

## **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 <sup>(1)</sup>
WLS15	С	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 <sup>(2)</sup>
WLS15	С	w	R	0360	D	S	C2
		W = Dayli	aht white	0220 mm (6 in)			C2 = 2 m (6.5 ft) integral PVC cable
		B = 6	•	0360 mm (1 ft)		S = Sealed (IP66, IP67)	C4 = 4 m (13 ft) integral PVC cable
	C = Cascadable	G = G		0500 mm (1.5 ft)			C5 = 5 m (16.4 ft) integral PVC cable
				` ′	D = Diffuse		C30 = 9 m (30 ft) integral PVC cable
	X = Non-cascadable	R=1		0640 mm (2 ft)			QP = 150 mm (5.9 in) PVC cable with M12
		Y = Y		0920 mm (3 ft)			quick-disconnect connector
		A = A	mber	1200 mm (4 ft)			QS = 150 mm (5.9 in) PVC cable with Deutsch DTM connector



Models with a quick-disconnect or Deutsch DTM connector require a mating cordset.
 Models with a quick-disconnect connector require a mating cordset.

## Wiring Diagrams

QP Models						
Male	Female	Pin	Wire Color	Single Color Models	Dual Color Models	
<b>≈</b> -1	1 6 3 3	1	brown	12 V DC or 24 V DC	Color 1: 12 V DC or 24 V DC	
2		3	blue	DC common	DC common	
2 4		4	black	Not used	Color 2: 12 V DC or 24 V DC (color 2 overrides color 1)	
J _		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	
21	1_2	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 Longth	Typical Current	(A) at 25°C (3)	Max. Current (A) at -40°C		
Light Length	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.

### Mounting

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

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

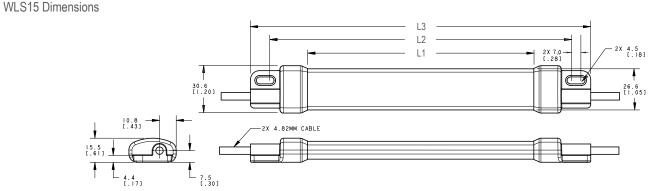
## Certifications



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



# have a maximum current of 1.92 A at -40 °C and 1.33 A at +60 °C.



Models	LI	L2	L3
WLS150220	146.4 mm (5.76 inches)	194 mm (7.64 inches)	220 mm (8.66 inches)
WLS150360	286.4 mm (11.28 inches)	334 mm (13.15 inches)	360 mm (14.17 inches)

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 $<sup>^{(3)}</sup>$  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

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Models	L1	L2	L3
WLS150500	426.4 mm (16.79 inches)	474 mm (18.66 inches)	500 mm (19.69 inches)
WLS150640	566.4 mm (22.3 inches)	614 mm (24.17 inches)	640 mm (25.2 inches)
WLS150920	846.4 mm (33.32 inches)	894 mm (35.2 inches)	920 mm (36.22 inches)
WLS151200	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.

## Mexican Importer

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