



## *Internal Driver LED Tube Installation Instructions*

Revised: 20161003

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 common dry or damp location fluorescent troffer, wrap or strip luminaire, with or without a diffuser operating at 100-277 Volts AC, without a dimming control.
2. Consult your local authority regarding disposal or recycling of removed ballast and lamps.
3. Internal driver LED tubes are not suitable for use with dimming or battery back up fixtures.

## LIST OF SUPPLIED COMPONENTS:

Internal Driver LED Tube(s) per Chosen Kit

Label: "Retrofitted Luminaire"

Label: "Modified Power Socket"



**LinmoreLED**  
ULTRA PERFORMANCE LIGHTING

559-485-6010  
info@linmoreled.com

### **Retrofitted Luminaire**

For use with Single End Source Power LED Tube lights ONLY!

Electrical Rating: 120-277VAC; 50/60 Hz  
(1x) 4' lamp 12 Watts, (2x) 4' lamp 24 Watts  
(3x) 4' lamp 36 Watts, or (4x) 4' lamp 48 Watts

### **--- WARNINGS ---**

- NOT FOR USE WITH DIMMERS
- Risk of electrical shock. Do not open or remove covers. Refer servicing to qualified service personnel.
- Risk of fire or electrical shock. Do not use this retrofit kit in luminaires employing shunted bi-pin lampholders.
- Risk of electric shock. Install this kit only in an open or enclosed surface or recessed (type non-IC) maximum 4-lamp luminaires. Not for use where exposed to weather.
- Disconnect power before repairs, maintenance, and relamping.

### **--- CAUTIONS ---**

- This luminaire is retrofitted to accept Linmore LED Internal Driver Tubes 120-277VAC, LED Tube T8 Single End Source lamps ONLY. Do not install any other lamp in this luminaire.
- The final installation of this fixture shall comply with all local and national codes.
- Risk of electrical shock ~ Use in dry locations only.
- Risk of electrical shock ~ Live voltage do NOT touch pins.
- MUST remove or bypass ballast and/or starter prior to installation or warranty is void.
- This device is NOT intended for use with emergency exit fixtures or emergency exit lights.



**Modified  
Power Socket**  
(HOT + NEUTRAL Leads)

Install Single End Source  
Power LED Tube Lamp  
ONLY!

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

Non-Shunted Lamp Holders, T-Series Medium Bi-Pin  
Additional wire to extend wire length or make jumpers  
Wire nuts

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

Step 1: Disconnect power before installation.

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



Step 3: Remove the wiring compartment cover. Set aside.

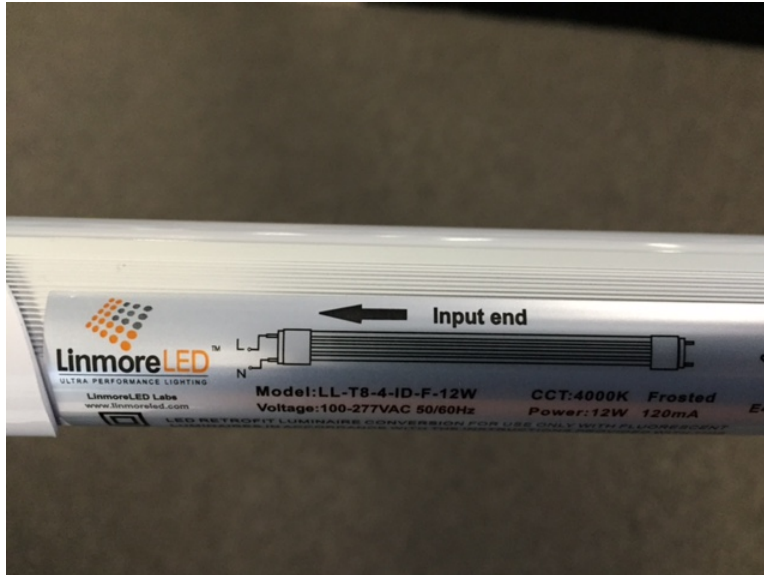


Step 4: Cut the leads from the ballast to the lamp holders on both sides of the ballast. When cutting the leads, leave the smallest amount of wire attached to the lamp holders as possible. Remove ballast from housing and dispose of properly.



Step 5: Lamp Holders MUST be non-shunted, T-Series Medium Bi-Pin. A qualified electrician should assess the lamp holders for continued use or replace with new non-shunted lamp holders.

Step 6: Connect line voltage to the non-shunted lamp holders/sockets on one side of the luminaire. Connect the hot conductor to one side of the lamp holder. Connect the neutral wire to the other. There is no polarity designation or requirement. Lamp holder(s) on the opposite side will not have any electrical connections.



Step 7: If multiple Internal Driver Tubes will be used, jump line voltage between non-shunted lamp holders on the same side of the fixture.

Step 8: Bring wiring compartment cover previously removed in Step 2 into the housing. Carefully tuck all leads and wire connectors into the wire compartment. Reattach wire compartment by snapping into place insuring no wires are pinched.

Step 9: Place the "Modified Power Socket" decal with arrow pointing to the wired lamp holders indicating the modification to incoming line voltage.

Step 10: Place the "Retrofitted Luminaire" decal in a prominent location on the end of the fixture with powered sockets. Ensure that the decal will be visible after completion of installation.

Step 11: Ensure that the pins on the twist lock lamp holders are in the vertical position. Bring the lamp(s) into the luminaire and insert both lamp sockets into the luminaire at the same time. Read the label on the LED Tube and ensure the end of the Tube with the label is installed into the powered sockets.

Step 12: Secure lamp by turning the twist lock into lock position on both ends of the lamp. Twist lock pins will be horizontal when twist lock is in locked position.

Step 13: Restore the power supply to the fixture and ensure proper operation.