

# LED Tube Lamp Installation Guide



## Technical Specification:

1. Verbatim LED T8 Tubes are suitable to replace T8 fluorescent lamps in fixtures containing standard non-shunted G13 (medium bi-pin) sockets.
2. Refer to the installation steps in this Installation Guide.

Part Number	LED Tube Model No.	Input Voltage (Vac)	Input Frequency (Hz)	Input Wattage (W)
70412	T8-4FT-C40-W12-BPDE150	120-277	60	12
70413	T8-4FT-C50-W12-BPDE150			
71151	T8-4FT-C40-W18-BPDE125			18
71152	T8-4FT-C50-W18-BPDE125			

Verbatim 5-year limited warranty [www.verbatimlighting.com/warranty](http://www.verbatimlighting.com/warranty).

For support, visit [www.verbatimlighting.com/support](http://www.verbatimlighting.com/support)

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.

## Luminaire Description for Retrofit Installation:

1. These LED tubes are suitable to be installed in standard T8 luminaires.
2. These LED tubes are NOT suitable to be installed in luminaires which use a remote starter.
3. These LED tubes are intended to retrofit surface mount, Type IC recessed mount Listed fluorescent luminaires that use maximum four straight tubular lamps with or without a diffuser.

## LED Tube Installation Guide: WARNING

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

#### DANGER -

#### RISK OF SHOCK – DISCONNECT POWER BEFORE CARRYING OUT ANY INSTALLATION WORK

#### WARNING -

Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaire electrical systems. If not qualified, do not attempt installation. Product must be installed in accordance with the National Electrical Code or your local electrical code. Contact a qualified electrician.

#### WARNING -

Risk of fire or electric shock. Install this kit only in luminaires that have construction features and dimensions shown in the photographs and/or drawings.

#### WARNING -

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

#### WARNING -

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

- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

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- Installers should not disconnect existing wires from lampholder terminals to make new connections at lampholder terminals. Instead, installers should cut existing lampholder leads away from the lampholder and make new electrical connections to the lampholder lead wires by employing applicable connectors.
- “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 lamping.
- Suitable for damp locations.
- Do not use if product is damaged.
- Dimmable with 0-10V dimming system\* (see Figure 3 for wiring diagram for Dimming Module and 0-10V Dimmer)
- Not intended for use with emergency exits.
- These LED tubes must be operated within an ambient fixture temperature of -4°F to +104°F (-20°C to +40°C) to comply with all safety and warranty regulations.
- **CONSULT A QUALIFIED ELECTRICIAN TO ENSURE CORRECT BRANCH CIRCUIT ENDUCTOR.**

\*Sold separately

THIS RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION.

## Installation Steps:

1. Make sure power to the luminaire is switched off at the source.
2. Remove the lens or diffuser (if applicable) and the existing fluorescent lamps from the luminaire.
3. Open the wiring compartment.
4. Cut off all wires that connect the ballast.
5. Make sure to connect the line (L) and neutral (N) to the corresponding ends of the tube socket according to the wiring diagram (Figure 2).
6. Close up wiring compartment.
7. Install the new Verbatim LED T8 tube with line (L) end of LED tube to line (L) end tube socket.
8. Apply Relamping Label on a visible location inside the fixture.
9. Replace diffuser (if removed in step 2).
10. Switch on power to the luminaire.

**Figure 1:**

Non-shunted and shunted socket

(a) Non-Shunted



(b) Shunted



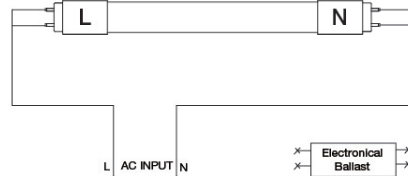
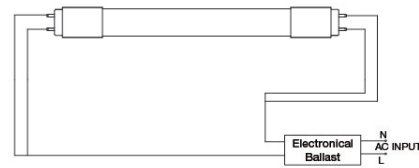
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Figure 2:

a. Retrofit luminaire with electronic ballast

Disconnect the wires between starter and ballast according to the left figure.

