

# LO-LOC-EMDR-15W-050 Series Installation Guide

## SAFETY INSTRUCTIONS: Read instructions carefully before attempting to install fixture.

- All wiring should be performed by a qualified electrician.
- Disconnect power before installing or servicing. This fixture must be wired in accordance with the National Electrical Code and applicable local codes and ordinances.
- Proper grounding is required to ensure personal safety.

## CAUTION:

- **WARNING:** This emergency battery provides more than one power supply output source. To reduce the risk of electrical shock, disconnect both normal and emergency source by turning off the A.C. branch circuit and by disconnecting the unit connector.
- **WARNING:** Do NOT attempt to service the battery. This is a sealed battery that is not field replaceable. Replace the entire unit when necessary.
- **WARNING:** The use of accessory equipment is NOT recommended by the manufacturer. It may cause an unsafe condition, void warranty and result in non-compliance with UL specifications.
- **WARNING:** The emergency battery requires an un-switched AC power source of 100-277VAC, 50/60Hz or 100-347VAC, 50/60Hz. **Verify the correspondent electrical rating at the LED fixture before servicing.** Both electrical rating will supply power under an output voltage of 25-230VDC in emergency mode for at least 90 minutes. (See individual units for output specifications).
- **WARNING:** The battery pack should be charged for 24 hours every 3 months during storage.
- **WARNING:** Disconnect the battery pack before shipping and storing.
- **WARNING:** The battery in this unit may not be fully charged. After charging for at least 24 hours, then scheduled operation should take effect.
- **WARNING:** For use in 32°F - 122°F temperatures. Suitable for use in damp locations.
- **WARNING:** Flexible metal conduit is optional depending on installation environment.
- **WARNING:** The emergency battery should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.
- **WARNING:** For LED fixture power higher than or equal to rating of the emergency battery pack.
- **WARNING:** Do NOT use this equipment for anything other than its intended use. Equipment is only used for LED lighting emergency backup.
- **WARNING:** Do NOT mount near gas or electric heaters. Do NOT let power supply cords touch hot surfaces.
- **WARNING:** Do NOT make or leave any other open holes in the wiring enclosure or electrical component enclosure during installation.
- **WARNING:** This fixture is for use with grounded, UL listed, damp location rated and indoor fixture. NOT for use in heated air outlets or hazardous locations.
- **WARNING:** Do NOT use outdoors!

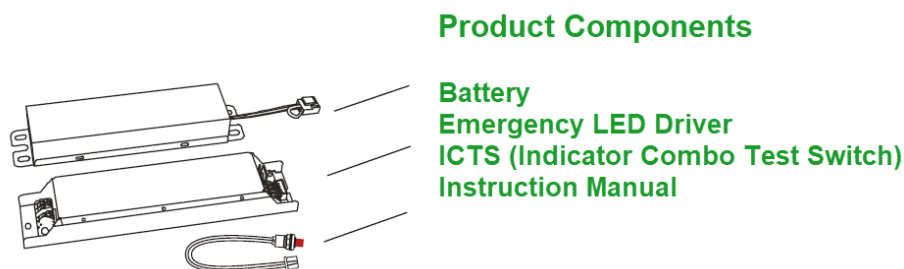


THIS PRODUCT CONTAINS A RECHARGEABLE LITHIUM-ION BATTERY. THE BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY TO PREVENT FIRE.

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## LUMEN OUTPUT DURING EMERGENCY OPERATION:

1. Determine the fixture efficacy under normal AC operation based on lumens per watt (LM/W).
2. Reference DLC QPL ([www.designlights.org](http://www.designlights.org)) and Energy Star ([www.energystar.gov](http://www.energystar.gov)) for rated data on fixture efficacy. If fixture is NOT found on DLC or Energy Star Qualified Product Lists, contact the fixture manufacturer.
3. Multiply fixture LM/W by rated output power of emergency pack.
  - a. (example: model LOC-EMDR-15W is 15W x 100LM/W = 1,500LM).



**CAUTION:** Power of the emergency battery selected must NOT exceed the power of the A.C. driver from LED fixture.

The LOC-EMDR-15W-050 can be used with most LED loads that operate at 25-50VDC.

