WLS70 Industrial LED Strip Light (AC) Quick Start Guide

Features

This guide is designed to help you set up and install the WLS70 Industrial LED Strip Light (AC). For complete information on programming, performance, troubleshooting, dimensions, and accessories, please refer to the Product Manual at www.bannerengineering.com. Search for part number 220753 to view the Product Manual. Use of this document assumes familiarity with pertinent industry standards and practices.



IMPORTANT: Read the following instructions before operating the light. Please download the complete WLS70 Industrial LED Strip Light (AC) 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 WLS70 Industrial LED Strip Light (AC), 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 WLS70 Industrial LED Strip Light (AC) sur notre site www.bannerengineering.com pour les détails sur leur utilisation correcte, les applications, les notes de sécurité et les instructions de montage.

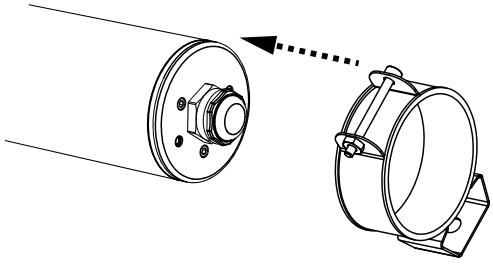
Models

Family	Voltage	Cascade[1]	Color	Lighted Length (mm)	Window	Control	Connection[2]
WLS70	**Z**	**X**	**W**	**600**	**D**	**A**	**QM**
	Z = AC	X = Non-cascadable C = Cascadable	W = Daylight white	300 = 300 mm 600 = 600 mm 900 = 900 mm 1200 = 1200 mm	D = Diffused window	A = 0 V DC to 10 V DC analog dimming	Blank = 2 m (6.5 ft) unterminated 5-wire PVC-jacketed cable QM = Integral 5-pin 7/8 in-16UNF (Mini) male quick-disconnect connector

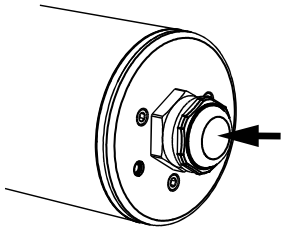
The following model is no longer available for order but is still covered by the information in this document: WLS70ZCW300DAQM.

Install the WLS70 Industrial LED Strip Light

Attaching the Clamp Brackets (Step 3)



Verifying the Cascade Cover is Attached (Step 10)



1. Turn off the power at the fuse or circuit breaker box.
2. Remove the light from the packaging and inspect it for damage before installing it.
3. Attach the included LMBWLS70T clamp brackets to the light. Slide on the gasket if desired.
   Refer to the instruction manual for a complete list of compatible brackets.
4. Select a suitable horizontal or vertical mounting location.
5. Place the light in the mounting location and mark the positions of the bracket mounting holes.
   The optional LMBWLS70HK bracket can be used to hang the light in conjunction with the LMBWLS70T (see "Accessories" on page 3).
6. Drill the holes and use appropriate screws to secure the bracket to the mounting location.
7. Clamp the light onto the brackets.
8. When daisy-chaining multiple lights, follow steps 1 through 5 to mount additional lights. See the application note in "Specifications" on page 2 for the maximum allowed lights daisy-chained together and maximum allowed cable run when choosing mounting locations.

[1] Cascadable models are only available with a QM connection.
[2] Models with a quick-disconnect connector require a mating cordset. See "Accessories" on page 3.

Original Instructions
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216262
p/n: 216262 Rev. E

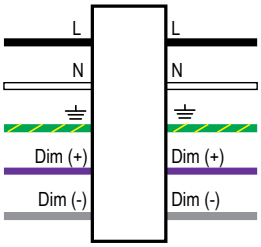
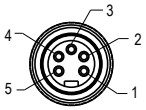
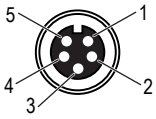
ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

9. Connect the daisy-chained units using cascade cordsets (see "Accessories" on page 3).
10. Verify the supplied cascade cover is on the output connector of the last light in the chain.
11. Attach cables (cabled model) or cordsets (quick-disconnect model) per the wiring diagram. Terminate wire as appropriate per application.

Installation is complete. Turn on the electricity at the fuse or circuit breaker box.

WARNING:
- **Risk of electric shock**
- Failure to follow these instructions could result in serious injury or death.
- Disconnect or turn off power before installing, removing, or servicing the device.
- Install and connect the device in accordance with the National Electrical Code (NEC) and any applicable local code requirements and supply the device with an appropriate fuse box or circuit breaker (see *Specifications*).

