

## LED LDR Troffer Retrofit Installation Instructions

Instruction Number: P-INT-X-423

Product Series: LDRES 2' x 2' and 2' x 4'



**WARNING!** Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when drilling for installation of LED retrofit kit. Check for enclosed wiring and components.

**WARNING!** 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.

**WARNING!** Risk of fire or electric shock. Install this kit only in the luminaires that have the constructions 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.

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

**CAUTION!** Risk of fire. Consult a qualified electrician to ensure correct branch circuit conductor.

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED. 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 INSTALLERS.

Use this instruction to convert a recessed troffer lensed fluorescent to LED.

### Components

- 1 LED Troffer Bracket Retrofit
- 2 Side Mounting Brackets

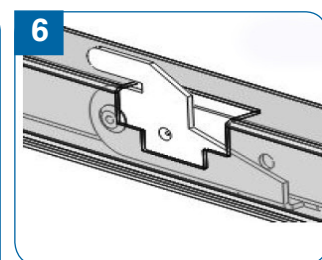
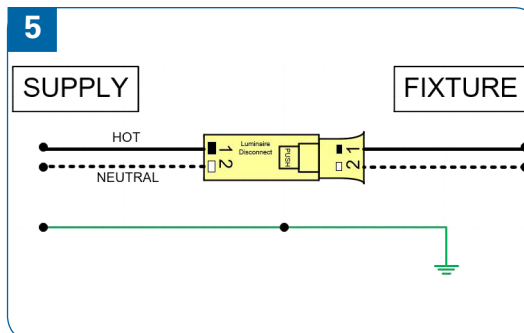
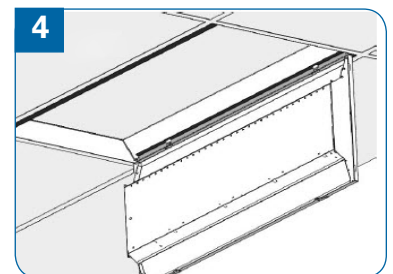
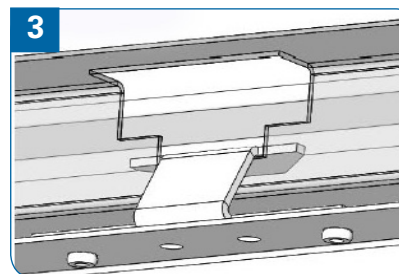
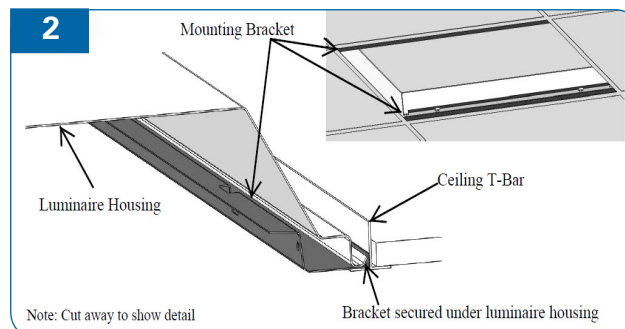
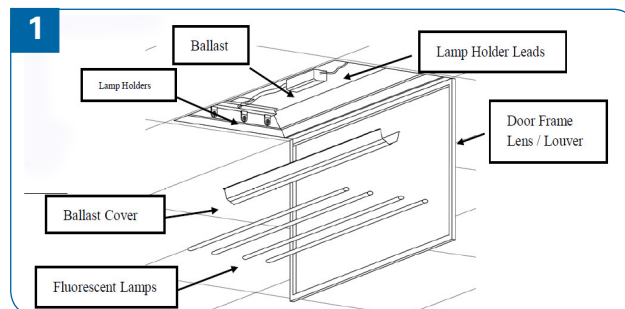
### Tools Required for Installation

Wire cutters/strippers

### Step-by-Step Instructions

1. Field installers are responsible for recognizing specific site requirements and making adjustments to assure a complete, functional installation.
2. Make all power connections using UL listed components.
3. Electrical connections must be made by a qualified electrician and in accordance with NEC and local codes.

- 1 Remove existing door frame (if installed) and lamps. If clearance permits, abandon ballast and socket bars inside the existing fixture. Otherwise remove these as needed. Dispose of lamps, door frame, and ballast properly. (See Fig. 1)
- 2 Lift luminaire housing and slide in both side mounting brackets between the housing and the T-Bar grid. (See Fig. 2) Lower luminaire onto mounting brackets.
- 3 Hang the LDR by its hinges on one of the mounting brackets. (See Fig. 3 and Fig. 4)
- 4 Install power disconnect (pre-attached) to supplied power leads) to the line (black) and neutral (white) coming into the fixture. (See Fig. 5)
- 5 Wire the existing fixture ground wire to the supplied ground wire(s). If no ground wire exists from the power supply, add ground wire to the existing luminaire housing.  
Note: The LDR must be properly grounded
- 6 Close the LDR and secure the latches. (See Fig. 6)
- 7 Reconnect the main power and test fixture.



