

# LEDone®

## LOC-EMDR-15W Series Installation

### **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:**

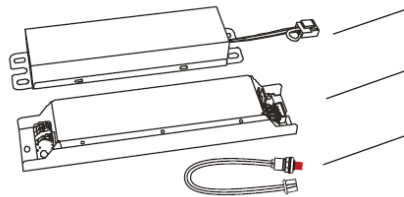
- **WARNING:** This emergency battery provides more than one power supply output source. To reduce the risk of electrical shock, disconnect both normal and emergency source by turning off the A.C. branch circuit and by disconnecting the unit connector.
- **WARNING:** Do NOT attempt to service the battery. A sealed, no maintenance battery is used 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:** 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 electricity is connected to the unit for at least 24 hours. Then normal operation of this unit should take effect.
- **WARNING:** For use in 0°C min. to 50°C max. ambient temperatures. Suitable for use in damp locations and plenum spaces.
- **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 readily 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 gar 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!

## LUMEN OUTPUT DURING EMERGENCY OPERATION:

The luminaire rated data and maximum mounting height can be found as follows:

1. Determine the fixture efficacy under normal AC operation based on fixture manufacturer published data in 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. (example: model LOC-EMDR-15W is 15W x 100LM/W = 1,500LM).

## Product Components



- Battery
- Emergency LED Driver
- ICTS (Indicator Combo Test Switch)
- Instruction Manual

**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 30 seconds 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: Ensure that the test button is illuminated. Conduct a 30 second discharge test by depressing the test button. The LED load should operate at reduced output.
  - b. Annually: Ensure that the test button is illuminated. Conduct a full 90-minute discharge test. The unit should operate as intended for the duration of the test. "Written records of the testing should be kept by the owner for inspection by the authority having jurisdiction." If the charging indicator is flashing rapidly or off, contact manufacturer.

**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 cover/wire-way cover for the test switch.
- b. Indicator light and test switch should be mounted where can be seen by the maintenance personnel.
- c. Determine 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 E emergency battery and A.C. driver must be on the same branch circuit.
- b. Select 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 loads.
- d. Wire the AC driver with the lamp in accordance with manufacturers installation instructions. Make sure all connections are accordance with National Electrical Code or any other local regulations.

## INSTALLATION:

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

- The emergency battery and A.C. driver must be on the same branch circuit.
- The emergency battery and 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.
- Insert test switch into the pre-drilled hole in the fixture's wire-way cover.

