



Outdoor (IP65) ColorBright™ RGB Digital Pixel LED Strip Light

Product Data Sheet

PRECAUTION:

Please read all instructions carefully before installation.

Our Outdoor (IP65) ColorBright™ RGB Digital Pixel LED Strip Lights feature integrated pixels—segments that offer individual control and interaction—with limitless color-changing capabilities and exceptional color saturation. Their silicone cover facilitates cleaning and repels dust and low-pressure water jets. Paired with a digital control system, they produce stunning dynamic patterns ideal for outdoor commercial locations, open-air entertainment venues, and residential exteriors.



Product Features

Voltage	24V DC Input
Efficacy	Up to 29 lm/W
LEDs per Pixel	6 LEDs per Pixel
Pixels per Reel	50 Pixels per Spool
IC Protocol	WS2811
Beam Angle	120° Beam Angle
LED Pitch	7/16" (11 mm)
Strip Width	1/2" (12 mm)
Cutting Points	4" (100 mm)
Max Run Length in Series	16.4 ft (5 m)
PCB	3 oz copper
LED Size	5050
Adhesive Type	3M LSE 9495 tape (IP65)
Ambient Temperature	-4°F to +113°F (-20°C to 45°C)
Operating Temperature	-4°F to 167°F (-20°C to 75°C)
Dimmable	Yes
IP Rating	IP65

Ordering Code

IP Protection

IP65

-

Brand

CB

ColorBright™

-

Series

PXL

Digital Pixel Series

-

Color

RGB

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Voltage

24V

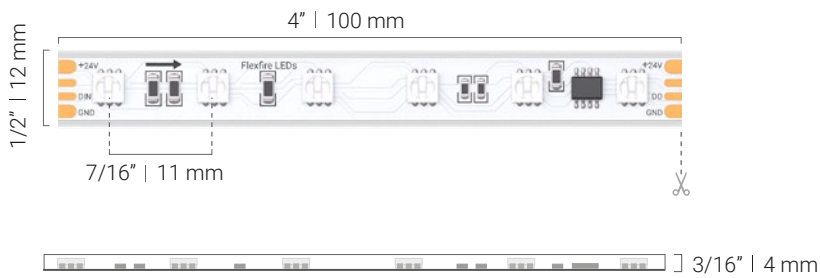
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Length

16FT

Example: IP65-CB-PXL-RGB-24V-16FT

Dimensions



Product Specifications

Product SKU	Watts / Foot (Meter)	Lumens / Foot (Meter)	Luminous Efficacy (Lumens / Watt)	Segment Lengths	Max Run Length in Series
IP65-CB-PXL-RGB	3.65 W/ft (12 W/m)	107 lm/ft (350 lm/m)	29 lm/w	4" (100 mm)	32 ft (10 m)

Complete Your Setup

☒ Drivers



☒ Controllers & Dimmers



☒ Connectors



☒ Extrusions



Compatible Drivers

Non-dimmable					
Power Supply	Diagram	LED Strip Length	Product SKU	Watts	Class 2
Plug-In Power Supply Plug-and-Play Power Supply		1 - 5 ft	24V-WMPS2-1	24 W	
		6 - 21 ft	24V-DPS2-4	96 W	
Mean Well™ HLG Hardwired Power Supply		1 - 14 ft	HLG-60H-24A	60 W	
		15 - 23 ft	HLG-100H-24A	96 W	
		24 - 45 ft	HLG-185H-24A	185 W	
		46 - 78 ft	HLG-320H-24A	320 W	
		79 - 147 ft	HLG-600H-24A	600 W	
Mean Well™ LPV Hardwired Power Supply		1 - 13 ft	LPV-60-24	60 W	

[See Power Supplies Selector](#)

