TL70 Modular Tower Light



Quick Start Guide

This guide is designed to help you set up and install the TL70 Modular Tower Light. For complete information on programming, performance, troubleshooting, dimensions, and accessories, please refer to the Instruction Manual at www.bannerengineering.com. Search for p/n 182214 to view the Instruction Manual. Use of this document assumes familiarity with pertinent industry standards and practices.

Configuring the Modules



Turn on the appropriate DIP switch to set the order of the components, counting up from the tower light's base.

	Module 6
îq	Module 5
î.ą	Module 4
ą	Module 3
<u> </u>	Module 2
q	Module 1
	Base

Assembly Options						DIP	Switches			
Assembly	/ Options		1	2	3	4	5	6	7	8
	Module 1		ON							
	Module 2			ON						
Light and Standard Audible	Module 3				ON					
Components	Module 4					ON				
	Module 5						ON			
	Module 6							ON		
	3 Hz								ON	OFF
Light Module Flash Rate	1.5 Hz								ON	ON
nate	Solid On*								OFF	OFF
	Pulse 1.5 Hz	<u>.</u>							ON	OFF
Standard Audible	Chirp Alarm								ON	ON
Module Settings	Siren Alarm								OFF	ON
	Continuous Ala	rm*							OFF	OFF
			, in the second s						* 	
Assembly Or	otions	DIP Switches								
, addition of						8 9	10			

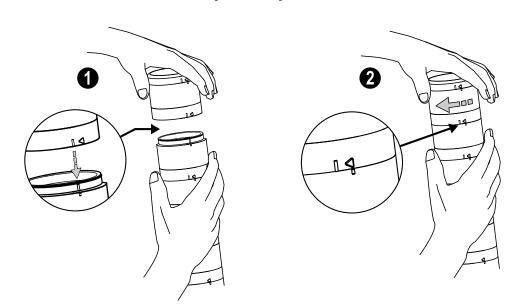
Assembly					DIP S	witches					
Assembly	Opuons	1	2	3	4	5	6	7	8	9	10
	Pulse 1.5 Hz							ON	OFF		
	Chirp Alarm							ON	ON		
	Siren Alarm							OFF	ON		
Loud Audible	Continuous Alarm*							OFF	OFF		
Module Settings	Low Intensity*									OFF	OFF
	Med. Intensity									ON	OFF
	Med./Loud Intensity									OFF	ON
	Loud Intensity									ON	ON

* Factory default setting



Assembling the Modules

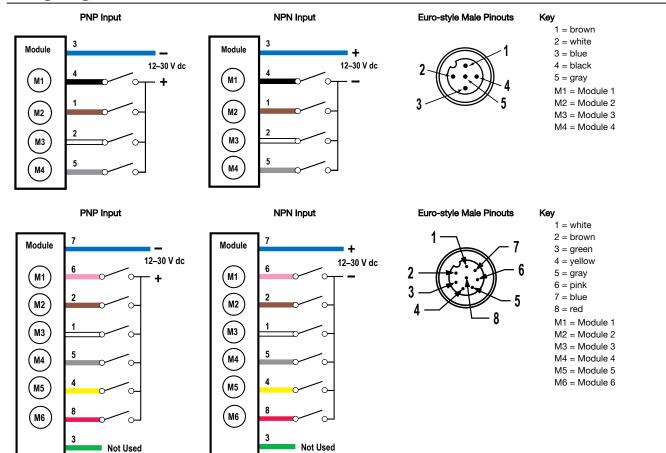
Figure 1. Assembling the modules



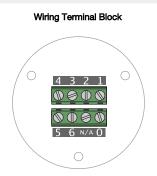
To assemble the modules:

- Align the notches on each module and press together.
 Rotate the top module clockwise to lock into place (notches shown in the locked position).

Wiring Diagrams



Note: Models SG-TL70-ALM and SG-TL70-ALMC are not compatible with NPN input wiring.



Terminal Block Key 0 = dc common

•				
1	=	Mc	dule	1
2	=	Mc	dule	2
2	_	Mc	dula	3

- 3
- 4 = Module 4
- 5 = Module 5
- 6 = Module 6

Specifications

Supply Voltage and Current 12 V DC to 30 V DC

Indicator Color or Audible Model	Maximum Current (mA)				
Indicator Color or Audible Model	at 12 V DC	at 24 V DC	at 30 V DC		
Blue, Green, White	420	200	150		
Red, Yellow, Orange	285	145	120		
Standard Audible	30	30	30		
Loud Audible (Intensity 1)	30	28	25		
Loud Audible (Intensity 2)	50	45	40		
Loud Audible (Intensity 3)	165	90	75		
Loud Audible (Intensity 4)	350	160	120		
Programmable Audible	290	140	125		

Supply Protection Circuitry Protected against transient voltages

Indicators

1 to 6 colors depending on model (Green, Red, Yellow, Blue, White, and Orange) LEDs are independently selected **Flash Rates:** 1.5 Hz \pm 10% and 3 Hz \pm 10%

Indicator Response Time Off Response: 150 µs (maximum) at 12 V DC to 30 V DC On Response: 180 ms (maximum) at 12 V DC; 50 ms (maximum) at 30 V DC

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Color Co	ordinates ¹	Lumen Output (Typical at	
	Color Temperature (CCT)		У	25 °C)	
Green	525 nm	-	-	92	
Red	625 nm	-	-	40	
Yellow	590 nm	-	-	22	
Blue	470 nm	-	-	32	
White	5000 K	-	-	125	
Orange	-	0.66	0.33	33	

Connections 5-pin M12 quick disconnect connector, 8-pin M12 quick disconnect connector, 150 mm (5.9 in) PVC cable with an M12 quick disconnect connector, terminal block, or 2 m (6.5 ft) unterminated cable, depending on model

Terminal Block Models

14 to 28 AWG wire

Operating Conditions -40 °C to +50 °C (-40 °F to +122 °F) 95% at +50 °C maximum relative humidity (non-condensing)

Environmental Rating IP65

Certifications

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

Turck Banner LTD Blenheim House. Blenheim Court, Wickford, Esse SS11 8YT, Great Britain

Audible Alarm

Standard Audible: 2.6 kHz ± 250 Hz oscillation frequency; maximum intensity (typical) 98 dB at 1 m (3.3 ft) Loud Audible: 2.6 kHz ± 250 Hz oscillation frequency; maximum intensity (typical) at 1

m (3.3 ft) (see table)

DIP S	witches	Maximum Intensity (typical) at 1 meter dB
9	10	
ON	ON	Intensity 4: 109 dB
OFF	ON	Intensity 3: 106 dB
ON	OFF	Intensity 2: 101 dB
OFF	OFF	Intensity 1: 94 dB

Audible Adjustment

Standard Audible: Rotate the cover until the desired volume is reached Loud Audible Alarm: Select the desired volume using DIP switches 9 and 10 Typical Reduction in Sound Intensity with Audible Adjustment (maximum to minimum):

Standard Audible: 8 dB Loud Audible: 15 dB •

Construction

Bases, Segments, Covers: polycarbonate

Vibration and Mechanical Shock Vibration: 10 Hz to 55 Hz, 0.5 mm peak-to-peak amplitude per IEC 60068-2-6 Shock: 15G 11 ms duration, half sine wave per IEC 60068-2-27 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 (Amps)
20	5.0
22	3.0
24	2.0
26	1.0
28	0.8
30	0.5

1 Refer to CIE 1931 chromaticity diagram or color chart, to show equivalent color with indicated color coordinates.

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