## SELF-DIAGNOSTIC (MAINTENANCE):

- The integrated self-diagnostic circuitry will automatically conduct 1 monthly 120-second and annual 90-minute tests to verify proper emergency capability per Life Safety Code requirements. NFPA101, Life Safety Code Outlines the following schedule:
  - a. Monthly: During AC mode, the system conducts a 120-seconds self-discharge test at reduced output of the emergency LED driver every 30 days. After 120 seconds, the battery will resume to normal charging.
  - b. Annually: During AC mode, the system conducts a 90-minutes self-discharge test at reduced output of the emergency LED driver every 365 days. The battery will automatically resume to normal charging after fully dis-charged.

**INSTALLATION: Caution:** Before installing, make certain the A.C. power is off!

### 1. MOUNTING THE EMERGENCY BATTERY:

- a. Pre-drill a hole into the fixture ballast wire-way cover for the test switch.
- b. The indicator light and test switch should be mounted where they can be seen by the maintenance personnel.
- c. Determine the appropriate location for the battery backup LED driver and LED battery pack in the fixture.
- d. Install the battery backup LED driver and LED battery pack to the fixture using existing mounting holes in the fixture. The installation instruction of the LED luminaire may provide guidance on mounting location.

### 2. WIRING THE EMERGENCY BATTERY AND AC LED DRIVER:

- a. Make certain the A.C. power is off. The emergency battery and A.C. driver must be on the same branch circuit.
- b. Determine the appropriate wiring diagram found as reference. For other diagrams, consult the manufacturer.
- c. Connect the A.C. driver power source leads to the input of the emergency battery. Connect the output leads of the emergency battery to the LED load.
- d. Wire the AC driver with the lamp in accordance with manufacturers installation instructions. Make sure all connections are in accordance with National Electrical Code or any other local regulations.

### 3. MOUNTING THE INDICATOR COMBO TEST SWITCH (ICTS):

- a. The emergency battery and A.C. driver must be on the same branch circuit.
- b. The emergency battery requires an unswitched A.C. power source of 100-347VAC, 50/60Hz. Therefore, when used with switched fixtures, the emergency battery input must be wired ahead of the test switch.
- c. Insert test switch into the pre-drilled hole in the fixture's wire-way cover.

### 4. TESTING:

- a. After the A.C. input wiring is complete, switch the A.C. on.
- b. Then the charging indicator light should illuminate which indicates the battery is charging.
- c. The battery in this unit may not be fully charged. A short-term discharge test may be conducted after the emergency battery has been charging for 1 hour. Charge for 24 hours before conducting a long-term discharge test.

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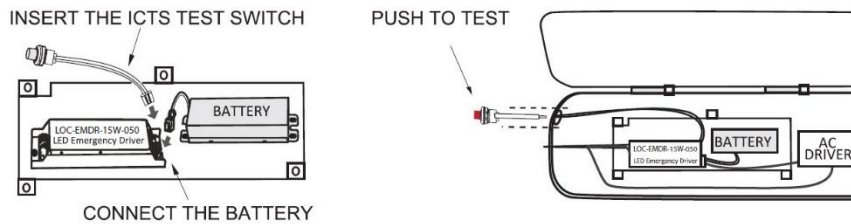
## OPERATION:

OPERATION (Indicator Status)			
Mode	Test Switch Operation	Indicator Status	Comment & Solutions
AC MODE (1)	NOT pressed	ON (no flashing)	Battery is charging.
AC MODE (2)	Press Once	2s ON and 2s OFF (slow flashing)	Battery is conducting a 30s short-term emergency test.
AC MODE (3)	Press Twice	2s ON and 2s OFF (slow flashing)	Battery is conducting a long-term emergency test until battery is fully discharged.
EMERGENCY MODE (1)	NOT Pressed	2s ON and 2s OFF (slow flashing)	Battery is conducting a long-term emergency test until battery is fully discharged.
EMERGENCY MODE (2)	Press once	OFF	Battery is turned off.
PROBLEM	When indicator flashes (0.2s) ON and (0.2s) OFF fast or goes off, the emergency back-up pack is abnormal. Contact the manufacturer.		
WARNING	Note: Please press the test switch once to make certain the battery is turned off before installation, maintenance, storage, or shipping.		

