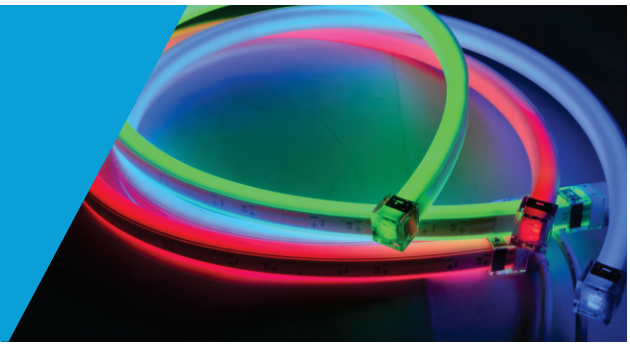
FLEXIBLE LED

LUMILINE™

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 and salt-mist proof
- Easy to install and connect On-Site
- Cuttable at 4 in intervals
- Min. bending radius 3.93 in

APPLICATIONS

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

5-YEAR WARRANTY

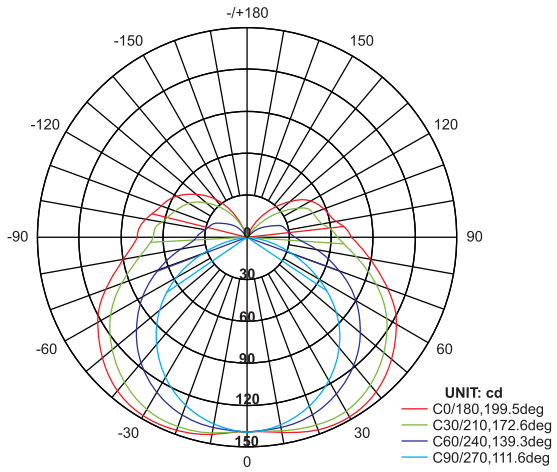
SPECIFICATIONS

Color	Footage	Wattage per foot	Lumens per foot	Number of LEDs/ft.
White 6500K	32	3.70	305	36
White 5700K**	32	3.70	305	36
White 4000K	32	3.70	305	36
White 2700K	32	3.70	275	36
Red	32	3.70	-	36
Blue	32	3.70	-	36
Green	32	3.70	-	36

*Lumiline systems based on Lektron-supplied 240W, 24 VDC, LED Driver
** Not typically stocked - available by special order only

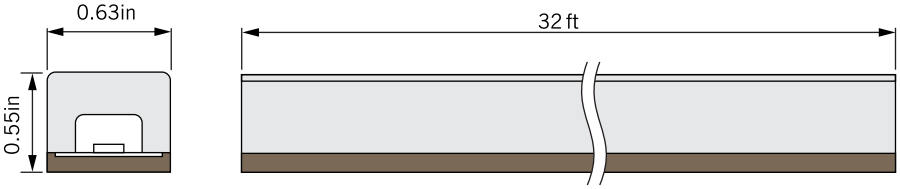
DETAILS

Input	100-240 VAC
Output	24 VDC
Max. Load Footage	32 ft
Watts per Foot	3.70
Dimming Capable	Yes
Bending Parameters	3.93 in min. bend radius
Limited Warranty Terms	5 Years
Materials	Silicone
Dimensions	0.55 in x 0.63 in
Certification	cURus



AVERAGE BEAM ANGLE (50%):155.8 DEG

DIMENSIONS:



Notes:
1. Unit: in/ft

*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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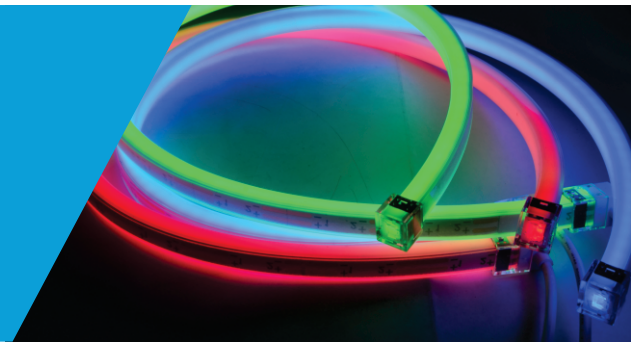

Sales Note

This product is now sold in bundles based on 32 ft and 64 ft light lengths. When ordering for your project, please be aware of what light length and how many separate runs of lights you expect, so we are able to direct you towards the right combination of these bundles for your project.

