FLEXIBLE LED
LUMIFLEX™
LED SIMULATED NEON

High Intensity Flexible LED Accent Lighting

FEATURES

- Dot-free linear neon-like illumination
- Fabricated with Eco-friendly, UV-resistant silicone material
- V-2 flame retardance
- Flexible PCB with SMD LED technology
- 24V DC low voltage, safe and reliable
- Cutting mark every 2 in
- cULus Listed, CE RoHS certified
- 5-year manufacture warranty
- 2.36 in min. bend diameter

5-YEAR WARRANTY

DETAILS

|	
Input	100-240 VAC
Output	24 VDC
Max. Load Footage	49 ft
Watts per Foot	3.10
Dimming Capable	Yes
Min. Bend Diameter	2.36 in
Limited Warranty Terms	5 Years
Materials	Silicone
Dimensions	1.00 x 0.40
Certification	cULus E335482, CE

APPLICATIONS

- Signage lighting
- Outdoor/indoor decoration lighting
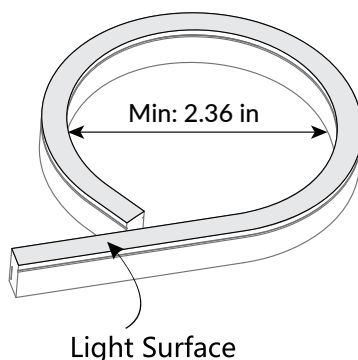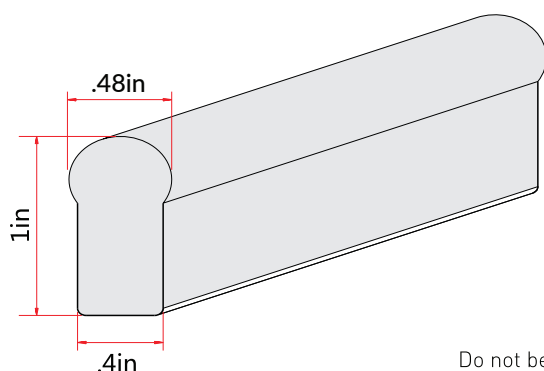- Contour application
- Channel Letters

SPECIFICATIONS

Color	Footage	Wattage per foot	Lumens per foot	Number of LEDs/ft.
White 6500K	49	3.10	150	36
White 4000K	49	3.10	150	36
White 3000K	49	3.10	150	36
Red	49	3.10	-	36
Blue	49	3.10	-	36
Green	49	3.10	-	36
Yellow	49	3.10	-	36
Orange	49	3.10	-	36

*LumiFlex systems based on Lektron supplied 185W, 24 VDC, LED Driver

UNIT: cd
C0/180,237.5
C90/270,112.8

AVERAGE BEAM ANGLE (50%):175.2 DEG
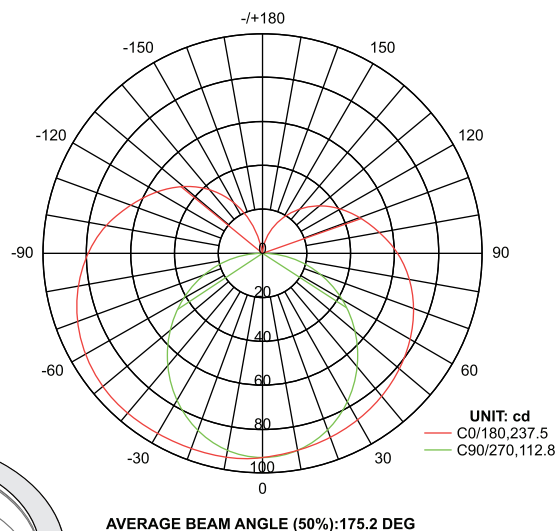
PROFILE AND MINIMUM BEND DIAMETER

.48in
1in
.4in

Min: 2.36 in

Light Surface
Do not bend smaller than allowed minimum bend diameter.

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 49 ft and 98 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.

- 49ft of Lights with Accessories for Four Runs
  - Includes: 49ft lights, 4 end caps, and 4 connectors

- 98ft of Lights with Accessories for Eight Runs
  - Includes: 98ft lights, 8 end caps, and 8 connectors

- Electrical Bundle (49 ft)
  - Includes: 1 power supply (185W), 1 j-box, and related accessories

- Electrical Bundle (98 ft)
  - Includes: 2 power supplies (185W), 1 j-box, and related accessories

- Mounting Bundle (49 ft)
  - Includes: 49 ft of mounting channel, related accessories

- Mounting Bundle (98 ft)
  - Includes: 98 ft of mounting channel, related accessories

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 49 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.

