



## *Troffer Door Retrofit System Installation Instructions*

Revised: 20160505

These instructions do not purport to cover all details or variations in components nor to provide for every possible contingency to be met in connection with installation, operation, or maintenance. Should further information be desired or should a particular problem arise which is not covered sufficiently for the purchaser's purpose, the matter should be referred to Linmore LED Labs. Linmore does not claim liability for any installation not performed according to this guide or not by a qualified electrician.

### **IMPORTANT SAFEGUARDS**

When using electrical equipment, basic safety precautions should always be followed including the following:

#### **READ AND FOLLOW ALL SAFETY INSTRUCTIONS**

1. DANGER – RISK OF SHOCK – DISCONNECT POWER BEFORE INSTALLATION
2. WARNING – Risk of fire or electric shock. LED Upgrade Kit installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Product must be installed in accordance with NEC or your local electrical code. If you are not familiar with these codes and requirements, contact a qualified electrician.
3. WARNING – Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when drilling for installation of the LED upgrade kit. Check for enclosed wiring and components.
4. WARNING – Risk of fire or electric shock. Check the existing wiring for damage before installing upgrade kit. Do not install if existing wires are damaged.
5. WARNING – To prevent wiring damage or abrasion, do not expose wires to the edge of sheet metal or any other sharp objects.
6. WARNING – Risk of fire or electric shock. Install this kit only in the luminaires that have the construction features and dimensions shown in the photographs and/or drawings.
7. The retrofit assembly is accepted as a component of a luminaire where the suitability of the combination shall be determined by UL or authorities having jurisdiction.
8. Only the holes indicated in the photographs or drawings may be made or altered as a result of the kit installation. Do not leave any other holes open in a wiring enclosure or electrical component.

**SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE NOTES:**

1. Upgrade Kit is for installation in a nominal 1x4, 2x2, or 2x4 Listed dry or damp location fluorescent troffer. The luminaire shall have the following minimum dimensions:

- 2-15/16" deep pan
- Consult your local authority regarding disposal or recycling of removed ballast and lamps.

**LIST OF SUPPLIED COMPONENTS:**

Retrofit Door Kit with URS Light Bar and Lens Installed (unless specified otherwise)

2 Mounting Brackets

2 Trim Pieces

Self Tapping Screws

External Driver

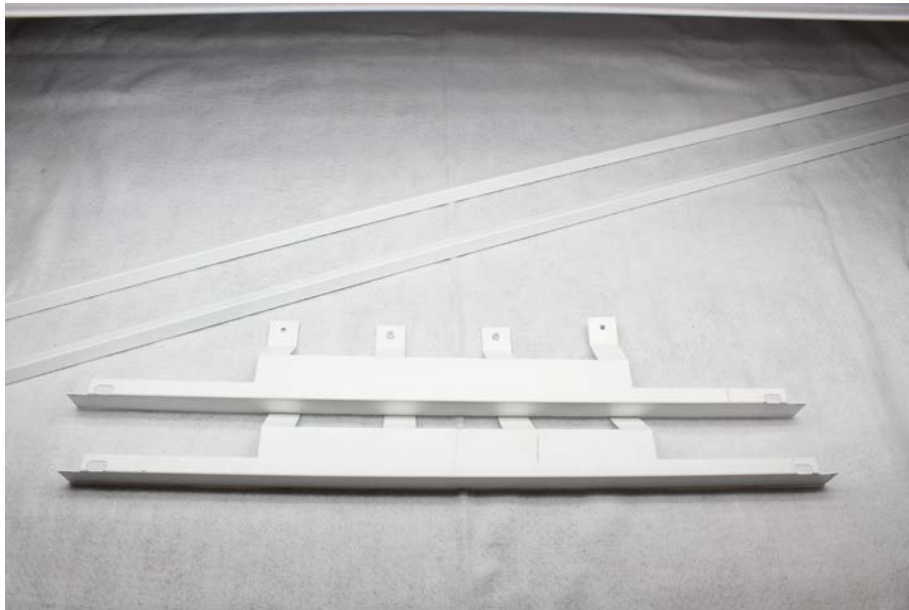
**LIST OF ITEMS INSTALLER MAY HAVE TO SUPPLY:**

Tin Snips

Wire Nuts

Additional Self Tapping Screws

Picture of Mounting Brackets and Trim Pieces:



**NOTE:** The instructions below reflect the steps necessary for retrofit of a typical fluorescent troffer luminaire.

Step 1: Locate latches on the lens frame and release them allowing the lens frame to open. Carefully let the lens frame hang then remove the existing troffer door.



Step 2: Remove the existing linear fluorescent tubes and properly dispose of them.



Step 3: Remove the wiring compartment cover by squeezing the sides in and pulling down. Dispose of the cover properly.



Step 4: Cut the leads from the ballast to the socket housing on both ends of the luminaire and cap socket leads. When cutting the leads, leave the smallest amount of wire attached to the luminaire.



Step 5: Cut the leads from the ballast to the input power ensuring to leave as much length as possible for electrical connections. Remove ballast from housing and dispose of properly.

