FLEXIBLE LED

LUMISTRAP™

LED SIMULATED NEON

High Intensity Flexible LED Accent Lighting

FEATURES

- Bendable lighting solution
- SMD LEDs inside a diffused silicone lens
- Long life - 50,000 hrs
- UV and discoloration resistant
- UL 94 V-0 flammability rating
- IP67
- Easy to install and connect On-Site
- Cuttable at 4 in intervals
- 4.7 in minimum bend radius

APPLICATIONS

- Building and sign border lighting
- Cove and under counter lighting
- Exterior accent/border lighting
- Lighting for custom fixtures

5-YEAR WARRANTY

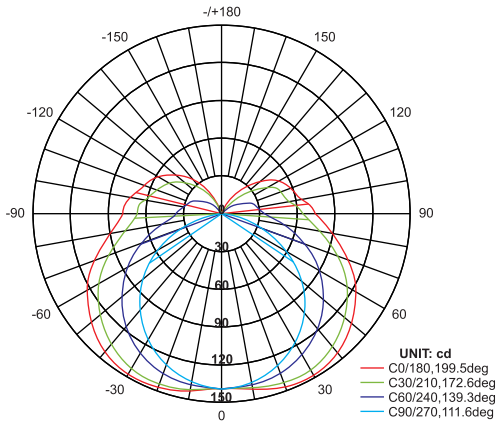
SPECIFICATIONS

Color	Max Footage	Wattage per foot	Lumens per foot
White 6500K	32	7.60	610
White 5000K	32	7.60	610
White 4000K	32	7.60	550
White 3000K	32	7.60	550
White 2700K	32	7.60	520
Red	32	7.60	-
Blue	32	7.60	-
Green	32	7.60	-

*LumiStrap systems based on Lektron-supplied 240W, 24 VDC, LED Driver

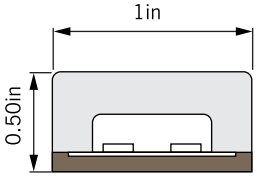
DETAILS

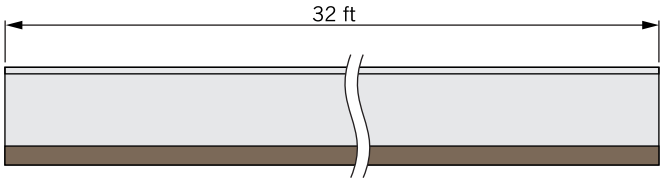
Power Supply Input	100-240, 277 VAC
Power Supply Output	24 VDC
Max. Load Footage	32 ft.
Watts per Foot	7.60
Dimming Capable	Yes
Bending Parameters	4.7 in min. bend radius
Limited Warranty Terms	5 Years
Materials	Silicone
Dimensions	0.50 in. x 1.00 in.
Certification	cULus



AVERAGE BEAM ANGLE (50%):155.8 DEG

DIMENSIONS





*NOTE: 32 ft is the maximum footage for single power supply

LEKTRON Branding Solutions
918.622.4978
www.lektroninc.com
sales@lektroninc.com

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Sales Note

This product is now sold in bundles of 32 ft light lengths. When ordering, please be aware of what light lengths and how many separate runs of lights you expect to need to complete your project. We are able to direct you towards the right number of bundles for your project.

- 32 ft of Lights with Accessories for Three Runs
  - Includes: 32 ft lights, 3 end caps, and 3 connectors
- Electrical Bundle (32 ft)
  - Includes: 1 power supply (240W), 1 j-box, and related accessories
- Mounting Bundle (32 ft)
  - Includes: 32 ft of mounting channel, related accessories

Bundle Part Number Charts

LumiStrap LED Bundles

Part Number	Footage	Color
03FX-0815	32 ft	White 6500K
03FX-0841	32 ft	White 5000K
03FX-0843	32 ft	White 4000K
03FX-0845	32 ft	White 3000K
03FX-0847	32 ft	White 2700K
03FX-0849	32 ft	Red
03FX-0851	32 ft	Blue
03FX-0853	32 ft	Green

Steps to Take When Planning and Installing

1. Read all instructions before beginning installation.
2. Plan out the locations and lengths of runs of lights. Do not exceed the 32 ft max run length.
3. Plan out the locations of power supplies and wire runs. Consider which side of your light runs will connect to your wire runs. Keep in mind the recommended 50 ft max wire length.
4. Install aluminum channel and mounting clips. See page 4.
5. Install junction boxes and power supplies. Route cable from junction boxes to start of runs. See pages 7-8.
6. Cut lights to size. Install end caps and connectors. Make sure to match up the "number" on the connector to the identical number on the back of the light. See pages 4-6.
7. Finish electrical install and connect lights to wire runs. Verify all sections of lights are working as expected.