- 32 ft of Lights with Accessories for Three Runs
  - Includes: 32 ft lights, 3 end caps, and 3 connectors
- 64 ft of Lights with Accessories for Six Runs
  - Includes: 64 ft lights, 6 end caps, and 6 connectors
- Electrical Bundle (32 ft)
  - Includes: 1 power supply (240W), 1 j-box, and related accessories
- Electrical Bundle (64 ft)
  - Includes: 2 power supplies (240W), 1 j-box, and related accessories
- Mounting Bundle (32 ft)
  - Includes: 32 ft of mounting channel, related accessories
- Mounting Bundle (64 ft)
  - Includes: 64 ft of mounting channel, related accessories

Bundle Part Number Charts

LumiLine LED Bundles

Part Number	Footage	Color
03FX-0855	32 ft	White 6500K
03FX-0856	64 ft	
03FX-0857	32 ft	White 4000K
03FX-0858	64 ft	
03FX-0859	32 ft	White 2700K
03FX-0860	64 ft	
03FX-0861	32 ft	Red
03FX-0862	64 ft	
03FX-0863	32 ft	Blue
03FX-0864	64 ft	
03FX-0865	32 ft	Green
03FX-0866	64 ft	

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.

LumiLine Component Bundles

Part Number	Description
03FX-0822	Electrical Components for 32ft of LumiLine
03FX-0823	Electrical Components for 64ft of LumiLine
03FX-0824	Cutter & Silicone Components for Flex Lights
03FX-0874	Mounting Components for 32ft of LumiLine
03FX-0875	Mounting Components for 64ft of LumiLine

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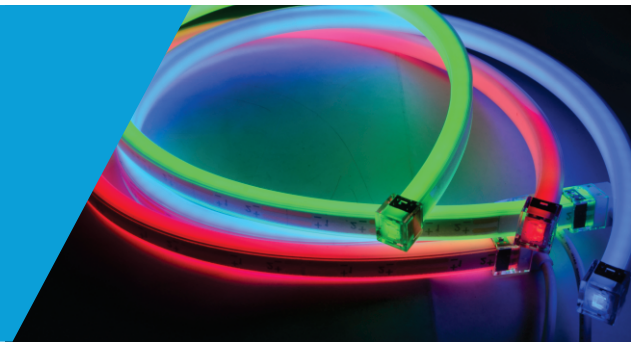
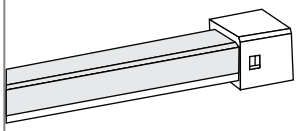


LUMILINE INSTALLATION MATERIALS

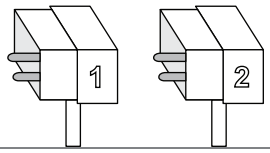
01FX-0467

LumiLine End Cap



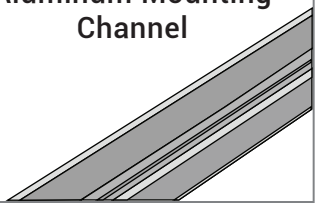
01FX-0772

LumiLine Quick Input Power Connector Set (bottom)



