Neon LED Rope Light
Installation Instructions
Specifications

<table>
<thead>
<tr>
<th></th>
<th>12V (WW, CW, BL)</th>
<th>24V (WW, CW, BL)</th>
<th>120V (WW, CW, R, B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beam angle (FWHM)</td>
<td>160°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Consumption</td>
<td>2.44W/ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luminous Flux (lm)*</td>
<td>85lm/ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifetime hours (70% light output)</td>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Halogen equivalency</td>
<td>10W/ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input voltage</td>
<td>12VDC</td>
<td>24VDC</td>
<td>120VAC</td>
</tr>
<tr>
<td>Ingress protection (IP)</td>
<td>IP66</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Luminous flux figures are for Warm White only. Cool White figures are available on our website (when Cool White is an option).

Cutting Intervals & Maximum Run Limitations

<table>
<thead>
<tr>
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<th>24V (WW, CW, BL)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>0.31” x 0.63” (7.8 x 16mm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cut Increments</td>
<td>3.30” 83mm</td>
<td>6.56” 167mm</td>
<td>19.7” 500mm</td>
</tr>
<tr>
<td>Max Run</td>
<td>33’ 10m</td>
<td>66’ 20m</td>
<td>164’ 50m</td>
</tr>
</tbody>
</table>
Minimum Bend Radius

- Using the cutting interval chart as a guideline, find the scissor icon and dotted line that indicates where to make your cut.
- Using sharp PVC conduit shears or utility knife, make a perpendicular cut between LEDs where the cut mark is located.

NOTE: Do not bend flexible strips to a diameter less than 10CM on any individual plane.

NOTE: Do not bend flexible strips to sharp angles. This will damage circuit traces and void warranty.

NOTE: Repeated and continuous bending may damage circuit traces and void warranty.

Cut to Length (at marked locations only)

- Using the cutting interval chart as a guideline, find the scissor icon and dotted line that indicates where to make your cut.
- Using sharp PVC conduit shears or utility knife, make a perpendicular cut between LEDs where the cut mark is located.
Attach Power Cord (Connector Kit) & End Cap

- Line up the sharp prongs of the power connector with the rope light wires.
- Gently insert pointed prongs of the metal power connector into the end of the rope light.
- It is recommended to use silicone sealant or heat shrink tubing to secure and/or waterproof all connections.
- Insert rounded prongs of the metal power connector into the sockets of the Power Cord PVC End Fitting.
- Attach PVC End Cap to end of rope light run. Use silicone sealant or heat shrink tubing to assure waterproofness.

**Note:** Neon LED Rope Lights are polarized. If they do not light up when you first plug them in, simply unplug the power cord and power connector and install in the opposite end of the rope light.
Mounting

Choose from PVC mounting clips, Metal mounting clips, or PVC mounting track. All these products are designed to be positioned and screwed down to the mounting surface first. Then simply push in the Neon LED Rope Light until it is firmly seated in place. The metal clips may be pinched together which is best for holding the rope light more securely when in an upside-down position. The plastic clips may also be used this way but recommended to also use a small amount of silicone for better security especially in vehicles or watercraft where movement and vibration can occur.

Splicing Sections Together

- Align metal power connectors using first step from “Attach Power Cord (Connector Kit) & End Cap” section.
- Gently insert pointed prongs of the metal power connectors into each end of the Neon LED Rope Light.
- It is recommended to use silicone sealant or heat shrink tubing to secure and/or waterproof all connections.
- Insert both ends of rope light into the Neon LED splice.

Power Sources

Our low voltage (12VDC or 24VDC) Neon LED Rope Light is designed for use with hard-wire DC hook-ups. If stepping down voltage from a 120/230V source, a standard low voltage AC transformer will damage the product. You must use a voltage-regulated DC power supply or LED power converter for this purpose. Imtra carries a full range of voltage regulated LED Converters and DC stabilizers/conditioners. See our website for more information. Our Neon LED Rope Light performs optimally with constant voltage at or near the specified voltage input. It is sensitive to over-voltage and transient spikes; therefore, long
term performance is directly dependent on the input voltage provided. For DC installation on boats, a power conditioner or voltage stabilizer is recommended for maximum life of the product. Imtra Corporation carries a range of Power Conditioners. See our website (www.imtra.com) for more information on these products.

Precautions

- Do not over extend the min. & max. bend radius.
- Although products do not generate a great amount of heat, it is recommended that you do not cover or conceal it.
- Do not route Neon LED Rope Light through walls, doors, windows, or building structures.
- Do not roll out Neon LED Rope Light on rough surfaces and over sharp corners. This will scratch the PVC optic.
- Do not use the product if outer PVC jacket is damaged, loose connections, or if the wire is visible without insulation.
- Do not secure the product with staples, nails, or like means that might damage the insulation or PVC material.
- Do not install Neon LED Rope Light on/in places where it is subject to continuous flexing.
- Do not operate/run Neon LED Rope Light in temperatures exceeding 115°F (45°C).
- Do not operate Neon LED Rope Light over the specified voltage or LED life degradation will be greatly increased. Please read Power Sources section to understand how you can obtain the best long term performance of this product.
- Do not leave any part of the Neon LED Rope Light unsecured. Movement over time from weather can cause damage from continuous movement.
- Always place 100% silicone inside every connection before assembly.
- All Neon LED IP66 rated connectors must be assembled properly to obtain rating. Do not reverse polarity when connecting from both ends. This will damage the internal PCB board. Always test connections with your multi-meter.
- Do not energize Neon LED Rope Light in reel package.
- Neon LED Rope Light can be cut only where marked. Look for “Dotted Line” or “Scissor Mark.”
- Cutting outside the specified mark will damage the light.
- Do not cut while the Neon LED Rope Light is connected to power.
**Limited Warranty**

Imtra warrants this product for a period of 1 year from the date of purchase. If the rope light should cease to function or not perform as advertised, return the faulty sections for replacement. This warranty does not apply to damage resulting from actions of the user such as misuse, improper wiring/installation, operation outside of specification, improper maintenance or repair, unauthorized modification, lightning strike or damage from a power surge. Imtra specifically disclaims any implied warranties, merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Imtra’s total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied. If it should become necessary to return product for replacement beyond the warranty period, please refer to Imtra’s standard Return Policy as detailed on Imtra’s website, www.imtra.com, or call Imtra customer service at 508.995.7000. No returns are accepted without a Return Authorization (RA) number.