## Tower Lights

Banner's Tower Lights are designed to be exceptionally bright with a long, visible indication range, providing excellent operational status for workers and supervisors. Several models are available for use in a variety of environments, including options with audible alerts.

| Series | Description | Number of Segments | Brightness | Dimensions | Power Supply | Communication |
|---|---|---|---|---|---|---|
|  | **TL70**<br>Designed to be exceptionally bright with a long, visible indication range, providing excellent operational status for workers and supervisors.<br>page 414 | 1 to 6 | High-Brightness | 30 mm base<br>Height varies by model | DC or AC models available | Wireless option |
|  | **TL50**<br>Designed to be exceptionally bright with a long, visible indication range, providing excellent operational status for workers and supervisors.<br>page 418 | 1 to 7 | Standard or High-Brightness | 30 mm base<br>Height varies by model | DC or AC models available | IO-Link option |
|  | **TL50C**<br>Compact design makes them ideal for status indication on small to mid-size pieces of equipment.<br>page 422 | 1 to 7 | Standard | 30 mm base<br>Height varies by model | DC or AC models available | NA |
|  | **TL50BL**<br>Extremely rugged and built for use in the toughest industrial environments. With a sleek and stylish design, the TL50 Beacon's housing is UV stabilized, making it suitable for use in outdoor environments.<br>page 426 | 1 to 5 | Daylight Visible | 30 mm base<br>Height varies by model | DC or AC models available | NA |
|  | **CL50**<br>Illumination provides easy-to-see operator guidance and equipment status indication for workers and supervisors.<br>page 430 | 1 | Standard | 30 mm base<br>Height varies by model | DC or AC models available | NA |

# TL70 Series

## Tower Lights

- Light segments have user-selectable solid ON or flashing
- Up to light segments (six color options) or five segments plus an audible in one device
- Rugged, water-resistant IP65 housing with UV stabilized material
- Bright, uniform indicator segments appear gray when off to eliminate false indication from ambient light
- Cordsets and brackets see page 432

LASER MARKING AVAILABLE

### Preassembled TL70 DC Tower Lights

| Housing | Color/Position 1 | 2 | 3 | 4 | 5 | 6 | Audible Alarm | Housing Color | Connection |
|---|---|---|---|---|---|---|---|---|---|
| TL70 | G | R | Y | B | W | O | | | Q |

**Color/Position:** G = Green, Y = Yellow, R = Red, B = Blue, W = White, O = Orange, **Blank** = None

**Audible Alarm:** **Blank** = None; **A** = Audible (92 dB); **AL** = Louder Audible (85 -101 dB); **AP** = Programmable Audible

**Housing Color:** **Blank** = Black; **C** = Gray

**Connection:** **Blank** = 2 m Integral Cable; **T** = Terminal Wired; **Q** = Euro Integral QD; **QP** = Euro Pigtail QD

### Build Your Own TL70 DC Tower Lights

| Housing | Connection | | Housing Color |
|---|---|---|---|
| B-TL70 | – | Q5 | |

**Base Segment**

**Connection:** **5** = 2 m, 5-wire Integral Cable; **8** = 2 m, 8-wire Integral Cable; **T** = Terminal; **Q5** = 5-pin Euro Integral QD (1-4 modules); **Q8** = 8-pin Euro Integral QD (5-6 modules); **QP5** = 5-pin Euro Pigtail QD (1-4 modules); **QP8** = 8-pin Euro Pigtail QD (5-6 modules)

**Housing Color:** **Blank** = Black; **C** = Gray

| Housing | | Color/Alarm | Housing Color |
|---|---|---|---|
| SG-TL70 | – | G | |

**Single-Color Light Segment**

**Color:** G = Green, Y = Yellow, R = Red, B = Blue, W = White, O = Orange

**Alarm:** **A** = Audible (92 dB); **AL** = Louder Audible (85 -101 dB); **ALM** = Multi-Tone Audible (75 - 101 dB); **AP** = Programmable Audible

**Housing Color:** **Blank** = Black; **C** = Gray

| Housing | | Color 1 | 2 | 3 | Housing Color |
|---|---|---|---|---|---|
| SG-TL70 | – | G | R | Y | |