LumiStrap Component Bundles

Part Number	Description
03FX-0820	Electrical Components for 32 ft of LumiStrap
03FX-0824	Cutter & Silicone Components for Flex Lights
03FX-0872	Black Mounting Components for 32 ft of LumiStrap

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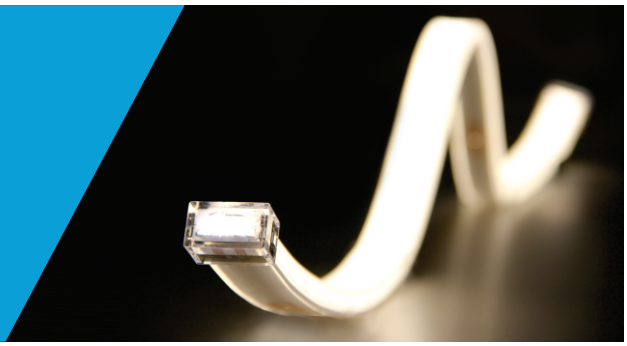
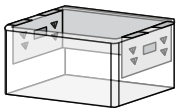
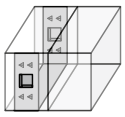
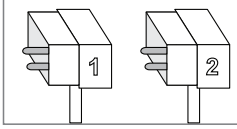
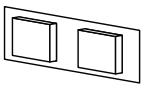
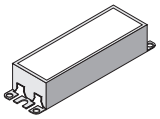
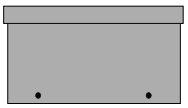


LUMISTRAP INSTALLATION MATERIALS

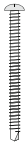
LUMISTRAP LED BUNDLE

VARIOUS	01FX-0550	CONS-0081	01FX-0765	CONS-0088
LumiStrap LED Light	LumiStrap End Cap	LumiStrap Quick Input Power Connector Cover	LumiStrap Quick Input Power Connector	LumiStrap Silicone Terminal
				

LUMISTRAP ELECTRICAL COMPONENTS BUNDLE (03FX-0820 & 03FX-0821)

01OT-0644	01LL-0546	01LL-0056	CONS-0039	01OT-0792	CONS-0010
240W 24 VDC Power Supply	J-Box	Strain Relief	Blue Wire Nuts	PLTC Cable	#10 x 3/4" Hex Washer Head Screw
					

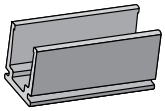
LUMISTRAP MOUNTING COMPONENTS BUNDLE (03FX-0872, 03FX-0873)

01FX-0826	CONS-0026
LumiStrap 96" Black Aluminum Mounting Channel	#10 x 3" Pan Head Screw
	

CUTTER AND SILICONE COMPONENTS BUNDLE (03FX-0824)

01TH-0338	01FX-0250
Flexible LED Neon Cutter	Silicone Grease
	

LUMISTRAP SPECIAL COMPONENTS

01FX-0343
LumiStrap 2" Alum. Mounting Clip *Upon Request


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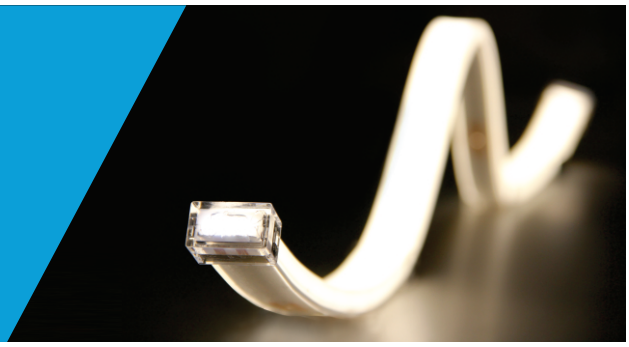
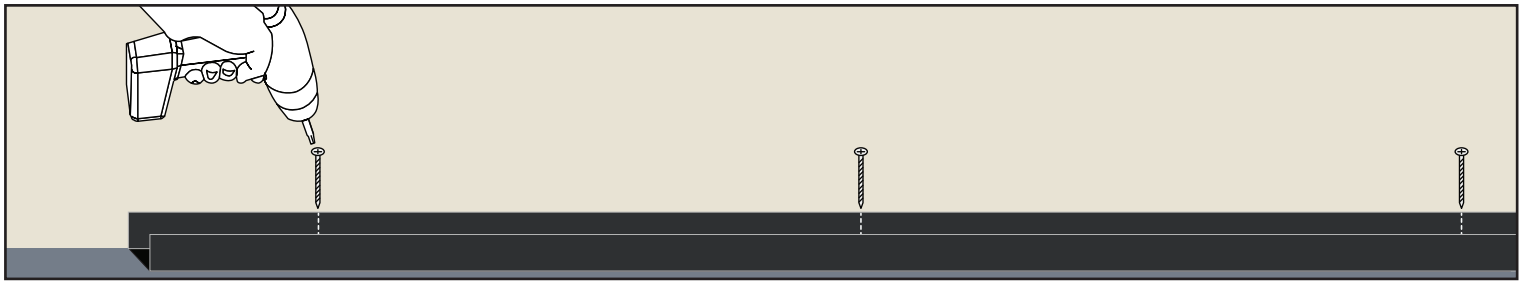


