

# EZ-LIGHT® TL50 Beacon Universal AC Voltage Tower Light

Multi-Color General-Purpose or Audible Indicators



The EZ-LIGHT® TL50 Beacon Tower Light is a cross between the TL50 tower light and the K50 beacon. This compact design is extremely intense and can even be used in areas with high levels of ambient light.

- Rugged, cost-effective, and easy-to-install multi-segment indicators
- Illuminated segments provide easy-to-see operator guidance and indication of equipment status
- Displays up to 5 colors
- 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
- No assembly required

## Non-Audible Models

Model <sup>1</sup>	# of LED Colors	LED Function <sup>2</sup>	Connection <sup>3</sup>	Inputs
TL50BLZR	1	Red	4-wire PVC cable	85-264V ac
TL50BLZGR	2	Green, Red		
TL50BLZGYR	3	Green, Yellow, Red		
TL50BLZBGYR	4	Blue, Green, Yellow, Red	5-wire PVC cable	
TL50BLZWBGYR	5	White, Blue, Green, Yellow, Red	6-wire PVC cable	

## Audible Models

Standard Audible Models <sup>1</sup>	# of LED Colors	LED Function <sup>2</sup>	Connection <sup>3</sup>	Inputs
TL50BLZRA	1	Red	4-wire PVC cable	85-264V ac
TL50BLZGRA	2	Green, Red		
TL50BLZGYRA	3	Green, Yellow, Red	5-wire PVC cable	
TL50BLZBGYRA	4	Blue, Green, Yellow, Red	6-wire PVC cable	

Sealed Audible Models <sup>1</sup>			# of LED Colors	LED Function <sup>2</sup>	Connection <sup>3</sup>	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato				
TL50BLZRALS	TL50BLZRALS3	TL50BLZRALS4	1	Red	4-wire PVC cable	85-264V ac
TL50BLZGRALS	TL50BLZGRALS3	TL50BLZGRALS4	2	Green, Red		
TL50BLZGYRALS	TL50BLZGYRALS3	TL50BLZGYRALS4	3	Green, Yellow, Red	5-wire PVC cable	
TL50BLZBGYRALS	TL50BLZBGYRALS3	TL50BLZBGYRALS4	4	Blue, Green, Yellow, Red	6-wire PVC cable	

Omni-Directional Sealed Audible Models <sup>1</sup>			# of LED Colors	LED Function <sup>2</sup>	Connection <sup>3</sup>	Inputs
Continuous	Pulsed at 1.6 Hz	Staccato				
TL50BLZRAOS	TL50BLZRAOS3	TL50BLZRAOS4	1	Red	4-wire PVC cable	85-264V ac
TL50BLZGRAOS	TL50BLZGRAOS3	TL50BLZGRAOS4	2	Green, Red		
TL50BLZGYRAOS	TL50BLZGYRAOS3	TL50BLZGYRAOS4	3	Green, Yellow, Red	5-wire PVC cable	
TL50BLZBGYRAOS	TL50BLZBGYRAOS3	TL50BLZBGYRAOS4	4	Blue, Green, Yellow, Red	6-wire PVC cable	

<sup>1</sup> Cabled Black models only are listed. For gray housing, add suffix **C** at the end of the model number (cabled models) or before the **QP** (pigtail models), for example, **TL50BLZRC** or **TL50BLZRCQP**.

<sup>2</sup> The first color listed is the bottom color, going up in successive order. Contact the factory for other colors and color combinations. Five color options are only available in non-audible cabled models. Four color options are only available in audible cabled models.

<sup>3</sup> Cabled models only are listed; mating cordset required for pigtail models (see [Cordsets](#) on page 3). For 150 mm (5.9 in) PVC pigtail with QD, add **QP** to the end of the model number, for example, **TL50BLZRCQP**.



## Specifications

### Supply Voltage and Current

85 - 264V ac, 50 or 60 Hz

**Indicators** - max. current per LED color:

- at 85V ac: 70 mA
- at 120V ac: 55 mA
- at 240V ac: 35 mA
- at 264V ac: 30 mA

**Standard Audible Alarm:** 25 mA max. current

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

**Omni-Directional Sealed Audible Alarm:** 45 mA max. current

### Indicators

LEDs are independently selected, 1 to 5 colors depending on model

### Supply Protection Circuitry:

Protected against reverse polarity and transient voltages

### 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-wire, 5-wire, or 6-wire 2m (6.5 ft) integral cable; 4-pin 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 m (3.3 ft) (typical)

**Sealed Audible Alarm:** 2.9 KHz ± 250 Hz oscillation frequency; max. intensity 94 db at 1 m (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)

### Construction:

**Bases and Covers:** ABS

**Light Segment:** Polycarbonate

### Environmental Rating

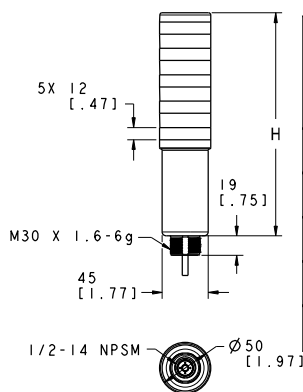
**Non-Audible and Sealed Audible:** IEC IP67

