

EZ-LIGHT® TL50 Beacon Tower Light

Multi-Color General-Purpose or Audible Indicators



For the latest technical information about this product, including specifications, dimensions, and wiring, see www.BannerEngineering.com



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 outdoor applications.

- 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 4 colors
- Optional audible function with variable intensity
- Available in black or light gray housing
- Audible models available with standard or sealed audible element
- Immune to ambient light, EMI, and RFI interference
- 12 to 30V dc or 24V ac operation
- No assembly required
- Consult model key about flashing and rotating options (see [Figure 1. TL50BL Tower Lights Model Key](#) on page 2)

Multi-Color General-Purpose Models



NOTE: More models are listed on the next page.

| Model* | # of LED Colors | LED Function† | Connection** | Inputs |
|-------------|-----------------|--------------------------|----------------------------------|----------------------|
| TL50BLRQ | 1 | Red | 4-pin Euro integral QD connector | Bimodal (NPN or PNP) |
| TL50BLGRQ | 2 | Green, Red | | |
| TL50BLGYRQ | 3 | Green, Yellow, Red | | |
| TL50BLBGYRQ | 4 | Blue, Green, Yellow, Red | 5-pin Euro integral QD connector | |

† The first color listed is the bottom color, going up in successive order. Contact factory for other colors and color combinations.

* Models with black housing are listed. For gray housing, add suffix **C** at the end of model number (cabled models) or before the **Q** (QD models), e.g., **TL50BLGYRC** or **TL50BLGYRCQ**.

** Integral QD models only are listed; mating cordset required (see [Quick-Disconnect \(QD\) Cordsets](#) on page 8):

- For 150 mm PVC pigtail with QD, replace **Q** with **QP** in model number (e.g., **TL50BLGYRQP**).
- For 2 m (6.5') cable, omit suffix **Q** from model number (e.g., **TL50BLGYR**).



WARNING: Not To Be Used for Personnel Protection

Never use this product as a sensing device for personnel protection. Doing so could lead to serious injury or death. This product does NOT include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.



