

Mounting/ Cooling Smart Driver™:

Smart Driver™ should be mounted vertically using mounting holes to allow for natural convection air flow and maximum cooling.

Power supplies can operate remotely, preferably located indoors, and should never be located outdoors without a NEMA 3R enclosure. Maximum distance from the power supply to the lamp is 50 feet. However, power supplies can be located at a maximum distance of 150 feet from the lamp with proper shielding.

Ballasts are designed to industrial specifications but may be vulnerable to severe shock or vibration. In areas where excessive shock or movement occur, it is recommended that vibration dampers, such as rubber grommets, be installed under the mounting screws.

If your location is susceptible to power surges or inconsistent power, it is important to have a surge protection system in place. We recommend placing a surge system between the power supply and wall outlet to eliminate power spikes. Power spikes will cause the Smart Driver™ to trip, and could possibly damage the unit beyond repair.



Electro-LuminX® Lighting Corporation
Technical Support: 1.804.530.8536
www.lighttape.com



Light Tape® Smart Driver™ Power Supply Manual:

While durable, always treat Light Tape® products with respect—it is a lamp!

If you have any questions after reviewing, call Electro-LuminX® before proceeding.

Important Smart Driver™ Handling Guidelines:

Always disconnect power before servicing any electrical equipment.

When wiring, follow all local electrical codes.

Always turn off power using the power switch on the unit. Allow five (5) minutes for capacitors to drain to the 120 or 240 VAC branch circuit grounding system before disconnecting supply to unit.

All power supplies must be grounded by connecting to the building's grounding system. All Smart Driver™ ballasts come with a UL approved grounded detachable IEC cable cord set.

Do NOT operate lamp with an oversized power supply. Excessive current will destroy electrical connections and possibly the power supply.

In some cases it may be necessary to use a dual conductor, shielded wire, and we recommend a minimum of 600 VAC rating on the wire. Always consult local electrical codes for official requirements.

Electroluminescent lamps do not have polarity (+ or -) and wires can be attached to either side of the lamp.

Light Tape® lamps can be connected in parallel so that multiple lamps can operate from one power supply. We do not recommend connecting in series or daisy chain.

The AC Smart Driver™ series of Lighting Ballasts and Lamps are recognized as unlisted components by Underwriters Laboratories Inc. Representative samples of these components have been evaluated by UL and meet applicable UL requirements for portable applications in indoor environments per UL file E319670.

Lighting Ballasts were evaluated under UL standards for Power Units Other Than Class 2, UL1012, Seventh Edition dated April 29, 2005 and the Canadian Standard for General Use Power Supplies, CAN/ CSA—C22.2 No. 107.1-01.

Engineering considerations and conditions of acceptability for UL approved installations are indicated in the installation section of Light Tape® Design Guide.

Smart Driver™ Operating Procedure:

