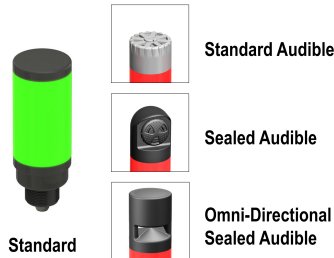


EZ-LIGHT® CL50 Column Light



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 to 30V 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	-	-	4-pin Euro integral QD connector	PNP
CL50GXXNQ		Green	-	-		NPN
CL50RXXPQ		-	Red	-		PNP
CL50RXNQ		-	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	-	-	5-pin Euro integral QD connector	PNP
CL50GXXANQ		Green	-	-		NPN
CL50RXAPQ		-	Red	-		PNP
CL50RXANQ		-	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 suffix C at the end of the model number (cabled models) or before the Q (QD models), for example, CL50GXXPC or CL50GXXPCQ.

² Contact Banner Engineering for other colors and color combinations.

³ Integral QD models only are listed; mating cordset required (see [Cordsets](#) on page 5).

• For 150 mm (5.9 in) PVC pigtail with QD, replace Q with QP in the model number, for example, CL50GXXQPQ.

• For 2 m (6.5 ft) cable, omit suffix Q from the model number, for example, CL50GXXP.



Sealed Audible Models ⁴			# of LED Colors	LED Function ⁵			Connection ⁶	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50GXXALSPO	CL50GXXALS3PO	CL50GXXALS4PO	1	Green	-	-	5-pin Euro integral QD connector	PNP
CL50GXXALSNO	CL50GXXALS3NO	CL50GXXALS4NO		Green	-	-		NPN
CL50XRXALSPO	CL50XRXALS3PO	CL50XRXALS4PO		-	Red	-		PNP
CL50XRXALSNO	CL50XRXALS3NO	CL50XRXALS4NO		-	Red	-		NPN
CL50GRXALSPO	CL50GRXALS3PO	CL50GRXALS4PO	2	Green	Red	-		PNP
CL50GRXALSNO	CL50GRXALS3NO	CL50GRXALS4NO		Green	Red	-		NPN
CL50GRYALSPO	CL50GRYALS3PO	CL50GRYALS4PO	3	Green	Red	Yellow		PNP
CL50GRYALSNO	CL50GRYALS3NO	CL50GRYALS4NO		Green	Red	Yellow		NPN

Omni-Directional Sealed Audible Models ⁴			# of LED Colors	LED Function ⁵			Connection ⁶	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50GXXAOSPO	CL50GXXAOS3PO	CL50GXXAOS4PO	1	Green	-	-	5-pin Euro integral QD connector	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 ⁴			# of LED Colors	LED Function ⁵			Connection ⁶	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50GXXAOSIPO	CL50GXXAOSI3PO	CL50GXXAOSI4PO	1	Green	-	-	5-pin Euro integral QD connector	PNP
CL50GXXAOSINO	CL50GXXAOSI3NO	CL50GXXAOSI4NO		Green	-	-		NPN
CL50XRXAOSIPO	CL50XRXAOSI3PO	CL50XRXAOSI4PO		-	Red	-		PNP
CL50XRXAOSINO	CL50XRXAOSI3NO	CL50XRXAOSI4NO		-	Red	-		NPN
CL50GRXAOSIPO	CL50GRXAOSI3PO	CL50GRXAOSI4PO	2	Green	Red	-		PNP
CL50GRXAOSINO	CL50GRXAOSI3NO	CL50GRXAOSI4NO		Green	Red	-		NPN
CL50GRYAOSIPO	CL50GRYAOSI3PO	CL50GRYAOSI4PO	3	Green	Red	Yellow		PNP
CL50GRYAOSINO	CL50GRYAOSI3NO	CL50GRYAOSI4NO		Green	Red	Yellow		NPN

⁴ Models with black housing are listed. For gray housing, add C at the end of the model number (cabled models) or before the Q (QD models), for example, CL50GXXAPC or CL50GXXAPCQ.

⁵ Contact Banner Engineering for other colors and color combinations.

⁶ Integral QD models only are listed; mating cordset required (see [Cordsets](#) on page 5).

- For 150 mm (5.9 in) PVC pigtail with QD, replace Q with QP in the model number, for example, CL50GXXAPQP.
- For 2 m (6.5 ft) cable, omit suffix Q from the model number, for example, CL50GXXAP.

Specifications

Supply Voltage and Current

18 to 30 V dc (10% max. ripple)

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

Standard Audible Alarm: 25 mA max. current

Sealed Audible Alarm: 35 mA max. current

Omni-Directional Sealed Audible Alarm: 45 mA max. 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 ms (max.)

