TL50 Audible Indicators
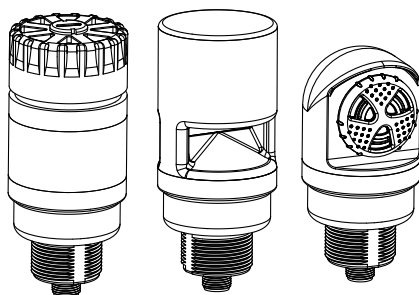
General-purpose audible indicators

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

- Rugged, cost-effective and easy to install
- Compact devices are self-contained — no controller needed
- Immune to EMI and RFI interference
- Choose IP50 or Sealed IP67 model, black or light gray housing
- 12 to 30V dc operation

Models

Table 1: Standard Audible Models [1]

Model	Connection[2]	Inputs
TL50AQ	4-pin Euro integral QD connector	Bimodal (NPN or PNP)

Table 2: Sealed Audible Models [1]

Continuous	Pulsed at 1.6 Hz	Staccato	Connection[2]	Inputs
TL50ALSQ	**TL50ALS3Q**	**TL50ALS4Q**	4-pin Euro integral QD connector	Bimodal (NPN or PNP)

Table 3: Omni-Directional Sealed Audible Models [1]

Continuous	Pulsed at 1.6 Hz	Staccato	Connection[2]	Inputs
TL50AOSQ	**TL50AOS3Q**	**TL50AOS4Q**	4-pin Euro integral QD connector	Bimodal (NPN or PNP)

Specifications

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 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)

Supply Voltage

12 to 30V dc (10% maximum ripple) at 45 mA max.; or 21 to 27V ac at 45mA

Environmental Rating

Standard models: IEC IP50

Sealed models: IEC IP67

Connections

Integral 4-pin, 150 mm PVC pigtail with QD, or 2 m (6.5 ft) integral cable, depending on model

Operating Conditions

−40 °C to +50 °C (−40 °F to +122 °F)

Certifications

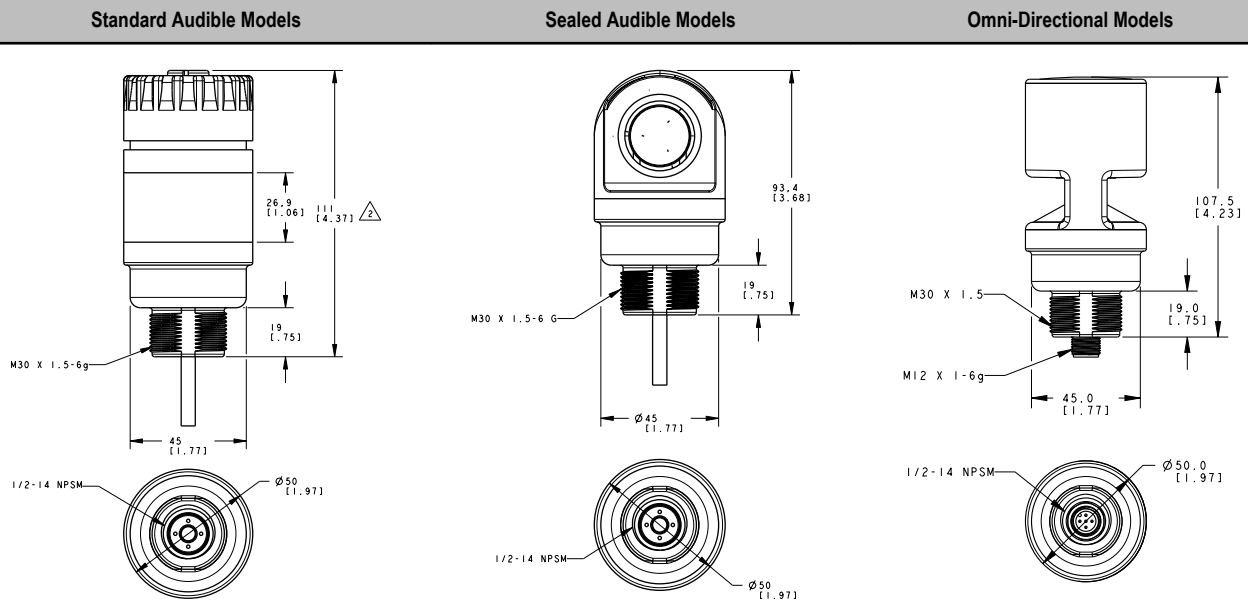CE UL LISTED

Omni-Directional models: pending

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[1] Models with black housing are listed. For gray housing, add suffix **C** at the end of the model number (cabled models) or before the Q (QD models), for example, TL50AC or TL50ACQ.