## LED LDR Troffer Retrofit Battery Back Up Field Installation Instructions

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

**CAUTION!** Risk of fire. Consult a qualified electrician to ensure correct branch circuit conductor.

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Use this instruction to install the battery back up onto the LDRES2 fixture in the field.

### Components

- 1 LED Troffer Retrofit (LDRES2)
- 2 Battery Back Up Kit
  - 4 Screws, battery back up channel, battery back up test light, wire nuts

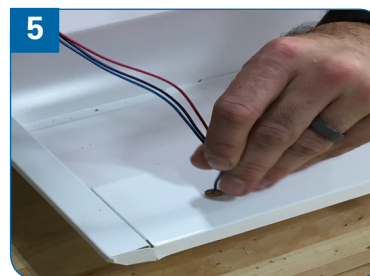
### Tools Required for Installation

Wire cutters/strippers

Cordless drill with a 5/16" drill bit

### Step-by-Step Instructions

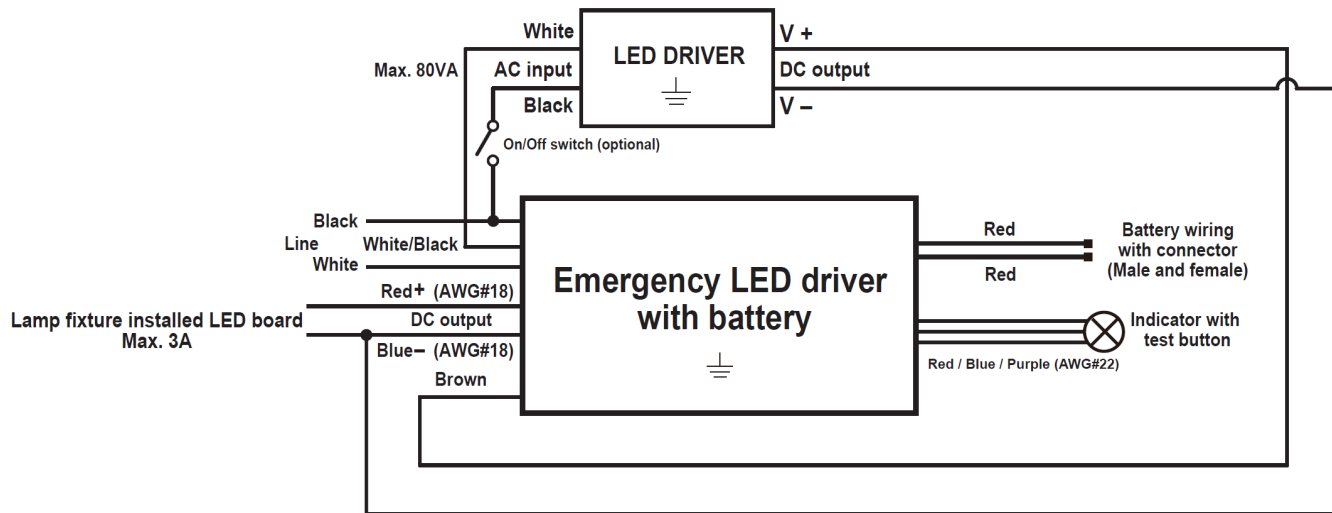
1. Field installers are responsible for recognizing specific site requirements and making adjustments to assure a complete, functional installation.
2. Make all power connections using UL listed components.
3. Electrical connections must be made by a qualified electrician and in accordance with NEC and local codes.
- 1 Remove retrofit kit and battery back up kit from packaging.
- 2 Mount the battery back up channel kit to the back side of the retrofit kit opposite of the kit latches using the screws provided, 2 per end (4 total) in the predrilled holes. (See Fig.1 and Fig. 2)
- 3 Using the cordless drill, drill through the retrofit kit housing 3" in from the end (width) of the retrofit kit and 1 1/2" from the edge (length). (See Fig.3 and Fig. 4)
- 4 Insert the battery back up test button wiring through the drilled hole in the fixture housing. (See Fig. 5 and Fig. 6)
- 5 Complete the rest of the standard installation instructions and wiring per NEC and local codes (See page 3 for battery back up wiring diagrams).
- 6 Reconnect the main power and test fixture.



## LED LDR Troffer Retrofit Battery Back Up Wiring Diagrams

### 120-277v Wiring Diagram

#### Connect emergency LED driver with lamp fixture installed LED board



#### Operation:

**Normal Mode:** AC power is present. The AC LED driver operates the LED load as designed. The Emergency LED Driver is charging in a standby mode. The test button will be illuminated, showing that the battery is charging. The test button will stay illuminated even fully charge.

#### Emergency Mode:

When the AC power goes out, the Emergency LED Driver detects the power outage and automatically switches to the Emergency Mode. The LED load is illuminated, for a minimum of 90 minutes. The test button will not be illuminated. When AC power is restored, the Emergency LED Driver switches back to Normal Mode and starts re-charging. If Emergency LED Driver detects failure, including short circuit, open circuit, battery fault, the test button indicator lamp will keep flashing. Please contact qualified electrician for inspection.