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TL70 Multicolor RGB Tower Light Module

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	

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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 µs (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.

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 µA

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

Certifications

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

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