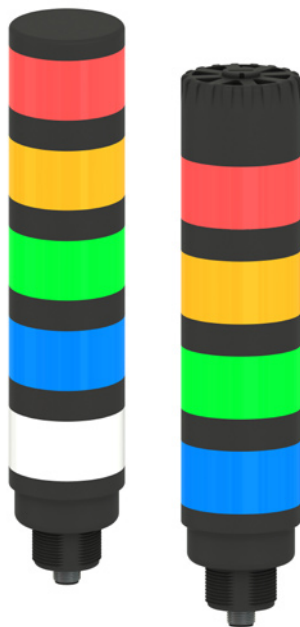# TL50 Tower Light

Multi-Color General-Purpose or Audible Indicators

Features

- Rugged, cost-effective and easy-to-install multisegment indicators
- Illuminated segments provide easy-to-see operator guidance and indication of equipment status
- Displays up to 5 colors
- Optional audible function with variable intensity
- Compact devices are completely self-contained — no controller needed
- Immune to EMI and RFI interference
- 18 to 30V dc or 24V ac operation
- No assembly required

Multi-Color General-Purpose Models

Model	Color Count	Connection*	LED Function**	Inputs
TL50RQ	1	4-pin Euro integral QD connector	**1 Color:** Red	Bimodal (NPN or PNP)
TL50GRQ	2		**2 Color:** Green, Red	
TL50GYRQ	3		**3 Color:** Green, Yellow, Red	
TL50BGYRQ	4	5-pin Euro integral QD connector	**4 Color:** Blue, Green, Yellow, Red	
TL50WBGYRQ	5	8-pin Euro integral QD connector	**5 Color:** White, Blue, Green, Yellow, Red	

Multi-Color Audible Models

Model	Color Count	Connection*	LED Function**	Inputs
TL50RAQ	1	4-pin Euro integral QD connector	**1 Color:** Red	Bimodal (NPN or PNP)
TL50GRAQ	2		**2 Color:** Green, Red	
TL50GYRAQ	3	5-pin Euro integral QD connector	**3 Color:** Green, Yellow, Red	
TL50BGYRAQ	4	8-pin Euro integral QD connector	**4 Color:** Blue, Green, Yellow, Red	

* Integral QD models are listed. For 150 mm PVC pigtail with QD, replace **Q** with **QP** in model number (example, **TL50GYRQP**). For 2 m (6.5') cable, omit suffix **Q** from model number (example, **TL50GYR**). A model with a QD requires a mating cable (see page 3)

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

⚠ **WARNING . . . Not To Be Used for Personnel Protection**

Never use these products as sensing devices for personnel protection. Doing so could lead to serious injury or death.

These sensors do NOT include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition. Consult your current Banner Safety Products catalog for safety products which meet OSHA, ANSI and IEC standards for personnel protection.
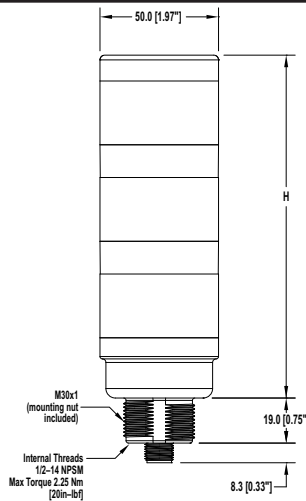
142406

