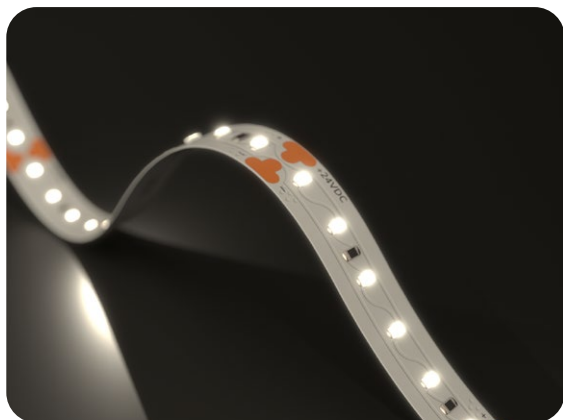


UltraBright™ Outline Series LED Strip Light

 **PRECAUTION:** Please read all instructions carefully before installation.

Our UltraBright™ Outline Series offers full-range dimming, ultra-vivid color rendering, and extended run lengths. Available in various shades of white, from warm to cool, this seamless line of light's subtle glow excels at soft embellishments and outlining in residential and commercial settings. It's ideal for nuanced cove and accent lighting, as well as spaces requiring discreet ambiance and mood enhancement.



Product Features

Voltage	24V DC
Wattage	1.5 W/ft (4.8 W/m)
Brightness	Up to 132 lm/ft (434 lm/m)
Efficacy	Up to 84 lm/W
CRI	High CRI of up to 97
R9 and R13 Values	High R9 (99) and R13 (97)
Number of LEDs	37 LEDs/ft (120 LEDs/m)
Beam Angle	120°
LED Pitch	5/16" (8 mm)
Strip Width	3/8" (10 mm)
Cutting Points	2" (50 mm)
Max Run Length in Series*	82 ft (25 m)
PCB	4 oz Copper
LED Size	2216
Adhesive Type	3M VHB 4930
Ambient Temperature	-4°F to 113°F (-20°C to 45°C)
Operating Temperature	-4°F to 149°F (-20°C to 65°C)
Dimmable	Yes
IP Rating	IP20: Indoor, Dry Location

15 Year
Warranty



**TITLE
24**
REQUIREMENTS



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

*To be in compliance with Class 2 and our UL Listing, the maximum run length of this strip may not exceed 26 ft (8 m). However, in terms of sheer voltage drop and reduction in brightness, the strip can be run 82 ft (25 m), which would be outside the parameters of our UL certification.

Ordering Code

Brand

Series

CCT

Voltage

Length

UB

OL

24V

UltraBright™

Outline Series

27K97C: 2700K/CRI 97+

30K97C: 3000K/CRI 97+

35K97C: 3500K/CRI 97+

40K95C: 4000K/CRI 95+

50K95C: 5000K/CRI 95+

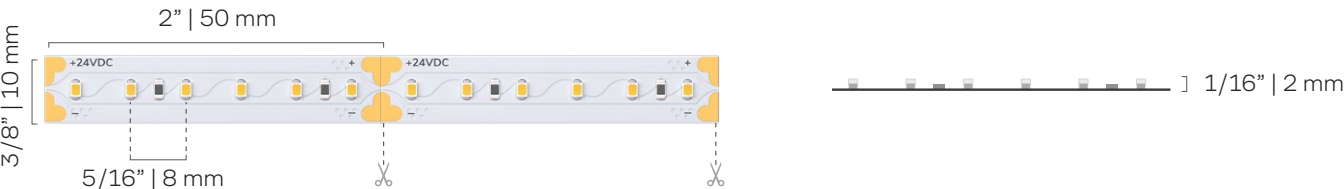
16FT

32FT

98FT

Example: UB-OL-27K97C-24V-16FT

Dimensions



Product Specifications

Product SKU	Color* (CCT)	Watts/Foot (Meter)	Lumens/Foot (Meter)	Luminous Efficacy (Lumens/Watt)	CRI	Gamut Score (Rg)	Relative Fidelity Score (Rf)
UB-OL-27K97C	2700K	1.5 W/ft (4.8 W/m)	123 lm/ft (402 lm/m)	78	97	105	95
UB-OL-30K97C	3000K	1.5 W/ft (4.8 W/m)	122 lm/ft (399 lm/m)	83	97	103	96
UB-OL-35K97C	3500K	1.5 W/ft (4.8 W/m)	129 lm/ft (423 lm/m)	83	97	103	96
UB-OL-40K95C	4000K	1.5 W/ft (4.8 W/m)	130 lm/ft (427 lm/m)	85	97	103	96
UB-OL-50K95C	5000K	1.5 W/ft (4.8 W/m)	132 lm/ft (434 lm/m)	86	96	103	96

