UltraBright™
**Render Series
LED Strip Light**

Product Data Sheet

⚠ **Please read all instructions carefully before installation.**

Description

Our UltraBright™ Render Series has near-perfect CRI and R9 values to show colors in their true, vibrant forms. With an incredibly high lumen output and full-spectrum lighting, this strip has the remarkable ability to mimic daylight. A short LED pitch guarantees a uniform, bright line of light. From spotlighting favorite pieces of art and photography, to lighting up a movie set and the runway, use this strip to impress a crowd. We use top-quality components and single BIN selection to ensure long-lasting consistency. This series is available in 24V and comes with a 7-year warranty. Heat sink recommended.

7 Year Warranty

CE

RoHS COMPLIANT

c (UL) us LISTED (LOW VOLTAGE LUMINAIRE) E362522

TITLE 24 REQUIREMENTS

Title 24 is regulated for lamps with color temperatures 4000K and below

Product Features

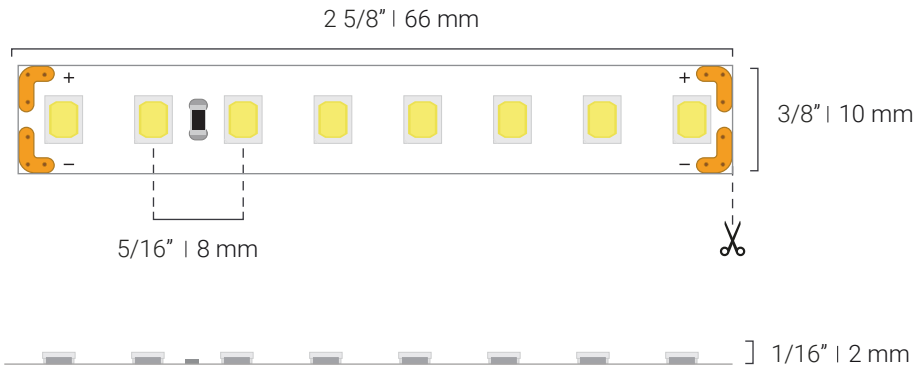|	
CRI	High CRI of up to 97
R9 and R13 Values	High R9 (98) & R13 (98) values
Voltage	24V DC Input
Brightness	Up to 891 lm/ft (2923 lm/m)
Efficacy	Up to 133 lm/W
LEDs/Foot	36 LEDs/ft (120/m)
Beam Angle	120° Beam Angle
LED Pitch	5/16" (8 mm)
Strip Width	3/8" (10 mm)
Cutting Points	2 5/8" (66 mm)
Max Run Length in Series	19 ft 8 in (6 m)
PCB	4 oz copper
LED Size	2835
Adhesive Type	3M VHB 4930 tape (IP20)
Ambient Temp	-4°F to 113°F (-20°C to 45°C)
Operating Temp	-4°F to 149°F (-20°C to 65°C)
Dimmable	Yes
IP Rating	IP20

Product Specifications

Product SKU	Color* (CCT)	Watts / Foot (Meter)	Lumen / Foot (Meter)	Luminous Efficacy (Lumens / Watt)	CRI	Gamut Score Rg (Color Sat.)	Relative Fidelity Score (RF)	TLCI (Qa)
UB-RS-30K97C	3000K	6.6 W/ft (21.7 W/m)	843 lm/ft (2766 lm/m)	124 lm/W	97	101	94	99
UB-RS-35K97C	3500K	6.6 W/ft (21.7 W/m)	891 lm/ft (2923 lm/m)	133 lm/W	97	100	92	99
UB-RS-40K95C	4000K	6.6 W/ft (21.7 W/m)	885 lm/ft (2902 lm/m)	132 lm/W	97	100	91	99
UB-RS-50K95C	5200K	6.6 W/ft (21.7 W/m)	855 lm/ft (2805 lm/m)	126 lm/W	97	99	91	100