5. Install junction boxes and power supplies. Route cable from junction boxes to start of runs.

6. Cut lights to size. Install end caps and connectors.

7. Finish electrical install and connect lights to wire runs. Verify all sections of lights are working as expected.

Bundle Part Number Charts

LumiFlex LED Bundles

Part Number	Footage	Color
03FX-0825	49 ft	White 6500K
03FX-0826	98 ft	
03FX-0827	49 ft	White 4000K
03FX-0828	98 ft	
03FX-0829	49 ft	White 3000K
03FX-0830	98 ft	
03FX-0831	49 ft	Red
03FX-0832	98 ft	
03FX-0833	49 ft	Blue
03FX-0834	98 ft	
03FX-0835	49 ft	Green
03FX-0836	98 ft	
03FX-0837	49 ft	Yellow
03FX-0838	98 ft	
03FX-0839	49 ft	Orange
03FX-0840	98 ft	

LumiFlex Component Bundles

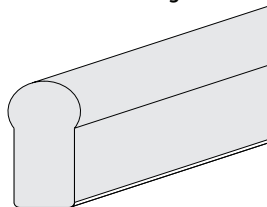| Part Number	Description
03FX-0818	Electrical Components for 49 ft of LumiFlex
03FX-0819	Electrical Components for 98 ft of LumiFlex
03FX-0824	Cutter & Silicone Components for Flex Lights
03FX-0868	Mounting Components for 49 ft of LumiFlex
03FX-0869	Mounting Components for 98 ft of LumiFlex

FLEXIBLE LED
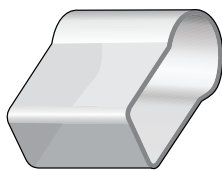# LUMIFLEX™
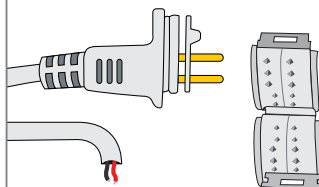## LED SIMULATED NEON

LUMIFLEX LED BUNDLE

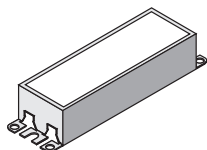| VARIOUS	01FX-0384	01FX-0228
LumiFlex LED Light	LumiFlex Silicone End Cap	LumiFlex Power Input Straight Connector Set

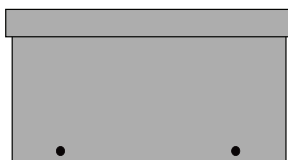## LUMIFLEX ELECTRICAL COMPONENTS BUNDLE (03FX-0818 & 03FX-0819)

01OT-0251	01LL-0546	01LL-0056	CONS-0039
185W 24 VDC Power Supply	J-Box	Strain Relief	Blue Wire Nuts
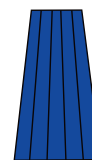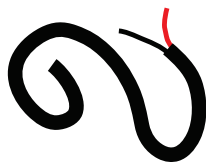
01OT-0792	CONS-0010
PLTC Cable	#10 x 3/4" Hex Washer Head Screw

LUMIFLEX MOUNTING COMPONENTS BUNDLE (03FX-0868 & 03FX-0869)

01FX-0457	01FX-0646	CONS-0026
LumiFlex Aluminum Channel 39.375" with 3 Clips	LumiFlex Installation Clip Set, 1-3/8"	#10 x 3" Pan Head Screw
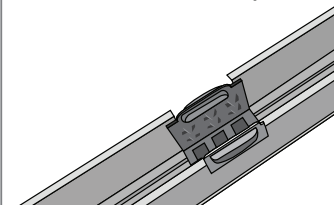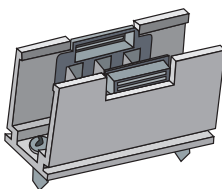
CUTTER AND SILICONE COMPONENTS BUNDLE (03FX-0824)

01TH-0338
Lumicutter
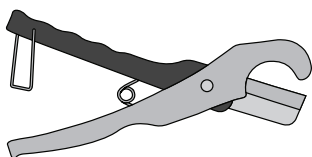
01FX-0250
Silicone Grease

SILICONE GREASE

LUMIFLEX SPECIAL COMPONENTS - AVAILABLE BY REQUEST ONLY

01FX-0337
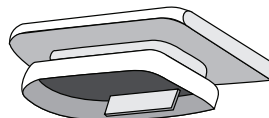**LumiFlex Soldered Power Supply Connector Set**
*Upon Request
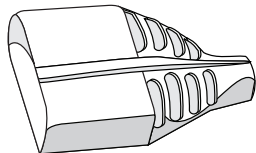
01FX-0745
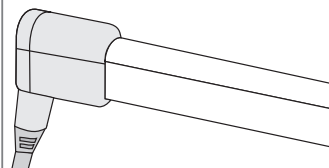**LumiFlex Interconnect Set**
*Upon Request
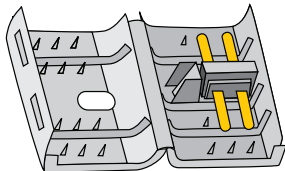
01FX-0746
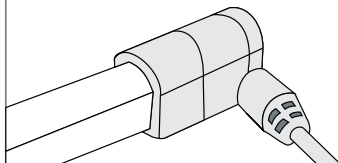**LumiFlex Snap-On End Cap**
*Upon Request