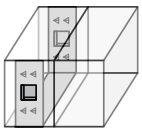
01FX-0632

LumiLine 39.375" Aluminum Mounting Channel



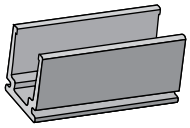
CONS-0080

LumiLine Quick Input Power Connector Cover



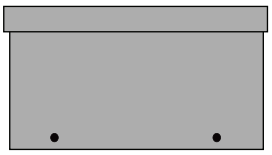
01FX-0475

LumiLine 2" Aluminum Mounting Clip



01LL-0546

J-Box

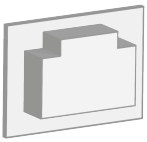


01OT-0251

240W 24 VDC Power Supply

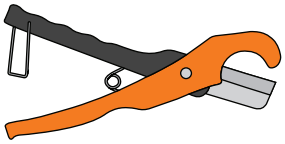
CONS-0089

LumiLine Silicone Terminal



01TH-0338

Flexible LED Neon Cutter



01FX-0250

Silicone Grease

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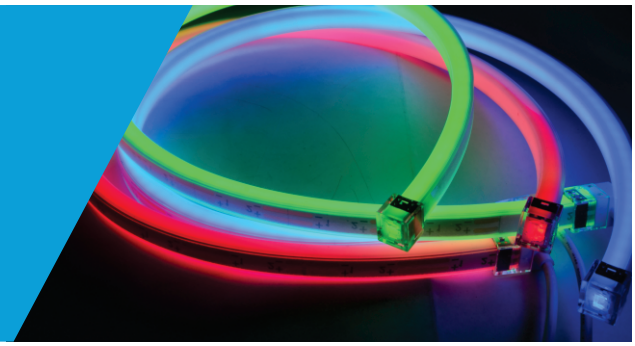
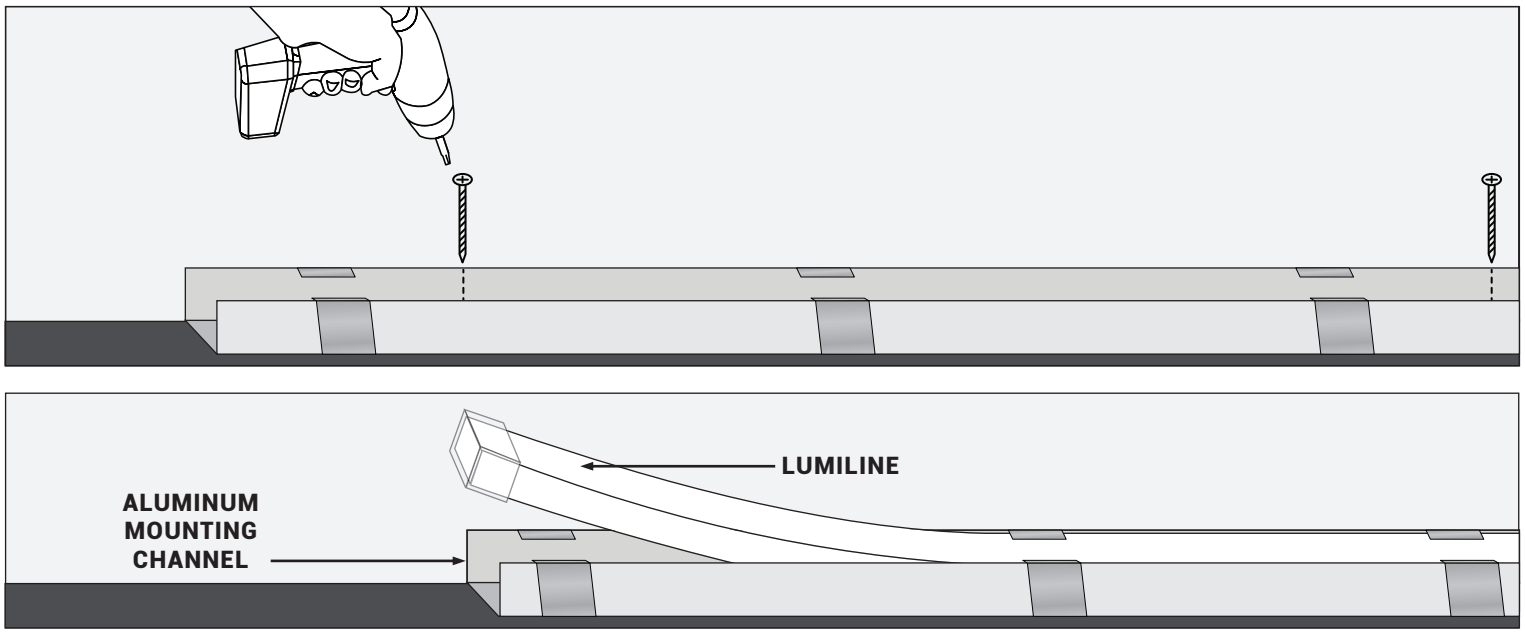


MOUNTING SURFACES VARY

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.

