CL50 Column Light



Datasheet

Multi-Color General Purpose or Audible Indicators





Standard Audible





Sealed Audible



Omni-Directional Sealed Audible

- 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
- No assembly required

Non-Audible Models

Madala ¹	Models ¹ # of LED Colors		LED Colors ²	Connection ³	la musta	
Models		Color 1	Color 2	Color 3	- Connection	Inputs
CL50GXXPQ		Green	-	-		PNP
CL50GXXNQ		Green	-	-		NPN
CL50XRXPQ	'	-	Red	-		PNP
CL50XRXNQ		-	Red	-	Integral 4-pin M12/Euro-style quick	NPN
CL50GRXPQ		Green	Red	-	disconnect	PNP
CL50GRXNQ	2	Green	Red	-		NPN
CL50GRYPQ		Green	Red	Yellow	1	PNP
CL50GRYNQ	3	Green	Red	Yellow		NPN

Audible Models

Standard Audible	# of LED		LED Colors ²	- Connection ³	Innute	
Models ¹	Colors	Color 1	Color 2	Color 3	- Connection ^ω	Inputs
CL50GXXAPQ		Green	-	-		PNP
CL50GXXANQ	1	Green	-	_		NPN
CL50XRXAPQ		-	Red	-		PNP
CL50XRXANQ		-	Red	_	Integral 5-pin M12/Euro-style quick	NPN
CL50GRXAPQ	2	Green	Red	-	disconnect	PNP
CL50GRXANQ	2	Green	Red	_		NPN
CL50GRYAPQ	3	Green	Red	Yellow		PNP
CL50GRYANQ		Green	Red	Yellow		NPN

Sealed Audible Models 1		# of LED	LED Colors ²			- Connection ³		
Continuous	Pulsed at 1.6 Hz	Staccato	Colors	Color 1	Color 2	Color 3	Connection	Inputs
CL50GXXALSPQ	CL50GXXALS3PQ	CL50GXXALS4PQ		Green	-	-		PNP
CL50GXXALSNQ	CL50GXXALS3NQ	CL50GXXALS4NQ	1	Green	-	-	1	NPN
CL50XRXALSPQ	CL50XRXALS3PQ	CL50XRXALS4PQ		-	Red	-	Integral E nin	PNP
CL50XRXALSNQ	CL50XRXALS3NQ	CL50XRXALS4NQ		-	Red	-	Integral 5-pin M12/Euro-style	NPN
CL50GRXALSPQ	CL50GRXALS3PQ	CL50GRXALS4PQ	2	Green	Red	-	quick disconnect	PNP
CL50GRXALSNQ	CL50GRXALS3NQ	CL50GRXALS4NQ	2	Green	Red	-		NPN
CL50GRYALSPQ	CL50GRYALS3PQ	CL50GRYALS4PQ	3	Green	Red	Yellow	1	PNP

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.



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Available colors include: Green (G), Red (R), Yellow (Y), Blue (B), and White (W). Contact Banner Engineering for other colors and color combinations.

To order the 150 mm (6 in) PVC cable model with a M12/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.

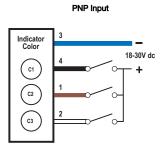
Models with a quick disconnect require a mating cordset.

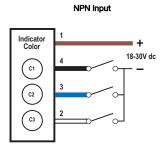
Sealed Audible Models ¹		# of LED	LED Colors ²			Connection ³	Inputs	
Continuous	Pulsed at 1.6 Hz	Staccato	Colors	Color 1	Color 2	Color 3	Connection	iliputs
CL50GRYALSNQ	CL50GRYALS3NQ	CL50GRYALS4NQ		Green	Red	Yellow		NPN