*CCT may be +/-100K but always ordered from same bin and will present no noticeable differences perceived by the human eye.
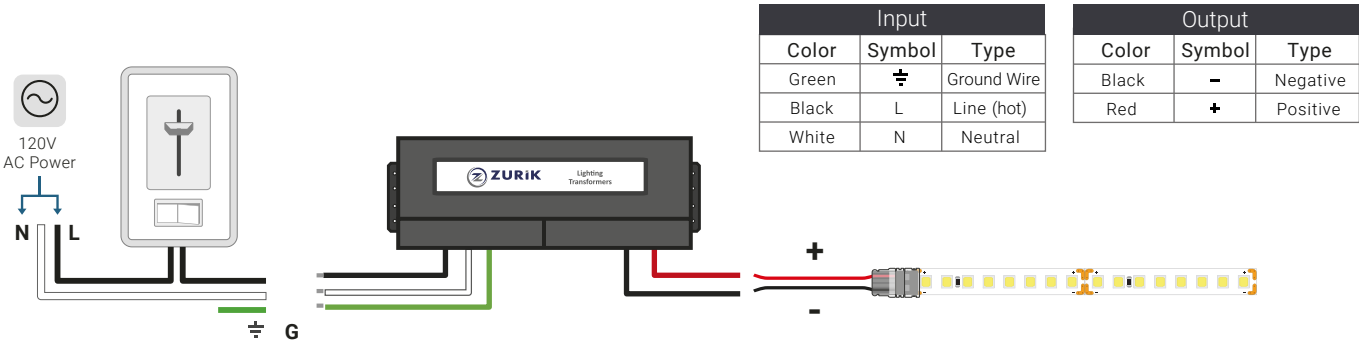
Ordering Code

Brand		Series		CCT		Voltage		Length
UB	-	**RS**	-	▼	-	**24V**	-	**16FT**
UltraBright™		Render Series		**30K97C** - 3000K/97+ CRI				
				35K97C - 3500K/97+ CRI				
				40K95C - 4000K/95+ CRI				
				50K95C - 5200K/95+ CRI				

Dimensions

2 5/8" | 66 mm

3/8" | 10 mm

5/16" | 8 mm

1/16" | 2 mm

Dimming Options

Lutron Style Wall Dimming

Input		
Color	Symbol	Type
Green	⏚	Ground Wire
Black	L	Line (hot)
White	N	Neutral

Output		
Color	Symbol	Type
Black	–	Negative
Red	+	Positive

120V AC Power

N L

⏚ G

ZURIK Lighting Transformers

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In-Line Dimming

Leona™

120V AC Power

Mean Well Power Supply

AC   DC

Leona™ Smart Home Controller

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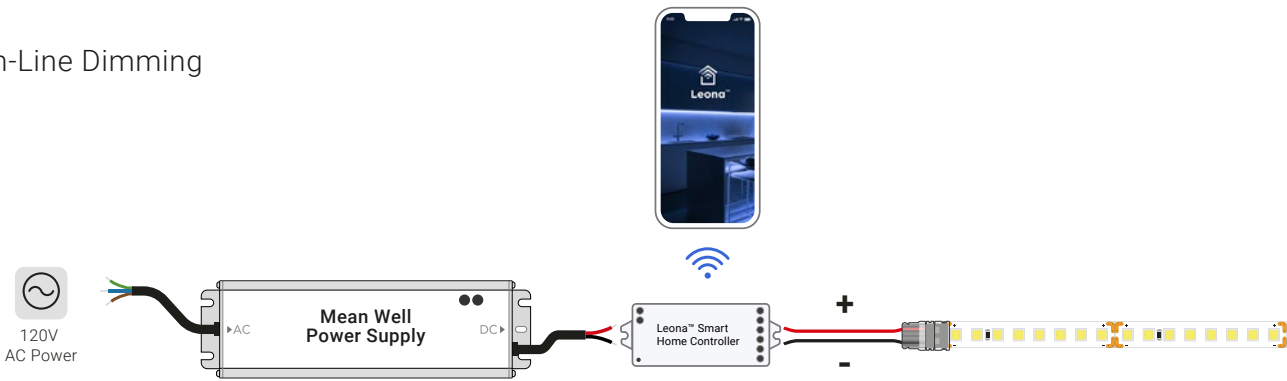
Strip Light Connectors

