EZ-LIGHT™ TL50

Convenient Tower Lights replace cumbersome stack lights

Time & energy efficient, aesthetic design easily fits onto any equipment.

The EZ-LIGHT™ TL50 Tower Lights are preassembled and preconfigured multi-segment indicators that are simple to install and provide highly visible operator guidance and indication of equipment status. With multiple LED color options and a robust housing, the TL50 replaces conventional stack lights, which require time-consuming assembly and complex wiring.

- Delivers real-time operational status indication for workers and supervisors
- Installs directly on machine quickly and easily with prewired or quick-disconnect options; no assembly required
- Features a completely self-contained design-no controller needed
- Displays up to 5 colors in a single tower; choice of green, yellow, red, blue or white LED colors
- Allows multiple lights to be on simultaneously
- Promotes high visibility from all angles
- Eliminates false indication from ambient light; indicators appear gray when off
- Provides excellent yet non-aggressive light brilliance and visibility at long distances
- Includes models with audible alert; intensity adjustable

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Versatile configurations with proven EZ-LIGHT™ performance

Robust, durable, green and Lean design

- Extremely long-lasting LED technology providing >100,000 hours (11 years) of continuous working life
- Very low power consumption of less than 2W compared to competitive units that consume up to 15W
- Aesthetic shape that sheds debris and moisture
- Robust IP67-rated, water- and oil-tight industrial housings for direct machine mounting
- Superior shock, vibration and impact resistance

Easy installation and wiring

- 30 mm threaded base for direct cabinet and panel mounting with a single drilled hole
- Standoff pipe and adapters for elevated mounting

- 1/2-14 NPSM threaded entrance for compatibility with electrical conduit fitting and gas/water pipe
- Right-angle and swivel brackets for base mounting
- 18 to 30V dc and 24V ac supply voltage in one device
- BiModal NPN or PNP, depending on hookup
- Prewired 2 m attached cable, or Euro-style integral or pigtail quick-disconnect

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BANNER®

more sensors, more solutions

EZ-LIGHT™ TL50 Tower Lights

General-Purpose, 18 to 30V dc or 24V ac

Model	Color Count	Connection*	Input	LED** Function	Data Sheet
TL50RQ	1	4-pin Euro QD	BiModal NPNor PNP	1 Color: Red	142406
TL50GRQ	2			2 Color: Green, Red	
TL50GYRQ	3			3 Color: Green, Yellow, Red	
TL50BGYRQ	4	5-pin Euro QD		4 Color: Blue, Green, Yellow, Red	
TL50WBGYRQ	5	8-pin Euro QD		5 Color: White, Blue, Green, Yellow, Red	

Audible, 18 to 30V dc or 24V ac

Model	Color Count	Connection*	Input	LED** Function	Data Sheet
TL50RAQ	1	4-pin Euro QD	BiModal NPNor PNP	1 Color: Red	142406
TL50GRAQ	2			2 Color: Green, Red	
TL50GYRAQ	3	5-pin Euro QD		3 Color: Green, Yellow, Red	
TL50BGYRAQ	4	8-pin Euro QD		4 Color: Blue, Green, Yellow, Red	

* Integral QD models are listed. For 150 mm PVC pigtail with QD, replace Qwith QP in model number (example, **TL50GYRQP).** For 2 m cable, omit suffix Q from model number (example, **TL50GYR).** Contact factory for other connector and cable options. A model with a QD requires a mating cordset (see page 4).

** Use model guide to create other color combinations.

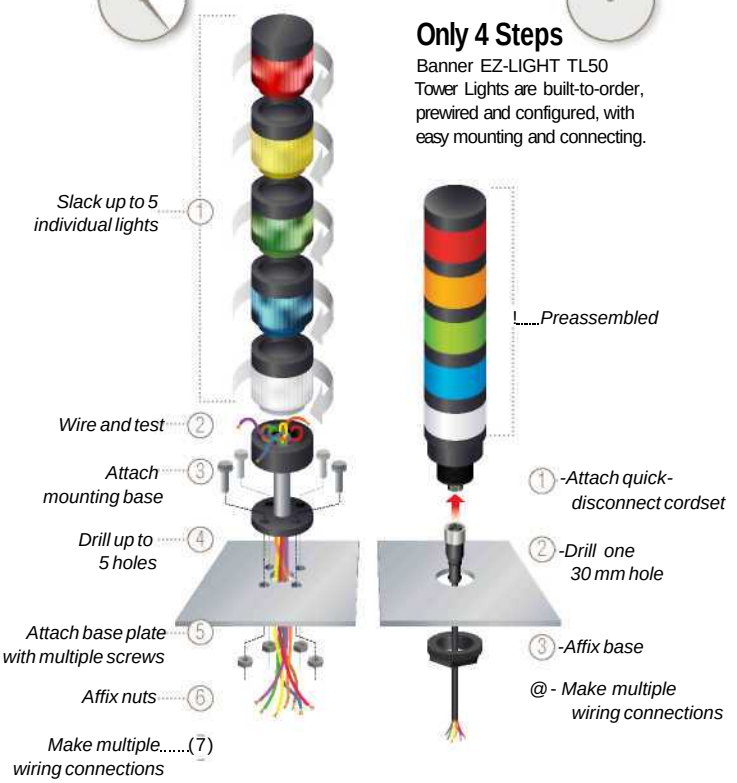
Simple Installation Compared to Competitive Solutions

Up To 7 Steps

Stack lights require tedious assembly, complex wiring and time-consuming mounting.