**Multicolor Light Segment**

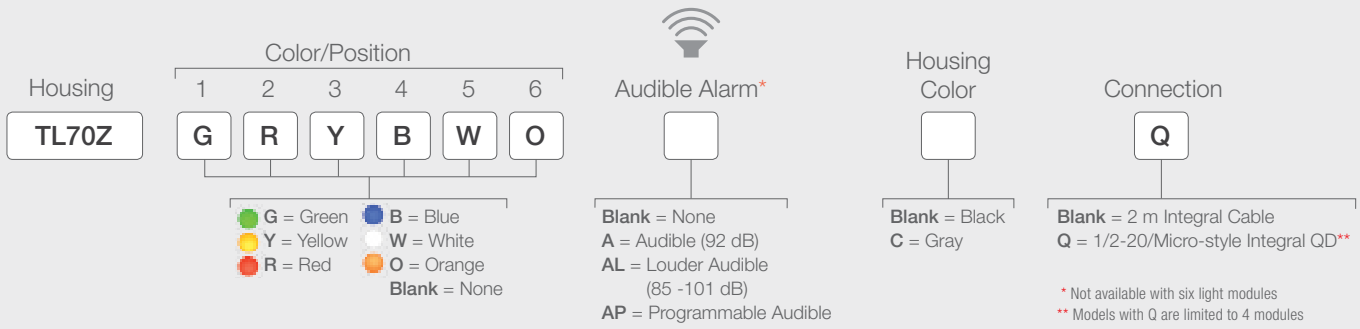
**Color:** G = Green, Y = Yellow, R = Red, B = Blue, W = White, O = Orange

**Housing Color:** **Blank** = Black; **C** = Gray

For more specifications see page 417.

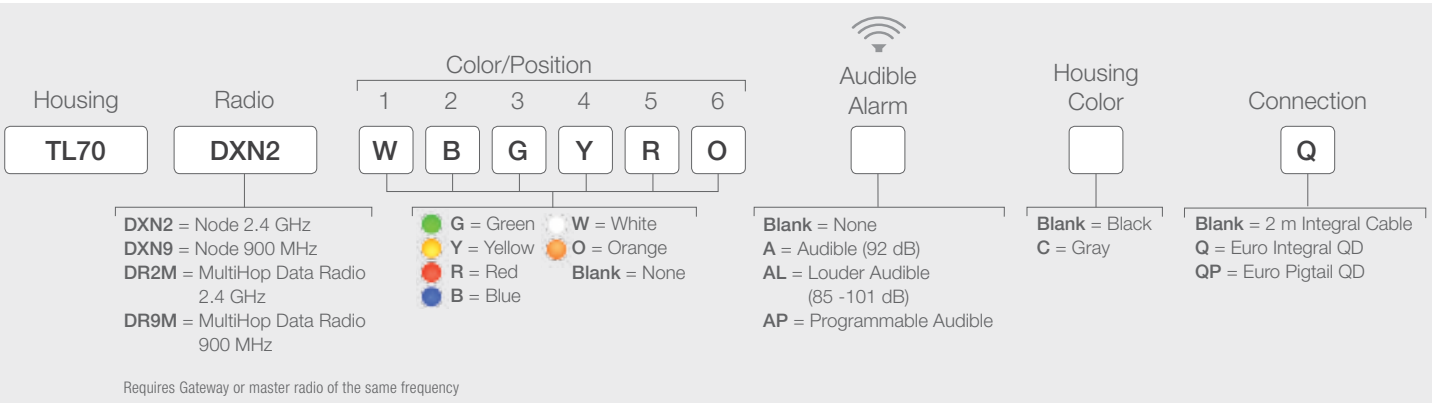
**Connection options:** A model with a QD requires a mating cordset (see page 432).

## Preassembled TL70 AC Tower Lights

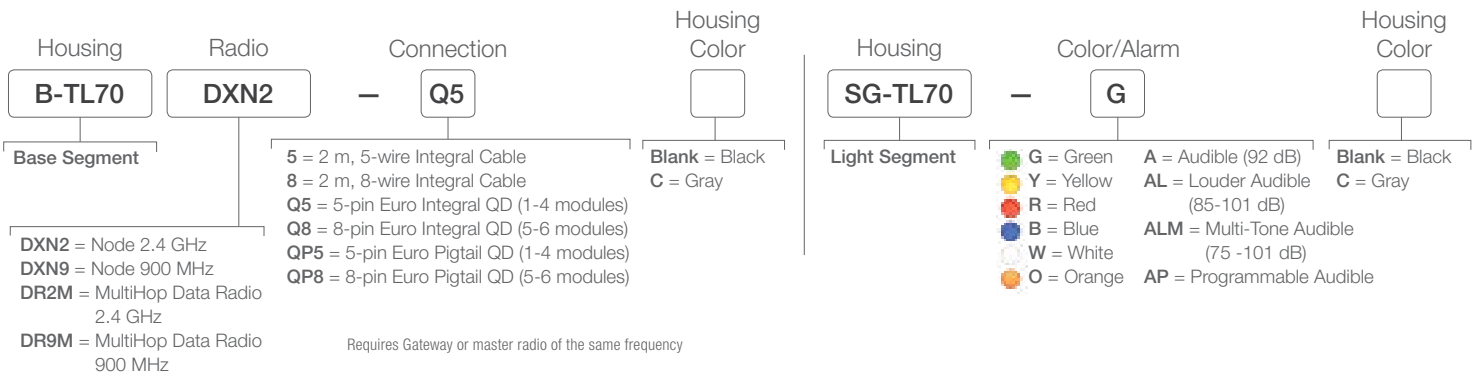



## Build Your Own TL70 AC Tower Lights


## Preassembled TL70 Wireless Tower Lights




## Build Your Own TL70 Wireless Tower Lights




For more specifications see page 417.