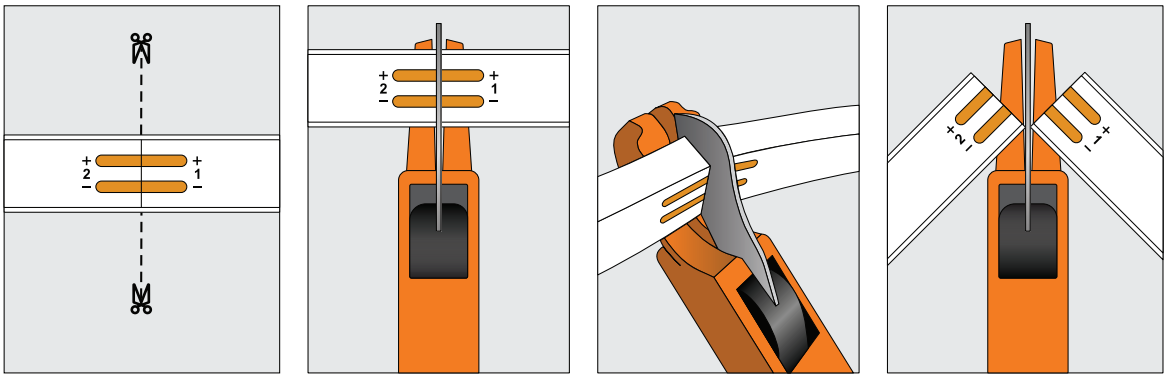
HANG / FASTEN

Hang the aluminum mounting channel using a minimum of 2 screws per 39.38" 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.

FLEXIBLE LED

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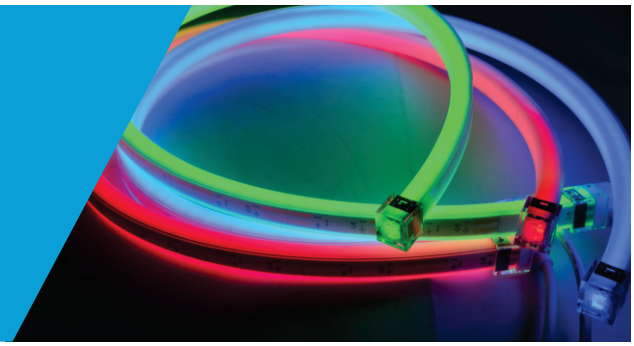
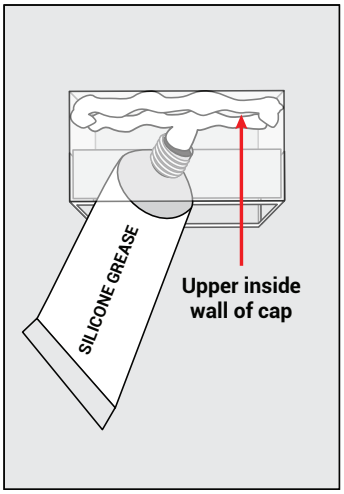
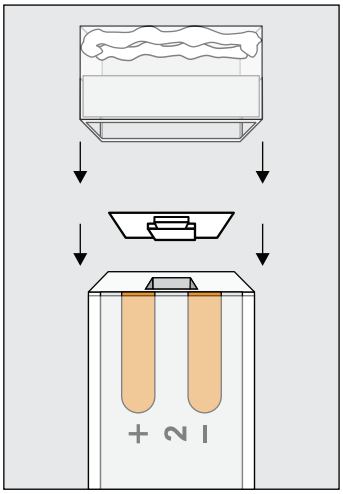
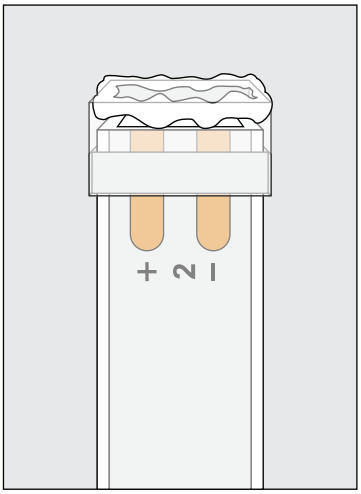


TERMINAL AND END CAP

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 LumiLine 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.

