

# EZ-LIGHT® CL50 Universal AC Voltage Column Light

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
- 85 to 264V ac operation
- Compact devices are completely self-contained - no controller needed
- Immune to EMI and RFI interference
- No assembly required

## Non-Audible Models

Models <sup>1</sup>	# of LED Colors	LED Function <sup>2</sup> - Lights Independently Selected			Connection <sup>3</sup>	Inputs
		Color 1	Color 2	Color 3		
CL50ZG	1	Green	-	-	4-wire PVC cable	85 - 264V ac
CL50ZR		Red	-	-		
CL50ZGR	2	Green	Red	-		
CL50ZGRY	3	Green	Red	Yellow		

## Audible Models

Standard Audible Models <sup>1</sup>			# of LED Colors	LED Function <sup>2</sup> - Lights Independently Selected			Connection <sup>3</sup>	Inputs
				Color 1	Color 2	Color 3		
CL50ZGA			1	Green	-	-	4-wire PVC cable	85 - 264V ac
CL50ZRA				Red	-	-		
CL50ZGRA			2	Green	Red	-		
CL50ZGRYA			3	Green	Red	Yellow	5-wire PVC cable	

Sealed Audible Models <sup>1</sup>			# of LED Colors	LED Function <sup>2</sup> - Lights Independently Selected			Connection <sup>3</sup>	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50ZGALS	CL50ZGALS3	CL50ZGALS4	1	Green	-	-	4-wire PVC cable	85 - 264V ac
CL50ZRALS	CL50ZRALS3	CL50ZRALS4		Red	-	-		
CL50ZGRALS	CL50ZGRALS3	CL50ZGRALS4	2	Green	Red	-		
CL50ZGRYALS	CL50ZGRYALS3	CL50ZGRYALS4	3	Green	Red	Yellow	5-wire PVC cable	

Omni-Directional Sealed Audible Models <sup>1</sup>			# of LED Colors	LED Function <sup>2</sup> - Lights Independently Selected			Connection <sup>3</sup>	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato		Color 1	Color 2	Color 3		
CL50ZGAOS	CL50ZGAOS3	CL50ZGAOS4	1	Green	-	-	4-wire PVC cable	85 - 264V ac
CL50ZRAOS	CL50ZRAOS3	CL50ZRAOS4		Red	-	-		
CL50ZGRAOS	CL50ZGRAOS3	CL50ZGRAOS4	2	Green	Red	-		
CL50ZGRYAOS	CL50ZGRYAOS3	CL50ZGRYAOS4	3	Green	Red	Yellow	5-wire PVC cable	

<sup>1</sup> Cabled Black models only are listed. For gray housing, add **C** at the end of the model number (cabled models) or before the **QP** (pigtail models), for example, **CL50ZGC** or **CL50ZGCQP**.

<sup>2</sup> Contact Banner Engineering for other colors and color combinations.

<sup>3</sup> Cabled Black models only are listed; mating cordset required for pigtail models (see [Cordsets](#) on page 4). For 150 mm (5.9 in) PVC pigtail with QD, add **QP** to the end of the model number, for example, **CL50ZGQP**.



## Specifications

### Supply Voltage and Current

85 - 264V ac, 50 or 60 Hz

**Indicators:** Max. current per LED color:

- at 85V ac: 80 mA
- at 120V ac: 60 mA
- at 240V ac: 40 mA
- at 264V ac: 35 mA

**Standard Audible Alarm:** 30 mA max. current

**Sealed Audible Alarm:** 35 mA max. current

**Omni-Directional Sealed Audible Alarm:** 35 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:** 500 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:** Rotate the front cover until the desired intensity is reached.

**Omni-Directional Sealed Audible Alarm:** No adjustment.

### Connections

4 or 5-wire, 2m (6.5 ft) integral cable; 4 or 5-pin 150 mm (5.9 in) PVC pigtail with QD, depending on model

### Leakage Current Immunity

500µA

**Application Note:** The use of relay output PLC is recommended since there is no leakage current. Solid state output PLCs often have leakage current above 1mA and, therefore, turn the light on in the off state. To counteract the leakage current, a shunt resistor must be used. A resistor must be applied from the neutral wire of the device to the hot wire of each channel of the device.