| Product SKU	Description	Wire Gauge	Amperage Limit*	Diagram
GRIP-SC-C1-10-0	Connector with no wire to attach the strip to power.	22 AWG		
GRIP-SC-C1-10-12 GRIP-SC-C1-10-36	Connector with 12" or 36" of wire to attach the strip to power.	22 AWG		
GRIP-SC-C2-10-06	Jumper connector with 6" of wire to attach two sections of strip together or go around tight corners.	22 AWG	5 Amps	
GRIP-SC-C3-10-0	Jumper connector with no wire to attach sections of strip together in a continuous run.	-		
GRIP-SC-CNR-10-5	Corner connector for 90 degree turns.	-		

* 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 0.18 A/ft (0.6 A/m) at 24 volts.
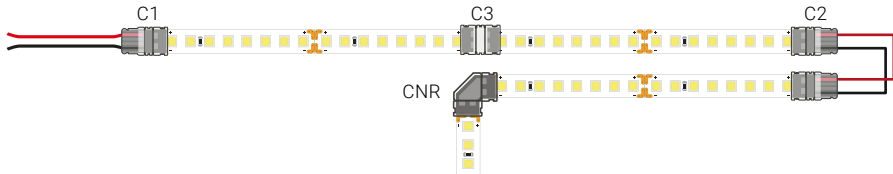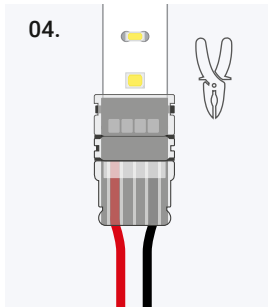
Solderless Connection Guide

01.

Peel off adhesive here
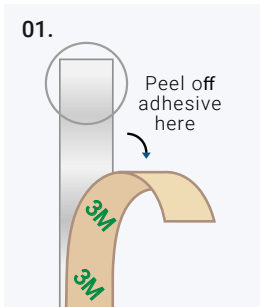
Remove 1/4" of 3M adhesive tape on the back from the end of the strip that you want to connect. It must be removed to allow it to fit properly with the solderless connector.

02.
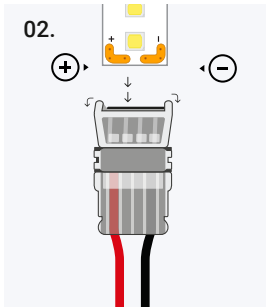
Check the polarity of the strip to match the positive (+) markings together and negative (-) markings together. If you accidentally close the connector before you're ready, use a small flathead screwdriver to pry the top back open.
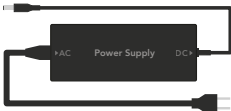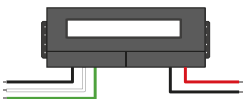
03.
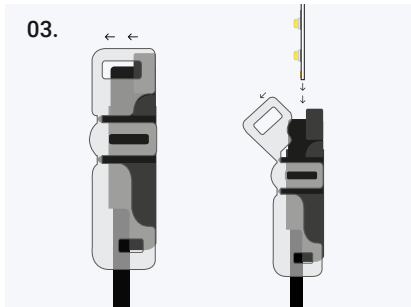
Open the top of the grip connector and insert the LED strip inside. Make sure the LED strip is facing up towards the translucent top and the solder pads are directly above the small hooks on the connector.

04.

Once everything is in order, use pliers to close and lock the connector. You'll hear a "click" sound when it is properly closed.