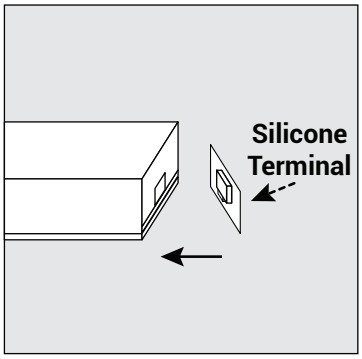


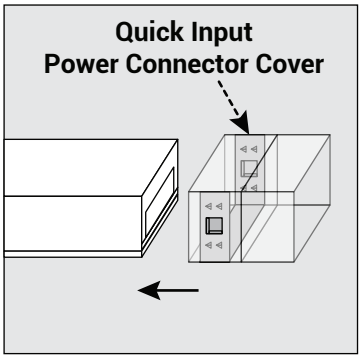


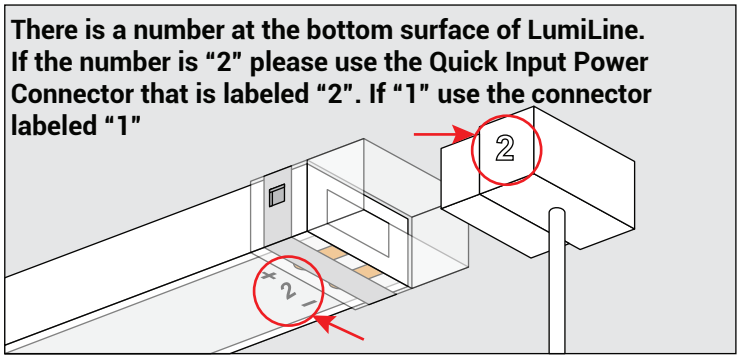


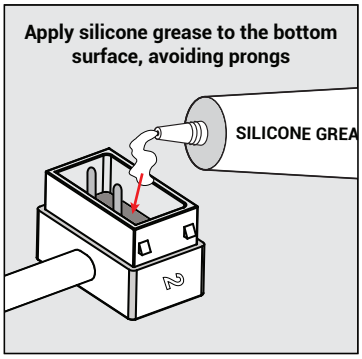
QUICK INPUT POWER CONNECTOR

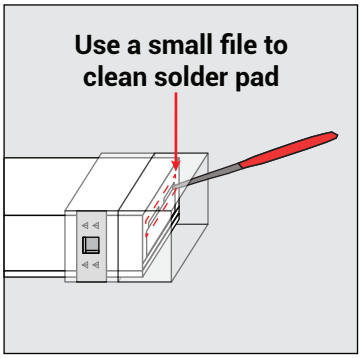
To install a quick input power connector, first push the silicone terminal into the slots. Next, push the quick input power connector cover onto the end of the LED. Make sure it is pushed sufficiently far onto the light. Add silicone grease to the bottom surface of the quick input power connector. File 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.