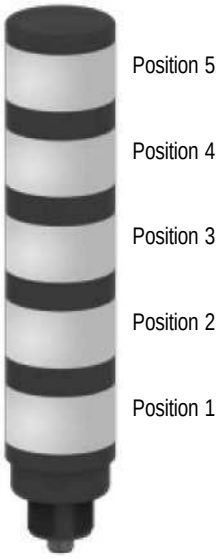
Only 4 Steps

Banner EZ-LIGHT TL50 Tower Lights are built-to-order, prewired and configured, with easy mounting and connecting.



Color Options

Position

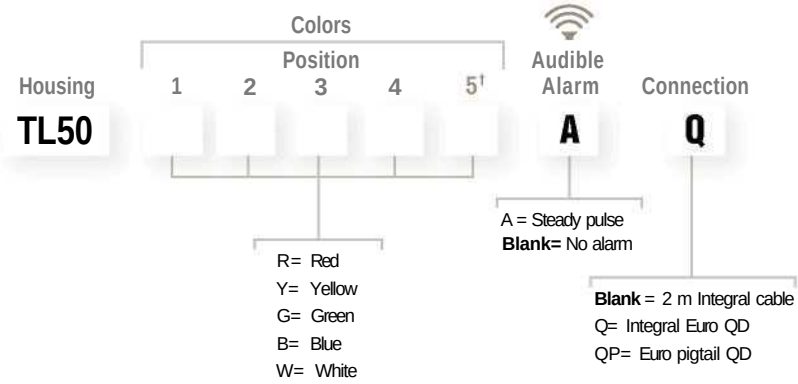


Specify the position of each color and Banner will assemble it.

How to Order Special Configurations

The models shown above use the standard sequence of colors: red at the top, followed by yellow, green, blue and white. If a special sequence is required, use the model numbering matrix shown below.

- Choose the number of indicators (up to five), colors and color position for your application
- Select audible alarm or no alarmt
- Select integral cable, Euro-style QD, Euro-style pigtail QD connector or PUR pigtail QD
- Select cordset and mounting accessories



15-color models are not available with audible indication

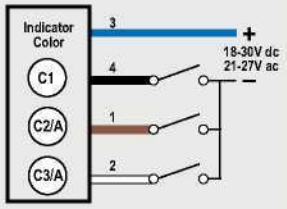
Note: *For reference only; confirm model number with Banner as some configurations may not be available.*

More information online at **bannerengineering.com**

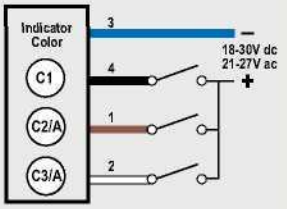
Hookup Diagrams

4-Pin Models

Sinking Input



Sourcing Input

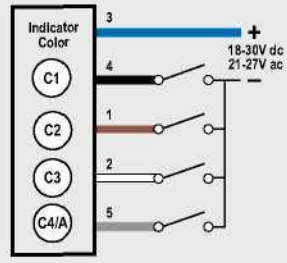


Key
1 = Brown
2 = White
3 = Blue
4 = Black

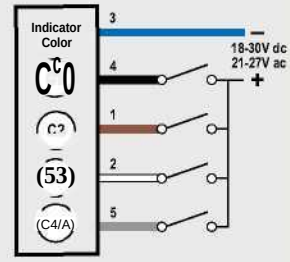
Pins 1 and 2 can activate the corresponding color or the audible function, depending on model.

5-Pin Models

Sinking Input



Sourcing Input

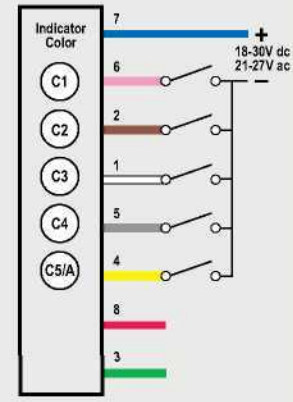


Key
1 = Brown
2 = White
3 = Blue
4 = Black
5 = Gray

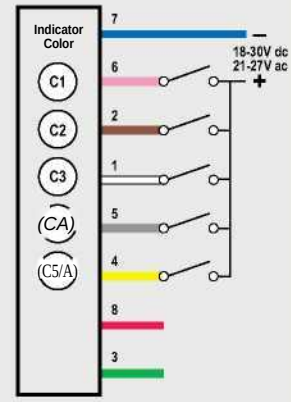
Pin 5 can activate the corresponding color or the audible function, depending on model.