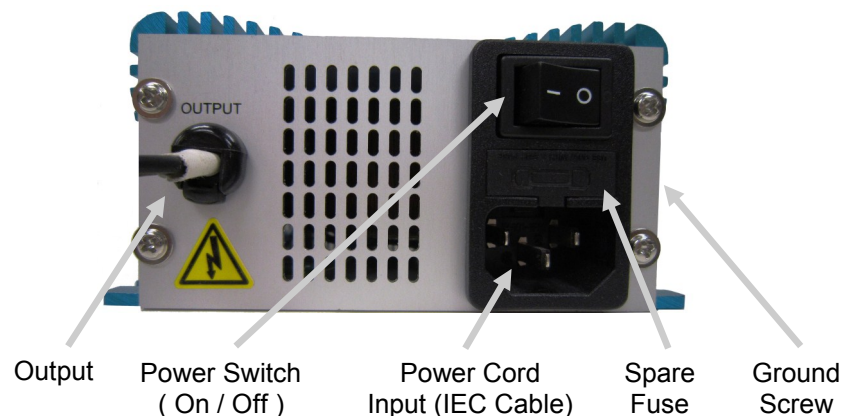
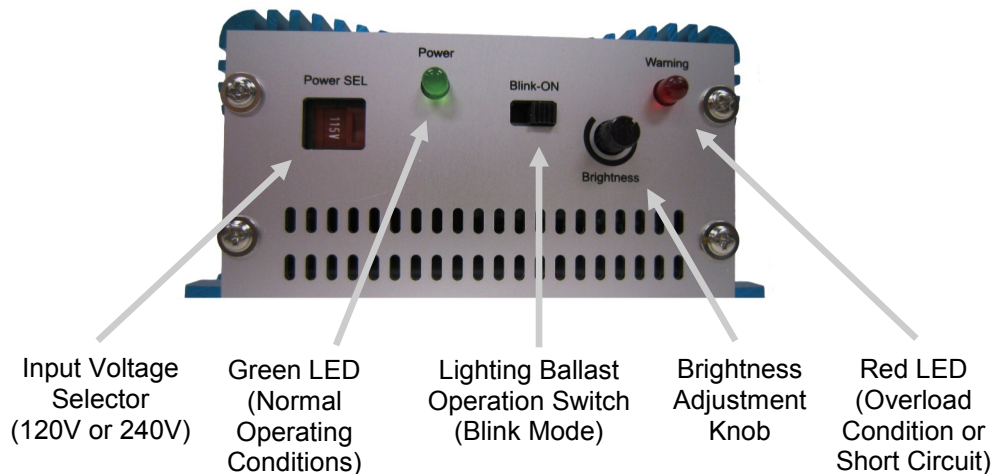
Smart Driver™ lighting ballasts are engineered to illuminate Light Tape®. Every ballast is factory tuned per the attached load to maximize Performance.

1. Verify that the total illuminated area of the Light Tape® is within the specified operating range of the Smart Driver™. If not, contact Sales for the correct ballast.
2. Before use, adjust Smart Driver™ to the correct input voltage (120 / 240) if your unit is equipped with a voltage selector switch.
3. Ensure Smart Driver™ is in Off position and not connected to power source.
4. Attach total Light Tape® load to output connector. Do NOT attempt to power Smart Driver™ without attached Light Tape® load.
5. Check all connections carefully and be sure to follow all local electrical codes.
6. Confirm Smart Driver™ brightness knob is in the low position by turning the brightness adjustment knob counterclockwise until completely closed.
7. Set Smart Driver switch in steady mode versus blink when first powering.
8. Plug lighting ballast into power source.
9. Push the On button and turn brightness adjustment knob clockwise to desired brightness.

Tuning Smart Driver and Trouble Shooting Tips:

250 Volts output is mid range and the recommended set point!

- A. Smart Driver™ has a brightness adjustment knob (dimmer) that controls the output voltage and frequency.
- B. Smart Driver™ ballasts have been evaluated by UL up to 400 volts output for SD50 / SD150, and 320 volts for larger models. Contact us if Smart Driver™ is operating outside of range.
- C. Use a voltage meter to determine volts / hertz.
- D. Set power supply output voltage per factory recommended setting:
Low: 200 volts - Medium: 250 volts - High: 270 volts
- E. Red LED Light indicates the following:
 1. Short Circuit Protection: Verify Wiring
 2. Overload Protection: Verify that lamp area is acceptable, or for possible damage to lamp.



Please Note:

All Smart Driver™ Lighting Ballasts have an automatic overload protection designed to shut down at a certain output level. As output power exceeds 280 Volts, the ballast will automatically shut down for the protection of the Light Tape® lamp. Under normal operating conditions, a green LED displays. A red LED is illuminated when the power supply exceeds recommended load per Light Tape® attached or some abnormal condition exists.

For your convenience, a spare fuse is located in the ballast input switch for larger units. For smaller PWB mounted units, please contact Electro-LuminX®.

If the lighting ballast shuts down and red LED is illuminated, follow directions below:

1. Shut the main power switch off and wait 15 seconds for red LED to go out.
2. Turn the brightness adjustment knob slightly counterclockwise.
3. Push the On button, turn brightness knob clockwise to increase brightness, stopping before reaching the voltage where the unit automatically shuts down. If the unit shuts down while turning the knob clockwise, start over with step 1 and do not increase the brightness quite as much when turning the knob clockwise.