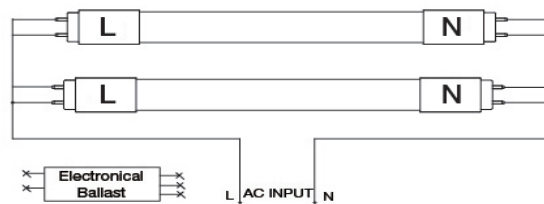
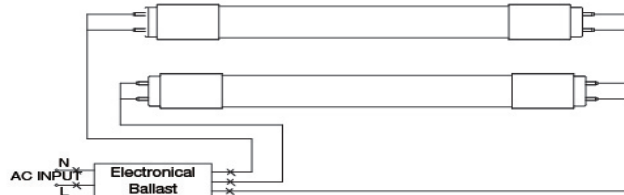
Connect two wires to branch circuit L and N according to the left figure.



b. Retrofit luminaire with two lamps and one electronic ballast

Disconnect the wires between starter and ballast according to the left figure.

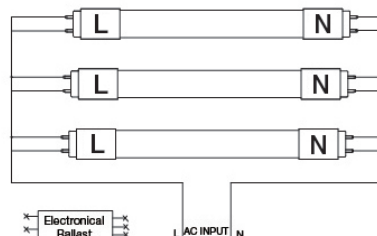
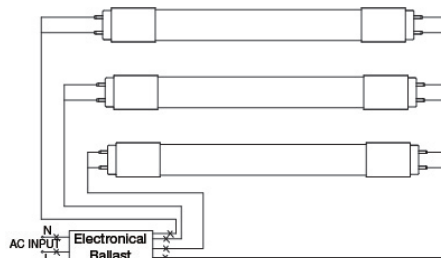
Connect two wires to branch circuit L and N according to the left figure.



c. Retrofit luminaire with three lamps and one electronic ballast.

Disconnect the wires between starter and ballast according to the left figure.

Connect two wires to branch circuit L and N according to the left figure.



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- d. Retrofit luminaire with four lamps and one electronic ballast.

Disconnect the wires between starter and ballast according to the left figure.

Connect two wires to branch circuit L and N according to the left figure.

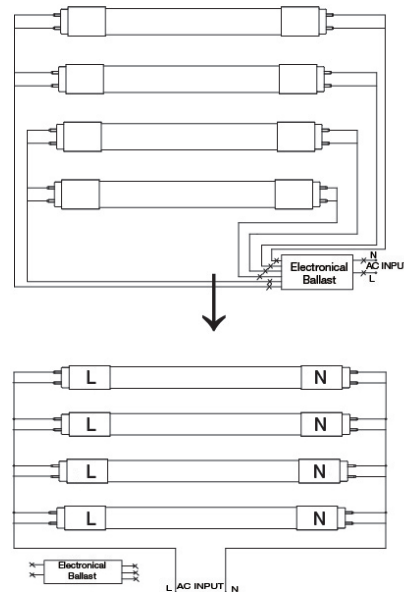
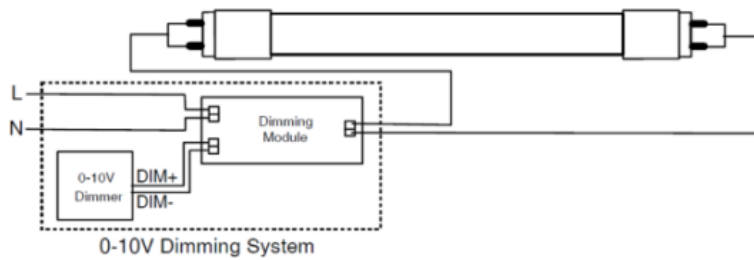


Figure 3:



Voltage Input: AC120-277V 50/60Hz