### 4. TESTING:

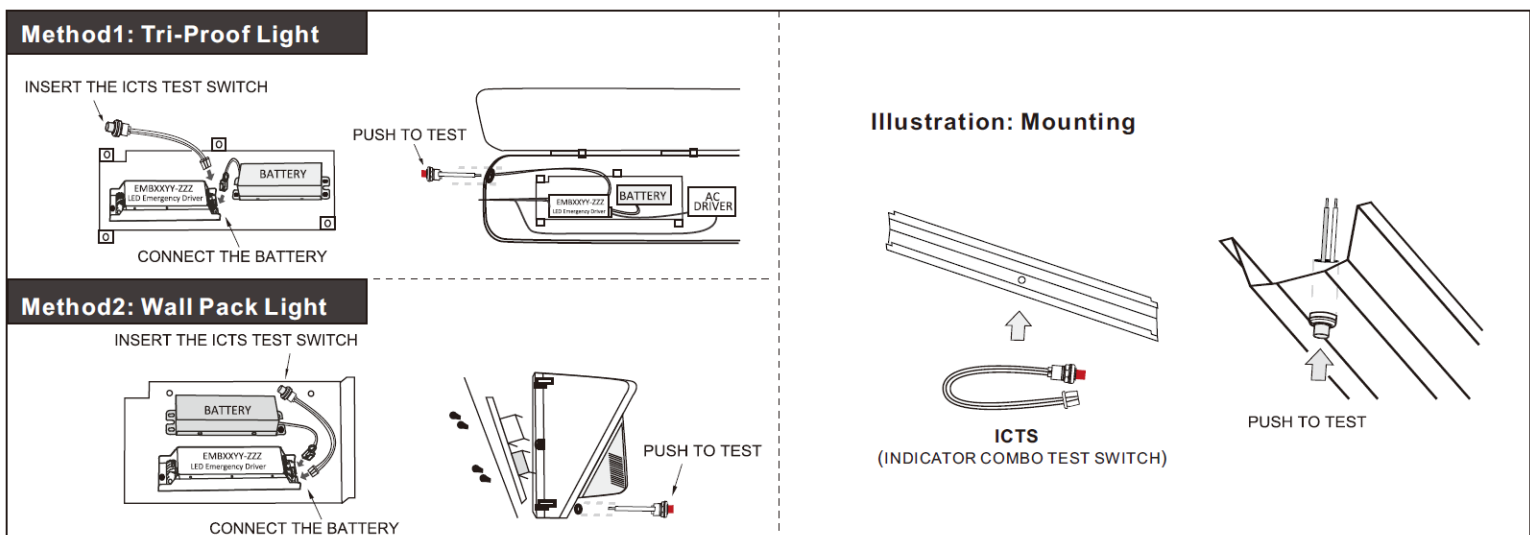
- After the A.C. input wiring is complete, switch the A.C. on.
- Then the charging indicator light should illuminate which indicates the battery is charging.
- The battery in this unit may not be fully charged. A short-term discharge test may be conducted after the emergency battery has been charging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

## OPERATION:

OPERATION (Indicator Status)			
Mode	Test Switch Operation	Indicator Status	Comment & Solutions
AC MODE	NOT pressed	ON (no flashing)	Battery is charging
DC MODE (1)	Pressed Once	2s ON and 2s OFF (slow flashing)	Battery is conducting a 30s short-term emergency test
DC MODE (2)	Pressed Twice	2s ON and 2s OFF (slow flashing)	Battery is conducting a long-term emergency test until battery is fully discharged
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.		

## VERSATILE MOUNTING METHOD:

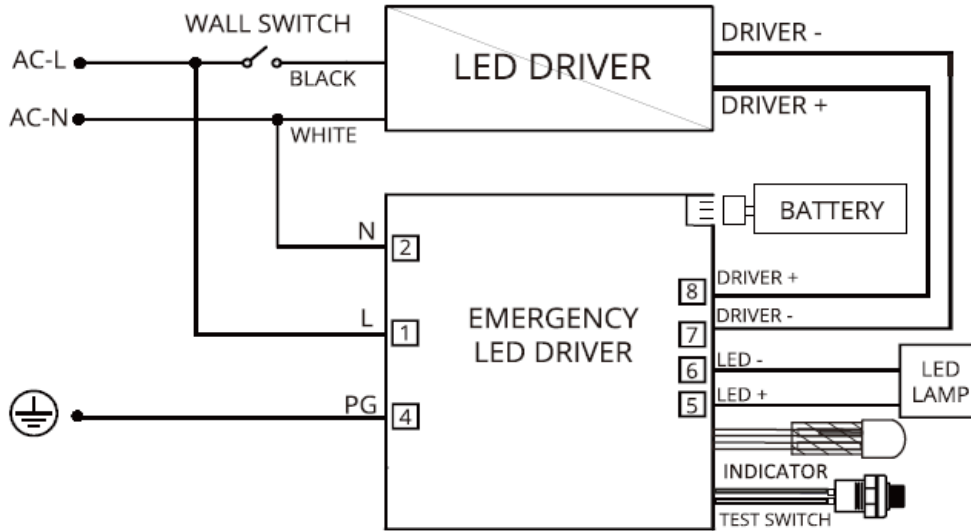
Suitable for LED lamp with internal driver. Mount the emergency battery in the driver/lamp compartment or enclosed wire-way, so the wire leads are not exposed, at least 1/2" away from the driver.



## 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.