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

Complete Your Setup



✓ Drivers



✓ Controllers & Dimmers



✓ Connectors



✓ Extrusions

Compatible Drivers (24V)

Non-dimmable

Power Supply	Diagram	LED Strip Length	Product SKU	Watts	Class 2
Plug-In Power Supply Plug-and-Play Power Supply		1 - 12 ft	24V-WMPS2-1	24W	X
		13 - 51 ft	24V-DPS2-4	96W	X
Mean Well™ HLG Hardwired Power Supply		1 - 36 ft	HLG-60H-24A	60 W	X
		37 - 57 ft	HLG-100H-24A	96 W	X
		58 - 111 ft	HLG-185H-24A	185 W	
		112 - 192 ft	HLG-320H-24A	320 W	
		193 - 360 ft	HLG-600H-24A	600 W	
Mean Well™ LPV Hardwired Power Supply		1 - 34 ft	LPV-60-24	60W	X

Dimmable

Power Supply	Diagram	LED Strip Length	Product SKU	Watts	Class 2
Zurik® EMLV Hardwired Power Supply		1 - 18 ft	ZRK-EMLV2-30W-24VDC	30W	X
		19 - 36 ft	ZRK-EMLV2-60W-24VDC	60W	X
Zurik® Universal Hardwired Power Supply		1 - 18 ft	ZRK-UNV-30W-24VDC	30 W	X
		19 - 36 ft	ZRK-UNV-60W-24VDC	60 W	X
		37 - 57 ft	ZRK-UNV-96W-24VDC	96 W	X
		58 - 72 ft	ZRK-UNV-120W-24VDC	120 W	
		73 - 120 ft	ZRK-UNV-200W-24VDC	200 W	
		121 - 180 ft	ZRK-UNV-300W-24VDC	300 W	
		1 - 228 ft (57 ft/output)	ZRK-UNV-C384W-24VDC	384W	X
Lutron® Hi-Lume™ Premier Hardwired Power Supply		1 - 57 ft	L3D0-96W24V-U	96W	X
		Dimming Range: 0.1-100%			

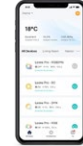
Compatible Controllers & Dimmers



Handheld Remotes



Wall Dimmers



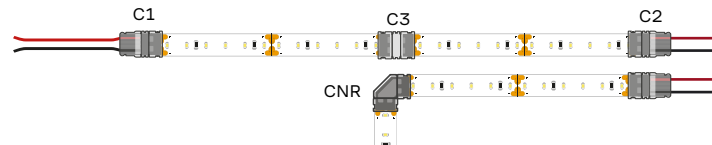
Smart Home Controllers

[See Controllers and Dimmers](#)

Compatible Strip Light Connectors

Product SKU	Diagram	Description	Wire Gauge	Amperage Limit*
GRIP-SC-C1-10-0		Connector with no wire to attach the strip to wire	-	5 Amps
GRIP-SC-C1-10-12		Connector with 12" or 36" of wire to attach the strip to a power supply or low voltage control.	22 AWG	
GRIP-SC-C1-10-36				
GRIP-SC-C2-10-06		Jumper connector with 6" of wire to attach two sections of strip together. Wire allows to go around tight corners.	-	
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.		

*Make sure no more than 5 amps are drawn after any solderless connector. Calculate max length of strip light to follow the solderless connector based on an amperage draw of 0.06 A/ft (0.2 A/m) at 24 volts.

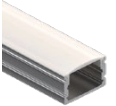


Strip Light Connectors Installation

- Peel off 1/4" of the 3M adhesive (both the tape and release paper) 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.
- 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.
- 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.
- Once everything is in order, use pliers to close and lock the connector. You'll hear a "click" sound when it is properly closed.