MOUNTING SURFACES VARY

PLEASE USE PROPER SCREW WHEN MOUNTING THE HOUSING TO THE STRUCTURE. IT IS CONTRACTORS RESPONSIBILITY TO DETERMINE IF SCREW TYPE IS SUITABLE FOR BACKING MATERIAL. REPLACE WITH SUITABLE SCREW TYPE AS REQUIRED.

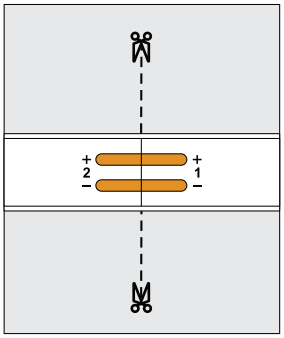
HANG / FASTEN

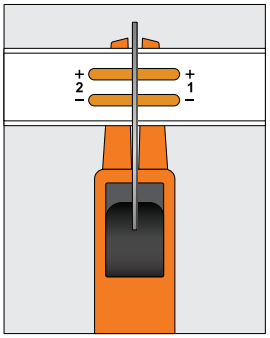
Hang the aluminum mounting channel using 5 screws per 96" section of channel. #10 x 3" Pan Head Self-Threading Screws are provided, but verify screw type is suitable for mounting surface. Cut mounting channel to size, and see Page 6 for the clearances needed for end caps and connectors.

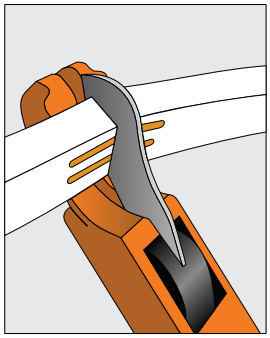


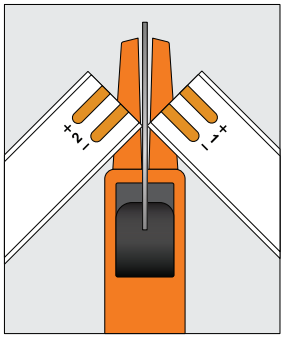
CUT LEDS

Locate a roll of the flexible LED light strips. The strips mount inside the aluminum u-channel and are held in place by friction fit. Gently push the LED strips into the aluminum mounting channel or clips working your way from the powered end towards the termination end. Once you reach a termination point, i.e. corner, it will be necessary to mark and cut the LED light strip using the provided cutters. Follow the distances given on Page 6 for locating the end of a light strip from the end of a channel. Apply these distances to both connectors and end caps.









NOTE:

YOU MUST CUT THE LED LIGHT STRIPS ONLY AT THE MARKED LINES ON THE BACK OF THE LIGHT STRIPS. THESE MARKS ARE IN 4" INCREMENTS.

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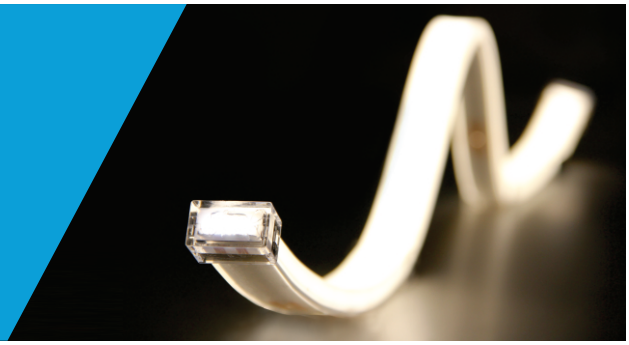
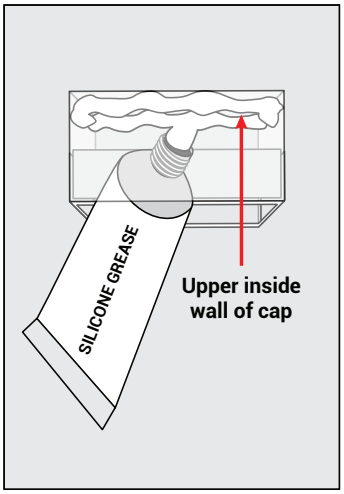
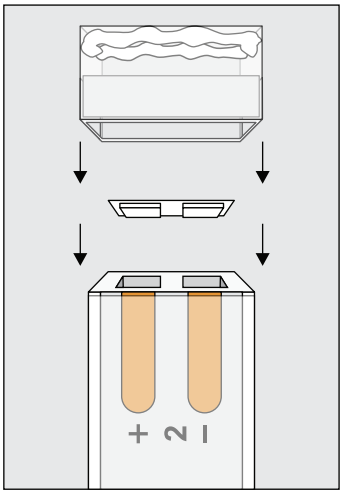
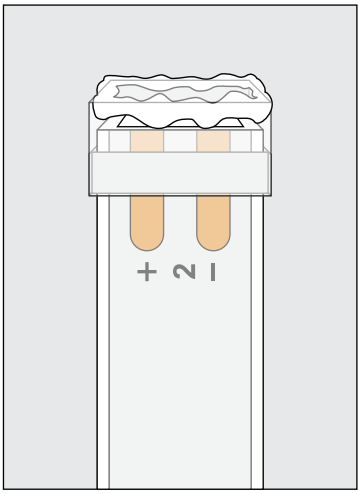