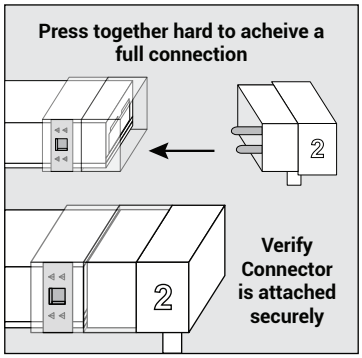


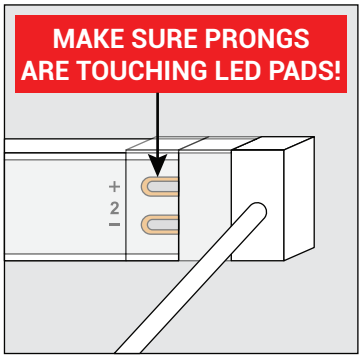












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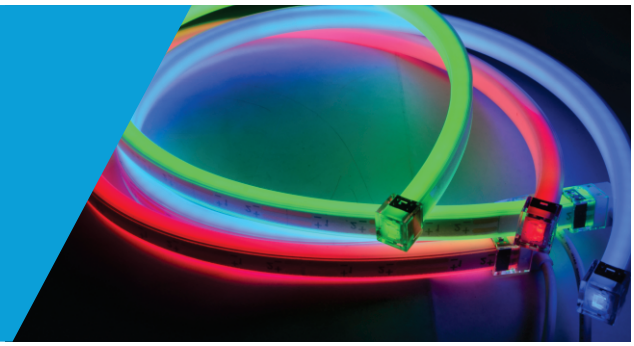
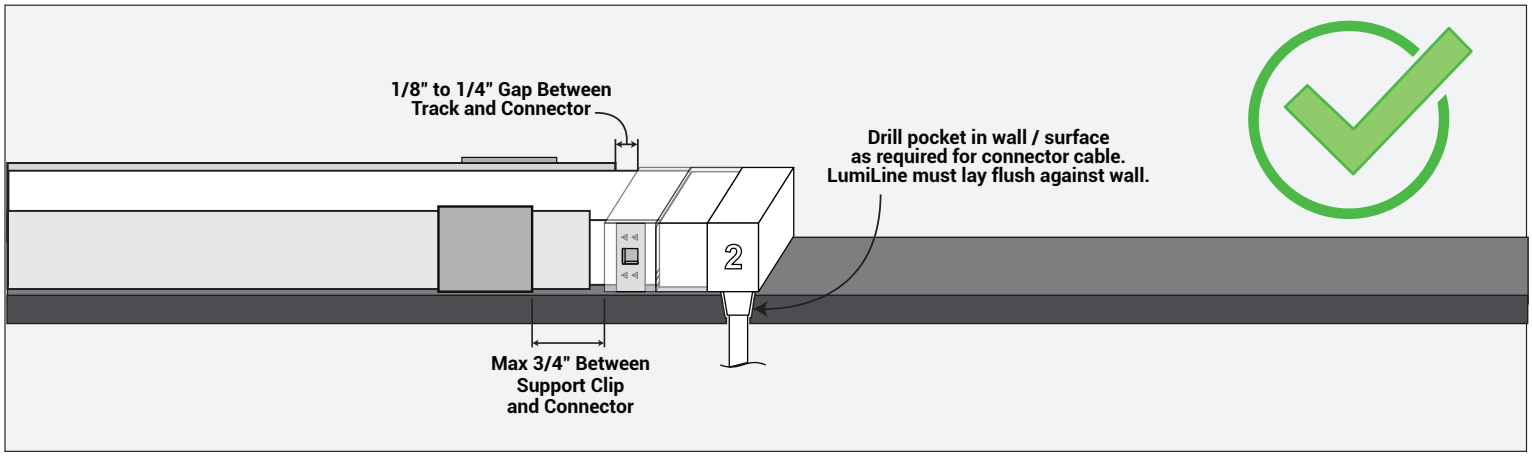
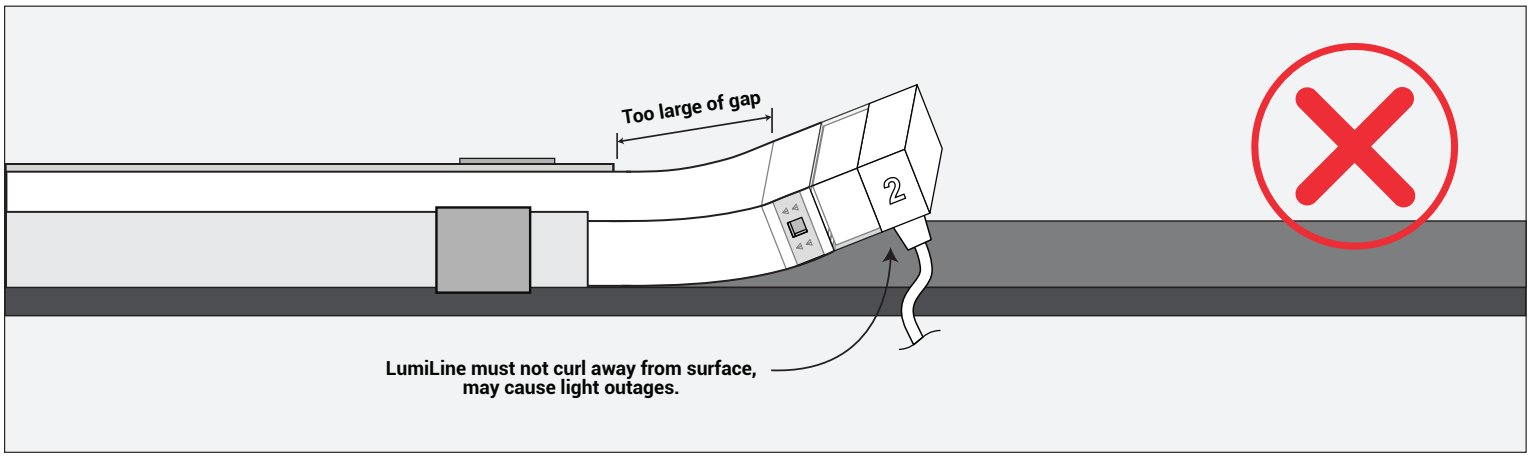


