

Easily upgrade to LED from fluorescent.

The LED EM T8 tube is designed and engineered as an all-in-one general purpose lighting and battery powered emergency backup LED solution. The tube can be switched on as a normal lamp, providing high lumen efficacy and supporting on/off switching operation. The integrated batteries and emergency driver provides a minimum of 90 minutes of light.

- UL Classified & DLC listed
- 18W/32W 4ft fluorescent tube replacement
- Integrated tube: regular T8 lighting and emergency lighting
- Built-in lithium batteries
- Reduces maintenance and replacement costs with longer lifespan
- Easy installation
- Power Factor >0.9, THD<20%, Triac Dimming
- Provides 90 minutes of light under emergency use

Electrical and Technical Data (subject to change without notice)

Ordering Code	Line Voltage Application			Emergency Application			Base	CRI	Color Temperature	Length
	Input Voltage	Lamp Wattage	Initial Lumen	Lamp Wattage	Time	Initial Lumen				
L48T8-8YY-17P-P2-EM	120-277V	17W	2100lm	3W	90 minutes	400lm	G13	80	4000K/5000K	48in

* Initial Lumen value above are @ 5000K

Installation Guide

WARNING:

*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.

*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.

*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.

*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.

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

*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 lampholder lead wires by employing applicable connectors.

*Installers should examine all parts that are not intended to be replaced by the retrofit kit for damage and replace any damaged parts prior to installation of the retrofit kit.

*This device is not suitable for use as emergency lighting equipment.

*The battery in this device is not user serviceable. Refer service to manufacturer's qualified personnel only. Do not incinerate.

*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 for use with luminaire ballast.

*Do not use if product is damaged.

*Suitable for use with non-shunted lamp holders only.

*Suitable for "Type IC" or "Type Non-IC" luminaires.

*MIN. LAMP COMPARTMENT DIMENSIONS "121 cm(L) x 61 cm(W) x 5 cm(H)

*Environment condition: charging: 0~+40 C (32 °F~104°F); Discharging: -20~+60 C (-4 °F~140°F); Storage within: -20~+35 C (-4 °F~95°F).

*DON'T dispose of the tube in a fire — the batteries may leak or rupture.

*DON'T disassemble, crush, puncture, or otherwise damage the tube. This can result in battery leakage or rupture.

*Note that regulations on disposal of products with battery may vary in your municipality or state so please check your local regulations.

Installation Steps:

- 1) Read all WARNINGS before continuing this section.
- 2) Ensure fixture is 120-277V input.
- 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).
- 6) If applicable, replace lamp holders at power end with non-shunted lamp holders (Cf. Diagram 2).
- 7) Connect Live from power source into Non-Shunted lamp holder "L In". Connect neutral (N) wire from power source into Non-Shunted lamp holder "N In".
- 8) Connect lamp holder 1 to the standard MAINS through circuit breaker 1, which will be "off" only during power outages. Connect lamp holder 2 with the regular rotor to standard MAINS through circuit breaker 2, which is typically connected to a wall switch. (Cf. Diagram 3)
- 9) The battery connection switch comes with a default "off" to prevent the built-in battery from being depleted or damaged during transportation. Turn on the switch near the endcap. The lamp may be lighted in a dimmed light level powered by the built-in battery.
- 10) Install the lamp into wired lamp holders.
- 11) Visibly affix "Modification Sticker" and reinstall housing cover and lens if applicable.
- 12) Return power back to source and the lamp should be lighted at full power. The LED indicator should be on to indicate normal AC MAINS exist. (Green LED light indicates fully charged, while red LED light indicates recharging.)
- 13) Regulatory compliance tests: Allow the lamp on the fixture for 24 hours with standard MAINS on. Turn off both the breaker 1 and the breaker 2 and observe the Battery LED T8 lamps under test to determine if they work for a 90-minute (monthly) testing period. The green LED will be off. If any of the lamps are not lighted during the test period, contact MANUFACTURER to replace the lamps. Written records documenting the testing must be maintained and available for review by local fire departments.

Diagram 1 - Cut all ballast wires

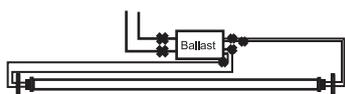


Diagram 2 - Non-Shunted lamp holders only

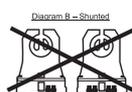
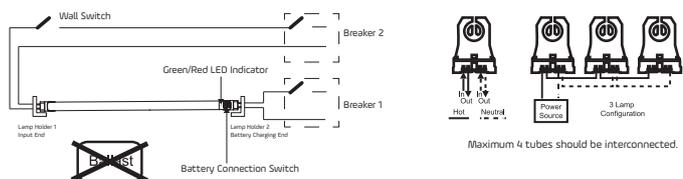


Diagram 3 - Wiring & Testing



Connect power to both ends with L and N markings. Wiring should be made using Non-Shunted lamp holders.