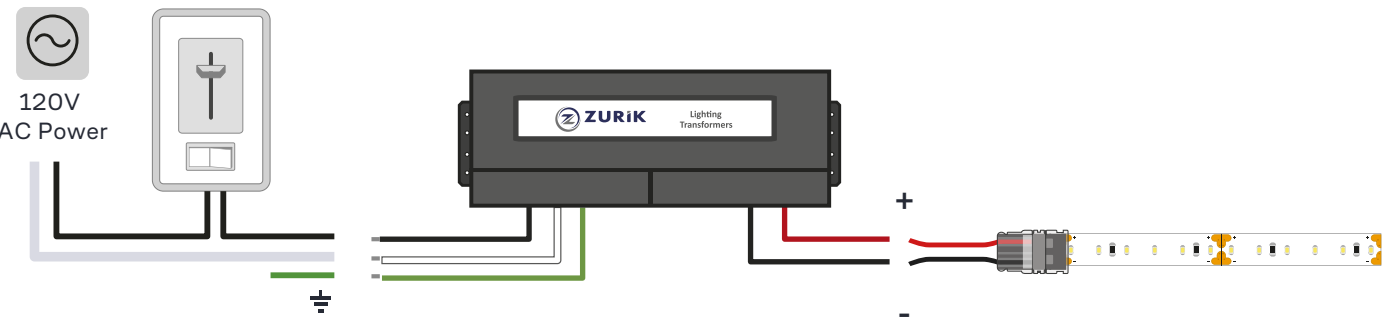
NOTE: Soldering is the preferred method. If you need further assistance, please download our Solderless Connector Installation Guide from our website.

Compatible Aluminum Channel Kits

Diagram	Name	Type	Channel Kit Description	Kit SKU	Included
	Ion™	 Surface Mount	1 Meter Ion Channel	ION-CH-A-1M	
	Gemini™	 Surface Mount	1 Meter Channel + Clear Cover Kit 2 Meter Channel + Clear Cover Kit 1 Meter Channel + Frosted Cover Kit 2 Meter Channel + Frosted Cover Kit 1 Meter Channel + Matte Cover Kit 2 Meter Channel + Matte Cover Kit	GEM-CH-A-CVR-C-1M GEM-CH-A-CVR-C-2M GEM-CH-A-CVR-F-1M GEM-CH-A-CVR-F-2M GEM-CH-A-CVR-M-1M GEM-CH-A-CVR-M-2M	2 Open End Caps 2 Closed End Caps 4 Mounting Clips
	Kepler™	 Surface Mount	1 Meter Channel + Clear Cover Kit 1 Meter Channel + Frosted Cover Kit 1 Meter Channel + Matte Cover Kit Note: Compatible only without connectors.	KEP-CH-A-CVR-C-1M KEP-CH-A-CVR-F-1M KEP-CH-A-CVR-M-1M	2 Open End Caps 2 Closed End Caps 4 Mounting Clips
	Laika™	 Surface Mount	1 Meter Channel + Clear Cover Kit 1 Meter Channel + Frosted Cover Kit 2 Meter Channel + Frosted Cover Kit Note: Compatible only without connectors.	LAI-CH-A-CVR-C-1M LAI-CH-A-CVR-F-1M LAI-CH-A-CVR-F-2M	2 Open End Caps 2 Closed End Caps 4 Mounting Clips
	Titan™	 Surface Mount	1 Meter Channel + Clear Cover Kit 1 Meter Channel + Frosted Cover Kit 2 Meter Channel + Frosted Cover Kit 1 Meter Channel + Matte Cover Kit 2 Meter Channel + Matte Cover Kit 1 Meter Channel + 10 Meter Frosted Cover Kit 1 Meter Channel + 10 Meter Matte Cover Kit 1 Pendant Kit	TTN-CH-A-CVR-C-1M TTN-CH-A-CVR-F-1M TTN-CH-A-CVR-F-2M TTN-CH-A-CVR-M-1M TTN-CH-A-CVR-M-2M TTN-CH-A-CVR-F-10MR TTN-CH-A-CVR-M-10MR TTN-PND-KIT	2 Open End Caps 2 Closed End Caps 4 Mounting Clips 6 Channel Connectors 10 Open End Caps 10 Closed End Caps 20 Mounting Clips 30 Channel Connectors 2 Pendant Mounts with Screws
	Atlas™	 Angled Surface Mount	1 Meter Channel + Clear Cover Kit 1 Meter Channel + Frosted Cover Kit 2 Meter Channel + Frosted Cover Kit 1 Meter Channel + Matte Cover Kit 2 Meter Channel + Matte Cover Kit	ATL-CH-A-CVR-C-1M ATL-CH-A-CVR-F-1M ATL-CH-A-CVR-F-2M ATL-CH-A-CVR-M-1M ATL-CH-A-CVR-M-2M	2 Open End Caps 2 Closed End Caps 4 Mounting Clips
	Calypso™	 Recessed	1 Meter Channel + Frosted Cover Kit 2 Meter Channel + Frosted Cover Kit 1 Meter Channel + Matte Cover Kit 2 Meter Channel + Matte Cover Kit 1 Meter Channel + 10 Meter Frosted Cover Kit 1 Meter Channel + 10 Meter Matte Cover Kit	CAL-CH-A-CVR-F-1M CAL-CH-A-CVR-F-2M CAL-CH-A-CVR-M-1M CAL-CH-A-CVR-M-2M CAL-CH-A-CVR-F-10MR CAL-CH-A-CVR-M-10MR	2 Open End Caps 2 Closed End Caps 4 Mounting Clips 10 Open End Caps 10 Closed End Caps 20 Mounting Clips 30 Channel Connectors
	Cassini™	 Recessed	1 Meter Channel + Clear Cover Kit 1 Meter Channel + Frosted Cover Kit 2 Meter Channel + Frosted Cover Kit 1 Meter Channel + Matte Cover Kit 2 Meter Channel + Matte Cover Kit	CAS-CH-A-CVR-C-1M CAS-CH-A-CVR-F-1M CAS-CH-A-CVR-F-2M CAS-CH-A-CVR-M-1M CAS-CH-A-CVR-M-2M	2 Open End Caps 2 Closed End Caps 4 Mounting Clips

