# WLS27 LED Strip Light with Dimmable PWM Quick Start Guide

## Important Information

This guide is designed to help you set up and install the WLS27 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 186597 to view the Product Manual. Use of this document assumes familiarity with pertinent industry standards and practices.



For PWM dimming, use with the LC65 Dimmer Module. For more information, refer to the LC65 LED Dimmer Module datasheet, p/n 177086.

**IMPORTANT:** Read the following instructions before operating the light. Please download the complete WLS27 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 WLS27 LED Strip Light, disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.

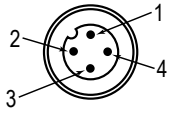
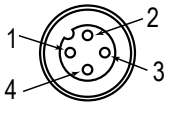
**IMPORTANT:** Lisez les instructions suivantes avant d'utiliser le luminaire. Veuillez télécharger la documentation technique complète des WLS27 LED Strip Light sur notre site www.bannerengineering.com pour les détails sur leur utilisation correcte, les applications, les notes de sécurité et les instructions de montage.

## Models

*Model Key*

| Family | Cascadable | LED Color | Lighted Length (mm) | Window | Construction | Dimming | Connector[1] |
|---|---|---|---|---|---|---|---|
| **WLS27** | **C** | **W** | **145** | **D** | **S** | **PWM** | **Q** |
| | C = Cascadable<br>X = Non-cascadable | W = Cool white<br>WW = Warm white<br>R = Red<br>G = Green<br>B = Blue<br>Y = Yellow | 145<br>285<br>430<br>570<br>710<br>850<br>990<br>1130 | D = Diffused plastic | S = Sealed | PWM = Pulse Width Modulation dimming | Q = Integral 4-pin M12 male quick-disconnect connector |

## Wiring

| Male | Female | Pin | Wire Color | Connection |
|---|---|---|---|---|
|  |  | 1 | brown | 12 V DC to 30 V DC |
| | | 3 | blue | DC common |
| | | 4 | black | Pulse width modulation (PWM) input. For maximum intensity, leave the black wire floating or connected to common. Connecting to 12 V DC to 30 V DC causes LEDs to shut off. |
| | | 2 | white | Not used |

## Specifications

**Operating Voltage**

12 V DC to 30 V DC
Use only with a suitable Class 2 power supply (UL) or SELV power supply (CE)
See electrical characteristics on product label.

**Pulse Width Modulation (PWM)**

Frequency: Up to 1000 Hz
Voltage: 8 to 30 V DC
Current: 4 mA max. per foot

**Supply Protection Circuitry**

Protected against reverse polarity and transient voltages

**Construction**

Clear anodized aluminum housing; FDA-grade copolyester outer housing

[1] Models with a quick-disconnect connector require a mating cordset.

Original Instructions
11-Sep-25

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189556
p/n: 189556 Rev. F

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

**Mounting**

Bracket LMBWLS27EC included (2 for lights up to 570 mm or 3 for lights 710 mm and longer)

**Certifications**

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

Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN

**Connections**

Integral 4-pin M12 male quick-disconnect connector (4-pin connecting cordset required)

**Storage Temperature**

–40 °C to +70 °C (–40 °F to +158 °F)

**Operating Temperature**

–40 °C to +70 °C (–40 °F to +158 °F)
Light output begins to decrease above 50 °C (122 °F) and will be approximately 65% of max intensity at 60 °C (140 °F) and 30% of max intensity at 70 °C (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: 1.4 m (4.6 ft)
Maximum length of light at 24 V DC: 3.0 m (9.8 ft)
Maximum length of light at 30 V DC: 3.1 m (10.2 ft)
At 50% intensity, double the lengths