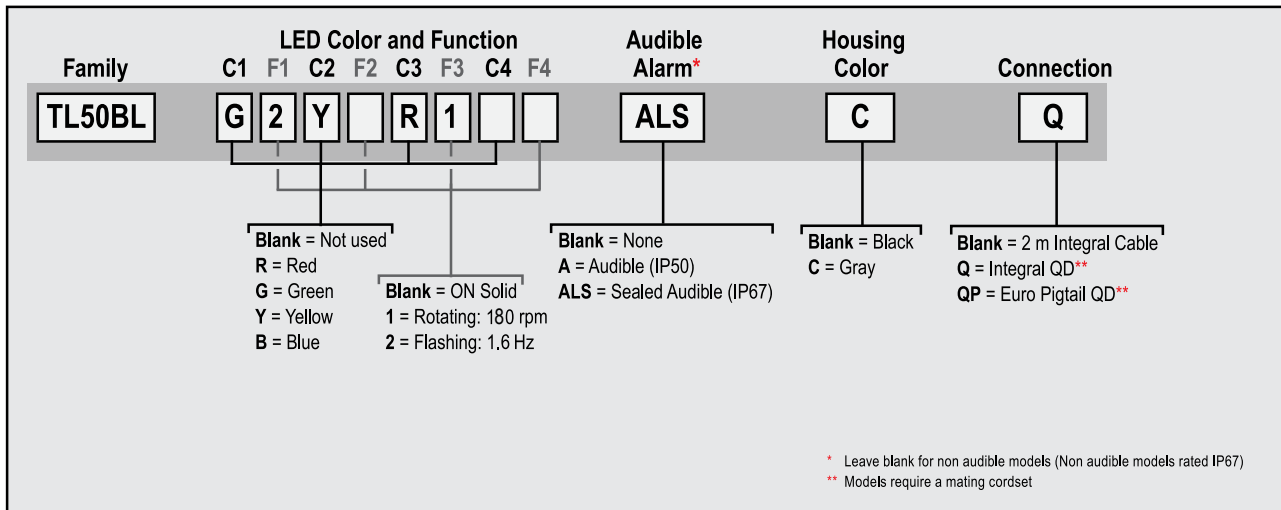


Figure 1. TL50BL Tower Lights Model Key

Multi-Color Audible Models

| Model* | | # of LED Colors | LED Function† | Connection** | Inputs |
|------------------|----------------|-----------------|--------------------------|----------------------------------|----------------------|
| Standard Audible | Sealed Audible | | | | |
| TL50BLRAQ | TL50BLRALSQ | 1 | Red | 4-pin Euro integral QD connector | Bimodal (NPN or PNP) |
| TL50BLGRAQ | TL50BLGRALSQ | 2 | Green, Red | | |
| TL50BLGYRAQ | TL50BLGYRALSQ | 3 | Green, Yellow, Red | 5-pin Euro integral QD connector | |
| TL50BLBGYRAQ | TL50BLBGYRALSQ | 4 | Blue, Green, Yellow, Red | 8-pin Euro integral QD connector | |

† The first color listed is the bottom color, going up in successive order. Contact factory for other colors and color combinations.

* Models with black housing are listed. For gray housing, add suffix **C** at the end of model number (cabled models) or before the **Q** (QD models), e.g., **TL50BLGYRC** or **TL50BLGYRCQ**.

** Integral QD models only are listed; mating cordset required (see [Quick-Disconnect \(QD\) Cordsets](#) on page 8):

- For 150 mm PVC pigtail with QD, replace **Q** with **QP** in model number (e.g., **TL50BLGYRQP**).
- For 2 m (6.5') cable, omit suffix **Q** from model number (e.g., **TL50BLGYR**).

Specifications

Supply Voltage and Current

12 to 30V dc (10% max. ripple); or 21 to 27V ac

Indicators — max. current per LED color:

@ 12V dc: 125 mA

@ 30V dc: 60 mA

@ 21V ac: 80 mA

@ 27V ac: 70 mA

Standard Audible Alarm: 25 mA max. current

Sealed Audible Alarm: 35 mA max. current

Indicators

1-4 colors depending on model; Green, Red, Yellow, Blue

LEDs are independently selected

Supply Protection Circuitry:

Protected against reverse polarity and transient voltages

Input Response Time

Indicator ON/OFF: 1 ms (max.)

Connections

Integral 4-pin, 5-pin or 8-pin M12/Euro-style QD, 150 mm PVC pigtail with QD, or 2 m (6.5') integral cable, depending on model

Operating Conditions:

General-Purpose: -40° to +50° C (-40° to +122° F)

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

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

Vibration and Mechanical Shock:

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

Construction:

Bases and Covers: ABS

Light Segment: Polycarbonate

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.

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 is recommended.

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

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

Environmental Rating

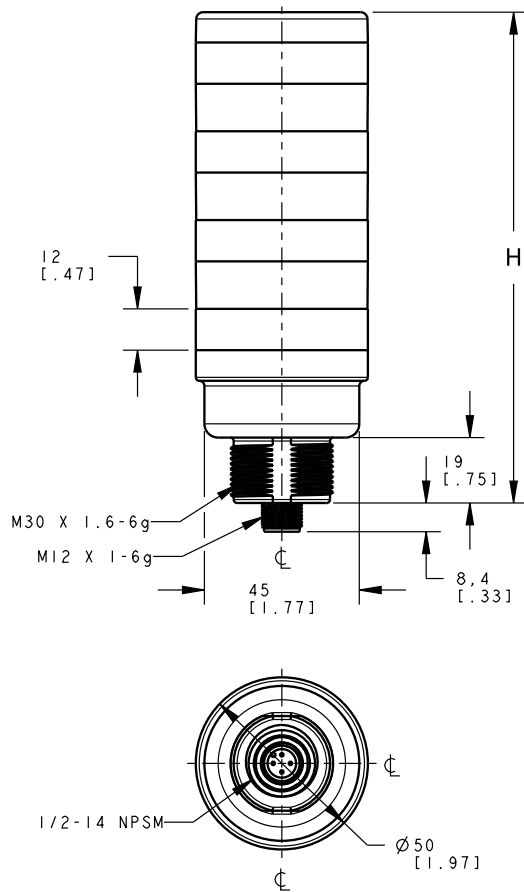
General-Purpose and Sealed Audible: IEC IP67