Wiring Diagrams

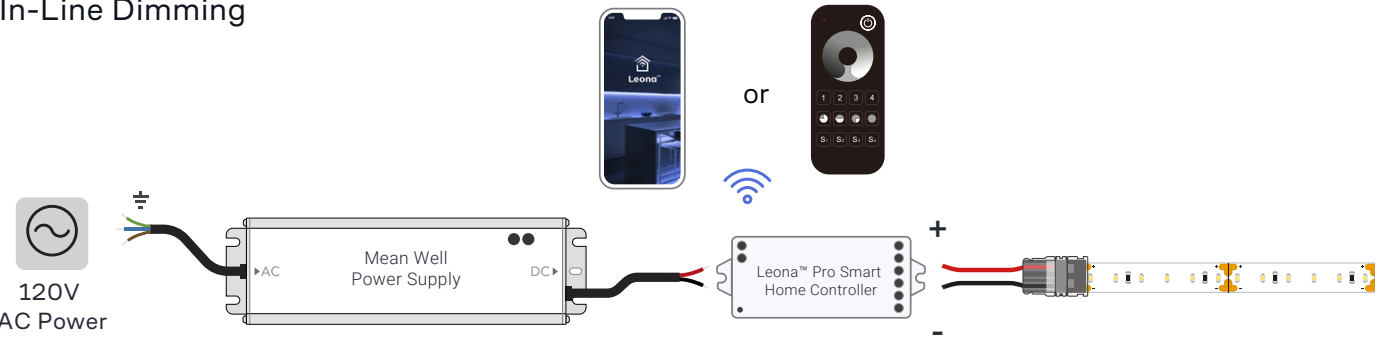
120V Wall Dimmer



Input		
● Green	⏏	Ground Wire
● Black	L	Line (hot)
○ White	N	Neutral

Output		
● Red	+	Positive
● Black	-	Negative

In-Line Dimming



Input		
● Green/Yellow	⏏	Ground Wire
● Brown	L	Line (hot)
● Blue	N	Neutral

Output		
● Red	+	Positive
● Black	-	Negative

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 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.
- 09.** Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
- 10.** 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.
- 11.** Do not modify the product beyond instructions or warranty will be void.
- 12.** 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 15 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.



www.flexfireleds.com

 Toll Free Number: 1-844-353-9347

 Local Number: (925) 273-9080

 info@flexfireleds.com