INSTALLATION INSTRUCTIONS
SURFACE EXTRUSIONS WITH LED TAPE

**DANGER: Prior to installation, disconnect power at the source.**

Make sure you have all components listed below:

• LED tape
• 24VDC Power Supply
• Connectors (if creating DIY connections)
• Extrusion/Lens
• Mounting clips and/or mounting adhesive
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Please read all steps before beginning the installation.

• **WARNING:** Do not connect directly to high voltage power (120V-277V). Use only with 24V DC hardwire or plug-in power supply. Factory warranty will be void if used otherwise.

• These products may represent a potential shock or fire hazard if improperly installed or attached in any way. Products should be installed in accordance with these instructions, local electrical codes and the National Electric Code (NEC).

• Do not energize LED tape light when rolled up in its spool.

• Uncoated products are intended for indoor use in dry locations. Coated products are intended for outdoor use or in damp/wet locations. Refer to product spec sheet for location ratings.

• Do not use if there is any damage to the unit or to the wiring/insulation. Inspect periodically.

• Do not route cords or LED tape through walls, doors, windows or any similar part of a building structure.

• Do not secure LED tape or its power cord with staples, nails, or any other sharp objects that may cause damage. Mounting adhesive is available (sold separately).

• Do not install LED tape closer than 6” to combustible material.

• Ensure proper gauge wires are installed between Power Supplies, Controls & LED tape to avoid voltage drop.

• Ensure applicable wires are in compliance with local codes (In-wall rated, wet-location, high temperature, etc.).

• Recommended load for power supplies is 80%.
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MINIMUM BEND RADIUS
1.5 INCH

DO NOT FOLD OR CREASE LED TAPE

DO NOT BEND LED TAPE SIDE TO SIDE

DO NOT COVER LED TAPE OR APPLY EXCESS PRESSURE TO LED TAPE
NOTE: If using LED tape connectors, verify that the LED tape and connector width are sized properly to fit into the channel with no interference to the lens.

IMPORTANT: The LED tape can only be cut at specific points along the tape. It is essential to dryfit your entire assembly to the cut point of your LED tape before routing/cutting out the mounting surface.

STEP 1
Measure the channel and cut to the desired length. Make sure to accommodate the profile of the endcap and the desired length for your LED tape before cutting.

STEP 2
Pull the wires through the endcap(s) and remove red adhesive backing from the LED tape. NOTE: Some channel types do not have a hole in the endcap, and a hole must be drilled.

STEP 3
Carefully place LED tape inside the aluminum channel and push the endcaps onto the ends of channel. Ensure a tight fit between the channel and endcaps.

STEP 4
LENS OPTION: Measure the opening for the lens between the endcaps. Cut lens to desired length and insert into channel.
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STEP 5
Secure clips to the mounting surface with appropriate fastener and insert channel into the clips.

STEP 6
Locate and route power feed wire back to power supply. Mount power supply in desired location and connect Single Color Linear vLED to low voltage output of power supply.

STEP 7
Connect the power supply to AC power/line voltage. Please refer to the wiring diagram of the power supply being used. Each power supply has its own specific wiring.
## Low Voltage Wire Gauge Chart

### 24V DC Voltage Drop and Wire Length (ft.) Distance Chart

<table>
<thead>
<tr>
<th>Wire Gauge</th>
<th>Power (W)</th>
<th>10W</th>
<th>20W</th>
<th>30W</th>
<th>40W</th>
<th>50W</th>
<th>60W</th>
<th>70W</th>
<th>80W</th>
<th>90W</th>
<th>100W</th>
<th>110W</th>
<th>120W</th>
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</thead>
<tbody>
<tr>
<td>#18</td>
<td>10W</td>
<td>189'</td>
<td>94'</td>
<td>63'</td>
<td>47'</td>
<td>38'</td>
<td>31'</td>
<td>27'</td>
<td>24'</td>
<td>21'</td>
<td>19'</td>
<td>17'</td>
<td>16'</td>
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<td></td>
<td>20W</td>
<td>300'</td>
<td>149'</td>
<td>100'</td>
<td>76'</td>
<td>60'</td>
<td>50'</td>
<td>43'</td>
<td>37'</td>
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<td>#16</td>
<td>30W</td>
<td>478'</td>
<td>238'</td>
<td>159'</td>
<td>120'</td>
<td>95'</td>
<td>79'</td>
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<td>753'</td>
<td>274'</td>
<td>250'</td>
<td>189'</td>
<td>150'</td>
<td>125'</td>
<td>108'</td>
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<td>#14</td>
<td>50W</td>
<td>1205'</td>
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<td>240'</td>
<td>200'</td>
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