Standard Audible: IEC IP50

Certifications

pending

Dimensions



| # of Colors | Tower Height (H) | | |
|-------------|------------------------|--------------------------|-----------------------|
| | General-Purpose Models | Standard Audible Models† | Sealed Audible Models |
| 1 | 46.2 mm (1.8") | 77.1 mm (3.1") | 100.2 mm (4.0") |
| 2 | 72.0 mm (2.8") | 102.9 mm (4.1") | 126.0 mm (5.0") |
| 3 | 97.8 mm (3.8") | 128.7 mm (5.1") | 151.8 mm (6.0") |
| 4 | 123.6 mm (4.8") | 154.5 mm (6.1") | 177.6 mm (7.0") |

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

Hookups – 4-Pin Models

| Sourcing (PNP) Input | Sinking (NPN) Input | Key: | |
|--|---------------------|---|---|
| | | 1 = Brown 2 = White 3 = Blue 4 = Black | C1 = Color 1 C2 = Color 2 C3 = Color 3 A = Audible |
| Pins 1 and 2 could activate the corresponding color or the audible function, if available. | | | |

Hookups – 5-Pin Models

| Sourcing (PNP) Input | Sinking (NPN) Input | Key: | |
|---|---------------------|---|---|
| | | 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray | C1 = Color 1 C2 = Color 2 C3 = Color 3 C4 = Color 4 A = Audible |
| Pin 5 could activate the corresponding color or the audible function, if available. | | | |

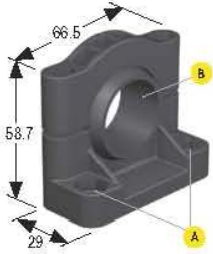


Hookups – 8-Pin Models

| Sourcing (PNP) Input | Sinking (NPN) Input | Key: | |
|--|---------------------|--|---|
| | | 1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red | C1 = Color 1 C2 = Color 2 C3 = Color 3 C4 = Color 4 A = Audible |
| Pin 4 could activate the corresponding color or the audible function, if available. Pins 3 and 8 are not used. | | | |



Accessories

Mounting Brackets




All measurements in mm

| | |
|--|--|
| <p>SMB30A</p> <ul style="list-style-type: none"> • Right-angle bracket with curved slot for versatile orientation • Clearance for M6 (1/4") hardware • 30 mm mounting hole • 12-ga. stainless steel | <p>SMB30SC</p> <ul style="list-style-type: none"> • Swivel bracket with 30 mm mounting hole • Black reinforced thermoplastic polyester • Stainless steel mounting and swivel locking hardware included  <p>Hole center spacing: A=∅ 50.8 Hole size: A=∅ 7.0, B=∅ 30.0</p> |
| <p>SMB30FA</p> <ul style="list-style-type: none"> • Swivel bracket with tilt and pan movement for precise adjustment • 30 mm mounting hole • 12-ga. 304 stainless steel • Easy sensor mounting to extrude rail T-slot |  |
| <p>SMB30MM</p> <ul style="list-style-type: none"> • 12-ga. stainless steel bracket with curved mounting slots for versatile orientation • Clearance for M6 (1/4") hardware • 30 mm mounting hole | <p>SMB30SK</p> <ul style="list-style-type: none"> • Flat-mount swivel bracket with extended range of motion • Black reinforced thermoplastic polyester and 316 stainless steel • Stainless steel swivel locking hardware included  |

