

LED Tube Lamp (Linear Fluorescent Replacement) Retrofit Installation Instructions

The product package includes the following components:

1. Integral LED Lamp (1 unit)
2. Fixture Warning Label (1 - self-adhesive)
3. Installation Instructions (1 - 6 pages)

IMPORTANT SAFETY INSTRUCTIONS AND WARNINGS:

THIS PRODUCT SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST U.L. SAFETY, NEC AND/OR LOCAL AUTHORITY HAVING JURISDICTION. INSTALLATION SHALL BE PERFORMED BY A QUALIFIED ELECTRICIAN UNDERSTANDING THE CONSTRUCTION AND OPERATION OF THIS PRODUCT AND THE ELECTRICAL REQUIREMENTS INVOLVED.

Risk of fire or electric shock: LED Retrofit Kit installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.

Only those open holes indicated in the photographs and/or drawings may be made or altered as a result of kit installation. Do not leave any other open holes in an enclosure of wiring or electrical components.

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

Do not install in a raceway or a luminaire marked for through branch wiring.

Risk of fire or electric shock: Use only on 120-277 VAC, 50/60Hz circuits. Installer shall verify operating voltage at the luminaries prior to installation.

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 below.

Item No.	Minimum luminaire dimensions: Length x Width x Height			
	One Lamp Fixture	Two Lamp Fixture	Three Lamp Fixture	Four Lamp Fixture
54105111 54105131 54105141	23.8" x 5.71" x 2.7"	23.8" x 11.34" x 2.7"	23.8" x 16.54" x 2.7"	23.8" x 20.7" x 2.7"
54130111 54130131 54130141	35.8" x 5.71" x 2.7"	35.8" x 11.34" x 2.7"	35.8" x 16.54" x 2.7"	35.8" x 20.7" x 2.7"
54108111 54108131 54108141 54108161 54145041 54145061 54145062	47.2" x 5.71" x 2.7"	47.2" x 11.34" x 2.7"	47.2" x 16.54" x 2.7"	47.2" x 20.7" x 2.7"

Suitable for damp or dry locations when used with UL Listed Type IC or Non-IC, recess mounted or surface mounted luminaires and suitable for use in totally enclosed luminaires.

Risk of fire or electric shock: To prevent wiring damage or abrasion, protect wiring from exposed edges of sheet metal or other sharp objects that may be present in the fixture.

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.

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. For more information, contact ETi Solid State Lighting at (855) 384-7754 or www.eted.us.

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.

Do not make modifications to or alter fixture housing, ballast enclosure or electrical components other than those required for proper installation.

THIS RETROFIT ASSEMBLY IS AN APPROVED COMPONENT OF A LINEAR FLUORESCENT LUMINAIRE KIT WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY CSA OR LOCAL AUTHORITIES HAVING JURISDICTION.

Non-shunted fluorescent lamp holders within fixture shall be rewired to line voltage and will no longer operate the original fluorescent lamp. **LAMP HOLDERS MUST BE NON-SHUNTED**

DO NOT USE WITH DIMMERS.

THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY LIGHTING (BATTERY TYPE) SYSTEMS FOR FLUORESCENT LIGHTING PRODUCTS.

1. Electrical Characteristics (Typical value):

Length 2ft (54105111, 54105131, 54105141)

Voltage AC (V) 120-277

Current AC (mA) 150

Power (W) 9

PFC >0.9

Rated Frequency (Hz) 50/60

Length 3ft (54130111, 54130131, 54130141)

Voltage AC (V) 120-277

Current AC (mA) 300

Power (W) 14

PFC >0.9

Rated Frequency (Hz) 50/60

Length 4ft (54108111, 54108131, 54108141, 54108161, 54145041, 54145061, 54145062)