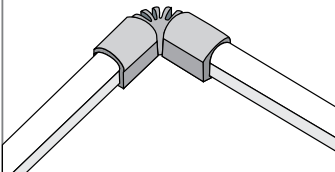### 01FX-0200
LumiFlex Power Input Bottom Connector Set
*Upon Request

01FX-0114
LumiFlex Power Input Side Connector Set
*Upon Request

01FX-0748
LumiFlex L-Bend Connector Set
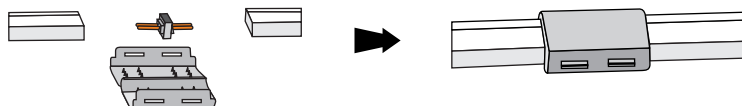***Upon Request**

TYPES OF CONNECTORS

Straight Power Connector

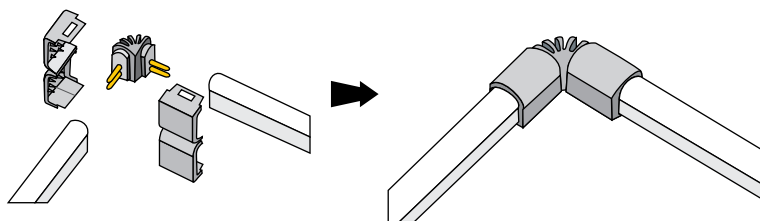LumiFlex Power Input Straight Connector Set. IP67 Connector.
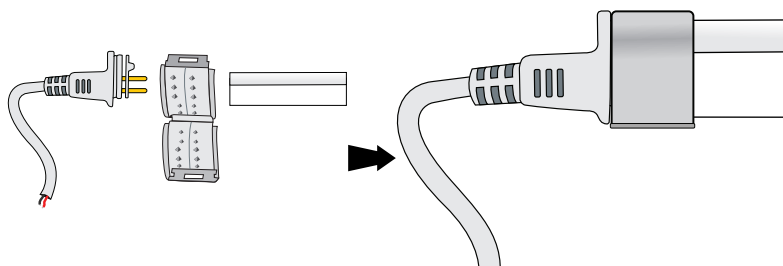
Linear Connector

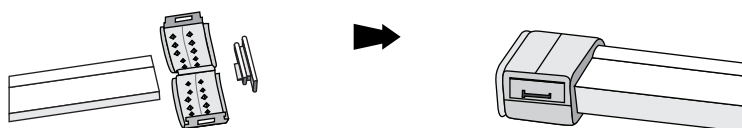Connects two pieces of light together with the re-connection kits. IP67 Connectors.

L Shape Connector

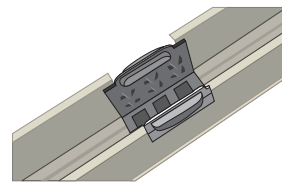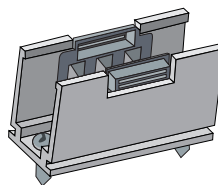Connects two pieces of light together with a L joint. IP67 Connector.

End Cap

Termination protection of the light. IP67 Cap.

MOUNTING CHANNEL

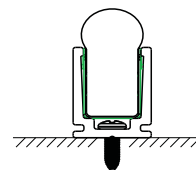**Self-Locking Aluminum Mounting Channel**

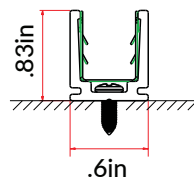| Standard Length	Part Number
1.4 inch	
39.37 inch	

Fixed Channel without Light

Fixed Channel with Profile Light

.83in

.6in
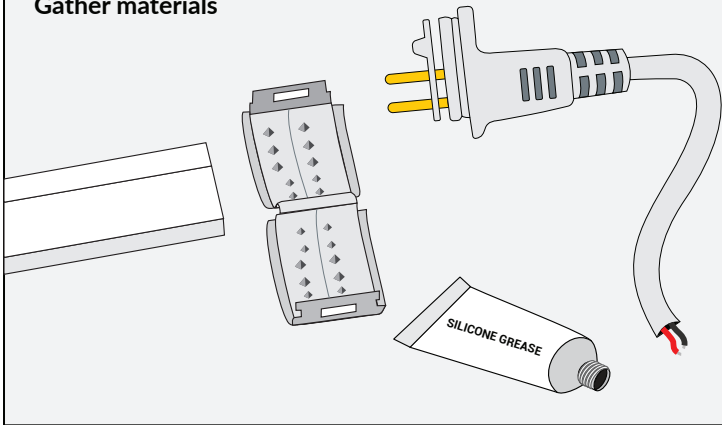
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POWER INPUT STRAIGHT CONNECTOR INSTALL GUIDE

