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 X = Non-cascadable	DW = Daylight white WW = Warm white	0220 mm (6 in) 0360 mm (1 ft) 0500 mm (1.5 ft) 0640 mm (2 ft) 0920 mm (3 ft) 1200 mm (4 ft)	D = Diffuse	S = Sealed (IP66, IP67)	C2 = 2 m (6.5 ft) integral PVC cable C4 = 4 m (13 ft) integral PVC cable C5 = 5 m (16.4 ft) integral PVC cable C30 = 9 m (30 ft) integral PVC cable QP = 150 mm (5.9 in) PVC cable with M12 quick-disconnect connector 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 X = Non-cascadable	W = Daylight white B = Blue G = Green R = Red Y = Yellow A = Amber		0220 mm (6 in) 0360 mm (1 ft) 0500 mm (1.5 ft) 0640 mm (2 ft) 0920 mm (3 ft) 1200 mm (4 ft)	D = Diffuse	S = Sealed (IP66, IP67)	C2 = 2 m (6.5 ft) integral PVC cable C4 = 4 m (13 ft) integral PVC cable C5 = 5 m (16.4 ft) integral PVC cable C30 = 9 m (30 ft) integral PVC cable QP = 150 mm (5.9 in) PVC cable with M12 quick-disconnect connector 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

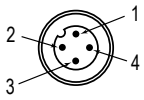
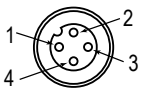
© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

197492
p/n: 197492 Rev. H

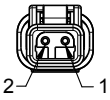
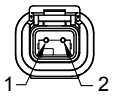
ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

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.

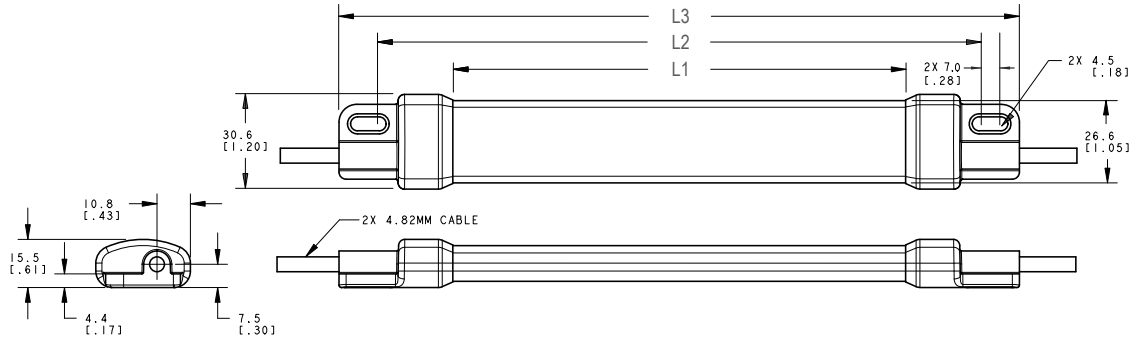
Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	1.0	30	0.5

Certifications

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

E476617

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

© Banner Engineering Corp. All rights reserved. www.bannerengineering.com

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)

Banner Engineering Corp Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. **IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.**

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change; Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to: www.bannerengineering.com.

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

Mexican Importer

Banner Engineering de Mèxico, S. de R.L. de C.V. | David Alfaro Siqueiros 103 Piso 2 Valle oriente | San Pedro Garza Garcia Nuevo Leòn, C. P. 66269

81 8363.2714

© Banner Engineering Corp. All rights reserved. www.bannerengineering.com