

# T8 TUBES TYPE B



## GENERAL SAFETY INFORMATION

**Danger** - risk of shock-disconnect power before installation.

**Warning** - risk of fire or electric shock. LED retrofit kit installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation and contact a qualified electrician.

**Warning** - risk of fire or electric shock. Product must be installed in accordance with the national electrical code or your local electrical code. If you are not familiar with these codes and requirements, contact a qualified electrician.

**Warning** - risk of fire or electric shock. Install this kit only in luminaires that have the construction features and dimensions shown in the photographs and/or drawings and where the input rating of the retrofit kit does not exceed the input rating of the luminaire.

**Warning** - to prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects. Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

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.

**Warning** - risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when installing of retrofit kit hardware. Check for enclosed wiring and components.

**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.

**The retrofit kit is accepted as a component of a luminaire where the suitability of the combination shall be determined by authorities having jurisdiction. Product must be installed by a qualified electrician in accordance with the applicable and appropriate electrical codes. The installation guide does not supersede local or national regulations for electrical installations.**

"This luminaire has been modified to operate led lamps. Do not attempt to install or operate fluorescent lamps in this luminaire," shall be marked on the retrofit luminaire where readily visible by the user during normal maintenance including lamps.

Do not use with dimmers.

Suitable for damp locations. Suitable for use in enclosed luminaires.

This device is not intended for use with emergency exits.

This device complies with part 15 of the FCC rules. 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.

## INSTALLATION INSTRUCTIONS (DOUBLE-ENDED POWER)

1. Make sure the circuit breaker that supplies the power to the fixture is turned off.
2. Remove lens or diffuser cover (if applicable) and existing fluorescent lamps.
3. Open/Remove ballast wiring compartment cover.
4. Identify the line and neutral wires running from the breaker box to the ballast and confirm the power is off using a voltmeter.
5. Cut all wires connected to ballast, and remove ballast (and starter if present). Dispose of removed ballast and fluorescent lamps in accordance with government regulations in your area.
6. IKIO LED T8 lamps are designed for double-ended connections (Figure 1).
7. Wire using appropriate wiring diagram. (Figure 2, 3, 4).
8. Reinstall the ballast cover to hide all wires.
9. Install your new IKIO LED T8 replacement lamps.
10. Turn power on at the breaker box.
12. Turn on the lights.