Step 1
Gather materials

SILICONE GREASE
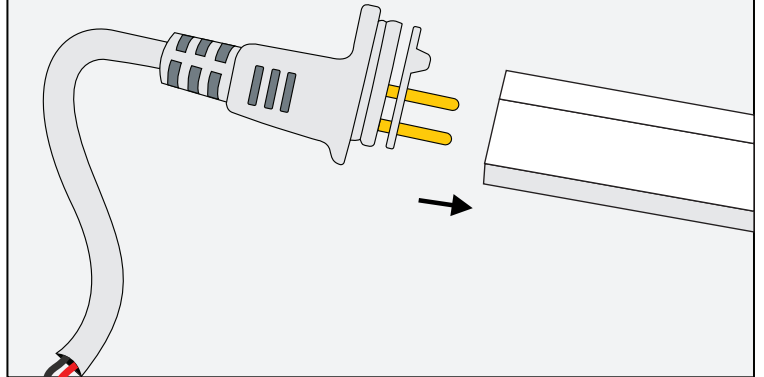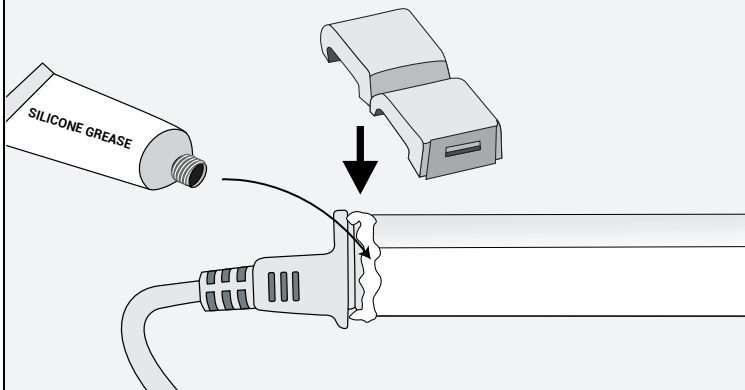
Step 2
Push prongs into the strip