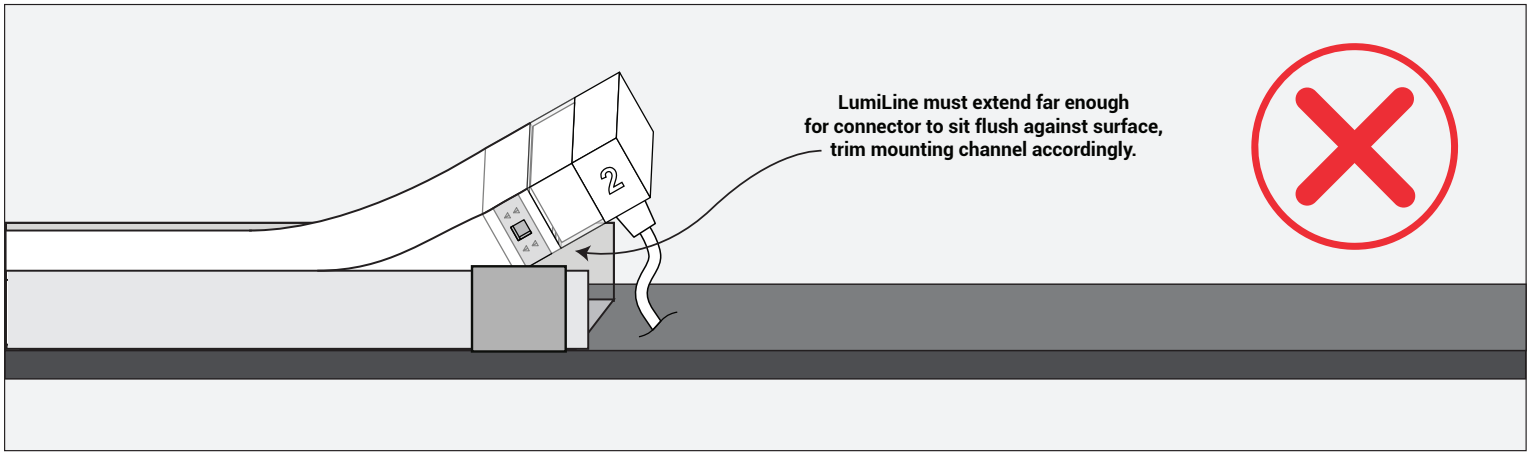
PROPER INSTALLATION



IMPROPER INSTALLATION



IMPROPER INSTALLATION



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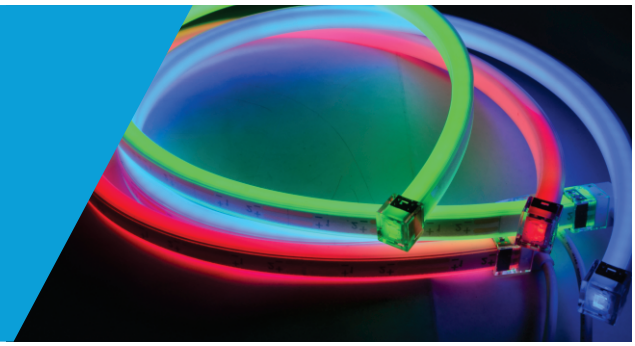
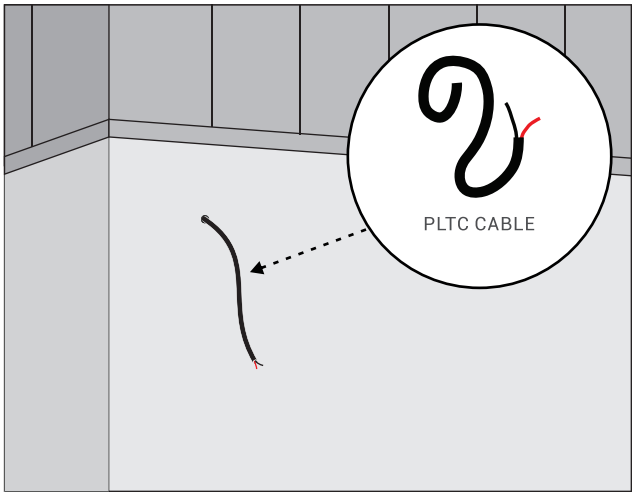


WIRING PREPARATION

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 LumiLine 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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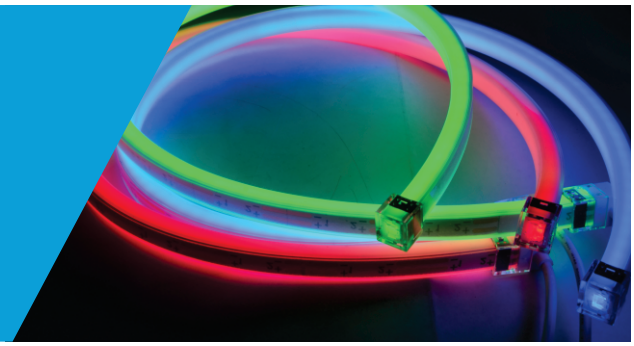


POWER SUPPLY WIRING

NOTE: Any primary voltage supply greater than 240, "STOP" call Lektron at 1-918-622-4978

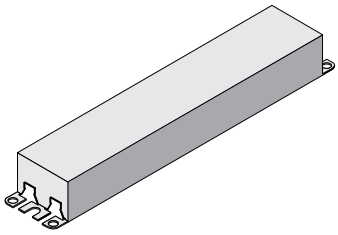
1. Locate suitable spot for power supply location. Power supplies should be located so they can be easily accessed for maintenance. Power supplies will have the longest life if mounted inside the facility. Local electrical codes may require the use of junction boxes even if installed inside.