Compatible Controllers & Dimmers

Handheld Remotes



DMX Controls

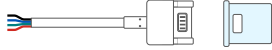




Smart Home Controllers

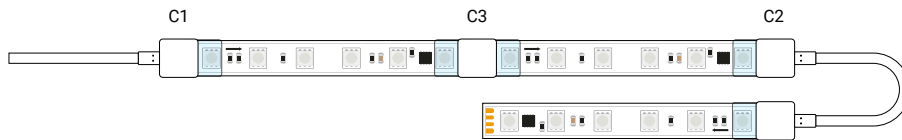

[See Controllers and Dimmers](#)

Compatible Strip Light Connectors

Please note that while the following connectors are compatible with our ColorBright™ RGB Digital Pixel LED Strip Light, there is a discrepancy in the wire colors between the connectors and the wires soldered directly onto the strip light. To ensure proper polarity, please follow the markings on the PCB rather than relying on the colors of the wires from the connectors. This is crucial for preventing any potential damage to the strip light or connectors. Always prioritize the PCB markings when making connections.

Product SKU	Diagram	Description	Wire Gauge	Amperage Limit*
IP65-GRIP-RGB-C1-10-40		Connector with 40" of wire to attach the strip to power.	22 AWG	5 Amps
IP65-GRIP-RGB-C2-10-08		Jumper connector with 8" of wire to attach two sections of strip together or go around tight corners.		
IP65-GRIP-RGB-C3-10-0		Jumper connector with no wire to attach sections of strip together in a continuous run.	-	

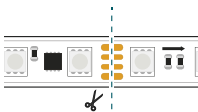
* Be sure no more than 5 amps is drawn after any solderless connector. Calculate max length of LED strip to follow the solderless connector based on an amperage draw of 0.15 A/ft (0.5 A/m) at 24 volts.

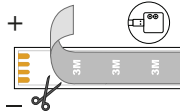



Strip Light Connectors Installation




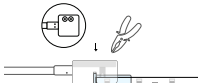
WARNING: When working with our ColorBright™ RGB Digital Pixel LED Strip Light please make all necessary connections before applying power to the LED strip. Do not cut the strips or make/remove connections while power is applied.

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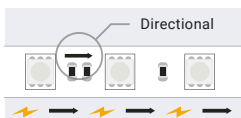
Cut the LED strip light and the silicone sleeve on the cutting point you want to install the connector.
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Check the polarity to match the positive (+) markings together and negative (-) markings together, and remove 2" of the adhesive tape and its backer from the back of the strip light.
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Apply silicone sealant liberally inside of the silicone sleeve until ensuring it is completely sealed.
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Slide the transparent case of your outdoor IP65 grip connector into the sleeve with the window of the case facing upward, until making sure that the strip is making proper contact.
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Grab your connector and push the metal contacts through the window of the transparent case. Adjust it with pliers until you hear a click, and let the sealant cure according to its own instructions.



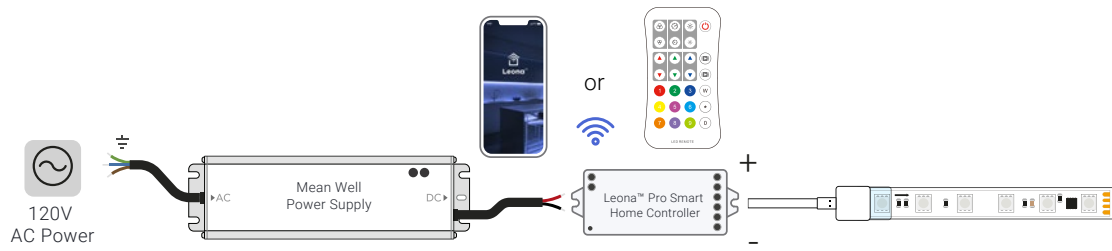
After making all connections, you will be ready to apply power. Please keep in mind that this LED strip light is directional, so the data can only flow from one direction. There are arrows printed on the PCB indicating the correct direction.

