



## LED TUBE INSTALLATION GUIDE – WARNING

**WARNING** - Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaires electrical systems. Installation should be performed only by a qualified electrician in accordance with the National Electrical Code and relevant local code.

**WARNING** - To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

- Disconnect power at the source before installation, inspection or removal. Do not simply switch off fixture.
- This item is rated at 120-277V. Installer must determine whether line voltage 120-277V is available at the luminaire before installation.
- Not intended for use with emergency exit fixtures or emergency exit lights.
- Not for use with luminaire ballast.
- Do not use if product is damaged.
- This lamp is non-dimmable. Not for use with dimmers.
- Suitable for use with non-shunted lamp holders only.
- Connect hot wire only to end cap with the logo. See Diagram 2. Opposite end cap is dead, do not wire.
  
- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- To avoid potential fire or shock hazard, do not use this retrofit kit in luminaires employing shunted bi-pin lamp holders. Note: Shunted lamp holders are found only in fluorescent luminaires with Instant-Start ballasts. Instant-Start ballasts can be identified by the words “Instant Start” or “I.S.” marked on the ballast. This designation may be in the form of a statement pertaining to the ballast itself, or may be combined with the marking for the lamps with which the ballast is intended to be used, for example, F40T12/IS. For more information, contact the LED luminaire retrofit kit manufacturer.
- “This luminaire has been modified and can no longer operate the originally intended lamp,” shall be marked on the retrofit luminaire where readily visible by the user during normal maintenance including re-lamping.
- Risk of fire or electric shock. Do not open or modify. No user serviceable parts inside.
- Installers should not disconnect existing wires from lamp holder terminals to make new connections at lamp holder terminals. Instead installers should cut existing lamp holder leads away from the lamp holder and make new electrical connections to lamp holder lead wires by employing applicable connectors.
- SUITABLE FOR DAMP LOCATIONS. Suitable for use in wet locations when used in an outdoor-rated fixture. Not for use where directly exposed to the weather or water.
- Complies with Part 15 of FCC. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received including interference that may cause undesired operation.
- SUITABLE FOR “TYPE IC” OR “TYPE NON-IC” LUMINAIRES.
- No external weight or mechanical force should be applied to tube or components.

Diagram A – Non-Shunted



Non Shunted lamp holder must be used

Diagram B – Shunted

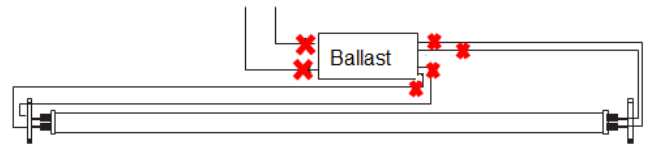


Shunted lamp holder used with Instant Start ballast must be replaced by non-shunted as per Diagram A.

## LED TUBE INSTALLATION GUIDE – INSTALLATION STEPS

- 1) Read all WARNINGS before continuing this section.
- 2) Ensure fixture is 120-277V.
- 3) Make sure POWER IS TURNED OFF AT THE SOURCE.
- 4) Remove lens if applicable, remove cover and fluorescent tubes.
- 5) Cut all wires that connect ballast (Cf. Diagram 1). Properly discard ballast or cap off wires. Cut wire away from lamp holders.
- 6) If applicable, replace lamp holders at power end with non-shunted lamp holders.
- 7) Connect Live (L) from power source into non-Shunted lamp holder "L In".
- 8) Connect neutral (N) wire from power source into non-Shunted lamp holder "N In".
- 9) If installing a single tube refer to Diagram 3 and go to section 13. If connecting multiple lamps, continue reading.
- 10) Connect separate hot wire into "Hot Out" from primary source lamp holder and connect that wire into "Hot In" on the adjacent tube.
- 11) Connect separate neutral wire into "Neutral Out" from primary source lamp holder and connect that wire into "Neutral In" on the adjacent tube. See Diagram 4 below.
- 12) Continue this process for additional lamps.
- 13) This device is powered on one end only; the end with the logo (Cf. Diagram 2). Do not wire opposite end of lamp holder.
- 14) Install lamp with the logo into the wired lamp holder end.

Diagram 1 – Cut all ballast wires



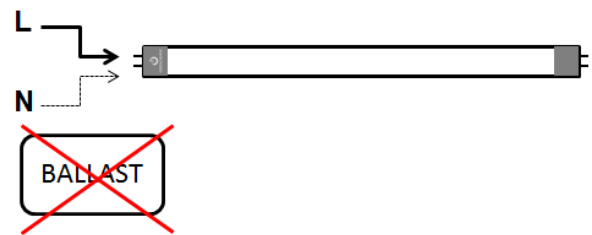
Cut all wires connecting ballast

Diagram 2 – Connecting end



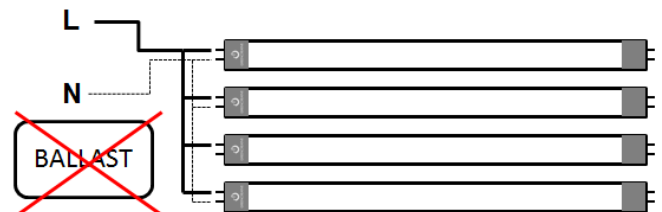
Connect power to end with logo

Diagram 3 – Single tube wiring



Only wire to one end, the end with the logo. Wiring should be made using non shunted lamp holder

Diagram 4 – Multiple tube wiring



Only wire to one end, the end with the logo. Wiring should be made using non shunted lamp holder Maximum 4 tubes should be interconnected.