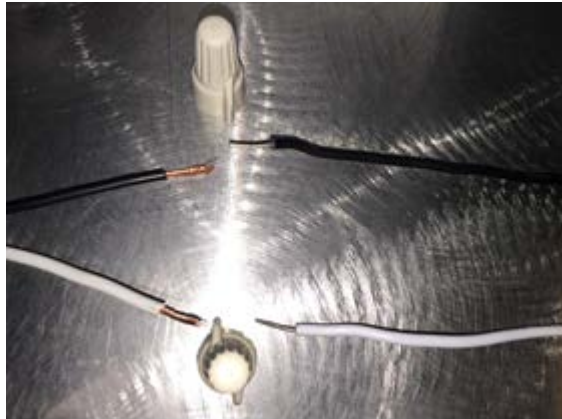
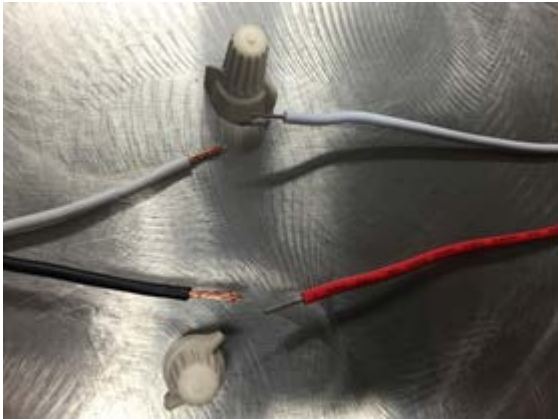
Step 6: Push exposed socket leads back into socket housing on each side of the luminaire or cap any exposed accessible leads.

Step 7: Prepare input power by stripping input power leads 5/8".

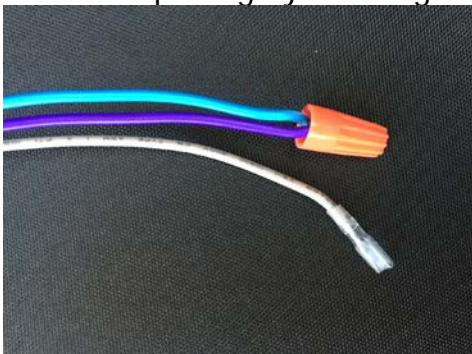
Step 8: Bring new driver into housing and install to either upper side of troffer housing using self-tapping screws. Ensure that the existing luminaire housing is properly grounded to ensure proper driver grounding.



Step 9: Make the input electrical connection per diagram on the face of the LED Driver. The White Input Wire is the Neutral. The Black or Red Input Wire is Line Voltage Input from 100 – 277 Volts. Ensure that the driver is properly grounded to the luminaire.



Step 10: The LED Driver comes standard with 0-10 Volt Dimming. The Blue, Purple, and Grey wires on the output side of the driver are for dimming functions. If the dimming functions will NOT be used, tie the blue and purple wires together with a wire nut and cap the grey dimming wire.





If the dimming functions will be used, this is the function of the dimming wires:

Purple: 0-10V + Dimming Input

Grey: 0-10V – Dimming Input

Blue: Input Power Supply for Dimmer at 9 Volts (when required by dimming system). If not required, cap this wire.

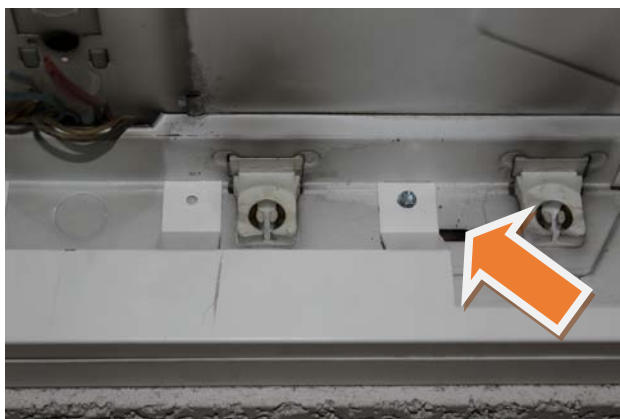
Step 11: It is the Installer's discretion to use or not use the Trim Pieces. As a suggestion, the installer should measure the width of the troffer opening after the existing door has been removed. If the opening width is greater than  $\frac{1}{2}$  inch wider than the new Troffer Door, it is suggested to use the Trim Pieces to reduce any excessive gap on the sides of the new Troffer Door. If Trim Pieces will be used, install them on the sides of the troffer as shown in the following pictures. Slightly lift the troffer so that the Trim Pieces slip between the suspended ceiling and the troffer.



Step 12: Install the mounting brackets to same side of troffer as the existing lamp holders. Slightly lift the troffer so that the mounting brackets slip between the suspended ceiling and the troffer.



Step 13: To maintain seismic connections to the existing troffer, secure the mounting brackets to the troffer housing with the supplied self-tapping screws to at least 2 of the 4 tabs provided as pictured. Use tin snips to trim or remove tabs that present fitment issues.



Step 14: The new troffer door is supplied with a latch bolt at each corner. The latch bolts act as both a latch and a hinge allowing for the door to open from two sides. Insert the bolt from one corner into the associated slot in the mounting bracket. Depress the latch bolt on the adjacent corner and line up with the slot in the mounting bracket. Release the latch bolt. The new door should now hang from the two latch bolts.



Step 15: The Troffer Door has a pair of white wires coming through the top of the door. With white insulation partially removed, one wire is copper color and one is silver color. Take the black & red output leads from the driver. Connect the black driver wire to the silver wire. Connect the red driver wire to the copper wire. Connector provided.



Step 16: Close the Door by depressing the two bolt latches and releasing when the bolts are in alignment with the slots in the mounting brackets.

Step 17: Restore the power supply to the fixture and ensure proper operation.

