodized Aluminum	Clear Anodized Aluminum	<ul style="list-style-type: none"> Elevated-use stand-off pipe (½ in. NPSM/DN15) Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface ½ in. NPT thread at both ends Compatible with most industrial environments 	
SOP-E12-150SS 150 mm (6 in) long	SOP-E12-150A 150 mm (6 in) long	SOP-E12-150AC 150 mm (6 in) long		
SOP-E12-300SS 300 mm (12 in) long	SOP-E12-300A 300 mm (12 in) long	SOP-E12-300AC 300 mm (12 in) long		
SOP-E12-900SS 900 mm (36 in) long	SOP-E12-900A 900 mm (36 in) long	SOP-E12-900AC 900 mm (36 in) long		
SA-E12M30 - Black Acetal			<ul style="list-style-type: none"> Streamlined black acetal or white UHMW mounting base adapter/cover Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole Mounting hardware included 	
SA-E12M30C - White UHMW				

Pipe Mounting Flange

Pipe Mounting Flange			
Model	Features	Construction	
SA-F12	<ul style="list-style-type: none"> For use elevated stand-off pipes (½ in. NPSM/DN15) M5 mounting hardware and nitrile gasket included 	Die-cast zinc base with black paint	

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