Compatible Aluminum Channel Kits

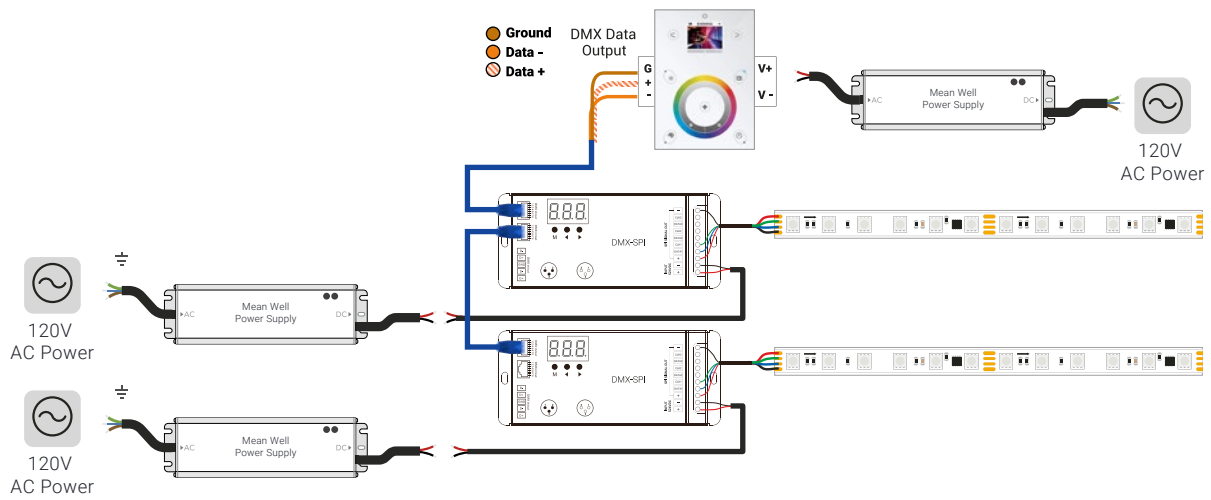
Diagram	Name	Type	Channel Kit Description	Kit SKU	Included Accessories
	Ion™	 Surface Mount	1 Meter Ion Channel	ION-CH-A-1M	
	Gemini™	 Surface Mount	1 Meter Channel + Clear Cover Kit	GEM-CH-A-CVR-C-1M	2 Open End Caps 2 Closed End Caps 4 Mounting Clips
			2 Meter Channel + Clear Cover Kit	GEM-CH-A-CVR-C-2M	
			1 Meter Channel + Frosted Cover Kit	GEM-CH-A-CVR-F-1M	
			2 Meter Channel + Frosted Cover Kit	GEM-CH-A-CVR-F-2M	
			1 Meter Channel + Matte Cover Kit	GEM-CH-A-CVR-M-1M	
			2 Meter Channel + Matte Cover Kit	GEM-CH-A-CVR-M-2M	
			Note: This extrusion only fits the Outdoor RGB Digital Pixel Series LED strip without connectors.		
	Kepler™	 Surface Mount	1 Meter Channel + Clear Cover Kit	KEP-CH-A-CVR-C-1M	2 Open End Caps
			1 Meter Channel + Frosted Cover Kit	KEP-CH-A-CVR-F-1M	2 Closed End Caps
			1 Meter Channel + Matte Cover Kit	KEP-CH-A-CVR-M-1M	4 Mounting Clips
			Note: This extrusion only fits the Outdoor RGB Digital Pixel Series LED strip without connectors.		
	Laika™	 Surface Mount	1 Meter Channel + Clear Cover Kit	LAI-CH-A-CVR-C-1M	2 Open End Caps
			1 Meter Channel + Frosted Cover Kit	LAI-CH-A-CVR-F-1M	2 Closed End Caps
			2 Meter Channel + Frosted Cover Kit	LAI-CH-A-CVR-F-2M	4 Mounting Clips
			Note: This extrusion only fits the Outdoor RGB Digital Pixel Series LED strip without connectors.		
	Titan™	 Surface Mount	1 Meter Channel + Clear Cover Kit	TTN-CH-A-CVR-C-1M	2 Open End Caps
			1 Meter Channel + Frosted Cover Kit	TTN-CH-A-CVR-F-1M	2 Closed End Caps
			2 Meter Channel + Frosted Cover Kit	TTN-CH-A-CVR-F-2M	4 Mounting Clips
			1 Meter Channel + Matte Cover Kit	TTN-CH-A-CVR-M-1M	6 Channel Connectors
			2 Meter Channel + Matte Cover Kit	TTN-CH-A-CVR-M-2M	
			1 Meter Channel + 10 Meter Frosted Cover Kit	TTN-CH-A-CVR-F-10MR	10 Open End Caps
			1 Meter Channel + 10 Meter Matte Cover Kit	TTN-CH-A-CVR-M-10MR	10 Closed End Caps
					20 Mounting Clips
					30 Channel Connectors
	Atlas™	 Angled Surface Mount	1 Meter Channel + Clear Cover Kit	ATL-CH-A-CVR-C-1M	2 Open End Caps 2 Closed End Caps 4 Mounting Clips
			1 Meter Channel + Frosted Cover Kit	ATL-CH-A-CVR-F-1M	
			2 Meter Channel + Frosted Cover Kit	ATL-CH-A-CVR-F-2M	
			1 Meter Channel + Matte Cover Kit	ATL-CH-A-CVR-M-1M	
			2 Meter Channel + Matte Cover Kit	ATL-CH-A-CVR-M-2M	
			Note: This extrusion only fits the Outdoor RGB Digital Pixel Series LED strip without connectors.		
	Calypso™	 Recessed	1 Meter Channel + Frosted Cover Kit	CAL-CH-A-CVR-F-1M	2 Open End Caps
			2 Meter Channel + Frosted Cover Kit	CAL-CH-A-CVR-F-2M	2 Closed End Caps
			1 Meter Channel + Matte Cover Kit	CAL-CH-A-CVR-M-1M	4 Mounting Clips
			2 Meter Channel + Matte Cover Kit	CAL-CH-A-CVR-M-2M	
			1 Meter Channel + 10 Meter Frosted Cover Kit	CAL-CH-A-CVR-F-10MR	10 Open End Caps
			1 Meter Channel + 10 Meter Matte Cover Kit	CAL-CH-A-CVR-M-10MR	10 Closed End Caps
	Cassini™	 Recessed	1 Meter Channel + Clear Cover Kit	CAS-CH-A-CVR-C-1M	2 Open End Caps
			1 Meter Channel + Frosted Cover Kit	CAS-CH-A-CVR-F-1M	2 Closed End Caps
			2 Meter Channel + Frosted Cover Kit	CAS-CH-A-CVR-F-2M	4 Mounting Clips
			1 Meter Channel + Matte Cover Kit	CAS-CH-A-CVR-M-1M	
			2 Meter Channel + Matte Cover Kit	CAS-CH-A-CVR-M-2M	
			Note: This extrusion only fits the Outdoor RGB Digital Pixel Series LED strip without connectors.		

