EcoFlex LED Neon Manual

Part number: LN-ECO-XXXX-10m

EcoFlex LED Neon from Environmental Lights is one of the most flexible and cost-effective members of our line of LED Neon products. It allows you to achieve the creative potential of traditional glass neon while getting all the benefits of LED. With 10-meter run lengths that only need to be powered from one end, EcoFlex LED Neon is UL Listed and saves time and money on installation. It runs on 24 volts DC and its silicone casing provides protection and excellent diffusion for a hotspot-free appearance. EcoFlex LED Neon is incredibly flexible, with a 60mm minimum lateral bending radius. It is low maintenance and easy to control. It is also easy to customize with our various end caps, connectors and wire exists, making it perfect for use in retail, scenic, architectural and other decorative lighting installations.

Feature

- Flexible silicone housing
- UV resistant and low maintenance
- IP65 rated with factory-sealed ends
- Easy to install
- 10-meter run length when powered from one end
- UL Listed
Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>24VDC</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>9 Watts per meter (2.7 Watts per foot)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>14.5mm x 24.25mm (0.57 inches x 0.95 inches)</td>
</tr>
<tr>
<td>LED quantity</td>
<td>120 LEDs per meter</td>
</tr>
<tr>
<td>Minimum bending diameter</td>
<td>120mm</td>
</tr>
<tr>
<td>Waterproof Rating</td>
<td>IP65</td>
</tr>
<tr>
<td>Certifications</td>
<td>UL Listed, RoHS</td>
</tr>
<tr>
<td>Warranty</td>
<td>3 years limited</td>
</tr>
</tbody>
</table>

Warnings and Caution

Warning
- Before making any cuts or performing installation/maintenance, be sure all electricity is disconnected.
- Operate LED Neon lighting according to instructions only.
- Confirm the polarity of connectors before inserting.
- Connect and cut this product correctly. Must use cutting shears designed to cut LED Neon (listed in accessories tab).
- Incorrect operation will damage the circuitry.

Caution
- Use only factory-recommended shears, connectors, and accessories.
- Do not operate in more than 45°C (110°F) ambient temperature.
- Do not operate light when ambient temperature is below 0°C (32°F).
Assembly and Installation

1. Be sure to mount the LED Neon correctly, as illustrated by figures 1-4.

2. LED Neon can be cut every six LEDs at specific cut points. Look for the black lines on the circuit board to indicate where cuts can be made. Be sure your cut is a straight line, perpendicular to the neon light as shown below.
3. Make sure the connector is being inserted into the correct side of the EcoFlex LED Neon. The pins of the connector need to be inserted into the tail end of the arrow found on the circuit board as shown below. Inserting the connector into the wrong side could possibly damage the neon. Always check the functionality after inserting a connector and before sealing the connection to ensure proper fit has been achieved.

4. Connecting your accessories properly is key to maintaining the lifetime of the LED lights. 10 meter reels will be received with a front connector fully sealed onto one end and an end cap on the other end.
Assembling Connectors

Insert the strain relief bracket into the LED side of the circuit board.

Insert the connector onto the back side of the circuit board. The strain relief bracket and the connector should be sandwiching the circuit board.

Connector installation guidelines:

- Fill the connector cover pieces 1/3-1/2 way filled with glue to ensure a tight seal around the LED neon. Ensure that the glue forms total seal around both the neon and the power cable.
- The connector cover pieces must be fully secured against one another. A rubber mallet might be necessary to get the two pieces fully secured without any gaps.
- The glue must set for 24 hours before the connector is ready for use. Moving the connector before this time has elapsed can result in defects.
Front Exit Connectors

Bottom Exit Connectors

End Caps
Interconnect Sets

Top Anchors

Mounting Clips
Mounting Channel

There are two types of mounting channel available for EcoFlex LED Neon. For either, use screws to mount the channel, then install the neon into the channel.