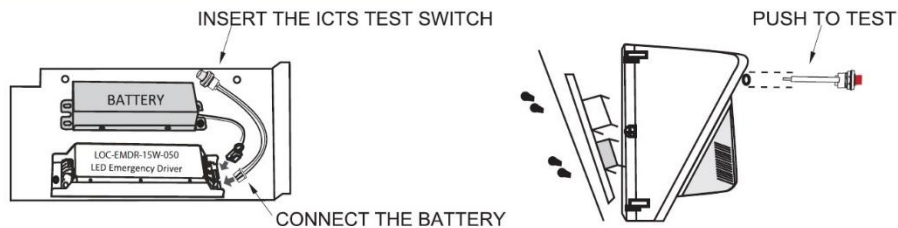
## VERSATILE MOUNTING METHOD:

Suitable for a LED lamp with an internal driver. Mount the emergency battery in the driver/lamp compartment or enclosed wire-way, so the wire leads are not exposed, at least 1/2" away from the driver.

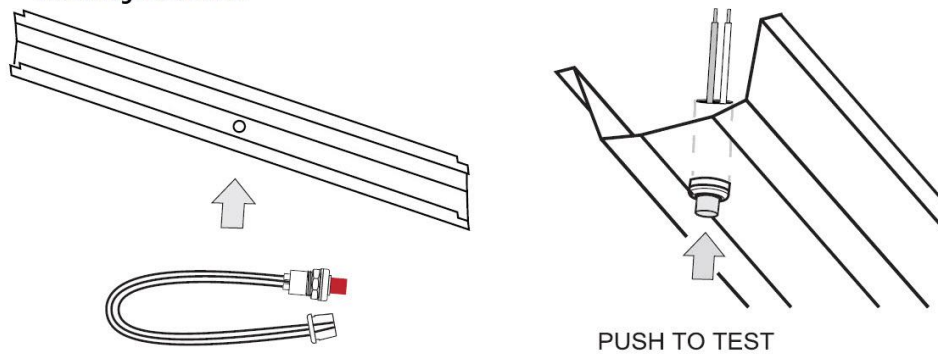
### Vapor Tight Style Light Fixture



### Wall Pack Style Light Fixture



### Mounting Illustration



**ICTS**

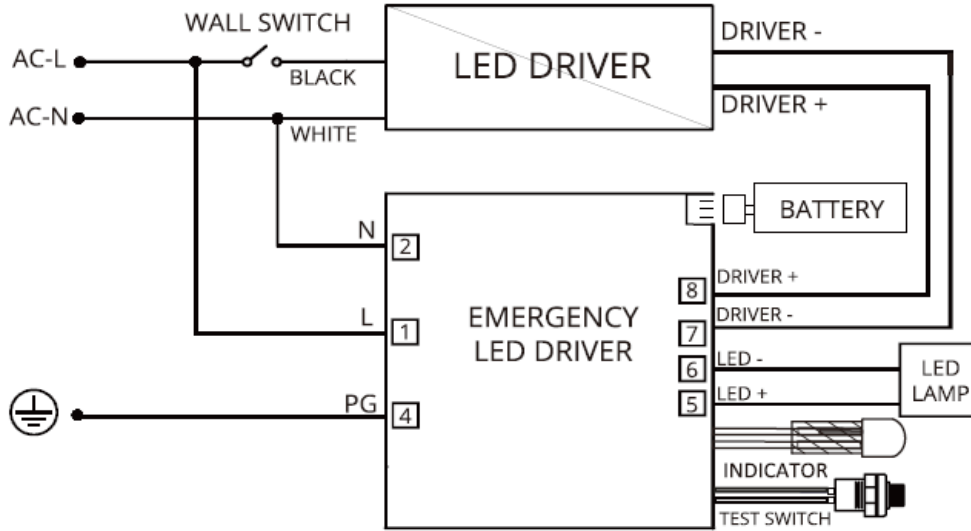
(INDICATOR COMBO TEST SWITCH)

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## INSTALLATION INSTRUCTIONS:

### WIRING DIAGRAM 1:

FOR LED LUMINAIRE < 120W AND < 3A LED DRIVER CURRENT.



### WIRING DIAGRAM 2:

FOR LED LUMINAIRE > 120W AND > 3A LED DRIVER CURRENT.