**Connection options:** A model with a QD requires a mating cordset (see page 432).

# Building a Tower Light

www.bannerengineering.com/towerlights

## 1 Choose Type

Standard dc, Wireless, or ac

## 2 Audible or No Audible

Sealed Omni-Directional Audible

## 3 Number of Lighting Segments

Position 6 (Light or Audible)

Position 5

Position 4

Position 3

Position 2

Position 1

Base

## 4 Connections

Integral QD | Euro Pigtail | Integral Cable | Terminal Wired

## 5 Housing Color


## TL70

| Color Count | AC Tower Height (H) | AC Tower Height with Audible (H) | DC Tower Height (H) | DC Tower Height with Audible (H) |
|---|---|---|---|---|
| 1 | 155.6 mm | 212.3 mm | 87.6 mm | 144.3 mm |
| 2 | 205.3 mm | 262.0 mm | 137.3 mm | 194.0 mm |
| 3 | 255.0 mm | 311.7 mm | 187.0 mm | 243.7 mm |
| 4 | 304.7 mm | 361.4 mm | 236.7 mm | 293.4 mm |
| 5 | 354.4 mm | 411.1 mm | 286.4 mm | 343.1 mm |
| 6 | 404.1 mm | NA | 336.1 mm | NA |

## TL70 Specifications

| | | |
|---|---|---|
| **Supply Voltage and Current** | 12 to 30 V dc<br>**Indicators—Maximum current per LED color:**<br>**Blue, Green, White:** 420 mA at 12 V dc; 145 mA at 30 V dc<br>**Red, Yellow, Orange:** 285 mA at 12 V dc; 120 mA at 30 V dc<br>**Audible:**<br>**Standard:** 30 mA at 12 to 30 V dc<br>**Loud:** 350 mA at 12 V dc; 110 mA at 30 V dc<br>**Multitone:** 270 mA at 12 V dc; 110 mA at 30 V dc<br>**Programmable:** 250 mA at 12 V dc; 110 mA at 30 V dc | 100 to 240 V ac; 50/60 Hz<br>**Maximum current per color or audible module:**<br>70 mA at 120 V ac and 60 Hz<br>50 mA at 230 V ac and 50 Hz |
| **Supply Protection Circuity** | Protected against reverse polarity and transient voltages | |
| **Indicator Response Time** | **DC models:**<br>**OFF Response:** 150 µs (maximum) at 12 to 30 V dc<br>**ON Response:** 180 ms (maximum) at 12 V dc;<br>50 ms (maximum) at 30 V dc | **AC models:**<br>**OFF Response:** 150 µs (maximum) at 12 to 30 V dc<br>**ON Response:** 180 ms (maximum) at 12 V dc;<br>50 ms (maximum) at 30 V dc |
| **Audible Alarm** | 2.6 KHz ± 250 Hz oscillation frequency; maximum intensity 92 dB at 1 m (3.3 ft) (typical) | |
| **Audible Adjustments** | Rotate the cover until the desired volume is reached<br>Change in sound intensity from fully open to fully closed is 8 dB | |
| **Radio Range*** (Wireless Models) | **900 MHz, 1 Watt (Internal antenna):** Up to 3.2 km (2 miles)<br>**2.4 GHz, 65 mW (Internal antenna):** Up to 1000 m (3280 ft) with line of sight | |
| **Minimum Separation Distance** (Wireless Models) | **900 MHz, 1 Watt:** 4.57 m (15 ft)<br>**2.4 GHz, 65 mW:** 0.3 m (1 ft) | |
| **Construction** | **Bases, segments and Covers:** Polycarbonate | |
| **Environmental Rating** | IEC IP65 | |
| **Operating Conditions** | –40 to +50 °C<br>**Relative Humidity:** 95% @ 50 °C (non-condensing)<br>**Storage Temperature:** –40 to +70 °C | |
| **Certifications** | CE UL LISTED | |

* Radio range significantly decreases without line of sight. Always verify your wireless network's range by running a site survey.