TERMINAL AND END CAP

Once you have made your cut, locate the silicone terminals and the plastic termination cap for the LED light strip. Push the terminal into the slots at the end of the Lumistrap strip. Apply silicone grease to the upper inside of the cap and slide the cap over the end of the LED light strip to protect it from moisture intrusion. The cap has gripper teeth that allow it to slide on, but not back off.

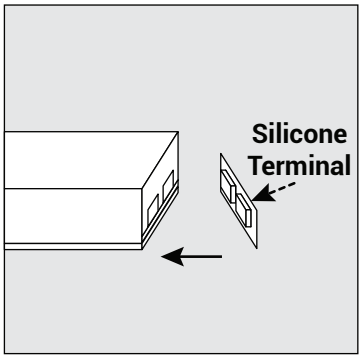


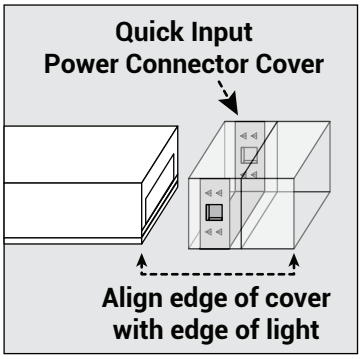


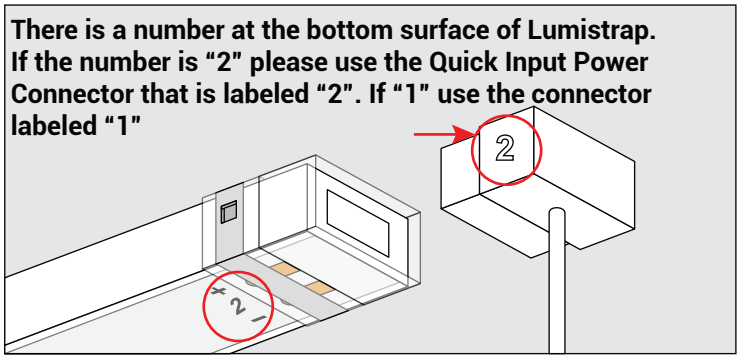


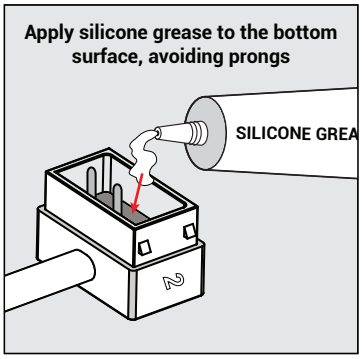
QUICK INPUT POWER CONNECTOR

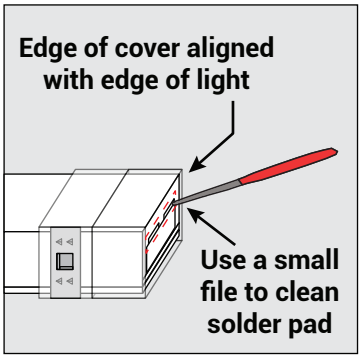
To install a quick input power connector, first push the silicone terminal into the slots. Next, push the quick input power connector cover onto the end of the LED. Push until the end of the cover is aligned with the end of the light. Add silicone grease to the bottom surface of the quick input power connector. File the solder pads. Take the quick input power connector and align the prongs with the pads on the back side of the LEDs. Press in very firmly to attach connector, and verify that the prongs are contacting the pads.

