

Features

Compact Beacon Tower Light



Standard Audible



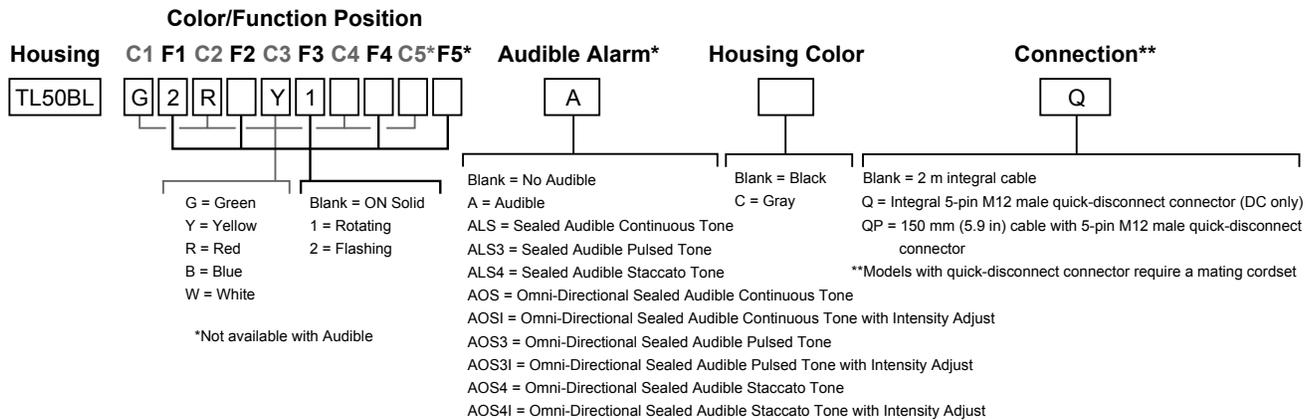
Sealed Audible



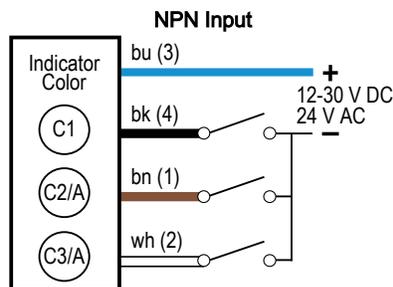
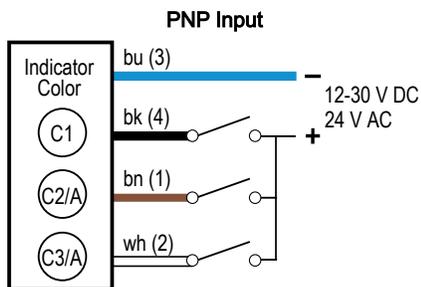
Omni-Directional Sealed Audible

- 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
- Steady on, flashing, and rotating models available
- Audible models available with standard, sealed, or omni-directional audible element
- Available in black or light gray housing
- Continuous, pulsed, and staccato tones available
- 12 V DC to 30 V DC or 24 V AC operation
- No assembly required

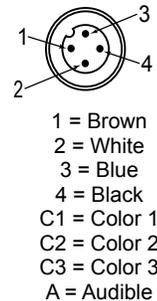
Models



Wiring Diagrams — 4-Pin Models with 1 to 3 Segments



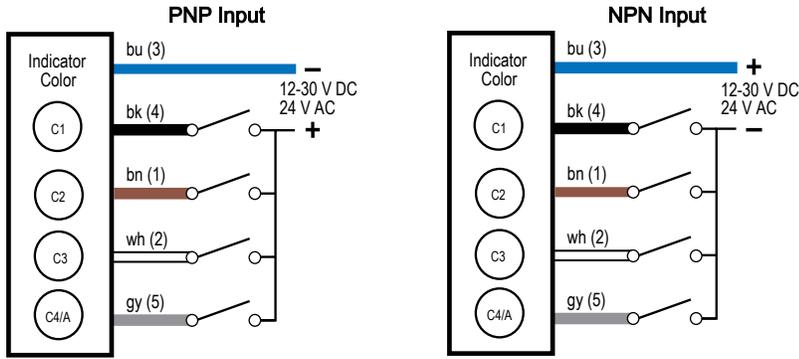
4-pin M12 Male Pinout



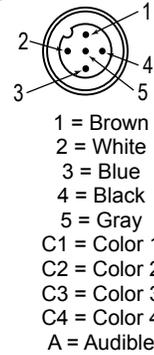
Pins 1 and 2 can activate the corresponding color or the audible function, if available.



