Features

Multi-Color General-Purpose or Audible Indicators

- Rugged, cost-effective, and easy-to-install multi-segment indicators
- Illuminated segments provide easy-to-see operator guidance and indication of equipment status
- Audible models available with omni-directional audible element
- Compact devices are completely self-contained, no controller needed
- 18 V DC to 30 V DC
- No assembly required

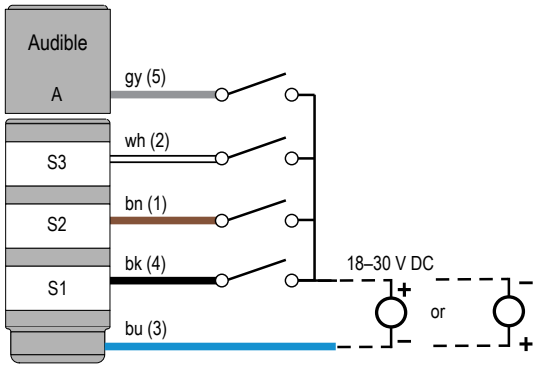
Models

Model	Audible	LED Colors[1]	Connection[2]	Inputs
TL50B-GYR	No	Green, Yellow, Red, Blue	1 m (3.3 ft) integral PVC-jacketed cable	Bimodal (NPN or PNP)
TL50B-GYRA	Yes			
TL50B-GYRQ	No		Integral 4-pin M12 male quick-disconnect connector	
TL50B-GYRAQ	Yes		Integral 5-pin M12 male quick-disconnect connector	
TL50B-BGYRQ	No			
TL50B-BGYRAQ	Yes		Integral 8-pin M12 male quick-disconnect connector	

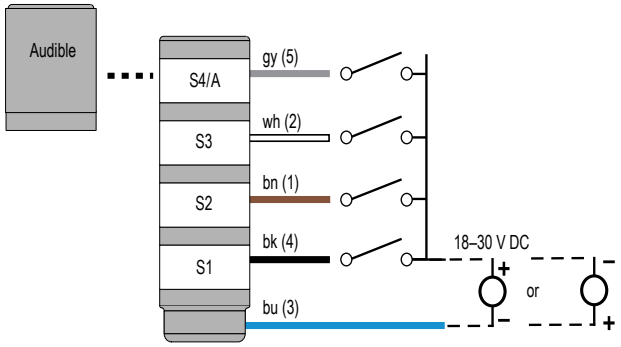
Wiring Diagram

4-Pin and 5-Pin Models

3-Segment



4-Segment



[1] The first color listed is the bottom color, going up in successive order.
[2] Models with a quick-disconnect connector require a mating cordset.

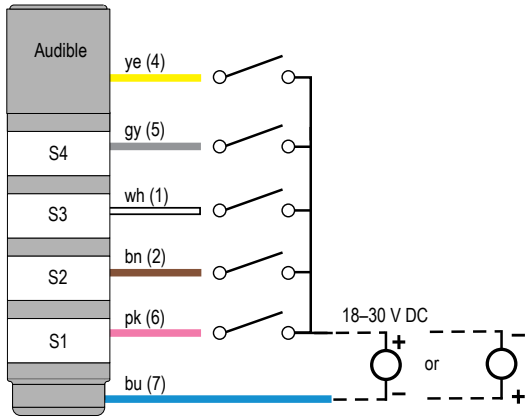
Original Instructions
22-Jul-25

www.bannerengineering.com

214732
p/n: 214732 Rev. C

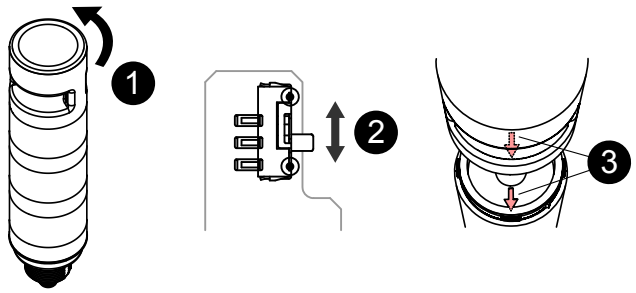
Wiring Key	Segment Key
1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray	S1 = Segment 1 S2 = Segment 2 S3 = Segment 3 S4 = Segment 4 A = Audible (optional)

8-Pin Models (4-Segment Models Only)

4-Segment	Wiring Key	Segment Key
	1 = White 2 = Brown 3 = Green (not used) 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red (not used)	S1 = Segment 1 S2 = Segment 2 S3 = Segment 3 S4 = Segment 4 A = Audible

Audible Adjustment

Follow these instructions to adjust the audible module.