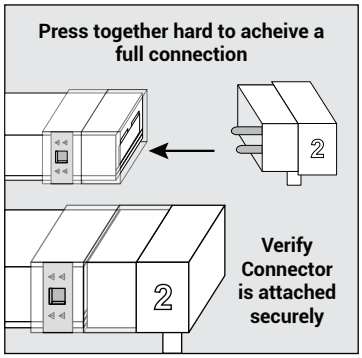


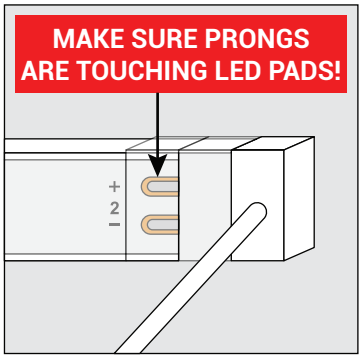












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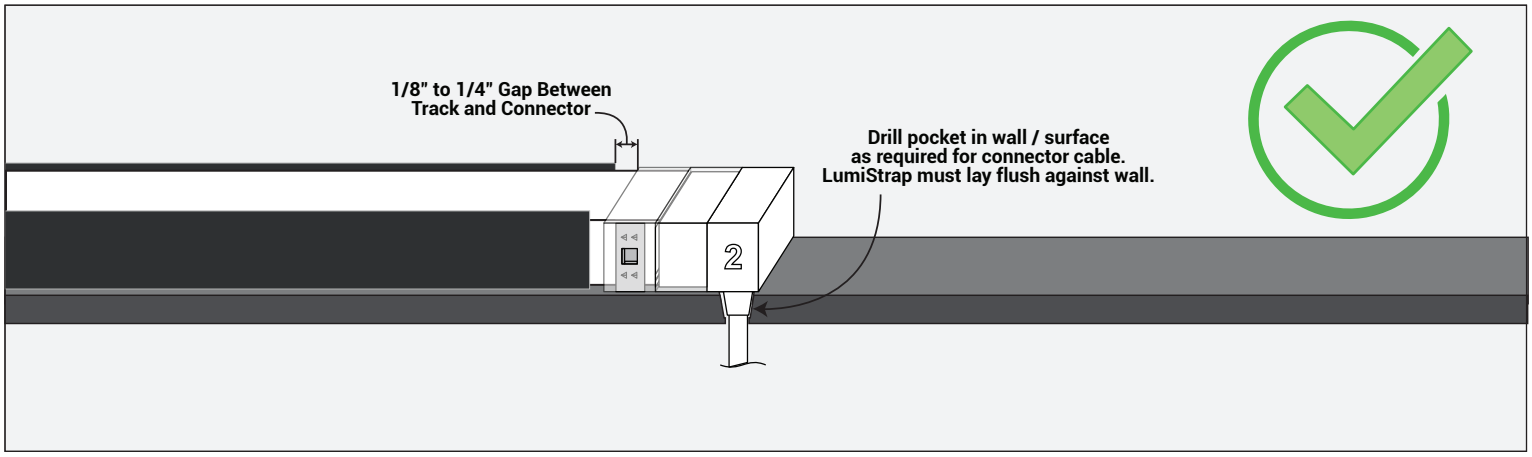
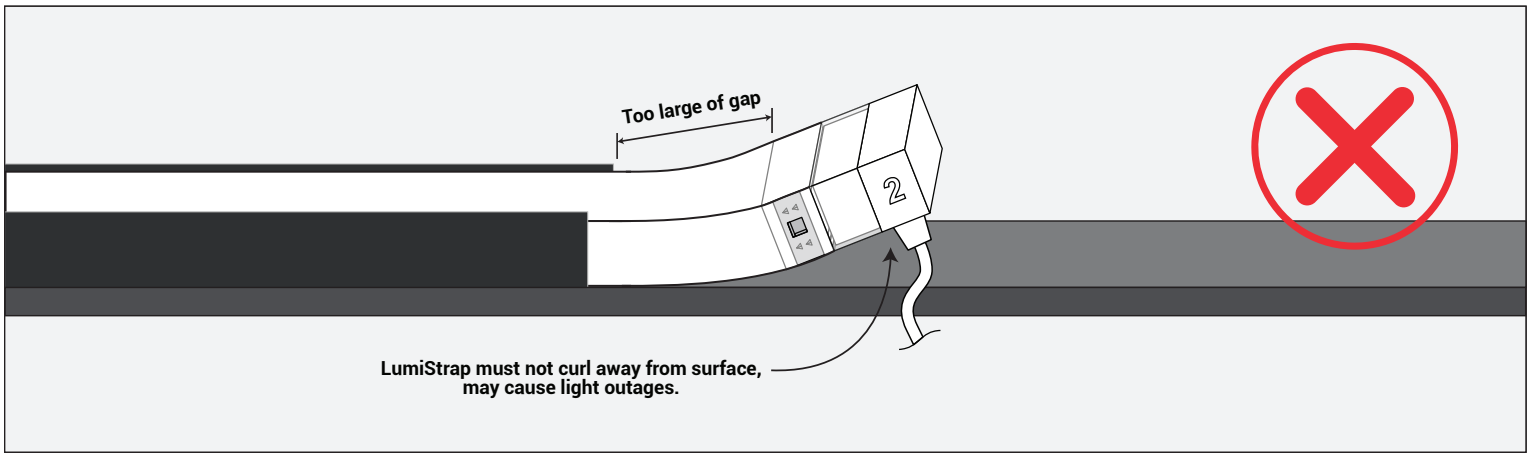
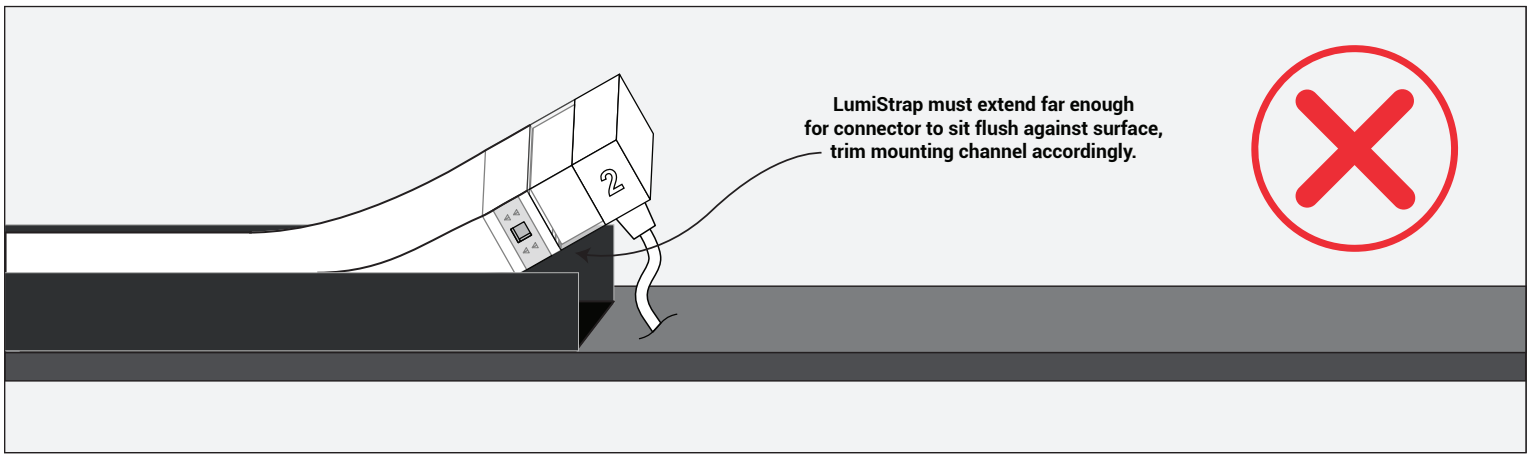
PROPER INSTALLATION



