

Overview

Models	Housing	Colors	Housing Color
SG-TL70-RGB14	TL70 Segment	RGB14	Black
SG-TL70-RGB14C			Gray

For more information regarding TL70 Multicolor RGB Tower Light final assemblies, including wiring diagrams, refer to the following documents:

- TL70 Modular Tower Light datasheet (p/n 182214)
- TL70 Wireless Modular Tower Light datasheet (p/n 185469)
- TL70 Modular Tower Light AC voltage datasheet (p/n 191349)

Configuring the Module

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

Assembly Options		Black DIP Switch							
		1B	2B	3B	4B	5B	6B	7B	8B
Color Selection	Red								ON
	Green							ON	
	Yellow						ON	ON	
	Blue					ON			
	Magenta					ON		ON	
	Cyan					ON	ON		
	White					ON	ON	ON	
	Amber				ON				
	Rose			ON				ON	
	Lime Green				ON		ON		
	Orange				ON			ON	ON
	Sky Blue				ON	ON			
	Violet				ON	ON			ON
	Spring Green				ON	ON	ON		
	Color Demo								
	Flash Demo				ON	ON	ON	ON	
Flashing and Strobing	Solid On								
	0.5 Hz Flash				ON				
	1.5 Hz Flash		ON						
	3.0 Hz Flash		ON	ON					
	0.5 Hz Strobe	ON							
	1.5 Hz Strobe	ON			ON				
	3.0 Hz Strobe	ON	ON						
	Intensity Sweep	ON	ON	ON					
Intensity	High								
	Low	ON							
Assembly Options		White DIP Switches							
		1	2	3	4	5	6		
Position	Module 1	ON							
	Module 2		ON						
	Module 3			ON					
	Module 4				ON				
	Module 5					ON			

Continued on page 2

Continued from page 1

Assembly Options	White DIP Switches					
	1	2	3	4	5	6
Module 6						ON

Specifications

Supply Voltage and Current

12 V DC to 30 V DC
 Maximum current in high intensity mode: 350 mA max. at 12 V DC; 170 mA typical at 24 V DC
 Maximum current in low intensity mode: 140 mA max. at 12 V DC; 70 mA typical at 24 V DC

Supply Protection Circuitry

Protected against transient voltages

Indicator Response Time

Off Response: 150 μ s (maximum) at 12 V DC to 30 V DC
 On Response: 40 ms (maximum) at 12 V DC; 50 ms (maximum) at 30 V DC

Indicator Characteristics

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Color Coordinates ⁽¹⁾		Lumen Output (Typical at 25 °C)
		x	y	
Red	622	0.694	0.304	27.4
Green	527	0.177	0.707	69
Yellow	575	0.456	0.489	46.6
Blue	472	0.128	0.08	17.4
Magenta	–	0.371	0.176	24
Cyan	493	0.161	0.347	49.5
White	5600 K	0.31	0.335	40.9
Amber	589	0.542	0.422	39.9
Rose	–	0.497	0.226	26.6
Lime Green	561	0.369	0.556	53.8
Orange	600	0.606	0.372	35.5
Sky Blue	486	0.146	0.251	41.7
Violet	–	0.222	0.117	21.3
Spring Green	508	0.166	0.531	62.4

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

Required Overcurrent Protection



WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Certifications



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



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 (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	2.0	30	0.5

Construction

Bases, segments, covers: polycarbonate

Leakage Current Immunity

550 μ A

Operating Conditions

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

Environmental Rating

IP65

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

Banner Engineering Corp Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. **IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.**

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp. will void the product warranties. All specifications published in this document are subject to change. Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to: www.bannerengineering.com.

For patent information, see www.bannerengineering.com/patents.