1. Remove the top cover by turning counterclockwise.
2. Toggle the switch up for low setting, and down for high setting.
3. To reassemble, align the inner arrows on the audible cover and top segment. Push down gently and turn clockwise.

NOTE: Do not pinch the wires when reassembling.

Specifications

Supply Voltage and Current

18 V DC to 30 V DC

Segments—maximum current per LED segment: 26 mA at 18 V DC to 30 V DC

Omni-Directional Audible Alarm: 20 mA maximum current

Supply Protection Circuitry

Protected against transient voltages

Input Response Time

Indicator On/Off: 1 milliseconds maximum

Operating Frequency

3.1 kHz ± 500 Hz oscillation frequency

Intensity:

- High Setting: 93 dB at 1 m (typical)
- Low Setting: 10 dB typical reduction in sound intensity with audible adjustment (maximum to minimum)

Connections

Integral 4-pin, 5-pin, or 8-pin M12 male quick-disconnect connector, or 1 m (3.3 ft) integral PVC-jacketed cable, depending on model

Models with a quick-disconnect connector require a mating cordset

Construction

Bases and Covers: Polycarbonate

Light Segment: Polycarbonate

Vibration and Mechanical Shock

Meets IEC 60068-2-6 requirements (Vibration: 10 Hz to 55 Hz, 0.5 mm amplitude, 5 minutes sweep, 30 minutes dwell)

Meets IEC 60068-2-27 requirements (Shock: 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)

95% at +50 °C maximum relative humidity (non-condensing)

Input Leakage Current Immunity

400 µA[3]

Environmental Rating

IP65

UL Type 4X

Included Accessories

M30 knurl nut and gasket

Indicators

LEDs are independently selected

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lumen Output (Typical at 25 °C)
Green	525 nm	17
Red	625 nm	8
Yellow	590 nm	16
Blue	465 nm	4

[3] Any current above this value may activate the TL50.

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

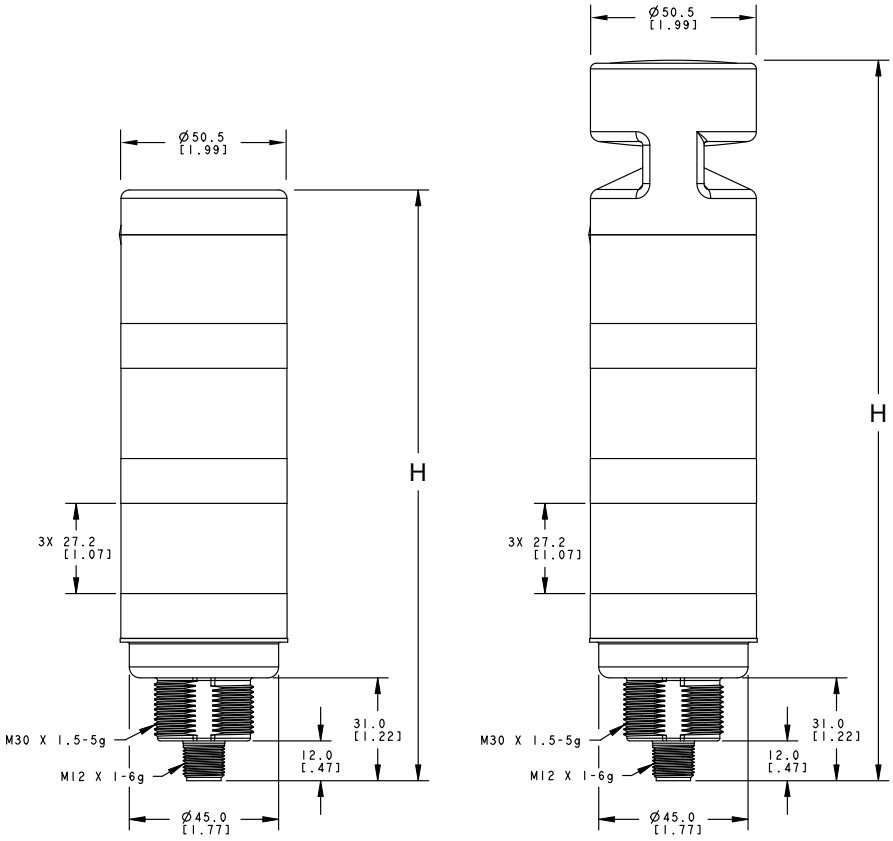
Certifications

Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN

Dimensions

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

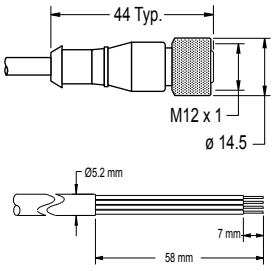
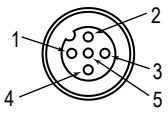