IMPROPER INSTALLATION



IMPROPER INSTALLATION



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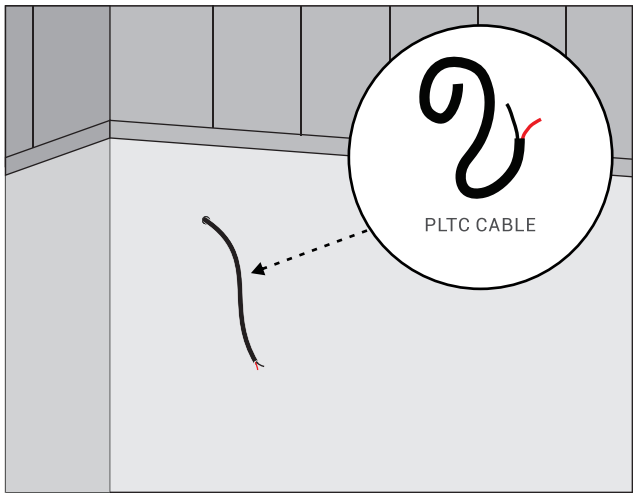
WIRING PREPARATION

The flexible LED light strips are powered from the power supplies via the supplied 2-conductor PLTC cable (use for low voltage only). The maximum PLTC cable length shall not exceed 50' between the power supply and the beginning of the LED run. If 50' is exceeded, significant voltage drop may occur. If a wire run longer than 50' is needed, larger gauge wire may be used to compensate for voltage drop. If using wire other than the supplied PLTC cable, verify it is suitably rated for its use and environment. Never use wire smaller than 18awg.



Consider this 50' maximum length when identifying possible locations of power supplies and the beginning/end of the LED runs. When mounting power supplies inside, lay out your wall penetration points and drill through the wall to allow passage of the provided PLTC cable. Feed/fish the PLTC cable from the outside to the power supply, leaving extra cable for connection at the power supply. Feed the long end of the cable from the penetration point through the panel mounting brackets down to the point where the connection will be made to the LED light strips. Seal all penetrations with silicone sealant.

It is contractors responsibility to install per local codes, and to apply best practices based on site conditions.