Step 3
Put silicone at the joint of strip, connector, and the housing

SILICONE GREASE

Step 4
Close the housing after silicone

Step 5
Power connector install complete

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INTERCONNECT INSTALL GUIDE

Step 1
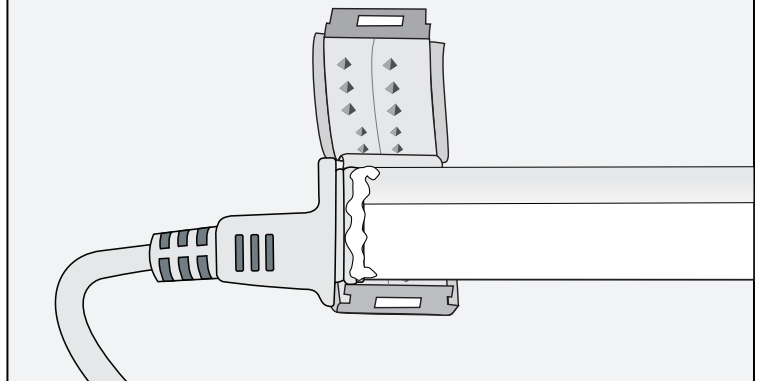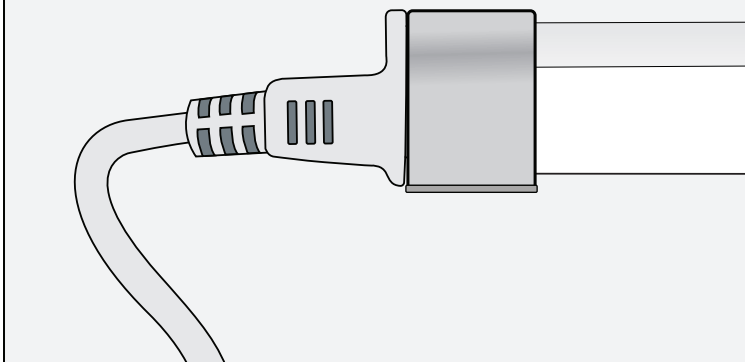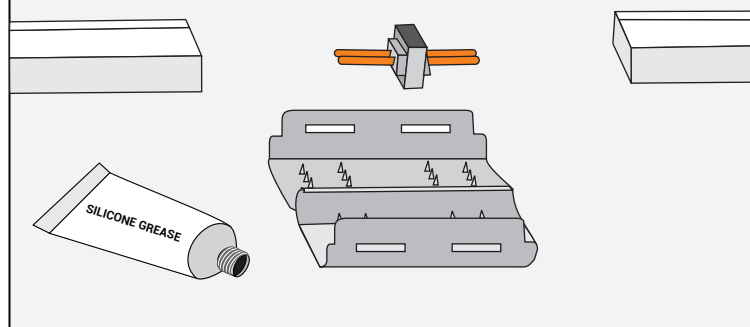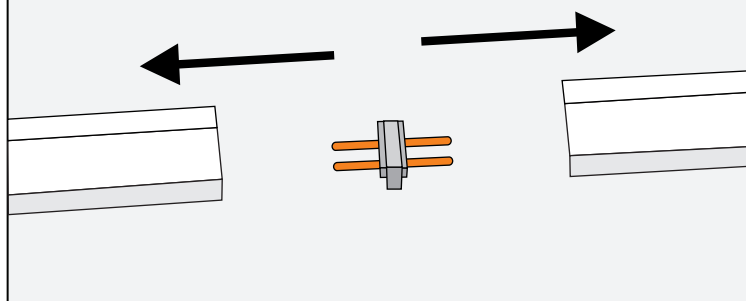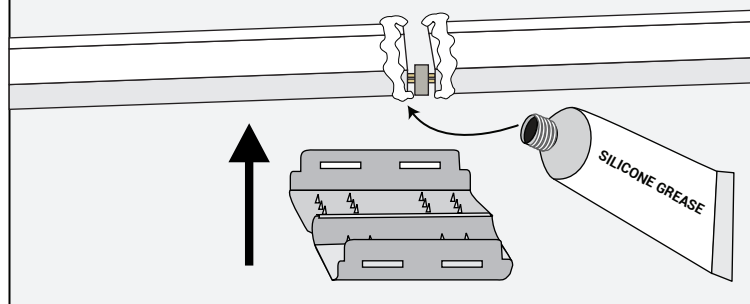Gather materials

Step 2
Insert the pin into the strip
Pins must make contact with pads on back of PCB
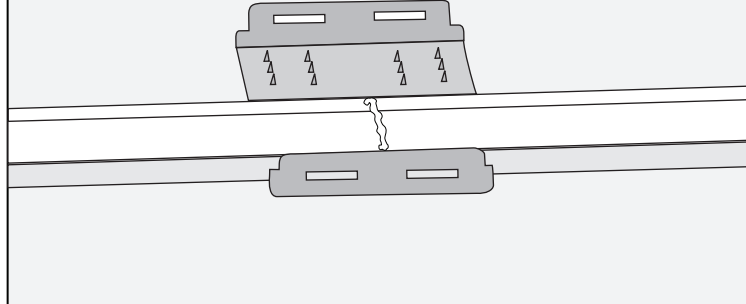
Step 3
Put silicone at the joint of strip and the housing
WARNING: Make sure the pins are inserted on the copper side.

Step 4
After silicone, push together and close the housing

Step 5
Interconnect install complete

END CAP INSTALL GUIDE

Step 1
Gather materials
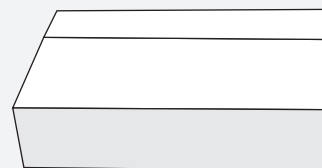
SILICONE GREASE
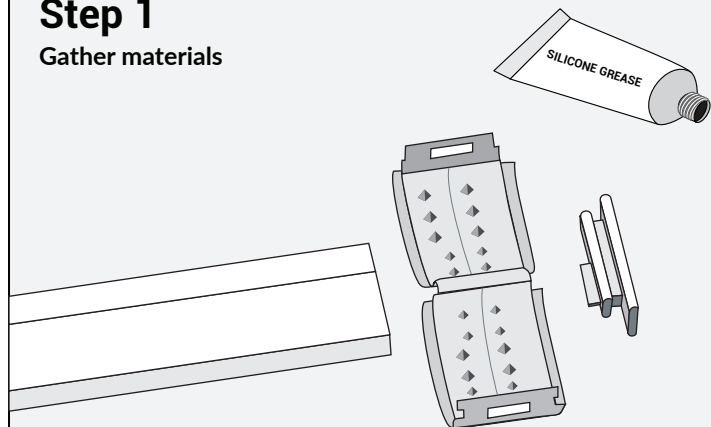
Step 2
Insert the end cap into the strip

