New Installation

1. **Tools required:** Measuring tape, wire strippers. **Optional:** Drill, screwdriver.

2. **Components list:**
   - SloanLED Prism modules, model numbers 701269-(XX)(Y)J(Z)-MB and 701269-(XX)24(Y)J(Z)-MB
   - SloanLED 12 V Class 2 output power supply (refer to "12 VDC Power Supply Capacity Chart" for appropriate model numbers)
   - SloanLED 24 V Class 2 output power supply (refer to "24 VDC Power Supply Capacity Chart" for appropriate model numbers)
   - UL approved 18 AWG or larger diameter supply wire
   - UL approved wire connectors appropriate for wire gauge used
   - Optional for mounting: Electrical grade silicone, #6 (M3) sheet metal screws, or 1/8" (3 mm) aluminum rivets

3. **Layout:** To populate sign, refer to SloanLED® Prism density guidelines as well as power supply loading chart below to determine appropriate number of modules and power supplies.

4. **Peel and stick:** Clean inside sign with rubbing alcohol and allow to dry. Using predetermined layout and LED placement from Step 3, remove tape backing and stick modules into place. Ensure modules are firmly attached. **NOTE:** If installing SloanLED Prism Nano, and installing in a narrow channel, tape may be unnecessary. Other means of securing strip (sealant, vinyl, etc.) are also acceptable.

5. **Fasteners:** Use fasteners or silicone as necessary to fix modules in place. Refer to components list above for acceptable fasteners.

**Power Supply Loading Chart**

**NOTE:** For SloanLED Prism Nano, to avoid significant line loss, do not use more than 6.56 ft (2.0 m) / 50 modules in series.
Retrofit Instructions for Existing Signs

GENERAL PURPOSE RETROFIT SIGN CONVERSION.
FOR USE ONLY IN ACCORDANCE WITH KIT INSTRUCTIONS.
KIT IS COMPLETE ONLY WHEN ALL PARTS REQUIRED BY THE INSTRUCTIONS ARE PRESENT.

1. Identify sign to be retrofit and ensure branch circuit supplying existing sign are within voltage range for LED power supply. Refer to components list (page 1) and “12/24 VDC Power Supply Capacity Chart” (page 3).

2. Remove existing lighting equipment intended to be replaced, such as neon or fluorescent, and all power supplies, transformers, or ballasts. Remove existing neon and all standoffs to leave an empty channel letter can. NOTE: All materials removed must be disposed of in accordance with applicable local, state, and federal laws.

3. If required by local, state, or national electrical code, install a new disconnect switch.

4. Determine suitability and structural integrity of existing sign after removal of existing lighting equipment. If retrofit does not require the making of any new holes, do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation. If existing holes are present in a wet or outdoor location sign, repair and seal any unused openings in the electrical enclosure. Openings greater than 0.5” (12.7 mm) diameter require a metal patch secured by screws or rivets and caulked with non-hardening caulk. Smaller openings may be sealed with non-hardening caulk.

5. Clean inside of sign using non-oil based cleaner. Follow all manufacturer’s instructions and ensure inside of sign is dry before proceeding with installation. This is an important step for good adhesion of SloanLED channel letter module mounting tape.

6. To populate sign, refer to SloanLED Prism density guidelines as well as power supply loading chart (page 1) to determine appropriate number of modules and power supplies. A list of acceptable power supply models is shown in the “12/24 VDC Power Supply Capacity Chart” (page 3).

7. Follow all instructions on pages 1 and 2 under “New Installations” to properly install LED modules.

8. Connect modules to power supply output as shown on page 1 under “New Installations”

9. Connect power supply input as outlined in power supply installation guide in accordance with local, state and national electrical codes by qualified personnel. Refer to power supply install guide included with power supply for details.