SPLICING PLTC CABLE TO CONNECTOR

The PLTC cable runs must be spliced to the short wires extending from the connector. When LumiStrap is used outdoors, this often requires a splice that can handle being in a wet location. The best practice for this situation is to add a small weatherproof junction box near the connector so this splice can be done inside of the box (not supplied by Lektron).

See the below list for potential alternate waterproof connection options. Always verify the connector you're using is suitable for the wire gauge used, is capable of carrying a minimum of 10 amps, and has a relevant approval from UL or an equivalent agency.

Other Suitable Waterproof Connection Options May Include:

- Tekox IP68 connectors with rubber seals
- TE Coolsplice large wire gel-filled connectors
- Dolphin Super B connectors with sealant
  - These are only IP65 and must be used with additional waterproofing measures

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POWER SUPPLY WIRING

1. Locate suitable spot for power supply location. Power supplies should be located so they can be easily accessed for maintenance. Power supplies will have the longest life if mounted inside the facility. Local electrical codes may require the use of junction boxes even if installed inside.

2. Remember that a single 240W power supply can supply power to maximum 32 ft of lights. This can be multiple runs of lights (e.g. two 15 ft runs could be powered by a single power supply), but the 32 ft maximum must not be exceeded.

3. Attach j-box to available support and install power supplies inside of j-box. #10 x 3/4" self-drilling hex head screws are provided, but only use if mounting surface is suitable. To prevent overheating, do not exceed more than two power supplies per supplied j-box. Leave a minimum of 4" spacing between the two power supplies to allow for heat dissipation.

VERY IMPORTANT:

Make sure you are using the correct power supply and LED configuration! Connecting lights to the wrong power supply could result in damage.

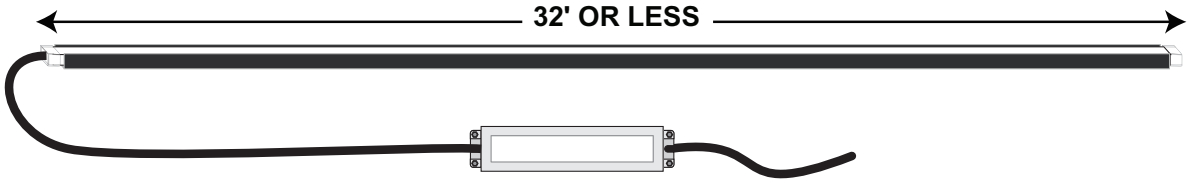
01OT-0644
240W 24 VDC
Power Supply

4. Install fittings and strain relief for wire runs. Details of wire runs to be determined by contractor. See Page 7 for more info.

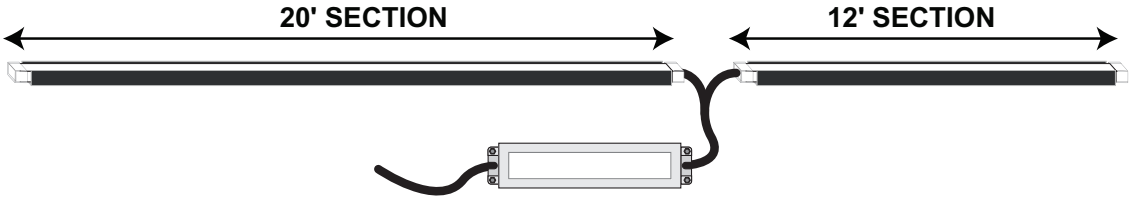
5. If installed outside, apply sealant to top of box and any penetrations, where required to prevent water intrusion. Do not seal holes at bottom of j-box that function as weep holes.