**NOTE:** Do not spray cable with high-pressure sprayer, or cable damage will result.

**Environmental Rating**

Rated IP66, IP67, and IP69K per ISO 20653

**Vibration and Mechanical Shock**

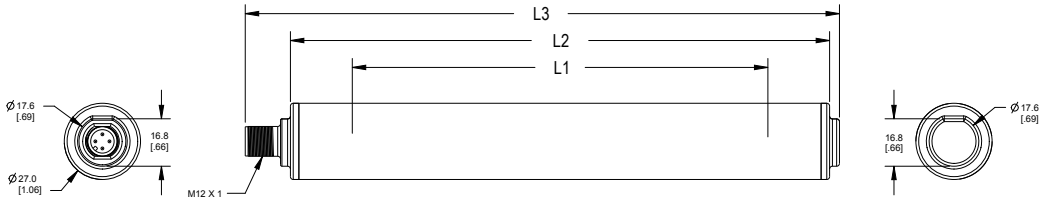
Vibration 10-55 Hz 1.0 mm p-p amplitude per IEC 60068-2-6
Shock 15G 11 ms duration, half sine wave per IEC 60068-2-27

| Light Length | Typical Current | | | Max. Current |
|---|---|---|---|---|
| | 12 V DC | 24 V DC | 30 V DC | A |
| 145 mm | 0.33 A | 0.15 A | 0.12 A | 0.4 |
| 285 mm | 0.66 A | 0.3 A | 0.24 A | 0.8 |
| 430 mm | 1.01 A | 0.46 A | 0.36 A | 1.2 |
| 570 mm | 1.36 A | 0.61 A | 0.48 A | 1.6 |
| 710 mm | 1.75 A | 0.77 A | 0.6 A | 2 |
| 850 mm | 2.13 A | 0.92 A | 0.73 A | 2.4 |
| 990 mm | 2.59 A | 1.08 A | 0.85 A | 2.8 |
| 1130 mm | 3.04 A | 1.24 A | 0.97 A | 3.2 |

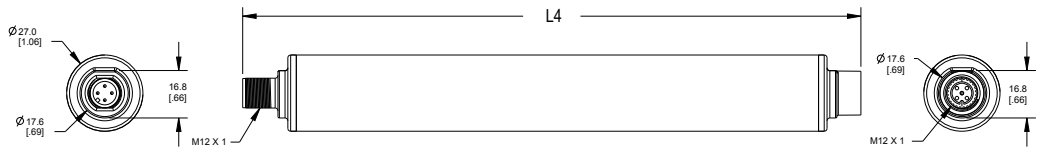
# Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

*Quick Disconnect Models*




*Cascade Models*




| Models | L1 | L2 | L3 | L4 |
|---|---|---|---|---|
| WLS27..145.. | 145 mm (5.7 in) | 191 mm (7.5 in) | 210.5 mm (8.3 in) | 219 mm (8.6 in) |
| WLS27..285.. | 286 mm (11.3 in) | 332 mm (13.1 in) | 351.5 mm (13.8 in) | 360 mm (14.2 in) |
| WLS27..430.. | 427 mm (16.8 in) | 473 mm (18.6 in) | 492.5 mm (19.4 in) | 501 mm (19.7 in) |
| WLS27..570.. | 568 mm (22.4 in) | 614 mm (24.2 in) | 633.5 mm (24.9 in) | 642 mm (25.3 in) |
| WLS27..710.. | 709 mm (27.9 in) | 755 mm (29.7 in) | 774.5 mm (30.5 in) | 783 mm (30.8 in) |
| WLS27..850.. | 850 mm (33.5 in) | 896 mm (35.3 in) | 915.5 mm (36 in) | 924 mm (36.4 in) |
| WLS27..990.. | 991 mm (39 in) | 1037 mm (40.8 in) | 1056.5 mm (41.6 in) | 1065 mm (41.9 in) |

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Continued from page 2

| Models | L1 | L2 | L3 | L4 |
|---|---|---|---|---|
| WLS27..1130.. | 1132 mm (44.6 in) | 1178 mm (46.4 in) | 1197.5 mm (47.1 in) | 1206 mm (47.5 in) |

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