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"> Streamlined black acetal or white UHMW stand-off pipe adapter/cover Connects between 30 mm light base and 1/2" NPSM/DN15 pipe Mounting hardware included | | |  | | | | | | | | | | | | |
| SA-M30TE12C - White UHMW | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Polished 304 Stainless Steel</th> <th>Black Anodized Aluminum</th> <th>Clear Anodized Aluminum</th> </tr> </thead> <tbody> <tr> <td>SOP-E12-150SS 150 mm (6") long</td> <td>SOP-E12-150A 150 mm (6") long</td> <td>SOP-E12-150AC 150 mm (6") long</td> </tr> <tr> <td>SOP-E12-300SS 300 mm (12") long</td> <td>SOP-E12-300A 300 mm (12") long</td> <td>SOP-E12-300AC 300 mm (12") long</td> </tr> <tr> <td>SOP-E12-900SS 900 mm (36") long</td> <td>SOP-E12-900A 900 mm (36") long</td> <td>SOP-E12-900AC 900 mm (36") long</td> </tr> </tbody> </table> | Polished 304 Stainless Steel | Black Anodized Aluminum | Clear Anodized Aluminum | SOP-E12-150SS 150 mm (6") long | SOP-E12-150A 150 mm (6") long | SOP-E12-150AC 150 mm (6") long | SOP-E12-300SS 300 mm (12") long | SOP-E12-300A 300 mm (12") long | SOP-E12-300AC 300 mm (12") long | SOP-E12-900SS 900 mm (36") long | SOP-E12-900A 900 mm (36") long | SOP-E12-900AC 900 mm (36") long | <ul style="list-style-type: none"> Elevated-use stand-off pipe (1/2" NPSM/DN15) Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface 1/2 NPT thread at both ends Compatible with most industrial environments | | |  |
| Polished 304 Stainless Steel | Black Anodized Aluminum | Clear Anodized Aluminum | | | | | | | | | | | | | | |
| SOP-E12-150SS 150 mm (6") long | SOP-E12-150A 150 mm (6") long | SOP-E12-150AC 150 mm (6") long | | | | | | | | | | | | | | |
| SOP-E12-300SS 300 mm (12") long | SOP-E12-300A 300 mm (12") long | SOP-E12-300AC 300 mm (12") long | | | | | | | | | | | | | | |
| SOP-E12-900SS 900 mm (36") long | SOP-E12-900A 900 mm (36") long | SOP-E12-900AC 900 mm (36") long | | | | | | | | | | | | | | |
| SA-E12M30 - Black Acetal | <ul style="list-style-type: none"> Streamlined black acetal or white UHMW mounting base adapter/cover Connects between 1/2" NPSM/DN15 pipe and 30 mm (1-3/16") drilled hole Mounting hardware included | | |  | | | | | | | | | | | | |
| SA-E12M30C - White UHMW | | | | | | | | | | | | | | | | |

Quick-Disconnect (QD) Cordsets

4-Pin M12/Euro-Style Cordsets (straight connector)

MQDC-406, 2 m (6.5')

MQDC-415, 5 m (15')

MQDC-430, 9 m (30')

5-Pin M12/Euro-Style Cordsets (straight connector)

MQDC1-506, 2 m (6')

MQDC1-515, 5 m (15')

MQDC1-530, 9 m (30')

5-Pin M12/Euro-Style Cordsets (right-angle connector)

MQDC1-506RA, 2 m (6')

MQDC1-515RA, 5 m (15')

MQDC1-530RA, 9 m (30')

8-Pin M12/Euro-Style Cordsets with Open-Shield (straight connector)

MQDC-806, 2 m (6.5')

MQDC-815, 5 m (15')

MQDC-830, 9 m (30')

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