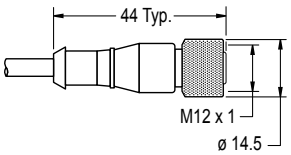
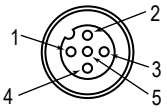
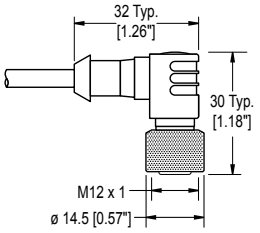
Standard Models Audible Models

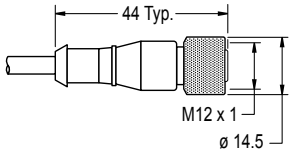
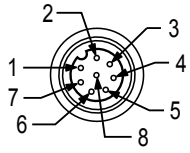
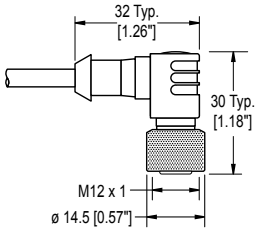
# of Segments	Standard Models	Audible Models
3	178.1 mm (7.01 in)	217.2 mm (8.55 in)
4	218.8 mm (8.61 in)	256.9 mm (10.11 in)

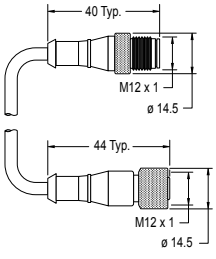
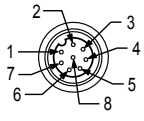
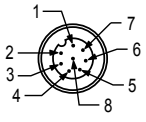
Accessories

Cordsets

4-Pin Single-Ended M12 Female Cordsets					
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**	
MQDC-403	1 m (3.28 ft)	Straight			1 = Brown 2 = White 3 = Blue 4 = Black 5 = Not used
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		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
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)			
MQDC1-506RA	2 m (6.5 ft)	Right-Angle		
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 Cordsets					
Model	**Length**	**Style**	**Dimension**	**Pinout (Female)**	
MQDC1-803	1 m (3.2 ft)	Straight			
MQDC1-806	2 m (6.5 ft)				
MQDC1-815	5 m (16.4 ft)				
MQDC1-830	9 m (29.5 ft)				
MQDC1-850	15 m (49.2 ft)				
MQDC1-806RA	2 m (6.5 ft)	Right-Angle		1 = White 2 = Brown 3 = Green 4 = Yellow	5 = Gray 6 = Pink 7 = Blue 8 = Red
MQDC1-815RA	5 m (16.4 ft)				
MQDC1-830RA	9 m (29.5 ft)				
MQDC1-850RA	15 m (49.2 ft)				

8-Pin Double-Ended M12 Female to M12 Male Cordsets					
Model	**Length**	**Style**	**Dimensions**		**Pinout**
MQDEC1-803SS	1 m (3.28 ft)	Male Straight / Female Straight			1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
MQDEC1-806SS	2 m (6.56 ft)				
MQDEC1-810SS	3 m (9.84 ft)				
MQDEC1-815SS	5 m (16.4 ft)				
MQDEC1-830SS	9 m (29.5 ft)		Female 	Male 	
MQDEC1-850SS	15 m (49.2 ft)				
MQDEC1-8100SS	30.5 m (100 ft)				
MQDEC1-8200SS	61 m (200 ft)				

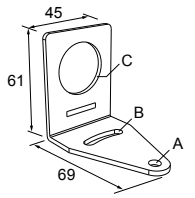
Mounting Brackets

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

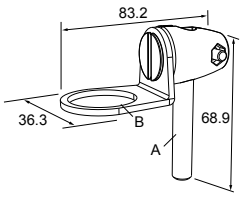
Hole center spacing: A to B=40
Hole size: A=ø 6.3, B= 27.1 × 6.3, C=ø 30.5