Wiring

Diagram	Wire	Connection	Pinout (Male)	Pinout (Female)
	L - Black	Line/Hot		
	N - White	Neutral		
	- Green/Yellow	Earth ground		
	Dim (+) - Purple	0 V DC to 10 V DC analog dimming		
	Dim (-) - Gray	Return analog dimming		
			1 = Purple 2 = White 3 = Yellow/Green 4 = Black 5 = Gray	1 = Purple 2 = White 3 = Yellow/Green 4 = Black 5 = Gray

Specifications

Supply Voltage

Nominal voltage: 120 V AC to 277 V AC, 60 Hz in North America

Nominal voltage: 100 V AC to 277 V AC, 50/60 Hz outside North America

Power factor: > 0.95 at 120 V AC and > 0.90 at 277 V AC

Total harmonic distortion (THD): < 20%

See electrical characteristics on product label

Supply Current

Lighted Length (mm)	Max. Current Draw (A) at 100 V AC	Typical Current Draw (A)		
		120 V AC	230 V AC	277 V AC
300	0.12	0.08	0.04	0.04
600	0.22	0.165	0.08	0.07
900	0.32	0.24	0.13	0.11
1200	0.42	0.315	0.16	0.14

Dimming

Compatible with 0 V DC to 10 V DC analog LED dimming, dimmable to 5% intensity

Dimming current: <1.0 mA

Supply Protection Circuitry

Protected against transient voltages

Construction

Clear anodized aluminum housing; polycarbonate outer housing

Mounting

Several optional mounting brackets are available (see Accessories)

Connections

Integral 5-pin 7/8 in-16UNF (Mini) male quick-disconnect connector (8A / 300V / 2.5kV / 2), (5-pin connecting cordset required); or 2 m (6.5 ft) unterminated 5-wire STOOW UL/HAR PVC cable

See "Accessories" on page 3

Environmental Rating

IP65

LED Lifetime

When operating within specifications, output will decrease less than 30% after 50,000 hours.

Application Notes

When connecting continuous run/cascadable lights in series, it is important not to exceed the maximum current limitations of 8A. For example: the typical current draw of a 1200 mm fixture at 120 V is 0.315A. 8A/0.315A yields a maximum of 25 fixtures cascaded together.

Two or more lights installed in parallel must maintain a 150 mm (6 inch) spacing to maintain a 50 °C operating temperature.

Certifications and Approvals

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

UL LISTED UL/cULus E338626

Operating Temperature

Surface Mount Installation: –40 °C to +50 °C (–40 °F to +122 °F)

85% at +50 °C maximum relative humidity (non-condensing)

Storage Temperature

–40 °C to +70 °C (–40 °F to +158 °F)

Vibration and Mechanical Shock

Vibration: 10 Hz to 55 Hz, 0.5 mm peak-to-peak amplitude per IEC 60068-2-6 (5 minute sweep, 30 minute dwell)

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

Impact: IK10 (IEC 60068-2-75)

Light Characteristics

Daylight White Efficacy: up to 143 lumens/watt typical at 120 V AC at 25 °C (77 °F)

CRI: 82, typical

Model	Color	Color Temperature (CCT)	Lumens (Typical at 25 °C)	Watts at 120 V AC	Luminous Efficacy (lm/w)
300	Daylight White	5000 K (±300 K)	1350	9.6	141
600	Daylight White	5000 K (±300 K)	2700	19.8	136
900	Daylight White	5000 K (±300 K)	4050	28.8	141
1200	Daylight White	5000 K (±300 K)	5400	37.8	143

FCC Part 15 Class A for Unintentional Radiators

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

(Part 15.21) Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Industry Canada ICES-003(B)

This device complies with CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions: 1) This device may not cause harmful interference; and 2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la norme NMB-3(B). Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas occasionner d'interférences, et (2) il doit tolérer toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité du dispositif.