Audible Adjustment

Standard Audible Alarm: Unscrew the cover (up to 1.5 turns max.) to adjust the audible intensity. Do not exceed 1.5 turns or the cover may detach during operation. For max. 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 PVC pigtail 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 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)

Max. Rel. Humidity: 95% at +50 °C (non-condensing)

Audible Alarm

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

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

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

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

Construction:

Bases and Covers: ABS

Light Segment: Polycarbonate

Environmental Rating

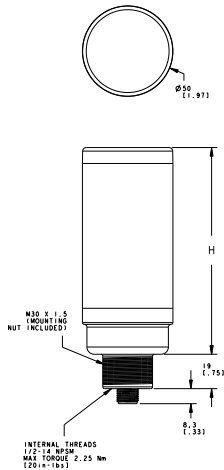
Non-Audible and Sealed Audible: IEC IP67

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			

Wiring Diagram– Non-Audible Models

Sourcing (PNP) Input	Sinking (NPN) Input	Key ⁷
		<p>1 = Brown 2 = White 3 = Blue 4 = Black</p> <p>C1 = Color 1 C2 = Color 2 C3 = Color 3</p>

Wiring Diagram – Audible Models

Sourcing (PNP) Input	Sinking (NPN) Input	Key ⁷
		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p> <p>C1 = Color 1 C2 = Color 2 C3 = Color 3 A = Audible</p>

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	

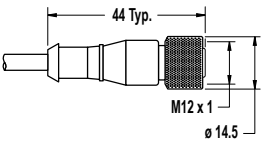
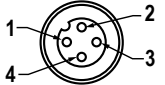
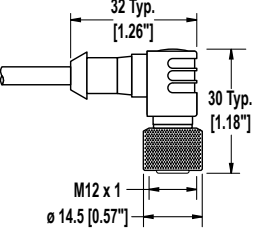
Functional Truth Table: NPN Models

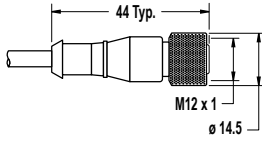
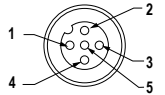
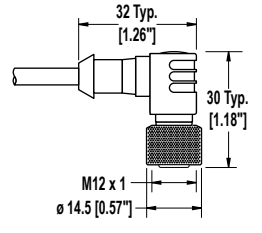
LED Function	Pin 4 (Black Wire)	Pin 3 (Blue Wire)	Pin 2 (White Wire)	
Color 1 On	–V dc			Pin 1 (brown wire) connected to +V dc. Alarm models: Alarm function is independent of light functions.
Color 2 On		–V dc		
Color 3 On			–V dc	
Color 3 On (color 3 inhibits color 1)	–V dc		–V dc	
Color 2 On (color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

⁷ If there is an X in the model number, that corresponding wire will not be used

Accessories

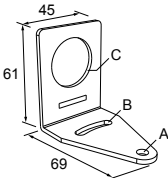
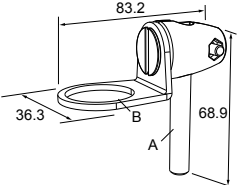
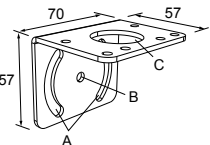
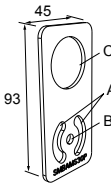
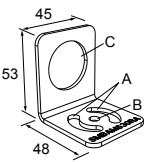
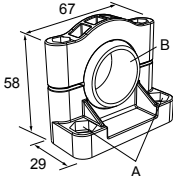
Cordsets

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

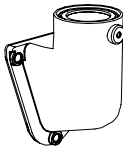

5-Pin Threaded M12/Euro-Style Cordsets (Single Ended)				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.50 m (1.5 ft)	Straight		
MQDC1-506	1.83 m (6 ft)			
MQDC1-515	4.57 m (15 ft)			
MQDC1-530	9.14 m (30 ft)			
MQDC1-506RA	1.83 m (6 ft)	Right-Angle		<p>1 = Brown 2 = White 3 = Blue 4 =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

Mounting Brackets




All measurements are in mm

<p>SMB30A</p> <ul style="list-style-type: none"> 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  <p>Hole center spacing: A to B=40 Hole size: A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5</p>	<p>SMB30FA</p> <ul style="list-style-type: none"> 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  <p>Bolt thread: SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50 Hole size: B= ø 30.1</p>
<p>SMB30MM</p> <ul style="list-style-type: none"> 12-ga. stainless steel bracket with curved mounting slots for versatile orientation Clearance for M6 (¼ in) hardware Mounting hole for 30 mm sensor  <p>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</p>	<p>SMBAMS30P</p> <ul style="list-style-type: none"> Flat SMBAMS series bracket 30 mm hole for mounting sensors Articulation slots for 90° + rotation 12-ga. 300 series stainless steel  <p>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</p>
<p>SMBAMS30RA</p> <ul style="list-style-type: none"> Right-angle SMBAMS series bracket 30 mm hole for mounting sensors Articulation slots for 90° + rotation 12-ga. (2.6 mm) cold-rolled steel  <p>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</p>	<p>SMB30SC</p> <ul style="list-style-type: none"> Swivel bracket with 30 mm mounting hole for sensor Black reinforced thermoplastic polyester Stainless steel mounting and swivel locking hardware included  <p>Hole center spacing: A=ø 50.8 Hole size: A=ø 7.0, B=ø 30.0</p>

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	

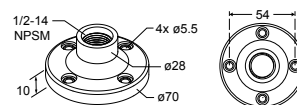
Elevated Mount System

Model			Features	Components
SA-M30TE12 - Black Acetal			<ul style="list-style-type: none">Streamlined black acetal or white UHMW stand-off pipe adapter/coverConnects between 30 mm light base and ½ in. NPSM/DN15 pipeMounting hardware included	
SA-M30TE12C - White UHMW				
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 surface½ in. NPT thread at both endsCompatible 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/coverConnects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled holeMounting hardware included	
SA-E12M30C - White UHMW				

Pipe Mounting Flange

SA-F12

- Die-cast zinc base with black paint
- For use elevated stand-off pipes (½ in, NPSM/DN15)
- M5 mounting hardware and nitrile gasket included



Banner Engineering Corp Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

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