Omni-	Omni-Directional Sealed Audible Models ¹		# of LED	LED Colors ²			- Connection ³	Innuto
Continuous	Pulsed at 1.6 Hz	Staccato	Colors	Color 1	Color 2	Color 3	Connection	Inputs
CL50GXXAOSPQ	CL50GXXAOS3PQ	CL50GXXAOS4PQ		Green	-	-		PNP
CL50GXXAOSNQ	CL50GXXAOS3NQ	CL50GXXAOS4NQ		Green	-	-		NPN
CL50XRXAOSPQ	CL50XRXAOS3PQ	CL50XRXAOS4PQ	' '	-	Red	-	Integral 5-pin	PNP
CL50XRXAOSNQ	CL50XRXAOS3NQ	CL50XRXAOS4NQ		-	Red	-		NPN
CL50GRXAOSPQ	CL50GRXAOS3PQ	CL50GRXAOS4PQ	2	Green	Red	-	M12/Euro-style quick disconnect	PNP
CL50GRXAOSNQ	CL50GRXAOS3NQ	CL50GRXAOS4NQ	2	Green	Red	-		NPN
CL50GRYAOSPQ	CL50GRYAOS3PQ	CL50GRYAOS4PQ	3	Green	Red	Yellow	1	PNP
CL50GRYAOSNQ	CL50GRYAOS3NQ	CL50GRYAOS4NQ	3	Green	Red	Yellow		NPN

Omni-Directional Se	Omni-Directional Sealed Audible Models with Intensity Adjustment $^{1\!\!1}$		# of LED	LED Colors ²			- Connection ³	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato	Colors	Color 1	Color 2	Color 3	Connection	IIIputs
CL50GXXAOSIPQ	CL50GXXAOS3IPQ	CL50GXXAOS4IPQ		Green	-	-		PNP
CL50GXXAOSINQ	CL50GXXAOS3INQ	CL50GXXAOS4INQ	1	Green	-	-	Integral 5-pin	NPN
CL50XRXAOSIPQ	CL50XRXAOS3IPQ	CL50XRXAOS4IPQ		-	Red	-		PNP
CL50XRXAOSINQ	CL50XRXAOS3INQ	CL50XRXAOS4INQ		-	Red	-		NPN
CL50GRXAOSIPQ	CL50GRXAOS3IPQ	CL50GRXAOS4IPQ		Green	Red	-	M12/Euro-style quick disconnect	PNP
CL50GRXAOSINQ	CL50GRXAOS3INQ	CL50GRXAOS4INQ	2	Green	Red	-		NPN
CL50GRYAOSIPQ	CL50GRYAOS3IPQ	CL50GRYAOS4IPQ		Green	Red	Yellow		PNP
CL50GRYAOSINQ	CL50GRYAOS3INQ	CL50GRYAOS4INQ	3	Green	Red	Yellow	1	NPN

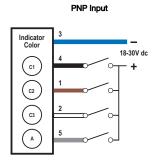
Wiring Diagrams — Non-Audible Models

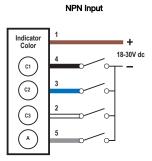




Xey4 1 = Brown 2 = White 3 = Blue 4 = Black C1 = Color 1 C2 = Color 2 C3 = Color 3

Wiring Diagrams — Audible Models





1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray
C1 = Color 1
C2 = Color 2
C3 = Color 3
A = Audible

Key⁴

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

Functional Truth Table: PNP Models

LED Function	Pin 4 (Black Wire)	Pin 1 (Brown Wire)	Pin 2 (White Wire)	
Color 1 On	+V dc		ĺ	
Color 2 On		+V dc		
Color 3 On			+V dc	Pin 3 (blue wire) connected to ground (-).
Color 3 On (color 3 inhibits color 1)	+V dc		+V dc	Alarm models: Alarm function is independent of
Color 2 On (color 2 inhibits color 1)	+V dc	+V dc		light functions.
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			
Color 2 On		-V dc		
Color 3 On			–V dc	Pin 1 (brown wire) connected to +V dc.
Color 3 On (color 3 inhibits color 1)	–V dc		–V dc	Alarm models: Alarm function is independent of
Color 2 On (color 2 inhibits color 1)	–V dc	–V dc		light functions.
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 dc to 30 V dc Indicators-maximum current per LED color:

