# WLS15 LED Strip Light Quick Start Guide

## Features

This guide is designed to help you set up and install the WLS15 LED Strip Light. For complete information on programming, performance, troubleshooting, dimensions, and accessories, please refer to the Product Manual at www.bannerengineering.com. Search for part number 197493 to view the Product Manual. Use of this document assumes familiarity with pertinent industry standards and practices.



For PWM dimming, use with the LC65P2T 2-wire dimmer module. For more information, refer to the LC65 LED Dimmer Module datasheet, p/n 177086. This module can only be used with the single color models.

**IMPORTANT:** Read the following instructions before operating the light. Please download the complete WLS15 LED Strip Light technical documentation, available in multiple languages, from www.bannerengineering.com for details on the proper use, applications, Warnings, and installation instructions of this device.

**IMPORTANT:** Lea el siguiente instructivo antes de operar el luminario. Por favor descargue desde www.bannerengineering.com toda la documentación técnica de los WLS15 LED Strip Light, disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.

**IMPORTANT:** Lisez les instructions suivantes avant d'utiliser le luminaire. Veuillez télécharger la documentation technique complète des WLS15 LED Strip Light sur notre site www.bannerengineering.com pour les détails sur leur utilisation correcte, les applications, les notes de sécurité et les instructions de montage.

### Single Color Models

*Model Key*

| Family | Cascadable | Color | Length | Window | Construction | Connector[1] |
|---|---|---|---|---|---|---|
| **WLS15** | **C** | **DW** | **0360** | **D** | **S** | **C2** |
| | C = Cascadable<br>X = Non-cascadable | DW = Daylight white<br>WW = Warm white | 0220 mm (6 in)<br>0360 mm (1 ft)<br>0500 mm (1.5 ft)<br>0640 mm (2 ft)<br>0920 mm (3 ft)<br>1200 mm (4 ft) | D = Diffuse | S = Sealed (IP66, IP67) | C2 = 2 m (6.5 ft) integral PVC cable<br>C4 = 4 m (13 ft) integral PVC cable<br>C5 = 5 m (16.4 ft) integral PVC cable<br>C30 = 9 m (30 ft) integral PVC cable<br>QP = 150 mm (5.9 in) PVC cable with M12 quick-disconnect connector<br>QS = 150 mm (5.9 in) PVC cable with Deutsch DTM connector |

### Dual Color Models

*Model Key*

| Family | Cascadable | Color 1 | Color 2 | Length | Window | Construction | Connector[2] |
|---|---|---|---|---|---|---|---|
| **WLS15** | **C** | **W** | **R** | **0360** | **D** | **S** | **C2** |
| | C = Cascadable<br>X = Non-cascadable | W = Daylight white<br>B = Blue<br>G = Green<br>R = Red<br>Y = Yellow<br>A = Amber | | 0220 mm (6 in)<br>0360 mm (1 ft)<br>0500 mm (1.5 ft)<br>0640 mm (2 ft)<br>0920 mm (3 ft)<br>1200 mm (4 ft) | D = Diffuse | S = Sealed (IP66, IP67) | C2 = 2 m (6.5 ft) integral PVC cable<br>C4 = 4 m (13 ft) integral PVC cable<br>C5 = 5 m (16.4 ft) integral PVC cable<br>C30 = 9 m (30 ft) integral PVC cable<br>QP = 150 mm (5.9 in) PVC cable with M12 quick-disconnect connector<br>QS = 150 mm (5.9 in) PVC cable with Deutsch DTM connector |

[1] Models with a quick-disconnect or Deutsch DTM connector require a mating cordset.
[2] Models with a quick-disconnect connector require a mating cordset.

Original Instructions
06-May-25

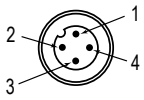
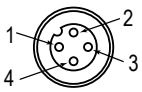
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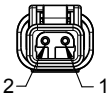
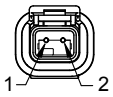
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## Wiring Diagrams

**QP Models**

| Male | Female | Pin | Wire Color | Single Color Models | Dual Color Models |
|---|---|---|---|---|---|
|   |   | 1 | brown | 12 V DC or 24 V DC | Color 1: 12 V DC or 24 V DC |
| | | 3 | blue | DC common | DC common |
| | | 4 | black | Not used | Color 2: 12 V DC or 24 V DC (color 2 overrides color 1) |
| | | 2 | white | Not used | Not used |

**QS Models: Single Color Models Only**

| Male | Female | Pin | Wire Color | Connection |
|---|---|---|---|---|
|   |   | 1 | brown | 12 V DC or 24 V DC |
| | | 2 | blue | DC common |

## Specifications

**Supply Protection Circuitry**

Protected against reverse polarity and transient voltages

**Supply Voltage**

12 V DC or 24 V DC nominal

Absolute operational limits of 10 V DC to 15 V DC and 20 V DC to 27 V DC

Use only with a suitable Class 2 power supply (UL) or a SELV power supply (CE)

Single Color Light Models can be PWM dimmed between 25% to 100% with a frequency up to 1000 Hz