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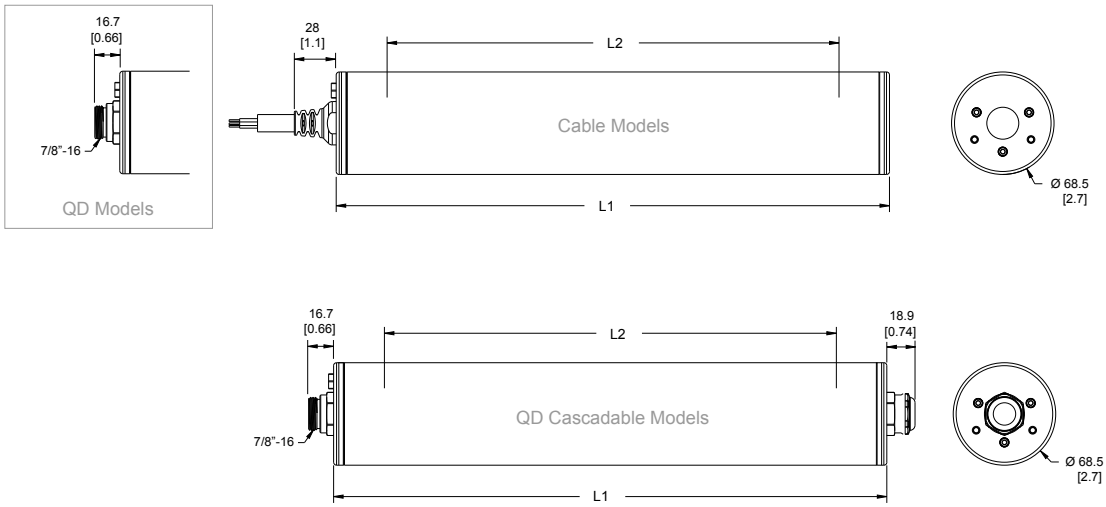
Dimensions

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



Model	Housing Length (L1)	Lighted Length (L2)
WLS70..300..	369.8	302
WLS70..600..	667.6	600
WLS70..900..	965.3	898
WLS70..1200..	1263	1196

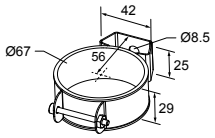
Accessories

Brackets

All measurements are listed in millimeters, unless noted otherwise. The measurements provided are subject to change. Refer to the instruction manual for a complete list of compatible brackets.

LMBWLS70T

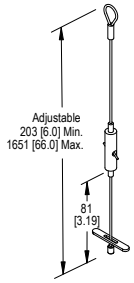
- Stainless steel
- Includes two clamp brackets for hanging or surface mount, two anti-rotation gaskets, and stainless steel hardware for securing the bracket to the light
- For use with M8 or 5/16" mounting hardware
- CAD Files: DXF, PDF, IGS, STP



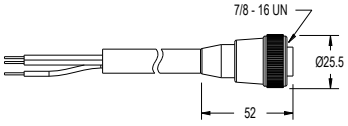
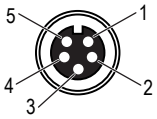
NOTE: The LMBWLS70T is supplied with the light.

LMBWLS70HK

- Hanging bracket kit allows for suspended installation
- Includes two hanging bracket assemblies
- For use with bracket LMBWLS70T
- CAD Files: DXF, PDF, IGS, STP



Cordsets

5-Pin Single-Ended Mini Female Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**
MBCCL-506	2 m (6.56 ft)	Straight		
MBCCL-515	5 m (16.4 ft)			

1 = Purple
2 = White
3 = Yellow/Green
4 = Black
5 = Gray

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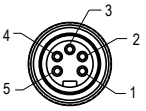
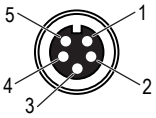
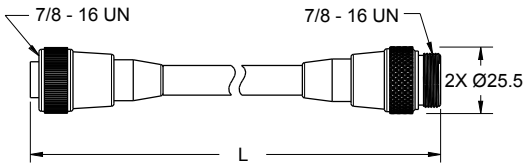
Continued from page 3

5-Pin Single-Ended Mini Female Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout (Female)**
MBCCL-530	9 m (29.5 ft)			

5-Pin Double-Ended Mini Female to Mini Male Cordsets				
Model	**Length**	**Style**	**Pinout (Male)**	**Pinout (Female)**
MBCCL-503SS	1 m (3.28 ft)	Female Straight/Male Straight	 1 = Purple 2 = White 3 = Yellow/Green 4 = Black 5 = Gray	 1 = Purple 2 = White 3 = Yellow/Green 4 = Black 5 = Gray
MBCCL-506SS	2 m (6.56 ft)			
MBCCL-512SS	4 m (13.1 ft)			
MBCCL-520SS	6 m (19.7 ft)			



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