Wiring Diagrams

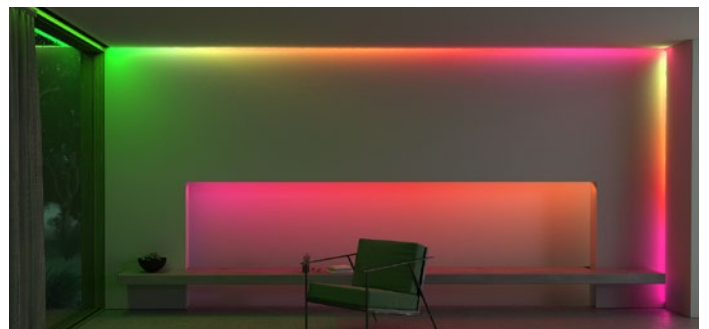
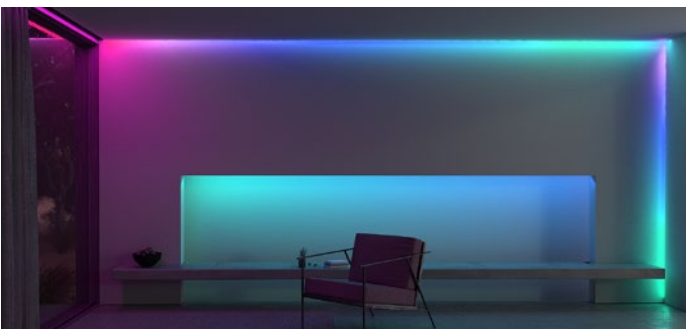
SPI Control