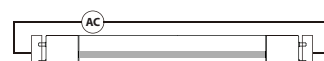


Figure 1. - Double-Ended connection

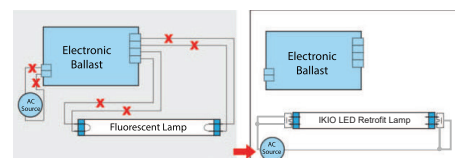


Figure 2. - Retrofit with One Lamp

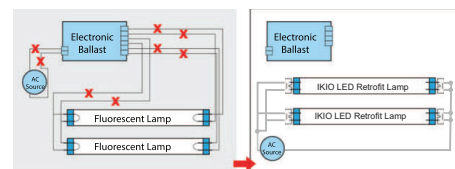


Figure 3. - Retrofit with Two Lamps

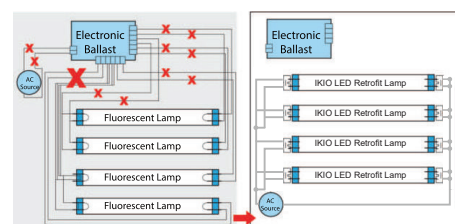


Figure 4. - Retrofit with Three/Four Lamps

# T8 TUBES TYPE B



## INSTALLATION INSTRUCTIONS (SINGLE-ENDED POWER)

1. Make sure the circuit breaker that supplies the power to the fixture is turned off.
2. Remove lens or diffuser cover (if applicable) and existing fluorescent lamps.
3. Open/Remove ballast wiring compartment cover.
4. Identify the line and neutral wires running from the breaker box to the ballast and confirm the power is off using a voltmeter.
5. Cut all wires connected to ballast, and remove ballast (and starter if present). Dispose of removed ballast and fluorescent lamps in accordance with government regulations in your area.
6. Ensure that the fixture contains non-shunted G13 Bi-pin lamp holders (Figure 1). If socket lamp holders are internally shunted, then replace with new non-shunted socket lamp holders. If socket lamp holders are shunted with a jumper wire, remove wire to convert into non-shunted sockets.
7. IKIO LED T8 lamps are designed for single sided connections (Figure 2). To install, please wire non-shunted sockets by connecting one wire from the lamp holder to branch circuit L (LIVE) and the other wire at the opposite end to the branch circuit N (NEUTRAL). Do not connect opposite side to power. Use appropriate wires for connection.
8. Make sure all sockets are replaced and wired according to the appropriate wiring diagram. (Figure 3, 4, 5, 6).
9. Reinstall the ballast cover to hide all wires.
10. Install your new IKIO LED T8 replacement lamps.
11. Turn power on at the breaker box.
12. Turn on the lights.

**Warning** - to avoid potential fire or shock hazard, do not use this retrofit kit in luminaires employing shunted bi-pin lampholders. Note: shunted lampholders 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.

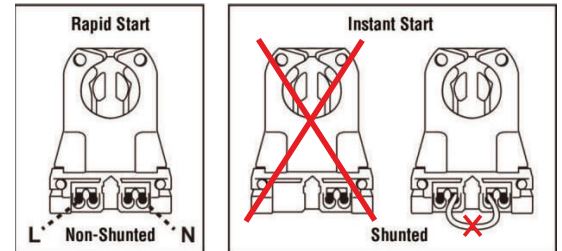


Figure 1. - Non-shunted & Shunted Lamp Holder



Figure 2. - Single-Ended connection

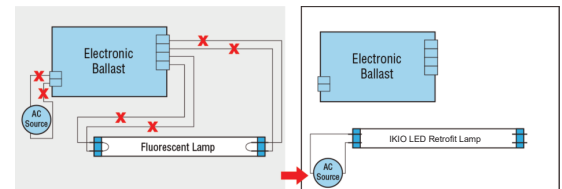


Figure 3. - Retrofit with One Lamp

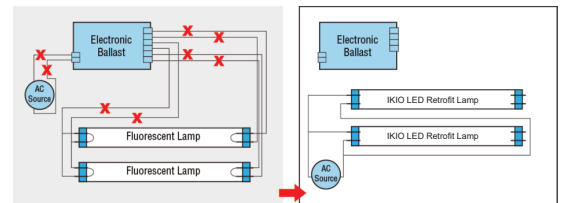


Figure 4. - Retrofit with Two Lamps

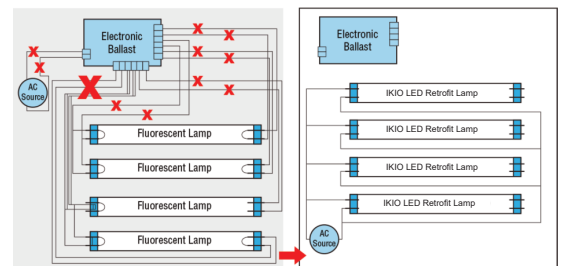


Figure 5. - Retrofit with Three/Four Lamps

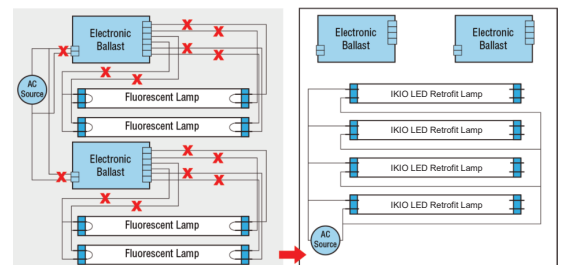


Figure 6. - Retrofit with Three/Four Lamps & Two Ballasts