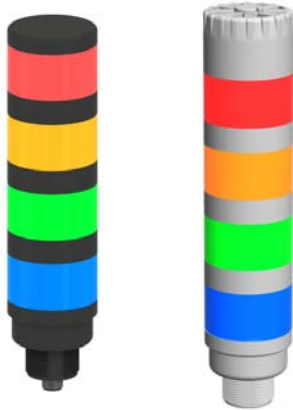# BANNER®

more sensors, more solutions

TL50H Tower Light – High Brightness

Multi-Color General-Purpose or Audible Indicators

Features

- More than 4 times brighter than standard TL50 Tower Lights, improving visiblity in areas with high levels of ambient light
- 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 4 colors
- Optional audible function with variable intensity
- Available in black or light gray housing
- Compact devices are completely self-contained — no controller needed
- 18 to 30V dc or 24V ac operation
- No assembly required

Multi-Color General-Purpose Models

Model*	Color Count	Connection**	LED Function†	Inputs
TL50HRQ	1	4-pin Euro integral QD connector	1 Color: Red	Bimodal (NPN or PNP)
TL50HGRQ	2		2 Color: Green, Red	
TL50HGYRQ	3		3 Color: Green, Yellow, Red	
TL50HBGYRQ	4	5-pin Euro integral QD connector	4 Color: Blue, Green, Yellow, Red	

Multi-Color Audible Models

Model*	Color Count	Connection**	LED Function†	Inputs
TL50HRAQ	1	4-pin Euro integral QD connector	1 Color: Red	Bimodal (NPN or PNP)
TL50HGRAQ	2		2 Color: Green, Red	
TL50HGYRAQ	3	5-pin Euro integral QD connector	3 Color: Green, Yellow, Red	
TL50 HBGYRAQ	4	8-pin Euro integral QD connector	4 Color: Blue, Green, Yellow, Red	

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* Models with black housing are listed. For models with light gray housing, add a **C** at the end of model number (cabled models) or before the **Q** (QD models) (example, **TL50HGYRC** or **TL50HGYRCQ**).
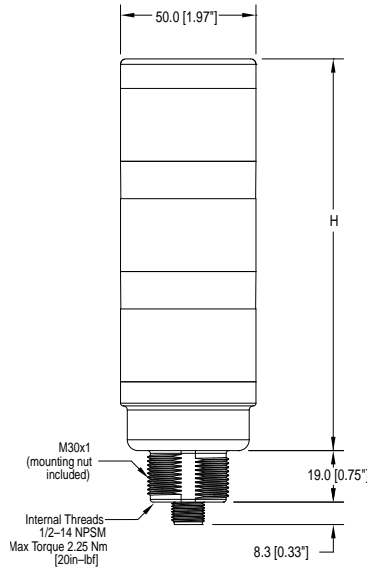
** Integral QD models are listed.

• For 150 mm PVC pigtail with QD, replace **Q** with **QP** in model number (example, **TL50HGYRQP**).
• For 2 m (6.5') cable, omit suffix **Q** from model number (example, **TL50HGYR**).
• A model with a QD requires a mating cable (see *Quick-Disconnect (QD) Cordsets* on page 4)

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

Specifications

Feature	Description
Supply Voltage and Current	18 to 30V dc (10% max. ripple); or 21 to 27V ac **Indicators:** Max. current per LED color: • @ 18V dc - 100 mA • @ 30V dc - 60 mA • @21V ac - 80 mA • @27V ac - 70 mA **Audible Alarm:** 25 mA max. current
Indicators	LEDs are independently selected: Green, Red, Yellow, or Blue; 1-4 colors depending on model
Input Response Time	**Indicator ON/OFF:** 10 ms (max.)
Audible Alarm	**Ocillation Frequency:** 2.7 KHz ± 500 Hz **Max. Intensity (typical):** 95 db @ 1 meter
Audible Adjustments	The audible intensity can be adjusted by unscrewing the cover. The cover should not be unscrewed more than one and a half turns or it may detach during operation. For max. intensity, remove the center plug by rotating it 180° counterclockwise.
Construction	**Bases and Covers:** ABS **Light Segment:** Polycarbonate
Environmental Rating	**General-Purpose:** IEC IP67 **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 are pending

Dimensions

50.0 [1.97"]

H

M30x1
(mounting nut
included)

Internal Threads
1/2–14 NPSM
Max Torque 2.25 Nm
[20in–lbf]