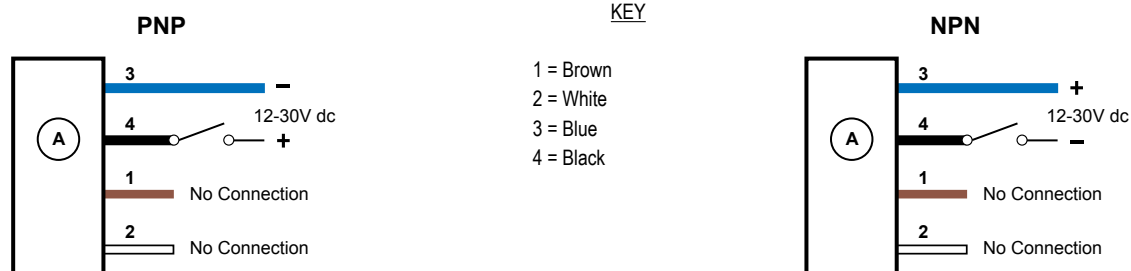[2] Integral QD models only are listed; mating cordset required (see *4-Pin Euro-Style Cordsets*):

- For 150 mm PVC pigtail with QD, replace **Q** with **QP** in model number, for example, **TL50AQP**
- For 2 m (6.5 ft)PVC cable, omit suffix **Q** from model number, for example, **TL50A**

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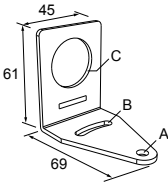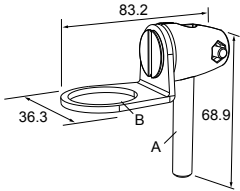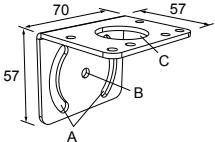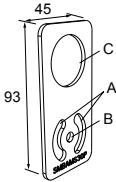## Dimensions

Standard Audible Models	Sealed Audible Models	Omni-Directional Models

Wiring

PNP

3 — (–)
4 — 12-30V dc +
1 — No Connection
2 — No Connection

KEY

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

NPN

3 — (+)
4 — 12-30V dc (–)
1 — No Connection
2 — No Connection
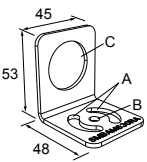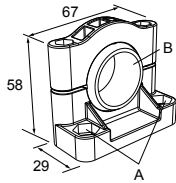
Accessories
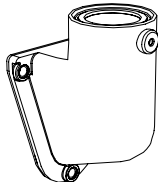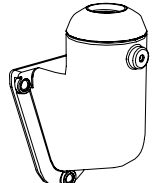
Cordsets

4-Pin Threaded M12/Euro-Style Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout**
MQDC-406	1.83 m (6 ft)	Straight	44 Typ. / M12 x 1 / ø 14.5	1 = Brown
MQDC-415	4.57 m (15 ft)			2 = White
MQDC-430	9.14 m (30 ft)			3 = Blue
MQDC-450	15.2 m (50 ft)			4 = Black
MQDC-406RA	1.83 m (6 ft)	Right-Angle	32 Typ. [1.26"] / 30 Typ. [1.18"] / M12 x 1 / ø 14.5 [0.57"]	
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

Mounting Brackets

All measurements are in mm

SMB30A

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

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

SMB30FA

- Swivel bracket with tilt and pan movement for precise adjustment
- Mounting hole for 30 mm sensor
- 12-ga. 304 stainless steel
- Easy sensor mounting to extrude rail T-slot
- Metric and inch size bolt available

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

SMB30MM

- 12-ga. 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 x 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-ga. 300 series stainless 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

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		Black polycarbonate	
LMB30RAC	**Direct-Mount Models:** Bracket kit with base, 30 mm adapter, set screw, fasteners, o-rings, and gaskets	Gray polycarbonate	
LMBE12RA		Black polycarbonate	
LMBE12RAC	**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)	Gray polycarbonate	

Elevated Mount System

Model			Features	Components
SA-M30TE12 - Black Acetal **SA-M30TE12C** - White UHMW			• Streamlined black acetal or white UHMW stand-off pipe adapter/cover • Connects between 30 mm light base and ½ in. NPSM/DN15 pipe • Mounting hardware included	
Polished 304 Stainless Steel	**Black Anodized Aluminum**	**Clear Anodized Aluminum**	• 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 • Compatible with most industrial environments	
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 **SA-E12M30C** - White UHMW			• Streamlined black acetal or white UHMW mounting base adapter/cover • Connects between ½ in. NPSM/DN15 pipe and 30 mm (1-3/16 in) drilled hole • Mounting hardware included	

Banner Engineering Corp Limited Warranty