# 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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Original Instructions
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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**

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1831 Diegem, BELGIUM

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