TL50 Tower Light

Specifications

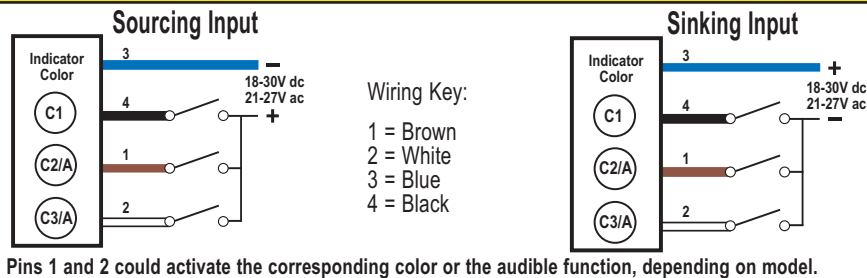|	
Supply Voltage and Current	18 to 30V dc (10% max. ripple) @ 45 mA max. per LED color; or 21 to 27V ac @ 45 mA max. per LED color
Indicators	LEDs are independently selected; Green, Red, Yellow, Blue or White; 1-5 colors depending on model
Input Response Time	Indicator ON/OFF: 10 ms
Oscillation Frequency (Audible only)	2.7 KHz ± 50 Hz **Max. intensity**: 95 db @ 1 meter
Audible Adjustments	The audible intensity can be adjusted by unscrewing the cover or removing the center plug for max. intensity.
Environmental Rating	**General-Purpose:** IEC IP65 **Audible:** IEC IP50
Connections	Integral 4-pin, 5-pin or 8-pin 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) **Audible:** −20° to +50° C (−4° to +122° F)
Certifications	Approvals pending

Dimensions*

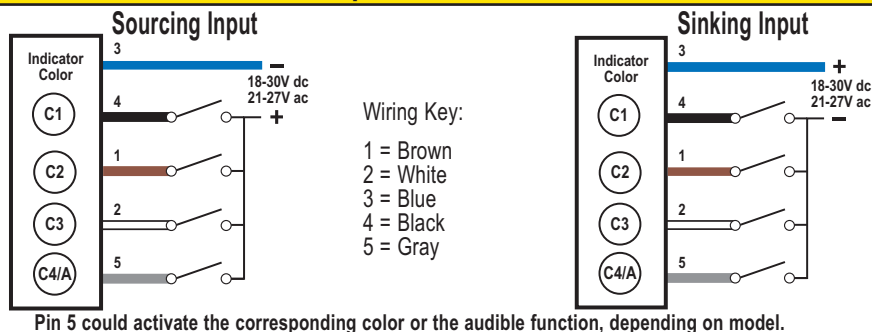|	Tower Height (H)	
Color Count	**Multi-Color General-Purpose Models**	**Multi-Color Audible Models†**
1	61.2 mm (2.4")	92.0 mm (3.6")
2	101.9 mm (4.0")	132.7 mm (5.2")
3	142.6 mm (5.6")	173.4 mm (6.8")
4	183.3 mm (7.2")	214.1 mm (8.4")
5	224.0 mm (8.8")	—

† Tower Height (H) with top unscrewed approximately 3.5 mm to allow sound to escape
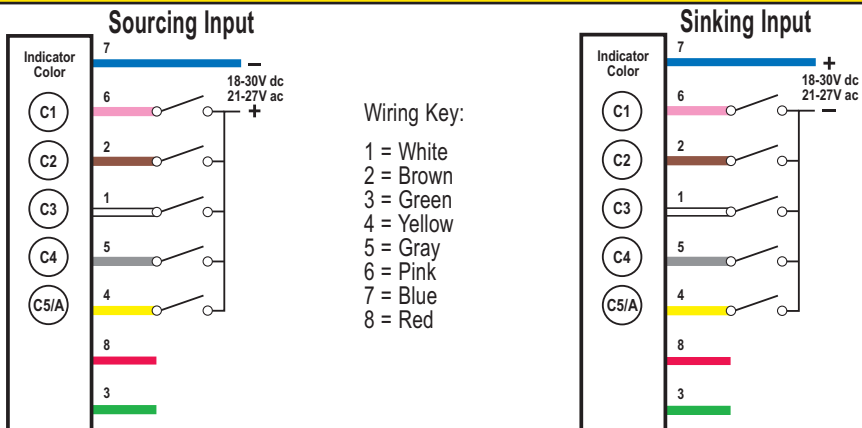
*Measurements in mm

Hookups – 4-Pin Models

Sourcing Input

Sinking Input

Wiring Key:

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

Pins 1 and 2 could activate the corresponding color or the audible function, depending on model.

Hookups – 5-Pin Models

Sourcing Input

Sinking Input

Wiring Key:

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

Pin 5 could activate the corresponding color or the audible function, depending on model.