WARNING: NEVER EXCEED MORE THAN 32 FEET OF LIGHTS ON A SINGLE POWER SUPPLY OR RUN OF LIGHTS

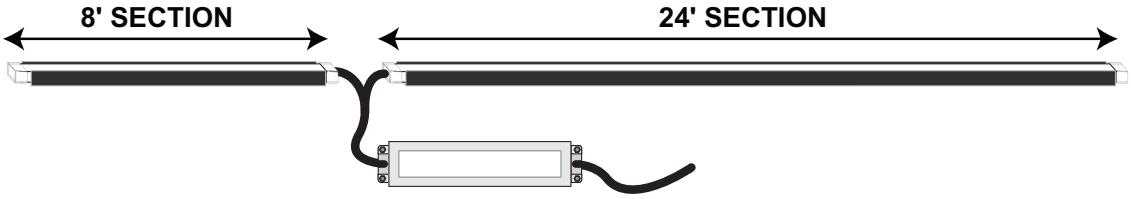
EXAMPLE 32' RUN



EXAMPLE 32' RUN



EXAMPLE 32' RUN



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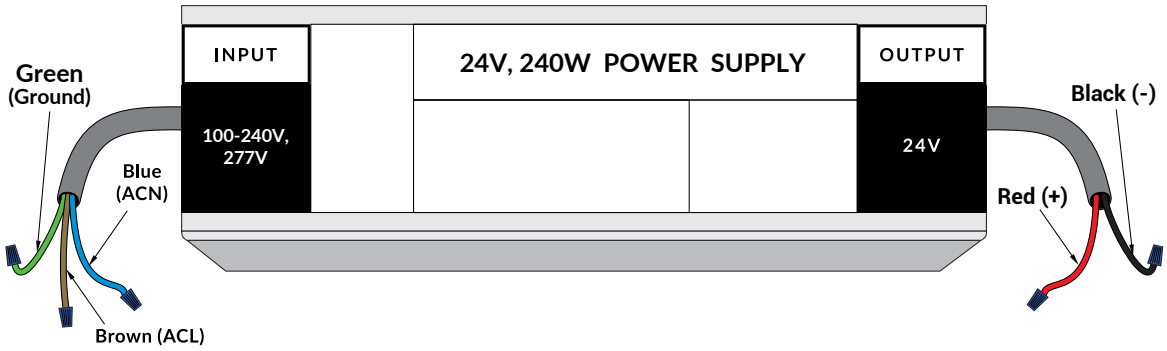
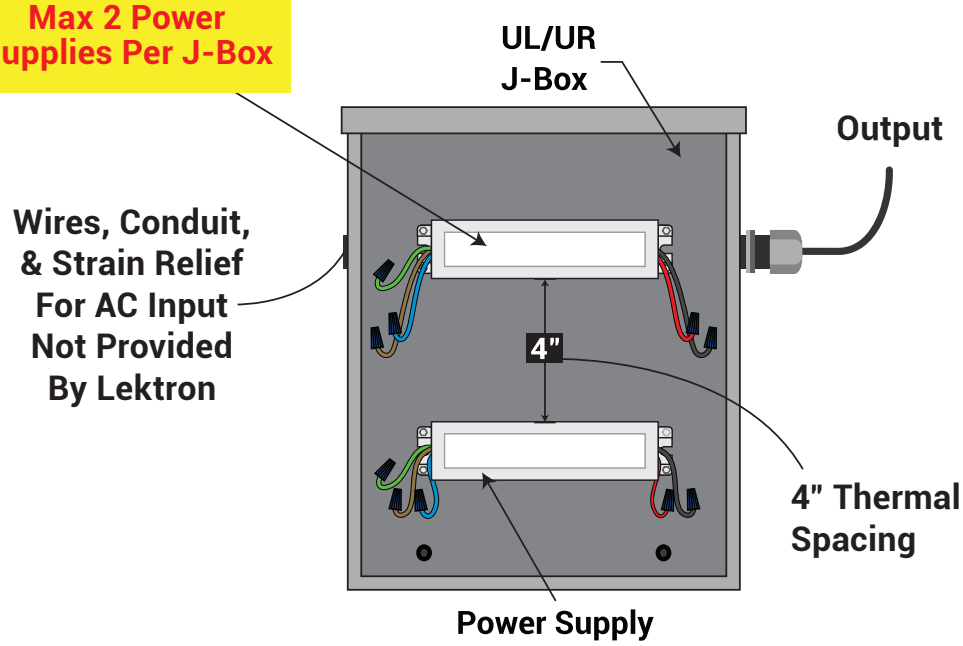


WARNING: DO NOT CONNECT 100-240V / 277V TO LEDS. LEDS ARE 24V ONLY!

WARNING:
Max 2 Power Supplies Per J-Box



IMPORTANT: DO NOT SKIP THIS STEP! ALWAYS CHECK ALL LED LIGHTS BEFORE CONTINUING.

TESTING EACH SECTION

1. Using the installed power supplies, supply power to the LED light by turning on 100-240V / 277V connection to the input wires on the power supply.

REMEMBER: LOOK CLOSELY AT POWER SUPPLY BEFORE CONNECTING WIRES. VERIFY WHICH ARE 100-240V / 277V INPUT (LINE, NEUTRAL) AND WHICH ARE 24V OUTPUT (V-, V+) BEFORE CONNECTING.

2. Check to see if all LEDs are lit and working correctly.

3. If a section does not light up, is damaged, etc., disconnect power and begin troubleshooting.

4. Some common troubleshooting steps are:

- Check for loose connections.
- Verify voltage of output wires with a multimeter.
- Verify correct polarity of output wires with regard to the lights.
- Verify quick input connector prongs are making good contact with pads on the LED strip.
- Verify the number on the quick input connector matches the number on the LED strip.
- Test the section of lights with a different power supply.
- Test the power supply with a different section of lights.

DO NOT APPLY 100-240V / 277V DIRECTLY TO THE LIGHTS OR TO THE LOW-VOLTAGE OUTPUT WIRES ON THE POWER SUPPLY

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