10. If required, install disconnect switch in accordance with local, state and national electrical codes by qualified personnel.
SloanLED Prism

Installation Guide for 701269-(XX)(Y)(Z)-MB and 701269-(XX)24(Y)(Z)-MB

12 VDC Power Supply Capacity Chart

<table>
<thead>
<tr>
<th>Power supply</th>
<th>Part number</th>
<th>Retrofit certified</th>
<th>Nominal input voltage</th>
<th>Input current</th>
<th>Power output</th>
<th>Output current</th>
<th>White 7100 K, 6500 K, 5700 K, 5000 K, 4500 K, 3000 K (1.5/ft, 4.8/m)</th>
<th>Red, Orange, Yellow, Green, Blue (1.5/ft, 4.8/m)</th>
<th>Red (2ft, 6.1/m)</th>
<th>White 7100 K, 6500 K, 5000 K, 4500 K, 3000 K (2.0/ft, 6.1/m)</th>
<th>Red, Green, Blue (2.0/ft, 6.1/m)</th>
<th>White 6500 K, 5000 K, 4500 K, 3000 K (7.6/ft, 25m)</th>
<th>Rod, Green, Blue (7.6/ft, 25m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Contained</td>
<td>701080</td>
<td></td>
<td>100-240 V</td>
<td>0.55 A</td>
<td>20 W</td>
<td>1.67 A</td>
<td>10 (3.3)/16 mods</td>
<td>16 (4.8)/16 mods</td>
<td>16.6 (5.1)/25 mods</td>
<td>12.5 (3.8)/45 mods</td>
<td>22.5 (6.8)/60 mods</td>
<td>30.0 (10.1)/60 mods</td>
<td>12.5 (3.8)/60 mods</td>
</tr>
<tr>
<td>Compact 12/25 W</td>
<td>410174</td>
<td></td>
<td>100-277 V</td>
<td>0.40 A</td>
<td>25 W</td>
<td>1.9 A</td>
<td>13.3 (4)/20 mods</td>
<td>20 (6.1)/20 mods</td>
<td>20.7 (6.3)/31 mods</td>
<td>15.5 (4.7)/56 mods</td>
<td>28.0 (8.5)/56 mods</td>
<td>37.5 (11.4)/75 mods</td>
<td>16.3 (4.9)/75 mods</td>
</tr>
<tr>
<td>60C1 60 W</td>
<td>701057-60C1</td>
<td></td>
<td>100-277 V</td>
<td>0.70 A</td>
<td>60 W</td>
<td>5.0 A</td>
<td>32 (8.8)/48 mods</td>
<td>48 (14.4)/48 mods</td>
<td>50 (15.2)/75 mods</td>
<td>37.5 (11.4)/75 mods</td>
<td>68.0 (20.7)/136 mods</td>
<td>90.0 (27.4)/180 mods</td>
<td>40.0 (12.3)/52 mods</td>
</tr>
<tr>
<td>60C2 60 W</td>
<td>701057-60C2</td>
<td></td>
<td>100-277 V</td>
<td>0.80 A</td>
<td>60 W</td>
<td>5.0 A</td>
<td>32 (8.8)/48 mods</td>
<td>48 (14.4)/48 mods</td>
<td>50 (15.2)/75 mods</td>
<td>37.5 (11.4)/75 mods</td>
<td>68.0 (20.7)/136 mods</td>
<td>90.0 (27.4)/180 mods</td>
<td>40.0 (12.3)/52 mods</td>
</tr>
<tr>
<td>60X2E 60 W</td>
<td>701057-60X2E/7</td>
<td></td>
<td>100-277 V</td>
<td>0.70 A</td>
<td>60 W</td>
<td>5.0 A</td>
<td>32 (8.8)/48 mods</td>
<td>48 (14.4)/48 mods</td>
<td>50 (15.2)/75 mods</td>
<td>37.5 (11.4)/75 mods</td>
<td>68.0 (20.7)/136 mods</td>
<td>90.0 (27.4)/180 mods</td>
<td>40.0 (12.3)/52 mods</td>
</tr>
<tr>
<td>60X3 60 W</td>
<td>701057-60X3</td>
<td></td>
<td>100-277 V</td>
<td>0.80 A</td>
<td>60 W</td>
<td>5.0 A</td>
<td>32 (8.8)/48 mods</td>
<td>48 (14.4)/48 mods</td>
<td>50 (15.2)/75 mods</td>
<td>37.5 (11.4)/75 mods</td>
<td>68.0 (20.7)/136 mods</td>
<td>90.0 (27.4)/180 mods</td>
<td>40.0 (12.3)/52 mods</td>
</tr>
<tr>
<td>120D1 120 W</td>
<td>701057-120D1</td>
<td></td>
<td>100-277 V</td>
<td>1.70 A</td>
<td>60 W</td>
<td>5.0 A</td>
<td>32 (8.8)/48 mods</td>
<td>48 (14.4)/48 mods</td>
<td>50 (15.2)/75 mods</td>
<td>37.5 (11.4)/75 mods</td>
<td>68.0 (20.7)/136 mods</td>
<td>90.0 (27.4)/180 mods</td>
<td>40.0 (12.3)/52 mods</td>
</tr>
</tbody>
</table>