Step 3
Put silicone at the joint of strip and the housing

SILICONE GREASE
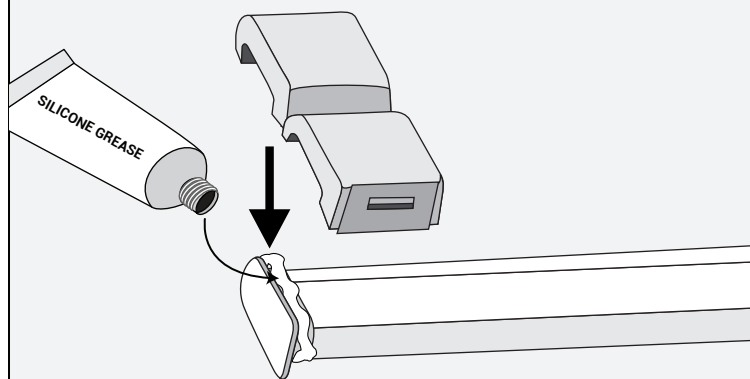
Step 4
Close the housing after silicone
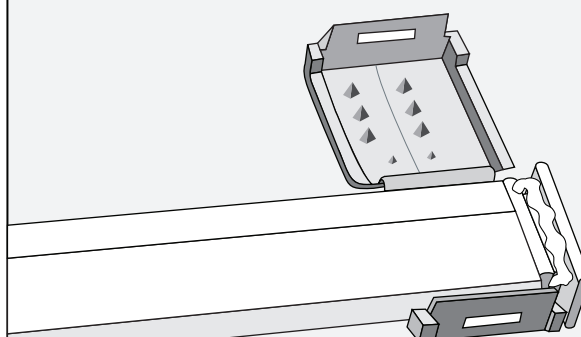
Step 5
End cap install complete
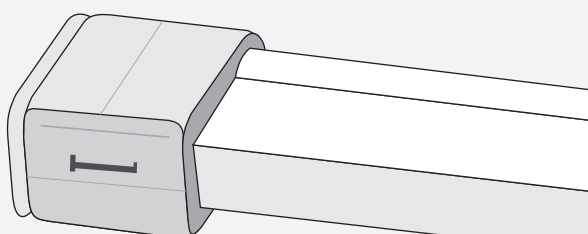
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SILICONE END CAP INSTALL GUIDE

Step 1
Gather materials

SILICONE GREASE
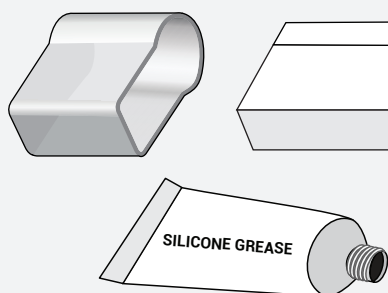
Step 2
Apply Silicone at the end of strip, put on the end cap

SILICON
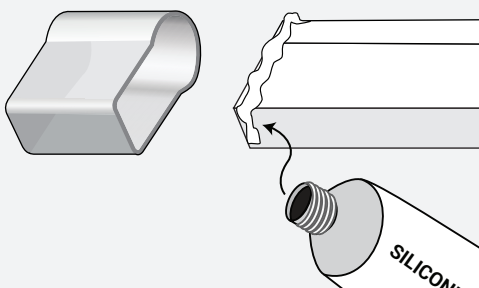
Step 3
End cap install complete

WARNING

No twisting

Ensure cuts are flat

No flexing horizontally

DC 24V

Only cut at cutting marks

No 90° bending

No bending repeatedly

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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 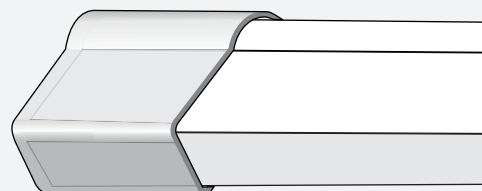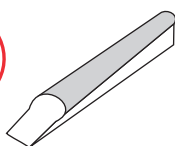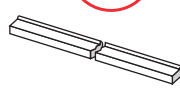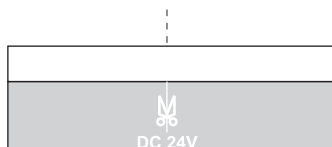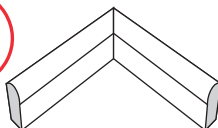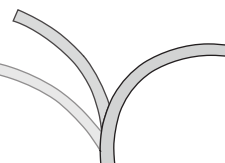drop may occur. If a wire run longer than 50' is needed, larger gauge wire may be used to compensate for voltage drop. If using wire other than the supplied PLTC cable, verify it is suitably rated for its use and environment. Never use wire smaller than 18awg.