100 mA at 18 V dc70 mA 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

Supply Protection Circuitry
Protected against reverse polarity and transient voltages

Indicator Response Time

Indicator On/Off: 10 milliseconds maximum

Audible Alarm

Standard Audible Alarm: 2.7 KHz ± 500 Hz oscillation frequency; maximum intensity **Standard Audible Alarm:** 2.7 KHz \pm 500 Hz oscillation frequency; maximum intensity 92 db at 1 meter (3.3 ft) (typical) **Sealed Audible Alarm:** 2.9 KHz \pm 250 Hz oscillation frequency; maximum intensity 94 db at 1 meter (3.3 ft) (typical) **Omni-Directional Sealed Audible Alarm:** 2.1 KHz \pm 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 \pm 250 Hz oscillation frequency; maximum intensity 95 dB at 1m (3.3 ft) (typical)

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 Typical Reduction in Sound Intensity with Audible Adjustment (maximum to minimum):

- Standard Audible: 30 dB Sealed Audible: 20 dB
- Omni-Directional Sealed Audible: 12 dB

Construction
Bases and Covers: ABS
Light Segment: Polycarbonate

Vibration and Mechanical Shock
Meets IEC 60068-2-6 requirements (Vibration: 10 Hz to 55 Hz, 1.0 mm amplitude, 5 minutes sweep, 30 minutes dwell)
Meets IEC 60068-2-27 requirements (Shock: 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)
95% at +50 °C maximum relative humidity (non-condensing)

Environmental Rating

VIOINTHINIA HAURY UL Type 4X Indoor and UL Type 13 Non-Audible and Sealed Audible: IEC IP67 Standard Audible: IEC IP50

Certifications





LEDs or audible are independently selected

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lumen Output (Typical at 25 °C)
Green	525 nm	72
Red	625 nm	38
Yellow	590 nm	30
Blue	475 nm	28
White	5000 K	85

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

Models with a quick disconnect require a mating cordset

Required Overcurrent Protection



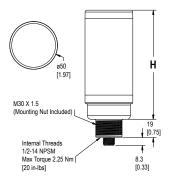
WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.

Supplied tables. Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply. Supply wiring leads < 24 AWG shall not be spliced. For additional product support, go to www.bannerengineering.com.

Supply Wiring (AWG)	Required Overcurrent Protection (Amps)
20	5.0
22	3.0
24	2.0
26	1.0
28	0.8
30	0.5

Dimensions



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

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

Accessories

Cordsets

4-Pin Threaded M12/Euro-Style Cordsets—Single Ended					
Model	Length	Style	Dimensions	Pinout (Female)	
MQDC-406	1.83 m (6 ft)		 44 Typ 		
MQDC-415	4.57 m (15 ft)	Straight	44 тур.		
MQDC-430	9.14 m (30 ft)				
MQDC-450	15.2 m (50 ft)		M12 x 1 — Ø 14.5 —	1-	
MQDC-406RA	1.83 m (6 ft)	Right-Angle	32 Typ. [1.26"]	4-3-3	
MQDC-415RA	4.57 m (15 ft)				
MQDC-430RA	9.14 m (30 ft)			1 = Brown	
MQDC-450RA	15.2 m (50 ft)		M12 x 1	2 = White 3 = Blue 4 = Black	

5-Pin Threaded M12/Euro-Style Cordsets—Single Ended				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.50 m (1.5 ft)			1 — 2 4 — 3 5 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
MQDC1-506	1.83 m (6 ft)	Straight		
MQDC1-515	4.57 m (15 ft)			
MQDC1-530	9.14 m (30 ft)		M12 x 1 — ø 14.5 —	
MQDC1-506RA	1.83 m (6 ft)	_	32 Typ. [1.26"] 30 Typ. [1.18"] 414.5 [0.57"]	
MQDC1-515RA	4.57 m (15 ft)			
MQDC1-530RA	9.14 m (30 ft)	Right-Angle		

Mounting Brackets

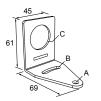
All measurements are listed in millimeters [inches], unless noted otherwise.