### 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° to +50° C (-40° to +122° F)

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

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

### Audible Alarm

Audible measurements are made in the direction sound exits the device. For standard audible models, this is the top of the unit (when mounted vertically, sound is directed toward the ceiling). For sealed audible models, sound exits the vented openings in the side of the unit, which should be oriented so that the sound is directed toward the machine operator(s). In environments with high ambient noise levels or high ceilings that absorb sound, the sealed version or omni-directional models are recommended.

**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 (typical)

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

### Construction:

**Bases and Covers:** ABS

**Light Segment:** Polycarbonate

### Environmental Rating

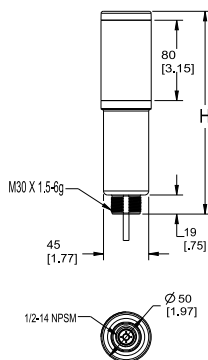
**Non-Audible and Sealed Audible:** IEC IP67

**Standard Audible:** IEC IP50

### Certifications

Approvals pending

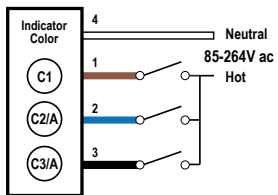
## Dimensions



Column Light Height (H)			
Non-Audible	Standard Audible*	Sealed Audible	Omni-Directional Sealed Audible
183.2mm (7.2 in)	214.3mm (8.4 in)	237.2mm (9.3 in)	251.2mm (9.9 in)
*Column Light (H) with top unscrewed approximately 3.5 mm to allow sound to escape			

## Hookups

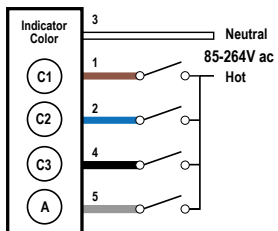
### 4-Wire Hookup



1 = Brown  
2 = Blue  
3 = Black  
4 = White

C1 = Color 1  
C2/A = Color 2/Audible  
C3/A = Color 3/Audible

### 5-Wire Hookup



1 = Brown  
2 = Blue  
3 = White  
4 = Black  
5 = Gray

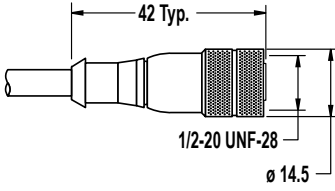
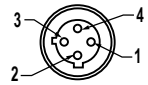
C1 = Color 1  
C2 = Color 2  
C3 = Color 3  
A = Audible

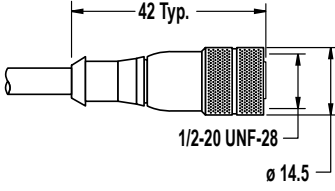
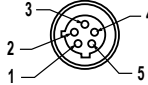
### Functional Truth Table

LED Function	Brown Wire	Blue Wire	Black Wire
Color 1 ON	Hot		
Color 2 ON		Hot	
Color 3 ON			Hot
Color 3 ON (color 3 inhibits color 1)	Hot		Hot
Color 2 ON (color 2 inhibits color 1)	Hot	Hot	
Color 3 ON (color 3 inhibits color 2)		Hot	Hot
Color 3 ON (color 3 inhibits colors 1 & 2)	Hot	Hot	Hot

## Accessories

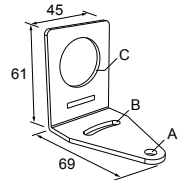
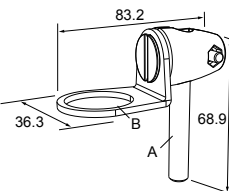
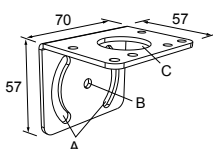
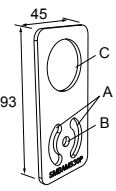
### Cordsets