When installing lights outside, always account for waterproofing. Seal any penetrations made for wire runs, mounting, etc. using silicone sealant or an equivalent sealing option. 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 LumiFlex 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
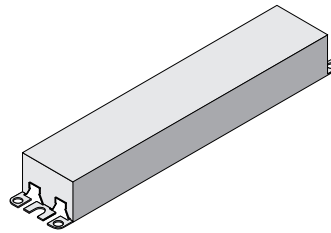
POWER SUPPLY WIRING

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 185W power supply can supply power to maximum 49 ft of lights. This can be multiple runs of lights (e.g. two 23 ft runs could be powered by a single power supply), but the 49 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.

4. Install fittings and strain relief for wire runs. Details of wire runs to be determined by contractor.

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.
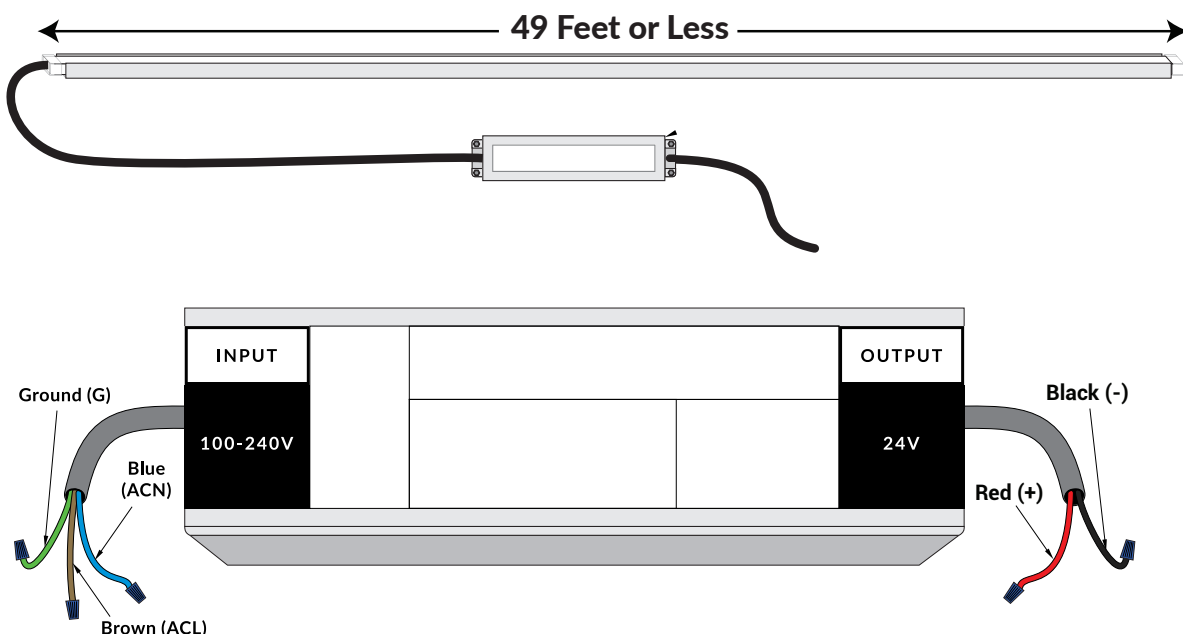
STOP

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-0251
185W 24 VDC Power Supply

49 Feet or Less

Ground (G)

Blue (ACN)

INPUT

100-240V

OUTPUT

24V

Black (-)

Red (+)

Brown (ACL)

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

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⚠ 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 prongs are making good contact with pads on the LED strip on all connections.
   - Verify voltage of output wires with a multimeter.
   - Verify correct polarity of output wires with regard to the lights.
   - Test the section of lights with a different power supply.
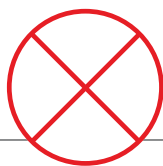   - Test the power supply with a different section of lights.