See electrical characteristics on the product's label

**Supply Current**

| Light Length | Typical Current (A) at 25°C [3] | | Max. Current (A) at -40°C | |
|---|---|---|---|---|
| | 12 V DC | 24 V DC | 12 V DC | 24 V DC |
| 0220 mm | 0.19 | 0.10 | 0.24 | 0.12 |
| 0360 mm | 0.38 | 0.20 | 0.48 | 0.24 |
| 0500 mm | 0.57 | 0.30 | 0.72 | 0.36 |
| 0640 mm | 0.76 | 0.40 | 0.96 | 0.48 |
| 0920 mm | 1.14 | 0.60 | 1.44 | 0.72 |
| 1200 mm | 1.52 | 0.80 | 1.92 | 0.96 |

**Connections**

2 m (6.5 ft) integral PVC-jacketed cable, 150 mm (6 in) PVC-jacketed cable with a 4-pin M12 male quick-disconnect connector, or 150 mm (5.9 in) 2-pin Deutsch DTM series sealed cable; models with a quick disconnect or Deutsch DTM connector require a mating cordset

Do not spray the cable with a high-pressure sprayer or cable damage will result.

[3] Typical current values are shown at 25 °C – current and lumen values decrease 0.4% per 1 °C from ambient. For example, a 1200 mm unit will have a maximum current of 1.92 A at -40 °C and 1.33 A at +60 °C.

**Mounting**

Integral mounting slots for M4 (#8) screws, tighten to 5 in·lbf max torque

Multiple bracket options available

Secure cables within 150 mm (5.9 inches) of the light

**Construction**

Clear anodized aluminum housing; Polycarbonate outer housing, Polyamide end caps

**Environmental Rating**

Rated IP66 and IP67

Suitable for wet locations per UL 2108

**Vibration and Mechanical Shock**

Vibration: 10 Hz to 55 Hz, 1.0 mm peak-to-peak amplitude per IEC 60068-2-6

Shock: 15G 11 ms duration, half sine wave per IEC 60068-2-27

**Operating Temperature**

–40 °C to +60 °C (–40 °F to +140 °F)

95% at +60 °C maximum relative humidity (non-condensing)

**Storage Temperature**

–40 °C to +70 °C (–40 °F to +158 °F)

**Application Note**

When connecting cascadable lights in series, it is important not to exceed maximum current limitations:

- Maximum length of light at 12 V DC: 2.4 m (7.9 ft)
- Maximum length of light at 24 V DC: 6 m (19.7 ft)

**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.

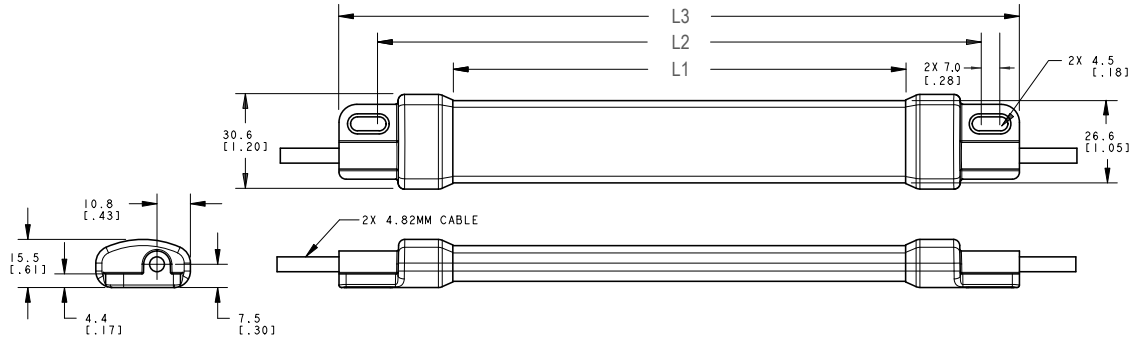
| Supply Wiring (AWG) | Required Overcurrent Protection (A) | Supply Wiring (AWG) | Required Overcurrent Protection (A) |
|---|---|---|---|
| 20 | 5.0 | 26 | 1.0 |
| 22 | 3.0 | 28 | 0.8 |
| 24 | 1.0 | 30 | 0.5 |

**Certifications**

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Park Lane, Culliganlaan 2F bus 3
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## WLS15 Dimensions




| Models | L1 | L2 | L3 |
|---|---|---|---|
| WLS15..0220.. | 146.4 mm (5.76 inches) | 194 mm (7.64 inches) | 220 mm (8.66 inches) |
| WLS15..0360.. | 286.4 mm (11.28 inches) | 334 mm (13.15 inches) | 360 mm (14.17 inches) |

Continued on page 3


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Continued from page 2

| Models | L1 | L2 | L3 |
|---|---|---|---|
| WLS15..0500.. | 426.4 mm (16.79 inches) | 474 mm (18.66 inches) | 500 mm (19.69 inches) |
| WLS15..0640.. | 566.4 mm (22.3 inches) | 614 mm (24.17 inches) | 640 mm (25.2 inches) |
| WLS15..0920.. | 846.4 mm (33.32 inches) | 894 mm (35.2 inches) | 920 mm (36.22 inches) |
| WLS15..1200.. | 1126.4 mm (44.35 inches) | 1174 mm (46.22 inches) | 1200 mm (47.24 inches) |

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

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