19.0 [0.75"]

8.3 [0.33"]

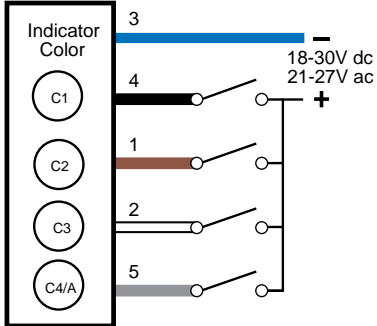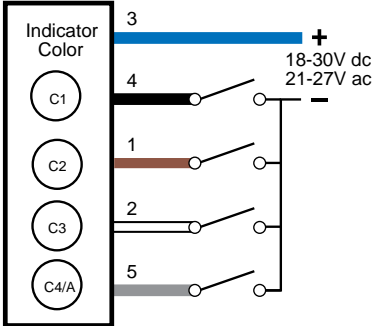|	Tower Height (H)	
Color Count	Multi-Color General-Purpose Models	Multi-Color Audible Models†
1	61.2 mm (2.4")	92.0 mm (3.6")
2	101.9 mm (4.0")	132.7 mm (5.2")
3	142.6 mm (5.6")	173.4 mm (6.8")
4	183.3 mm (7.2")	214.1 mm (8.4")

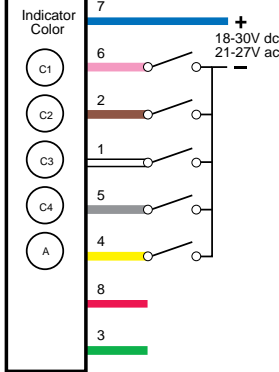† Tower Height (H) with top unscrewed approximately 3.5 mm to allow sound to escape
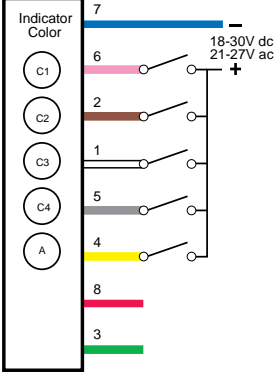
Hookups – 4-Pin Models

Sourcing (PNP) Input	Sinking (NPN) Input	Key:	
Indicator Color — C1, C2/A, C3/A — 3 — 18-30V dc 21-27V ac — 4, 1, 2 — +	Indicator Color — C1, C2/A, C3/A — 3 + — 18-30V dc 21-27V ac — 4, 1, 2 — −	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, depending on model.
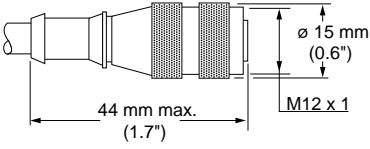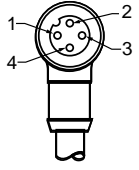
Hookups – 5-Pin Models

Sourcing (PNP) Input	Sinking (NPN) Input	Key:	
Indicator Color C1 C2 C3 C4/A 3 ▬ – 18-30V dc 21-27V ac + 4 1 2 5	Indicator Color C1 C2 C3 C4/A 3 ▬ + 18-30V dc 21-27V ac – 4 1 2 5	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, depending on model.

Hookups – 8-Pin Models

Sourcing (PNP) Input	Sinking (NPN) Input	Key:	
Indicator Color C1 C2 C3 C4 A 7 ▬ – 18-30V dc 21-27V ac + 6 2 1 5 4 8 3	Indicator Color C1 C2 C3 C4 A 7 ▬ + 18-30V dc 21-27V ac – 6 2 1 5 4 8 3	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 C5 = Color 5 A = Audible

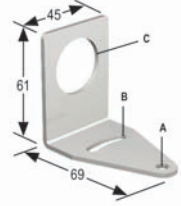Pin 4 could activate the corresponding color or the audible function, depending on model. Pins 3 and 8 are not used.