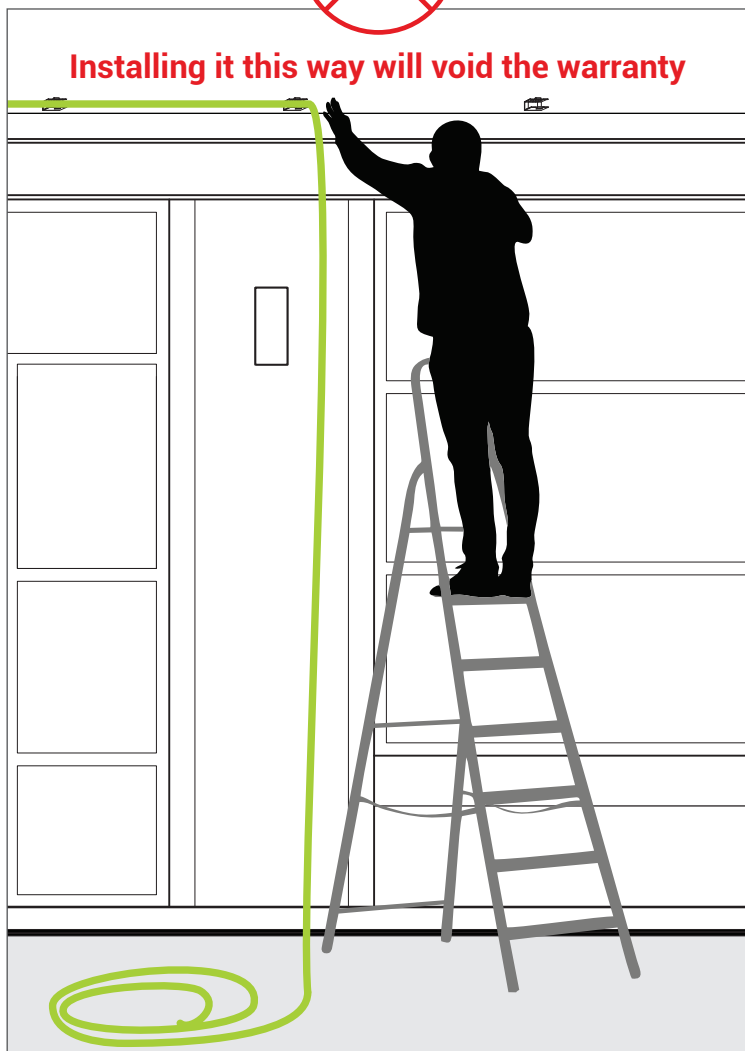## ⚠ DO NOT APPLY 100-240V DIRECTLY TO THE LIGHTS OR TO THE LOW-VOLTAGE OUTPUT WIRES ON THE POWER SUPPLY
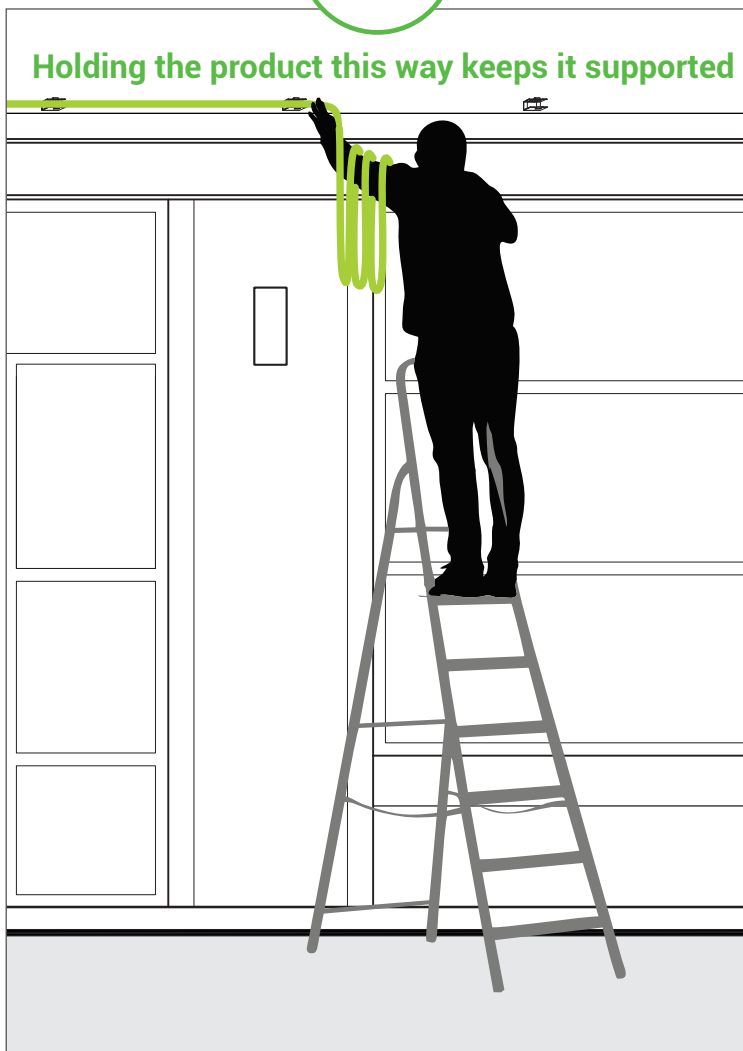
WARNING:

YOU MUST KEEP THE PRODUCT SUPPORTED DURING INSTALLATION. DO NOT LET IT HANG DOWN DURING INSTALLATION. FAILING TO DO SO COULD RESULT IN AN OUTAGE.

Installing it this way will void the warranty

Holding the product this way keeps it supported

LEKTRON
Branding Solutions

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