Wiring Diagrams — 5-Pin Models with 4 Segments

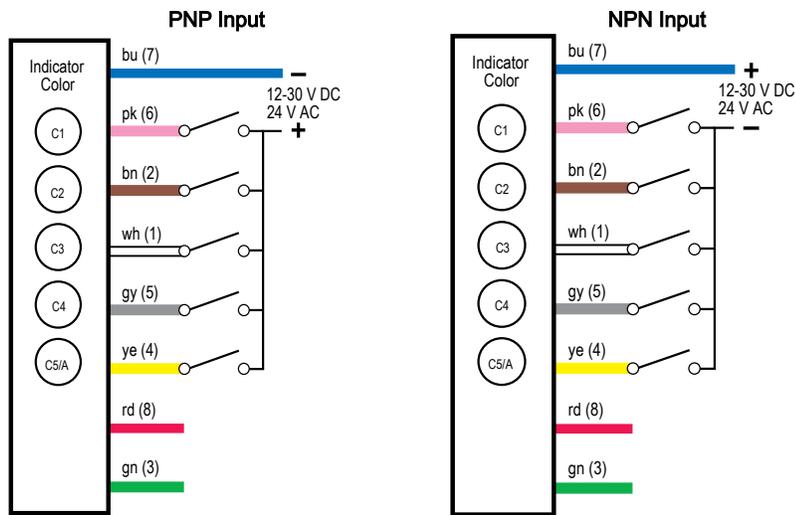


5-pin M12 Male Pinout



Pin 5 can activate the corresponding color or the audible function, if available.

Wiring Diagrams — 8-Pin Models with 5 Segments



8-pin M12 Male Pinout



Pin 4 can activate the corresponding color or the audible function, if available. Pins 3 and 8 are not used.

Specifications

Supply Voltage and Current

12 V DC to 30 V DC; or 24 V AC (± 3 V) at 50 Hz to 60 Hz

Indicators—maximum current per LED color:

- 125 mA at 12 V DC
- 60 mA at 30 V DC
- 75 mA at 24 V AC

Standard Audible Alarm: 25 mA maximum current

Sealed Audible Alarm: 35 mA maximum current

Omni-Directional Sealed Audible Alarm: 45 mA maximum current

Use only with a suitable Class 2 power supply or transformer

Supply Protection Circuitry

Protected against transient voltages

Input Response Time

Indicator On/Off: 1 millisecond maximum

Audible Alarm

Standard Audible Alarm: 2.7 kHz \pm 500 Hz oscillation frequency; maximum intensity 92 dB at 1 m (3.3 ft) (typical)

Sealed Audible Alarm: 2.9 kHz \pm 250 Hz oscillation frequency; maximum intensity 94 dB at 1 m (3.3 ft) (typical)

Omni-Directional Sealed Audible Alarm: 2.1 kHz \pm 250 Hz oscillation frequency; maximum intensity 99 dB at 1 m (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 1 m (3.3 ft) (typical)

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

Indicators

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

Indicator Functions

A color designation followed by an LED option number, indicates the LED status. For example: TL50BLR2Q or TL50BLG1AQ.

LED Option	LED Status	Rotation or Flash Rate
Blank	Steady On	—
1	Rotating	200 RPM \pm 15%
2	Flashing	1.6 Hz rate \pm 15%

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lumen Output (Typical at 25 °C)
Green	525 nm	52
Red	626 nm	24
Yellow	590 nm	15
Blue	470 nm	16
White	5000 K	56

Audible Adjustment

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.
Omni-Directional Sealed Audible Alarm: No adjustment.

Connections

Integral 4-pin, 5-pin, or 8-pin M12 male quick-disconnect connector, 150 mm (6 in) PVC-jacketed cable with an M12 male quick-disconnect connector, or 2 m (6.5 ft) integral PVC-jacketed cable, depending on model
 Models with a quick-disconnect connector require a mating cordset

Construction

Bases and Covers: ABS
Light Segment: Polycarbonate

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)

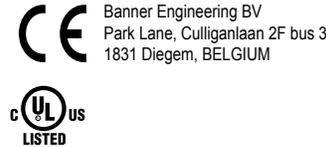
Environmental Rating

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

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)

Certifications



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

FCC Part 15 Class B for Unintentional Radiators

(Part 15.105(b)) This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

(Part 15.21) Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Industry Canada ICES-003(B)

This device complies with CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions: 1) This device may not cause harmful interference; and 2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la norme NMB-3(B). Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas occasionner d'interférences, et (2) il doit tolérer toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité du dispositif.

Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

Dimensions	# of Colors	Tower Height (H)			
		Non-Audible	Standard Audible ⁽¹⁾	Sealed Audible	Omni-Directional Sealed Audible
	1	46.2 mm (1.8 in)	77.1 mm (3.1 in)	100.2 mm (4 in)	114.2 mm (4.5 in)
	2	72 mm (2.8 in)	102.9 mm (4.1 in)	126 mm (5 in)	140 mm (5.5 in)
	3	97.8 mm (3.8 in)	128.7 mm (5.1 in)	141.8 mm (6 in)	165.8 mm (6.5 in)
	4	123.6 mm (4.8 in)	154.5 mm (6.1 in)	177.6 mm (7 in)	191.6 mm (7.5 in)
	5	149.4 mm (5.8 in)	-	-	-

⁽¹⁾ Tower height (H) with top unscrewed approximately 3.5 mm (0.18 in) to allow sound to escape

Accessories

Cordsets

4-Pin Single-Ended M12 Female Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-403	1 m (3.28 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Not used</p>
MQDC-406	2 m (6.56 ft)			
MQDC-410	3 m (9.8 ft)			
MQDC-415	5 m (16.4 ft)			
MQDC-430	9 m (29.5 ft)			
MQDC-450	15 m (49.2 ft)			
MQDC-460	18.3 m (60 ft)			
MQDC-470	21 m (68.9 ft)			
MQDC-4100	30 m (98.43 ft)			

5-Pin Single-Ended M12 Female Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC1-501.5	0.5 m (1.5 ft)	Straight		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC1-503	0.9 m (2.9 ft)			
MQDC1-506	2 m (6.5 ft)			
MQDC1-515	5 m (16.4 ft)			
MQDC1-530	9 m (29.5 ft)			
MQDC1-560	18 m (59 ft)			
MQDC1-5100	31 m (101.7 ft)	Right-Angle		<p>1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray</p>
MQDC1-506RA	2 m (6.5 ft)			
MQDC1-515RA	5 m (16.4 ft)			
MQDC1-530RA	9 m (29.5 ft)			
MQDC1-560RA	19 m (62.3 ft)			

8-Pin Single-Ended M12 Female Open-Shielded Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC2S-806	2.04 m (6.7 ft)	Straight		<p>1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red</p>
MQDC2S-815	5.04 m (16.54 ft)			
MQDC2S-830	10.04 m (32.95 ft)			
MQDC2S-850	16 m (52.49 ft)	Right-Angle		<p>1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red</p>
MQDC2S-806RA	2 m (6.56 ft)			
MQDC2S-815RA	5 m (16.4 ft)			
MQDC2S-830RA	10 m (32.81 ft)			
MQDC2S-850RA	16 m (52.49 ft)			

Mounting Brackets

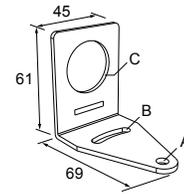
All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

SMB30A

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

Hole center spacing: A to B=40

Hole size: A=∅ 6.3, B= 27.1 × 6.3, C=∅ 30.5

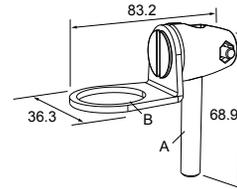


SMB30FA

- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-gauge 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= ∅ 30.1

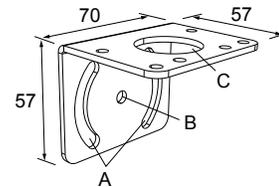


SMB30MM

- 12-gauge stainless steel bracket with curved mounting slots for versatile orientation
- Clearance for M6 (¼ in) hardware
- Mounting hole for 30 mm sensor

Hole center spacing: A = 51, A to B = 25.4

Hole size: A = 42.6 × 7, B = ∅ 6.4, C = ∅ 30.1

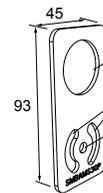


SMBAMS30P

- Flat SMBAMS series bracket
- 30 mm hole for mounting sensors
- Articulation slots for 90°+ rotation
- 12-gauge 300 series stainless steel