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

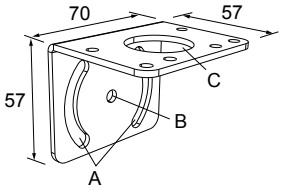
Bolt thread: SMB30FA, A= 3/8 - 16 × 2 in; SMB30FAM10, A= M10 - 1.5 × 50
Hole size: B= ø 30.1



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

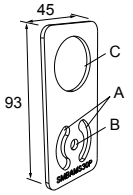
Hole center spacing: A = 51, A to B = 25.4
Hole size: A = 42.6 × 7, B = ø 6.4, C = ø 30.1



SMBAMS30P

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

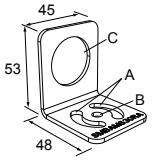
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



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

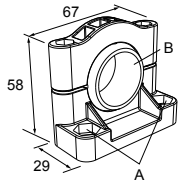
Hole center spacing: A=26.0, A to B=13.0
Hole size: A=26.8 × 7.0, B=ø 6.5, C=ø 31.0



SMB30SC

- Swivel bracket with 30 mm mounting hole for sensor
- Black reinforced thermoplastic polyester
- Stainless steel mounting and swivel locking hardware included

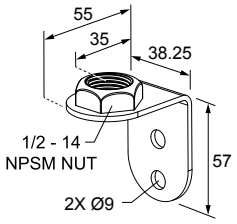
Hole center spacing: A=ø 50.8
Hole size: A=ø 7.0, B=ø 30.0

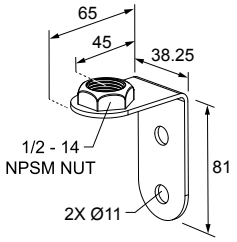


LMBE12RA35

- 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

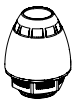
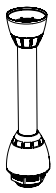


LMBE12RA45 • Direct mounting of stand-off pipe, with common bracket type • Zinc-plated steel • 1/2-14 NPSM nut • Mounting distance from the wall to the center of the 1/2-14 NPSM nut is 45 mm **Hole center spacing:** 35.0	

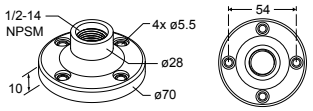
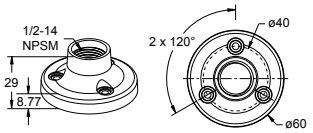
LMB Sealed Right Angle Bracket

Model	Description	Construction	
LMB30RA	**Direct-Mount Models:** Bracket kit with base, 30 mm adapter, set screw, fasteners, O-rings, and gaskets.	Black polycarbonate	
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	

Elevated Mount System

<table>
<tr><th colspan="3">Model</th><th>Description</th><th>Components</th></tr>
<tr><td colspan="3">SA-M30TE12 - Black Acetal</td><td>• Streamlined black acetal stand-off pipe adapter/cover
• Connects between 30 mm light base and ½ in. NPSM/ DN15 pipe
• Mounting hardware included</td><td>  </td></tr>
<tr><td>Polished 304 Stainless Steel</td><td>Black Anodized Aluminum</td><td>Clear Anodized Aluminum</td><td rowspan="4">• Elevated-use stand-off pipe (½ in. NPSM/DN15)
• Polished 304 stainless steel, black anodized aluminum, or clear anodized aluminum surface
• ½ 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</td><td rowspan="4">  </td></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>
<tr><td colspan="3">SA-E12M30 - Black Acetal</td><td>• Streamlined black acetal mounting base adapter/cover
• Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole
• Mounting hardware included</td><td>  </td></tr>
<tr><td colspan="3">SOK-TL50-150A
SOK-TL50-300A</td><td>Includes:
• SA-M30TE12
• SA-E12M30
• SOP-E12-150/300A</td><td>  </td></tr>
</table>

Pipe Mounting Flange

Pipe Mounting Flange			
Model	**Description**	**Construction**	
SA-F12	• Elevated-use stand-off pipes (½ in, NPSM/ DN15) • M5 mounting hardware and nitrile gasket included	Die-cast zinc base with black paint	
SA-F12-3	• Elevated-use stand-off pipes (½ in, NPSM/ DN15) • M4 mounting hardware and nitrile blend gasket included	Black Polycarbonate	

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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This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. **IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.**

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For patent information, see www.bannerengineering.com/patents.