8-Pin Models

Sinking Input



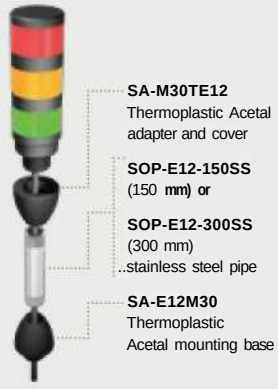
Sourcing Input



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

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

Elevated Use—Standoff Pipe, Extensions and Brackets



SA-M30TE12
Thermoplastic Acetal adapter and cover

SOP-E12-150SS
(150 **mm) or**

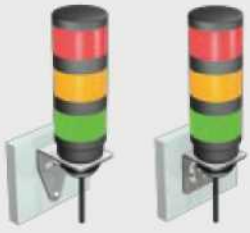
SOP-E12-300SS
(300 mm)
..stainless steel pipe

SA-E12M30
Thermoplastic Acetal mounting base

SMBE12USS
Stainless steel bracket for wall or other flat surfaces

Brackets

Right-Angle



SMB30A **SMBAMS30RA**

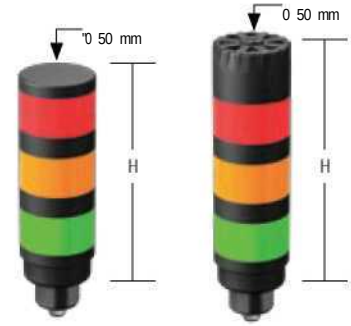
Flat

SMBAMS30P

Swivel

SMB30SC **SMB30FA**

Dimensions

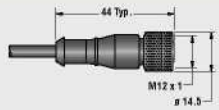
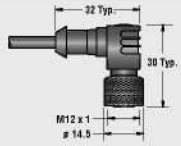
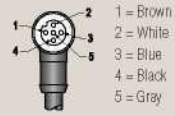
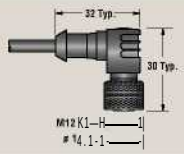
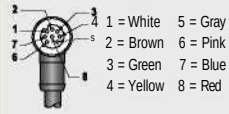


General-Purpose *Audible*

Color Count	Tower Height (H)	
	General-Purpose	Audiblet
1	61.2 mm	92.0 mm
2	101.9 mm	132.7 mm
3	142.6 mm	173.4 mm
4	183.3 mm	214.1 mm
5	224.0 mm	—

t Tower Height (H) with top unscrewed approximately 3.5 mm to allow sound to escape.

Quick-Disconnect (QD) Cordsets

Style	Model	Length	Dimensions	Female Pinout
4-pin Euro-style, straight	**MQDC-406**	**2m**		 1 = Brown 2 = White 3 = Blue 4 = Black
	MQDC-415	**5** m		
	MQDC-430	9 m		
4-pin Euro-style, right-angle	**MQDC-406RA**	**2m**		
	MQDC-415RA	**5** m		
	MQDC-430RA	**9m**		
5-pin Euro-style, straight	**MQDC1-506**	**2m**		 1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
	MQDC1-515	**5** m		
	MQDC1-530	9 m		
5-pin Euro-style, right-angle	**MQDC1-506RA**	**2m**		
	MQDC1-515RA	**5** m		
	MQDC1-530RA	**9m**		
8-pin Euro-style, straight	**MQDC2S-806**	2m		 1 = White 5 = Gray 2 = Brown 6 = Pink 3 = Green 7 = Blue 4 = Yellow 8 = Red
	MQDC2S-815	5 m		
	MQDC2S-830	9 m		

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 milliseconds
Oscillation Frequency (Audible only)	2.7KHz±50Hz **Max. intensity:** 95 db @ 1 m
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 IP67 **Audible:** IEC IP50
Connections	2 m integral cable, or 4-pin, 5-pin or 8-pin Euro-style integral QD (Q) or 150 mm PVC pigtail with QD (QP), depending on model. QD cordsets are ordered separately.
Operating Temperature	**General-Purpose: -40°** to +50° **C Audible: -20°** to +50° **C**

Online Learning

Online Training & Tutorials

A complete resource for tutorials, product questions and answers—and the mechanics and theory behind sensor technology available online at www.bannerengineering.com

Q: What is the difference between a tower light and a stack light?

Q: I have a broken stack light on my machine. Should I replace it with a tower light?

Q: How often does the tower light require service?

Q: Can I choose my own color sequence?

Q: How visible will these lights be on a factory floor or in a retail space?

Q: The operator has to move out of his work area to see the tower indicator. Do you have other suggestions?

Q: How is this tower stack different from other Banner indicator lights?

Q: For our 'green initiatives,' how do the power requirements compare with other lights?

Q: Are models available with special connectors andpinouts?

Go online for answers to these questions or to pose your own!

EZ-LIGHT™: A complete offering of visual indication products

Smart **General-Purpose** indicators displaying up to five colors in one device

Multi-Function indicators displaying up to five colors with solid, flashing or sequenced flashing cycles

Sensor Emulator indicators displaying sensor status where sensor visibility is limited

Segmented indicators delivering simultaneous one, two, three or four color display for multiple status updates

Daylight Visible indicators generating intense levels of light output for outdoor applications or areas of high ambient light

Audible indicators combining visible light indication with audio alerts

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