Quick-Disconnect (QD) Cordsets

4-Pin Euro-Style Cables – Single-Ended				
Style	**Model**	**Length**	**Dimensions**	**Pinout**
4-pin Euro-style straight	**MQDC-406** **MQDC-415** **MQDC-430**	2 m (6.5') 5 m (15') 9 m (30')	ø 15 mm (0.6") 44 mm max. (1.7") M12 x 1	1 2 3 4

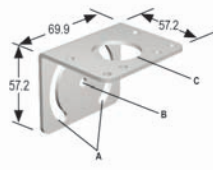| 4-Pin Euro-Style Cables – Single-Ended				
Style	Model	Length	Dimensions	Pinout
4-pin Euro-style Right-angle	**MQDC-406RA** **MQDC-415RA** **MQDC-430RA**	2 m (6.5') 5 m (15') 9 m (30')		1 = Brown 2 = White 3 = Blue 4 = Black
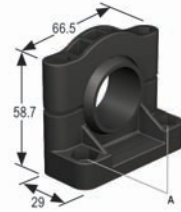
Quick-Disconnect (QD) Cordsets
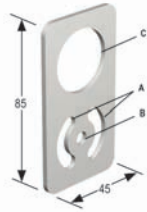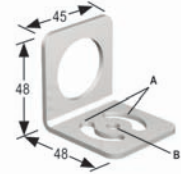
Style	Model	Length	Dimensions	Pinout
				Female
5-pin Euro-style Straight	**MQDC1-506** **MQDC1-515** **MQDC1-530**	2 m (6.5') 5 m (15') 9 m (30')		
5-pin Euro-style Right-Angle	**MQDC1-506RA** **MQDC1-515RA** **MQDC1-530RA**	2 m (6.5') 5 m (15') 9 m (30')		1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray

Quick-Disconnect (QD) Cordsets

Style	Model	Length	Dimensions	Pinout
				Female
8-pin Euro-Style straight	**MQDC2S-806** **MQDC2S-815** **MQDC2S-830**	2 m (6.5') 5 m (15') 9 m (30')		1 = White 5 = Gray 2 = Brown 6 = Pink 3 = Green 7 = Blue 4 = Yellow 8 = Red

Mounting Brackets

Model	Features	Dimensions (all measurements in mm)
SMB30A	• Right-angle bracket with curved slot for versatile orientation • Clearance for M6 (¼") hardware • 30 mm mounting hole • 12-ga. stainless steel	 **Hole center spacing:** A to B=40.0 **Hole size:** A=ø 6.3, B=27.3 x 6.3, C=ø 30.5
SMB30FA	• Swivel bracket with tilt and pan movement for precision adjustment • 30 mm mounting hole • 12-ga. 304 stainless steel	 A=3/8 - 16 x 50.8 **Hole size:** B=ø 30.1
SMB30MM	• 12-ga. stainless steel bracket with curved mounting slots for versatility and orientation • Clearance for M6 (¼") hardware • 30 mm mounting hole	 **Hole center spacing:** A=51.0, A to B=25.4 **Hole size:** A=42.6 x 7.0, B=ø 6.4, C=ø 30.1
SMB30SC	• Swivel bracket with 30 mm mounting hole • Black reinforced thermoplastic polyester • Stainless steel mounting and swivel locking hardware included	

Model	Features	Dimensions (all measurements in mm)
		Hole center spacing: A to B=50.8 **Hole size:** A=ø 7.0
SMBAMS30P	• Flat SMBAMS series bracket • 30 mm mounting hole • 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 mounting hole • Articulation slots for 90+° rotation • 12-ga. cold rolled 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

Mounting Systems - Elevated Mount

Model		Features	Mounting System	
SA-M30TE12		• Streamlined acetal stand-off pipe adapter/cover • Connects between TL50 Tower Light and ½" NPSM/DN15 pipe • Mounting hardware included		
Stainless Steel	**Aluminum**	• Elevated-use stand-off pipe (½" NPSM/DN15) • Polished 304 stainless steel or anodized aluminum surface • ½ NPT thread at both ends • Compatible with most industrial environments		
SOP-E12-150SS Length: 150 mm (6")	**SOP-E12-150A** Length: 150 mm (6")			
SOP-E12-300SS Length: 300 mm (12")	**SOP-E12-300A** Length: 300 mm (12")			
SOP-E12-900SS Length: 900 mm (36")	**SOP-E12-900A** Length: 900 mm (36")			
SA-E12M30		• Streamlined acetal mounting base adapter/cover • Connects between ½" NPSM/DN15 pipe and 30 mm (1-3/16") drilled hole • Mounting hardware included		

⚠️ **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. Consult your Banner Safety Products catalog for safety products that meet OSHA, ANSI and IEC standards for personnel protection.

BANNER®
more sensors, more solutions