Voltage AC (V) 120-277

Current AC (mA) 350

Power (W) 18

PFC >0.9

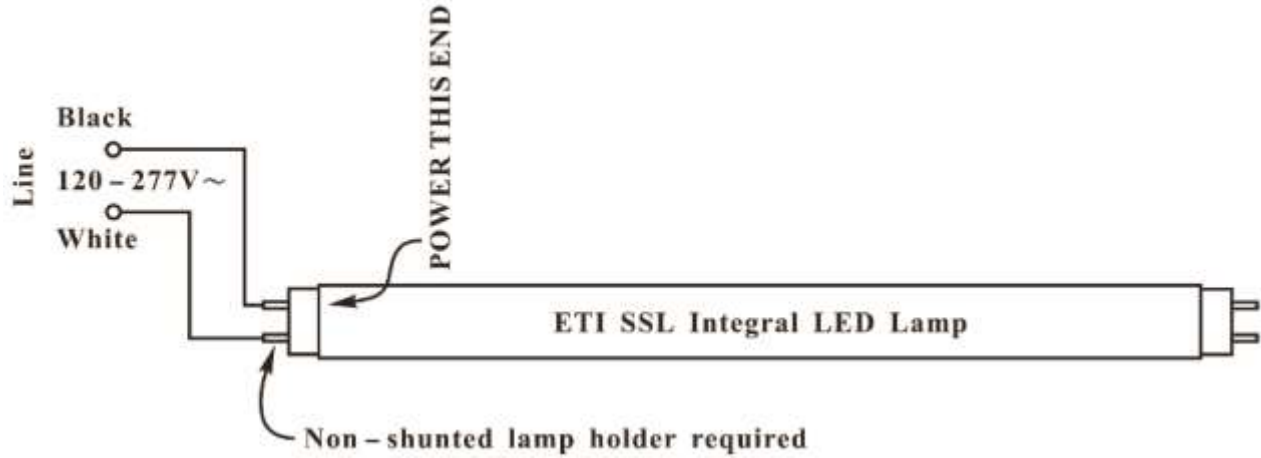
Rated Frequency (Hz) 50/60

2. Installation

DANGER -RISK OF ELECTRIC SHOCK-DISCONNECT POWER TO LIGHT FIXTURE BEFORE INSTALLATION

To replace fluorescent tube lamp with LED tube lamp, the wiring must be installed according to these instructions to ensure a complete and safe installation of the LED tube lamp.

Integral LED Tube Lamp Wiring Diagram:



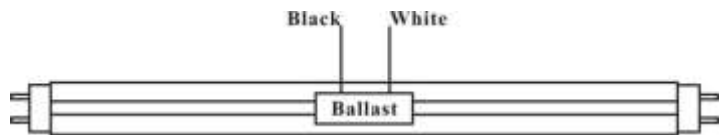
Note: LED Tube Lamp requires single end power only; wiring to one side of the fixture is sufficient. Ensure lamp end labeled "POWER THIS END" is installed to the live circuit.

CAUTION: LAMP HOLDERS MUST BE NON-SHUNTED. POWER FLOWS THROUGH LED TUBE LAMP

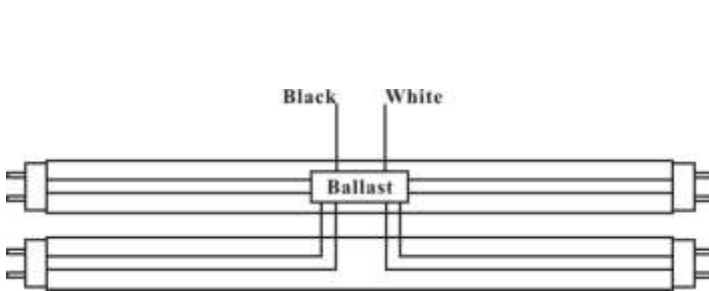
1. Turn off the power to the light fixture at the breaker panel before installation.
2. If retrofitting an enclosed fixture open the diffuser from the light fixture.
3. Remove existing fluorescent lamps. Please dispose or recycle these items properly in accordance with local requirements as they contain mercury.
4. Open the wiring cover to expose the fluorescent ballast.



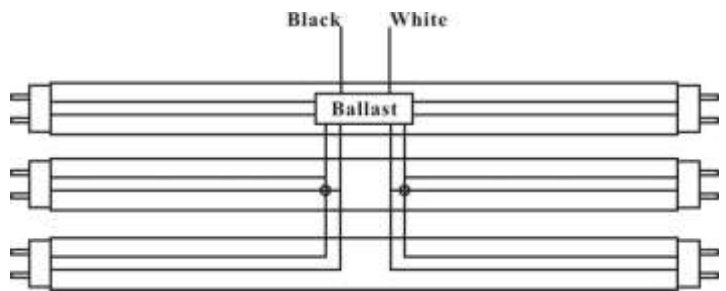
Inductive ballast type



Electronic ballast type

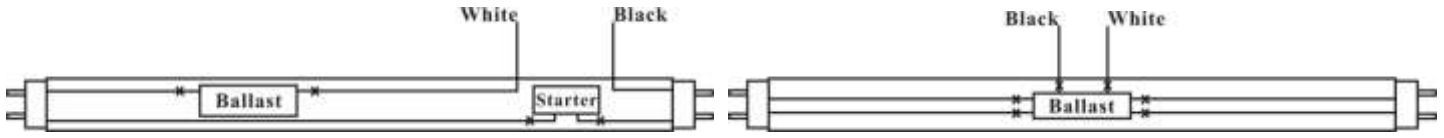


Ballast with 2 lamps



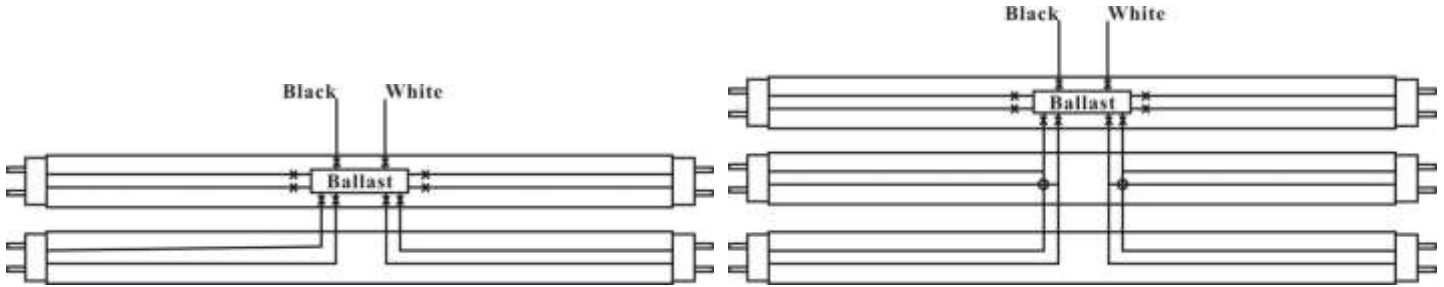
Ballast with 3 lamps

5. Cut the wires shown as the diagram below. Optional: Remove ballast and starter and dispose or recycle in accordance with local requirements.