*For sign applications, only certified for use outside of U.S. and Canada.
¥ Wet location power supply.

NOTE: Each 12 V circuit must be limited to 5 A (60 W) or less. For North American installations, a power supply that meets NEC Class 2 specifications is required.

24 VDC Power Supply Capacity Chart

<table>
<thead>
<tr>
<th>Power supply</th>
<th>Part number</th>
<th>Retrofit certified</th>
<th>Nominal input voltage</th>
<th>Input current</th>
<th>Power output</th>
<th>Output current</th>
<th>White 6500 K (0.8/ft, 2.6/m)</th>
<th>White 6500 K (1.5/ft, 4.8/m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 VDC Power Supply</td>
<td>701057-24C1*</td>
<td></td>
<td>100-277 V</td>
<td>1.4 A</td>
<td>96 W</td>
<td>4.0 A</td>
<td>72.5 (22.5)158 mods</td>
<td>38.7 (11.8)58 mods</td>
</tr>
<tr>
<td>24 VDC Power Supply</td>
<td>701057-24S1</td>
<td></td>
<td>100-277 V</td>
<td>1.4 A</td>
<td>96 W</td>
<td>4.0 A</td>
<td>72.5 (22.5)158 mods</td>
<td>38.7 (11.8)58 mods</td>
</tr>
<tr>
<td>300T1 Power Supply</td>
<td>701057-300T1</td>
<td></td>
<td>100-277 V</td>
<td>4.0 A</td>
<td>3 × 96 W</td>
<td>3 × 4.0 A</td>
<td>3 × 72.5 (22.5)85 mods</td>
<td>3 × 38.7 (11.8)58 mods</td>
</tr>
</tbody>
</table>

*NOTE: Each 24 V circuit must be limited to 4.2 A (100 W) or less. For North American installations, a power supply that meets NEC Class 2 specifications is required.
¥ Wet location power supply. Refer to install guide for configurations.

Extension of Power Supply Leads

If longer lead wire from power supply to LED modules is needed, an extension can be used. Extension should be kept as short as possible, i.e., under 15 ft for 18 AWG UL Listed PLTC (4.6 m for 1 mm² PLTC) or under 50 ft for 14 AWG UL Listed PLTC (15.2 m for 2.5 mm² PLTC).

Troubleshooting

NOTE: A licensed electrician should perform all applicable steps.

- Entire sign or leg does not light after complete installation: Check connection from power supply lead to first module. Make sure polarity of connections made at the power supply lead and any jumper wire is correct. Power supply outputs should be connected RED-TO-RED and BLACK-TO-WHITE.
- Still does not light: Check output voltage of power supply using a voltmeter. The output voltage should be DC 12.0 V ± 0.5 V, or DC 24.0 V ± 0.5 V (24 V Product). If there is no output voltage, have a licensed electrician check input voltage. Make sure power supply is connected correctly and getting primary power. If power supply is connected properly and getting primary power and there is still no output voltage, try a different power supply.
- Still does not light: If power supply is getting primary power and the modules don’t light, there may be a short in the secondary wiring. Check all connections and cap all loose wires.
- The beginning of a leg lights, but the entire leg does not light or lights intermittently: The primary cause of a portion of a SloanLED Prism leg not lighting or lighting intermittently is a bad connection or reverse polarity connection between the modules that light and the modules that don’t light. Check this connection.
- One module does not light, but all others in the leg do: SloanLED Prism is designed so if one module fails, it will not cause the entire sign or leg to go out. If one module does not light, but all others in the leg do, replace this module with a new one.

SloanLED Prism is covered by US patent 6,932,495 and US and foreign patents pending.