DMX



Application Examples



Safety And Disclosures

01.Installation must be in accordance with local and national electrical code regulations. To ensure safety and correct installation, our strips are intended to be installed by a qualified, licensed electrician.

02.Only install with a Class 2 DC Constant Voltage LED driver to meet UL requirements.

03.Do not install in an environment where excessive heat may exist.

04.LED strip lights must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.

05.Do not secure this product with any kind of staples, nails, or materials that could potentially damage the product in any way. Keep these instructions for future reference.

06.Do not cover this product with any kind of combustible material such as paper, fabrics, etc.

07.Do not install product with the majority of the product unsupported. Allowing the product to be suspended or dangling while installing may cause damage to the PCB due to the weight of the strip and/or spool.

08.Do not install within 5 feet of a swimming pool or spa.

09.Unless otherwise stated as appropriate, do not use the product in direct sunlight or in close proximity to caustic substances such as saltwater, chlorine, bromine, etc.

10.Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.

11.Make sure the appropriate gauge wire is installed between the driver, LEDs, and any dimmers. When choosing wire, calculate voltage drop, maximum amperage rating, and the location ratings on the wire. Improper wire selection and installation could overheat wires, and cause fire.

12.Do not modify the product beyond instructions or warranty will be void.

13.We reserve the right to modify and improve the design of our fixtures without prior notice. Although we try our best to order the same colors every time, due to changes in technology and phosphors over time, we cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

Warranty Information

Limited Warranty

This product has a 7 year limited warranty from the date of shipment. This warranty only includes the main product outlined in this specification sheet and does not include the additional accessories that are used as a reference. Complete warranty details for fixtures and additional accessories are available at <https://www.flexfireleds.com/warranties/> within the Policies section. For warranty related questions please contact the product support team at (support@flexfireleds.com).

Consumer's Acknowledgment

Flexfire LEDs, Inc. stands behind its products when they are used properly and according to our specifications. When you purchase our products, you are agreeing to the terms and conditions outlined in our warranty section. We try our best to make recommendations, but the burden of proper installation, design, and maintenance relies on the purchaser. This limited warranty does not include product failures that are the result of: Not using a voltage regulated power supply to connect the LED product or controls; Connecting LED products to the wrong output voltage; Improper connection of power supplies, LED products, or controls; Connecting LED products or controls directly to any AC power source if they are stated for DC only input; Connecting power supplies backwards to an AC power source; Products used in an inappropriate location or in environmental conditions (temperature, humidity, moisture, etc.) outside the normal specified range; Water damage to products not specifically sold as waterproof products; Electrical power surges and spikes; Damage from hail, flooding, tornado, fire, wind, earthquake, lightning, electrical storm, or any other natural disasters or "force majeure" incidences; Damage caused by a vehicle or other accident; Damage caused when transporting the item; Damage to any products that were modified by the user, used for purposes other than as intended or directed, or connected to LED systems or components not purchased from Flexfire LEDs; Products that have been subjected to misuse, mishandling, misapplication or accident. Products used in connection with any components, devices or systems other than those explicitly approved as compatible with Company's products and listed on Company's website. Excessive wear and tear and/or physical or accidental abuse, loss, or theft. Improper repairs or warranty services performed by someone other than Flexfire LEDs will void this warranty.



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FLEXFIRELEDs

www.flexfireleds.com