Hole center spacing: A=26.0, A to B=13.0

Hole size: A=26.8 × 7.0, B=∅ 6.5, C=∅ 31.0

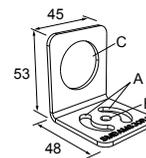


SMBAMS30RA

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

Hole center spacing: A=26.0, A to B=13.0

Hole size: A=26.8 × 7.0, B=∅ 6.5, C=∅ 31.0

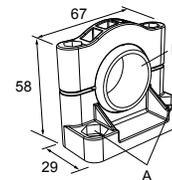


SMB30SC

- 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=∅ 50.8

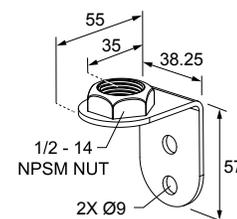
Hole size: A=∅ 7.0, B=∅ 30.0

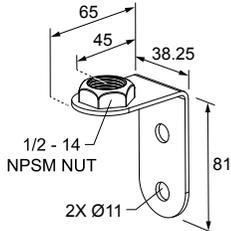


LMBE12RA35

- 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



<p>LMBE12RA45</p> <ul style="list-style-type: none"> • 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 <p>Hole center spacing: 35.0</p>	
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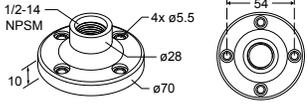
LMB Sealed Right-Angle Bracket

Model	Description	
<p>LMB30RA - Black polycarbonate LMB30RAC - Gray polycarbonate</p>	<ul style="list-style-type: none"> • Direct-Mount Models • Bracket kit with base, 30 mm adapter, set screw, fasteners, O-rings, and gaskets. 	
<p>LMBE12RA - Black polycarbonate LMBE12RAC - Gray polycarbonate</p>	<ul style="list-style-type: none"> • 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) 	

Elevated Mount System

Model	Description	Components												
<p>SA-M30TE12 - Black Acetal</p>	<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 in. NPSM/DN15 pipe • Mounting hardware included 													
<p>SA-M30TE12C - White UHMW</p>														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 33%;">Polished 304 Stainless Steel</th> <th style="width: 33%;">Black Anodized Aluminum</th> <th style="width: 33%;">Clear Anodized Aluminum</th> </tr> <tr> <td>SOP-E12-150SS 150 mm (6 in) long</td> <td>SOP-E12-150A 150 mm (6 in) long</td> <td>SOP-E12-150AC 150 mm (6 in) long</td> </tr> <tr> <td>SOP-E12-300SS 300 mm (12 in) long</td> <td>SOP-E12-300A 300 mm (12 in) long</td> <td>SOP-E12-300AC 300 mm (12 in) long</td> </tr> <tr> <td>SOP-E12-900SS 900 mm (36 in) long</td> <td>SOP-E12-900A 900 mm (36 in) long</td> <td>SOP-E12-900AC 900 mm (36 in) long</td> </tr> </table>	Polished 304 Stainless Steel	Black Anodized Aluminum	Clear Anodized Aluminum	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	<ul style="list-style-type: none"> • Elevated-use stand-off pipe (1/2 in. NPSM/DN15) • Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface • 1/2 in. NPT thread at both ends: one end screws into the internal threads of the light's base, and one end screws into the mounting base adapter/cover • Compatible with most industrial environments 	
Polished 304 Stainless Steel	Black Anodized Aluminum	Clear Anodized Aluminum												
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												
<p>SA-E12M30 - Black Acetal</p>	<ul style="list-style-type: none"> • Streamlined black acetal or white UHMW mounting base adapter/cover • Connects between 1/2 in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole • Mounting hardware included 													
<p>SA-E12M30C - White UHMW</p>														

Pipe Mounting Flange

Pipe Mounting Flange			
Model	Description	Construction	
SA-F12	<ul style="list-style-type: none"> • Elevated-use stand-off pipes (1/2 in. NPSM/DN15) • M5 mounting hardware and nitrile gasket included 	Die-cast zinc base with black paint	

Continued on page 7

Continued from page 6

Pipe Mounting Flange			
Model	Description	Construction	
SA-F12-3	<ul style="list-style-type: none"> Elevated-use stand-off pipes (½ in, NPSM/ DN15) M4 mounting hardware and nitrile blend gasket included 	Black Polycarbonate	

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