NOTE: Soldering is the preferred method. If you need further assistance, please download our Solderless Connector Installation Guide from our website.

Compatible Drivers

	Power Supply	LED Strip Length	Product SKU	Watts	Class 2	Diagram
Non-dimmable	Plug-In Power Supply	1 - 2 ft	24V-WMPS2-1	24W	X	
		3 - 7 ft	24V-DPS2-2.5	60W	X	
		8 - 11 ft	24V-DPS2-4	96W		
		12 - 14 ft	24V-DPS2-5	120W		
	Mean Well™ HLG	1 - 8 ft	HLG-60H-24A	60W	X	
		9 - 13 ft	HLG-100H-24A	96W	X	
		14 - 25 ft	HLG-185H-24A	185W		
		26 - 43 ft	HLG-320H-24A	320W		
		44 - 81 ft	HLG-600H-24A	600W		
	Mean Well™ LPV	1 - 7 ft	LPV-60-24	60W	X	
Dimmable	Zurik® EMLV	1 - 4 ft	ZRK-EMLV2-30W-24VDC	30W	X	
		5 - 8 ft	ZRK-EMLV2-60W-24VDC	60W	X	
	Zurik® Universal	1 - 4 ft	ZRK-UNV-30W-24VDC	30W	X	
		5 - 8 ft	ZRK-UNV-60W-24VDC	60W	X	
		9 - 13 ft	ZRK-UNV-96W-24VDC	96W	X	
		14 - 16 ft	ZRK-UNV-120W-24VDC	120W		
		17 - 27 ft	ZRK-UNV-200W-24VDC	200W		
		28 - 40 ft	ZRK-UNV-300W-24VDC	300W		
		1 - 26 ft (13ft/output)	ZRK-UNV-C192W-24VDC	192W	X	
		27 - 52 ft (13ft/output)	ZRK-UNV-C384W-24VDC	384W	X	
	Lutron® Hi-Lume™ Premier	1 - 13 ft	L3D0-96W24V-U	96W	X	

0.1% Constant Voltage Driver

Dimming Range:
0.1-100%

Description:
Hi-Lume Premier 0.1% EcoSystem 24V constant voltage LED driver with Soft-on, Fade-to-Black dimming technology

Compatible Aluminum Extrusions

Name	Type	Included Accessories	Covers	Kit SKU	Mockup
Ion™	Surface Mount	-	-	ION-CH-A-1M	
Atlas™	Angled Surface Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover Frosted Cover Matte Cover	ATL-CH-A-CVR-C-1M ATL-CH-A-CVR-F-1M ATL-CH-A-CVR-M-1M	
Gemini™	Surface Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover Frosted Cover Matte Cover	GEM-CH-A-CVR-C-1M GEM-CH-A-CVR-F-1M GEM-CH-A-CVR-M-1M	
Kepler™	Surface Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover Frosted Cover Matte Cover	KEP-CH-A-CVR-C-1M KEP-CH-A-CVR-F-1M KEP-CH-A-CVR-M-1M	
	Note: This extrusion only fits the Render™ Series LED strip without connectors				
Laika™	Surface Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover Frosted Cover Matte Cover	LAI-CH-A-CVR-C-1M LAI-CH-A-CVR-F-1M	
	Note: This extrusion only fits the Render™ Series LED strip without connectors				
Titan™	Surface Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover Frosted Cover Matte Cover	TTN-CH-A-CVR-C-1M TTN-CH-A-CVR-F-1M TTN-CH-A-CVR-M-1M	

Safety And Disclosures

1. Installation must be in accordance with local and national electrical code regulations.

2. To ensure safety and correct installation, our strips are intended to be installed by a qualified, licensed electrician.

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

4. Do not install in environment where excessive heat may exist.

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

6. Do not install indoor LED tape light products in outdoor / wet location environments. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.

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

8. 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.

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

10. 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.

Contact
Information

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FLEXFIRELEDs

www.flexfireleds.com