Hookups – 8-Pin Models

Sourcing Input

Indicator Color

C1 — 6
C2 — 2
C3 — 1
C4 — 5
C5/A — 4

7
8
3

18-30V dc
21-27V ac
− +

Sinking Input

Indicator Color

C1 — 6
C2 — 2
C3 — 1
C4 — 5
C5/A — 4

7
8
3

18-30V dc
21-27V ac
+ −

Wiring Key:

1 = White
2 = Brown
3 = Green
4 = Yellow
5 = Gray
6 = Pink
7 = Blue
8 = Red

Pin 4 could activate the corresponding color or the audible function, depending on model. Pins 3 and 8 are not used.

Accessories

Quick-Disconnect (QD) Cables

Style	Model	Length	Dimensions (mm)	Pinout
4-Pin Euro Straight	MQDC-406 MQDC-415 MQDC-430	2 m (6.5') 5 m (15') 9 m (30')	44 Typ. [1.73"] M12 x 1 ø 14.5 [0.57"]	**Female** 1, 2, 3, 4
4-Pin Euro Right-Angle	MQDC-406RA MQDC-415RA MQDC-430RA	2 m (6.5') 5 m (15') 9 m (30')	32 Typ. [1.26"] 30 Typ. [1.18"] M12 x 1 ø 14.5 [0.57"]	1 = Brown 2 = White 3 = Blue 4 = Black
5-Pin Euro Straight	MQDC1-506 MQDC1-515 MQDC1-530	2 m (6.5') 5 m (15') 9 m (30')	44 Typ. [1.73"] M12 x 1 ø 14.5 [0.57"]	**Female** 1, 2, 3, 4, 5
5-Pin Euro Right-Angle	MQDC1-506RA MQDC1-515RA MQDC1-530RA	2 m (6.5') 5 m (15') 9 m (30')	32 Typ. [1.26"] 30 Typ. [1.18"] M12 x 1 ø 14.5 [0.57"]	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
8-Pin Euro Straight	MQDC2S-806 MQDC2S-815 MQDC2S-830	2 m (6.5') 5 m (15') 9 m (30')	44 Typ. [1.73"] M12 x 1 ø 14.5 [0.57"]	**Female** 1, 2, 3, 4, 5, 6, 7, 8 1 = White 5 = Gray 2 = Brown 6 = Pink 3 = Green 7 = Blue 4 = Yellow 8 = Red

TL50 Tower Light

Mounting Brackets

	Description	Model
	• 12-ga. stainless steel right-angle mounting bracket with curved slot for versatile orientation • Clearance for M6 (¼") hardware	**SMB30A**
	• 30 mm 12-ga. stainless steel bracket with curved mounting slots for versatile orientation • Clearance for M6 (¼") hardware • Articulation slots for 90°+ rotation	**SMB30MM**
	• 12-ga. 300 series stainless steel • Right-angle SMBAMS series bracket with 30 mm hole for mounting sensors • Articulation slots for 90°+ rotation	**SMBAMS30RA**
	• 30 mm swivel bracket • Black reinforced thermoplastic polyester • Includes stainless steel mounting and swivel locking hardware	**SMB30SC**
	• 12-ga. 300 series stainless steel • Flat SMBAMS series bracket with 30 mm hole for mounting sensors • Articulation slots for 90°+ rotation	**SMBAMS30P**
	• Streamlined acetal stand-off pipe adapter/cover • Connects between TL50 Tower Light and 1/2" NPSM/DN15 pipe • Mounting hardware included	**SA-M30TE12**
	• Stainless steel elevated-use stand-off pipe (1/2" NPSM/DN15) • Polished 304 stainless steel surface • 1/2 NPT thread at both ends • Compatible with most industrial environments	**SOP-E12-150SS** Length: 150 mm (6")
		SOP-E12-300SS Length: 300 mm (12")
	• Streamlined acetal mounting base adapter/cover • Connects between 1/2" NPSM/DN15 pipe and 30 mm (1-3/16") drilled hole • Mounting hardware included	**SA-E12M30**

WARRANTY: Banner Engineering Corp. warrants its products to be free from defects for one year. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture found to be defective at the time it is returned to the factory during the warranty period. This warranty does not cover damage or liability for the improper application of Banner products. This warranty is in lieu of any other warranty either expressed or implied.