SMB30A

SMB30MM

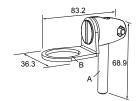
- Right-angle bracket with curved slot for versatile orientation Clearance for M6 (¼ in) hardware Mounting hole for 30 mm sensor 12-ga. stainless steel

Hole center spacing: A to B=40 Hole size: $A=\emptyset$ 6.3, $B=27.1 \times 6.3$, $C=\emptyset$ 30.5



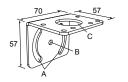
SMB30FA

- 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 - 16×2 in; SMB30FAM10, A= M10 - 1.5×50 **Hole size:** B= \varnothing 30.1

- 12-ga. stainless steel bracket with curved mounting slots for versatile orientation
 Clearance for M6 (1/4 in) hardware
- Mounting hole for 30 mm sensor



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



Hole center spacing: A = 51, A to B = 25.4Hole size: $A = 42.6 \times 7$, $B = \emptyset 6.4$, $C = \emptyset 30.1$

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



SMB30SC

- Swivel bracket with 30 mm mounting hole for sensor

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

Black reinforced thermoplastic Stainless steel mounting and swivel locking hardware included

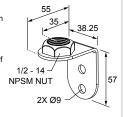


Hole center spacing: A=26.0, A to B=13.0 Hole size: A=26.8 \times 7.0, B= \emptyset 6.5, C= \emptyset 31.0

LMBE12RA35

- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 35 mm

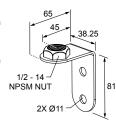
Hole center spacing: 20.0



LMBE12RA45

- Direct mounting of stand-off pipe, with common bracket type
- Zinc-plated steel
- 1/2-14 NPSM nut
- Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 45 mm

Hole center spacing: 35.0



LMB Sealed Right-Angle Bracket

Model	Description	Construction		
LMB30RA		Black polycarbonate		
LMB30RAC	Direct-Mount Models: Bracket kit with base, 30 mm adapter, set screw, fasteners, O-rings, and gaskets.	Gray polycarbonate		
LMBE12RA		Black polycarbonate		
LMBE12RAC	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).	Gray polycarbonate		

Elevated Mount System

Model			Features	Components
SA-M30TE12 - Black Acetal SA-M30TE12C - White UHMW		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		
Polished 304 Stainless Steel	Black Anodized Aluminum	Clear Anodized Aluminum		db
SOP-E12-150SS 150 mm (6 in) long	SOP-E12-150A 150 mm (6 in) long	SOP-E12-150AC 150 mm (6 in) long	Elevated-use stand-off pipe (½ in. NPSM/DN15) Polished 304 stainless steel, black anodized aluminum, or	
SOP-E12-300SS 300 mm (12 in) long	SOP-E12-300A 300 mm (12 in) long	SOP-E12-300AC 300 mm (12 in) long	clear anodized aluminum surface '\(\frac{1}{2} \) in. NPT thread at both ends Compatible with most industrial environments	
SOP-E12-900SS 900 mm (36 in) long	SOP-E12-900A 900 mm (36 in) long	SOP-E12-900AC 900 mm (36 in) long	Companie with most industrial environments	
SA-E12M30 - Black Acetal		Streamlined black acetal or white UHMW mounting base	طله	
SA-E12M30C - White UHMW		 adapter/cover Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole Mounting hardware included 		

Pipe Mounting Flange

Pipe Mounting Flange				
Model	Features	Construction		
SA-F12	Elevated-use stand-off pipes (½ in, NPSM/DN15) M5 mounting hardware and nitrile gasket included	Die-cast zinc base with black paint	1/2-14 NPSM 4x ø5.5 028	
SA-F12-3	Elevated-use stand-off pipes (½ in, NPSM/DN15) M4 mounting hardware and nitrile blend gasket included	Black Polycarbonate	1/2-14 NPSM 2x 120 040	

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