Inductive ballast type

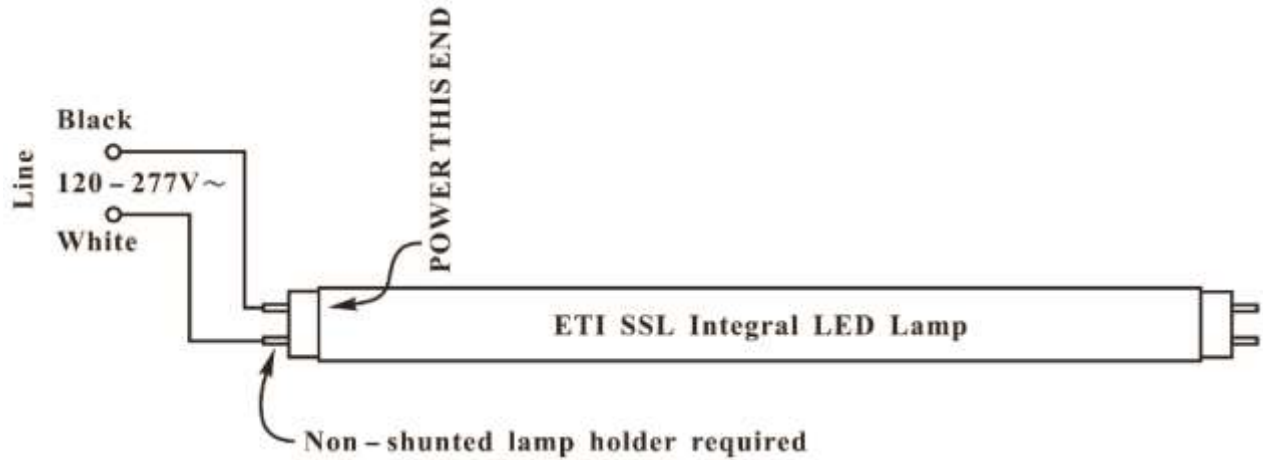
Electronic ballast type



Ballast with 2 lamps

Ballast with 3 lamps

6. Make the new wire connection for new branch circuit wiring required and shown as in diagram below.



The labeled end of LED Tube Lamp is the live, input powered end. The opposite end is electrically isolated and serves as means of mechanical support only.

7. Reinstall the ballast cover over the wiring channel.
8. **IMPORTANT:** Install the fixture warning label provided in a visible location after the LED Tube Lamp is installed, possibly on the wiring channel cover.

Fixture warning label

ETi SSL Inc.
The Americas Headquarters
26650 Renaissance PKW, STE 6
Cleveland, OH 44128

**Notice: This luminaire has been modified and no longer operates Fluorescent Lamps. Use only ETi SSL, Item # 541051XX ("X" represents a digit from 0 to 9), LED self-ballasted lamps for lamp replacement.
Tel:(855)384-7754, www.etiled.us**

**Notice: This luminaire has been modified and no longer operates Fluorescent Lamps. Use only ETi SSL, Item # 541301XX ("X" represents a digit from 0 to 9), LED self-ballasted lamps for lamp replacement.
Tel:(855)384-7754, www.etiled.us**

**Notice: This luminaire has been modified and no longer operates Fluorescent Lamps. Use only ETi SSL, Item # 541081XX ("X" represents a digit from 0 to 9), LED self-ballasted lamps for lamp replacement.
Tel:(855)384-7754, www.etiled.us**

Imported by

ETi Solid State Lighting, Inc.
26650 Renaissance PKWY, STE6
Cleveland, OH 44128

Made in China

LIMITED WARRANTY: This product is warranted for a period of 5 years from the date of original purchase against defects in materials and workmanship. If this product should fail to operate due to defects in material or workmanship, simply call 1-216-468-0232 within 60 months of purchase. This product will be repaired or replaced, at ETi's option. This warranty is expressly limited to repair or replacement of product and liability for direct, incidental, or consequential damages is hereby expressly excluded. Some states do not allow exclusions of direct, incidental or consequential damages so the above limitation of exclusion may not apply to you. This warranty gives the consumer specific legal rights, which vary from state to state. **WARRANTY IS VOID IF PRODUCT IS NOT USED FOR THE PURPOSE WHICH THIS PRODUCT IS MANUFACTURED.**

ETi SSL Inc.
The Americas Headquarters
26650 Renaissance PKW, STE 6
Cleveland, OH 44128