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.

VERY IMPORTANT:

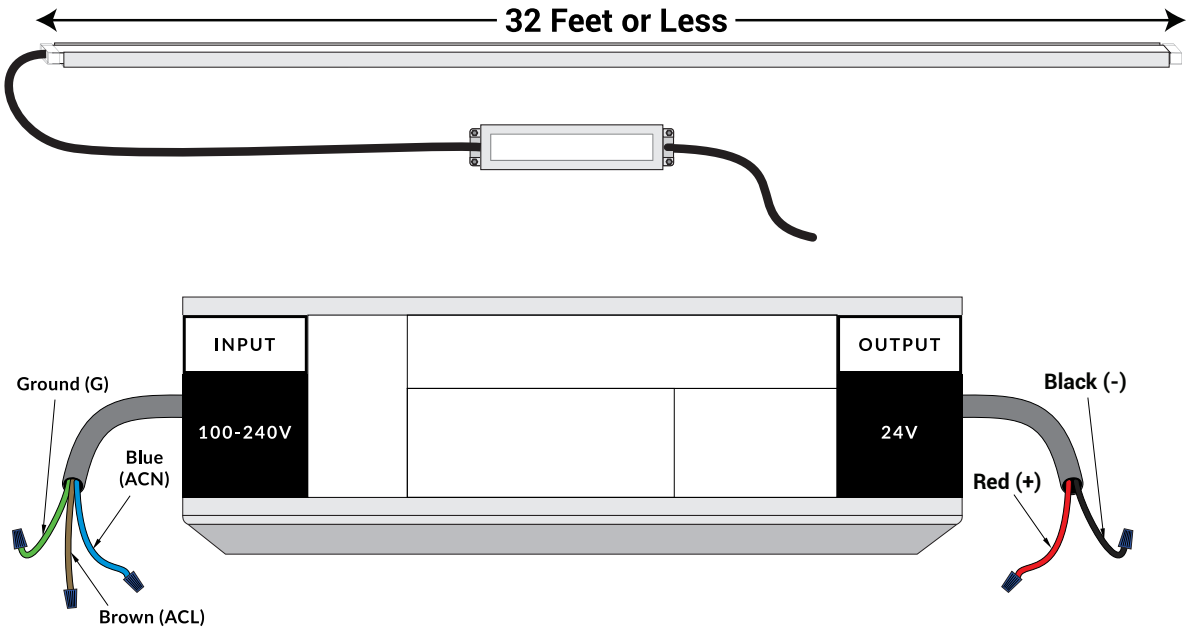
Make sure you are using the correct power supply and LED configuration! Connecting lights to the wrong power supply could result in damage.



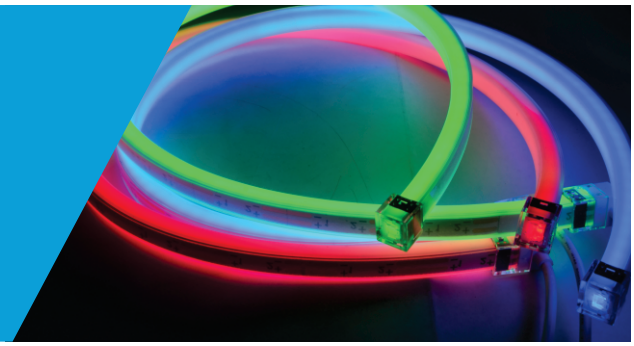
240W 24 VDC
Power Supply

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



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 connection to the input wires on the power supply.

REMEMBER: LOOK CLOSELY AT POWER SUPPLY BEFORE CONNECTING WIRES. VERIFY WHICH ARE 100-240V 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 DIRECTLY TO THE LIGHTS OR TO THE LOW-VOLTAGE OUTPUT WIRES ON THE POWER SUPPLY

sales@lektroninc.com

918.622.4978

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