4-Pin Micro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout
MQAC2-406	1.83 m (6 ft)	Straight		 <p>1 = Brown 2 = Blue 3 = Black 4 = White</p>
MQAC2-415	4.57 m (15 ft)			
MQAC2-430	9.14 m (30 ft)			

5-Pin Micro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout
MQAC2-506	1.83 m (6 ft)	Straight		 <p>1 = Brown 2 = Blue 3 = White 4 = Black 5 = Gray</p>
MQAC2-515	4.57 m (15 ft)			
MQAC2-530	9.14 m (30 ft)			

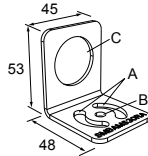
### Mounting Brackets

All measurements are in mm

<p><b>SMB30A</b></p> <ul style="list-style-type: none"> <li>Right-angle bracket with curved slot for versatile orientation</li> <li>Clearance for M6 (¼ in) hardware</li> <li>Mounting hole for 30 mm sensor</li> <li>12-ga. stainless steel</li> </ul>  <p><b>Hole center spacing:</b> A to B=40 <b>Hole size:</b> A=ø 6.3, B= 27.1 x 6.3, C=ø 30.5</p>	<p><b>SMB30FA</b></p> <ul style="list-style-type: none"> <li>Swivel bracket with tilt and pan movement for precise adjustment</li> <li>Mounting hole for 30 mm sensor</li> <li>12-ga. 304 stainless steel</li> <li>Easy sensor mounting to extrude rail T-slot</li> <li>Metric and inch size bolt available</li> </ul>  <p><b>Bolt thread:</b> SMB30FA, A= 3/8 - 16 x 2 in; SMB30FAM10, A= M10 - 1.5 x 50 <b>Hole size:</b> B= ø 30.1</p>
<p><b>SMB30MM</b></p> <ul style="list-style-type: none"> <li>12-ga. stainless steel bracket with curved mounting slots for versatile orientation</li> <li>Clearance for M6 (¼ in) hardware</li> <li>Mounting hole for 30 mm sensor</li> </ul>  <p><b>Hole center spacing:</b> A = 51, A to B = 25.4 <b>Hole size:</b> A = 42.6 x 7, B = ø 6.4, C = ø 30.1</p>	<p><b>SMBAMS30P</b></p> <ul style="list-style-type: none"> <li>Flat SMBAMS series bracket</li> <li>30 mm hole for mounting sensors</li> <li>Articulation slots for 90°+ rotation</li> <li>12-ga. 300 series stainless steel</li> </ul>  <p><b>Hole center spacing:</b> A=26.0, A to B=13.0 <b>Hole size:</b> A=26.8 x 7.0, B=ø 6.5, C=ø 31.0</p>

**SMBAMS30RA**

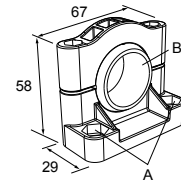
- Right-angle SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-ga. (2.6 mm) cold-rolled steel



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

**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, 1/2-14 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"> <li>• Streamlined black acetal or white UHMW stand-off pipe adapter/cover</li> <li>• Connects between 30 mm light base and 1/2 in. NPSM/DN15 pipe</li> <li>• Mounting hardware included</li> </ul>			
SA-M30TE12C - White UHMW				
Polished 304 Stainless Steel	Black Anodized Aluminum	Clear Anodized Aluminum	<ul style="list-style-type: none"> <li>• Elevated-use stand-off pipe (1/2 in. NPSM/DN15)</li> <li>• Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface</li> <li>• 1/2 in. NPT thread at both ends</li> <li>• Compatible with most industrial environments</li> </ul>	
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"> <li>• Streamlined black acetal or white UHMW mounting base adapter/cover</li> <li>• Connects between 1/2 in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole</li> <li>• Mounting hardware included</li> </ul>			
SA-E12M30C - White UHMW				

## **Banner Engineering Corp Limited Warranty**

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