

Custom Luminous SkyCeiling LED Lighting Installation Instructions

Custom Luminous SkyCeilings come with two types of lighting systems – T5 and LED.

LED Lighting System

All LED Lighting Systems in Custom Luminous SkyCeilings require a combination of standard LED light boxes and custom LED light boxes.

The weight of the LED light boxes must be carried by hanger wire. The purpose of the end caps and supports is solely to facilitate the installation of the fixtures and establish the lighting at the correct height. Refer to local codes for hanger wire size. Install the light boxes prior to installing The Sky Factory elevators.

To install standard LED light boxes:

1. Fasten an end cap onto each end of a light box body using the seven #8 x 1/4" sheet metal screws supplied. The end cap sits inside the light box body and the screws insert from the outside of the unit.
2. Place the assembled light box over a 2'x2' opening of suspended ceiling grid so that the main grid runners are parallel to the open sides of the light box. Lower the light-box into place making sure

that the end caps sit *inside* of the vertical grid tee & rest on the upper surface of the 15/16" horizontal grid.

3. Support the light box with approved hanger wire using the slots located in each corner of the top of the light box body. The weight of the LED light boxes **must be carried by hanger wire**.

To install custom LED light boxes:

1. The custom LED light boxes have supports rather than end caps.
2. Each light box has sets of pre-drilled holes to receive the light box supports and sets of pre-drilled holes to receive the hanger wires. The light box support holes are in pairs 2" apart. The light box hanger wire holes are in pairs 1/2 " apart. See Lighting Plan L1.
3. Four supports with screws are provided for each light box with three straight sides. Three supports with screws are provided for each light box with two straight sides. Attach the supports to the light boxes using the appropriate holes and insert them in the grid openings according to Lighting Plan L1.
4. Support the light box with approved hanger wire using the slots located in each corner of the top of the light box body. The weight of the LED light boxes **must be carried by hanger wire**.

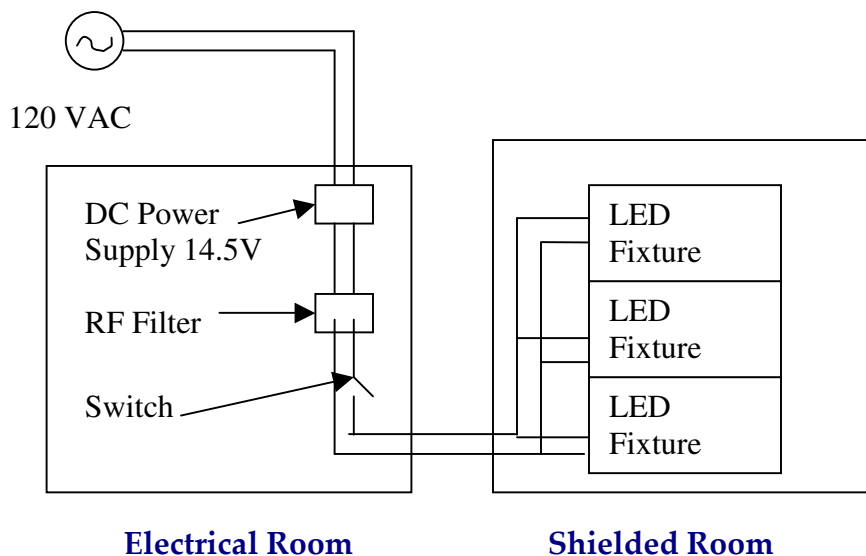
To wire the LED light boxes:

1. Connect power (15 VDC) in conformance to Local and ational Electrical Codes. See **Figure 2.0** below. The DC Power Supply is powered by 115/230 VAC – factory set to 115 VAC. Check the red slide switch on the side of the power supply to ensure the correct setting. Connect 115 VAC or 230 VAC in, and DC power out. All DC output terminals should be jumpered together (all + together, all – together). Enclosures are not supplied, but are available with mounting brackets if required.
2. Where multiple light boxes are installed, all **MUST** be wired in parallel. Red wire goes to the +, Black wire goes to the –, and the Green

(Ground) wire goes to the middle hole marked with the earth ground symbol.

3. Use a switch that can carry the full load amperage of the installation. Connect switch so that it is between the RF filter and the load. **Under no circumstance should the Power Supply be switched on the AC side while the load is attached. See Figure 2.0 below.**

Figure 2.0



IMPORTANT The Power Supply voltage must be adjusted before powering up the LED Light Boxes.

CHECK that the output is 15 volts. Note polarity and **MAKE SURE** that the Red wire to the light boxes is connected to the (+) terminals and the Black wire is connected to the (-) terminals.

CHECK the polarity of the output of the RF filter. **Damage to the LVW's will occur if reverse polarity is connected. MAKE SURE** that the Red wire is connected to the (+) terminal of the filter and the Black wire is connected to the (-) terminal of the filter.

Because the RF filter typically causes a small voltage drop (approximately 2 volts), the output of the power supply **must be adjusted** to compensate. Use a small Philips screwdriver to carefully turn the small white plastic screw on the front of the Power Supply (+V ADJ), while monitoring the voltage **at the load** with a voltmeter. Adjust until the reading is 15 volts.

4. Be sure to test the lighting system before installing the elevators and SkyTiles.

For technical support please call us toll free at 866-759-3228. We want your installation to go as smoothly as possible. Thank you for choosing The Sky Factory.