**Standard Audible:** IEC IP50

### Certifications

Approvals pending

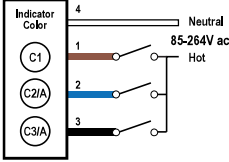
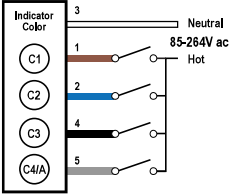
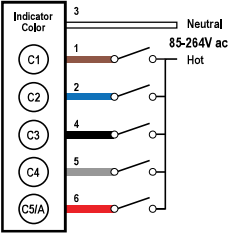
## Dimensions



# of Colors	Tower Height (H)			
	Non-Audible	Standard Audible*	Sealed Audible	Omni-Directional Sealed Audible
1	115.2 mm (4.5 in)	146.1 mm (5.8 in)	169.2 mm (6.7 in)	183.2 mm (7.2 in)
2	141.0 mm (5.6 in)	171.9 mm (6.8 in)	195.0 mm (7.7 in)	209.0 mm (8.2 in)
3	166.8 mm (6.6 in)	197.7 mm (7.8 in)	220.8 mm (8.7 in)	234.8 mm (9.2 in)
4	192.6 mm (7.6 in)	223.5 mm (8.8 in)	246.6 mm (9.7 in)	260.6 mm (10.3 in)
5	218.4 mm (8.6 in)	-	-	-

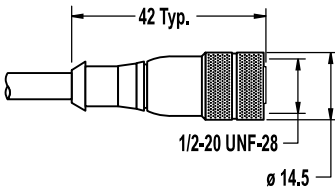
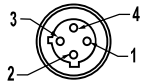
\* Tower height (H) with top unscrewed approximately 3.5 mm to allow sound to escape

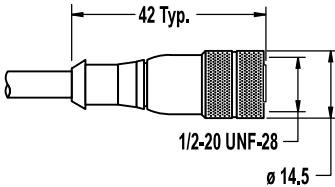
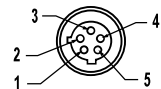
## Hookups

4-wire Hookup	5-wire Hookup	6-wire Hookup
 <p>1 = Brown 2 = Blue 3 = Black 4 = White</p> <p>C1 = Color 1 C2 = Color 2 C3 = Color 3 A = Audible</p>	 <p>1 = Brown 2 = Blue 3 = White 4 = Black 5 = Gray</p> <p>C1 = Color 1 C2 = Color 2 C3 = Color 3 C4 = Color 4 A = Audible</p>	 <p>1 = Brown 2 = Blue 3 = White 4 = Black 5 = Gray 6 = Red</p> <p>C1 = Color 1 C2 = Color 2 C3 = Color 3 C4 = Color 4 C5 = Color 5 A = Audible</p>

## Accessories

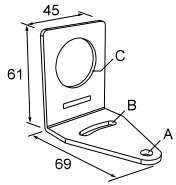
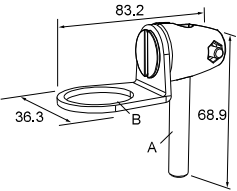
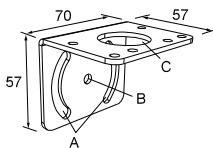
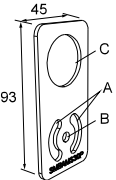
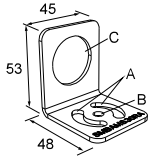
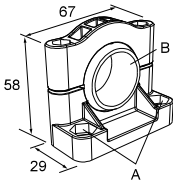
### Cordsets

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

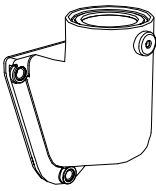
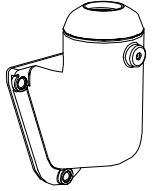
5-Pin Micro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout
MQAC2-506	1.83 m (6 ft)	Straight		  1 = Brown 2 = Blue 3 = White 4 = Black 5 = Gray
MQAC2-515	4.57 m (15 ft)			
MQAC2-530	9.14 m (30 ft)			

## Mounting Brackets




All measurements 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>
<p><b>SMBAMS30RA</b></p> <ul style="list-style-type: none"> <li>Right-angle SMBAMS series bracket</li> <li>30 mm hole for mounting sensors</li> <li>Articulation slots for 90+° rotation</li> <li>12-ga. (2.6 mm) cold-rolled 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>	<p><b>SMB30SC</b></p> <ul style="list-style-type: none"> <li>Swivel bracket with 30 mm mounting hole for sensor</li> <li>Black reinforced thermoplastic polyester</li> <li>Stainless steel mounting and swivel locking hardware included</li> </ul>  <p><b>Hole center spacing:</b> A=ø 50.8  <b>Hole size:</b> A=ø 7.0, B=ø 30.0</p>

## LMB Sealed Right-Angle Bracket

Model	Description	Construction	
LMB30RA	<b>Direct-Mount Models:</b> Bracket kit with base, 30 mm adapter, set screw, fasteners, o-rings, and gaskets	Black polycarbonate	
LMB30RAC		Gray polycarbonate	
LMBE12RA	<b>Pipe-Mount Models:</b> 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"><li>Streamlined black acetal or white UHMW stand-off pipe adapter/cover</li><li>Connects between 30 mm light base and ½ 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 (½ in. NPSM/DN15)</li><li>Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface</li><li>½ 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 ½ 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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