## INSTALLATION INSTRUCTIONS



# **LED Hazardous Location Emergency Light | Class 1 Division 2 | Adjustable Lamp Heads**

## IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following.

## **READ AND FOLLOW ALL SAFETY INSTRUCTIONS**

- 1. Do not let power supply cords touch hot surfaces.
- 2. Do not mount near gas or electric heaters.
- 3. Turn off electrical power before and during installation.
- 4. Turn off electrical power before opening unit for maintenance or servicing.
- 5. Use caution when handling batteries. Battery acid can cause burns to the skin and eyes. Avoid possible shorting.
- 6. Equipment should be mounted in locations and at heights where it will not readily be subject to tampering by unauthorized personnel.
- 7. The use of accessory equipment not authorized by the manufacturer may cause and unsafe condition.
- 8. Do not use this equipment for other than its intended purpose.
- 9. Servicing of this equipment should only be performed by qualified service personnel.

**Note:** UL recommended maximum mounting height for this model is 16-ft

#### WALL MOUNT INSTALLATION

- 1. Extend AC of rated voltage nearby to the unit into recessed junction box (supplied by others). This circuit should NOT be energized/live at this time.
- 2. Remove the screw caps and loosen the four mounting lens screws until the lens is detachable. **Note:** Do not detach the four screws and eight O-rings from the lens' mounting holes.
- 3. Separate the lens from the fixture. Pull out the luminaire housing. Unscrew the battery brackets and pull the batteries out.
- 4. Determine the appropriate knockouts (K/O) to remove for mounting to the junction box. Support area around the knockouts and remove them using a hammer and screwdriver. Remove one of the ¾" knockouts in the center and route the fixture supply wires through it.
- 5. Place the gasket provided, between the fixture's back housing and the junction box. Route the fixture supply wires through one of the circular holes in the center of the gasket.
- 6. Refer to the "Wiring Diagrams" section and make electrical connections inside the junction box using the wire nuts provided. Cap off the unused (Red or Black) lead.
- 7. Using the two screws provided and the previously removed K/O holes, mount the fixture to the surface over the recessed junction box. Tighten the screws enough to compress the gasket to ensure a good sealed joint.
- 8. Install the batteries back using the brackets previously removed. Complete battery connection using the leads or connector from the PCB inside the housing. For SLA (Lead acid) battery models, refer to Fig. 1 to make the correct battery connections.
- 9. Attach the luminaire housing back onto the fixture. Adjust the lamps to the desired position.
- 10. Reinstall the lens using the four screws and eight O-rings. Tighten the screws enough to compress the gasket to ensure a good sealed joint. Replace the four screw caps.
- 11. Apply power. Allow the unit to charge for 24 hours before testing it in emergency mode.

# **Installation Instructions**

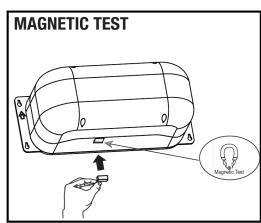
## **INSTALLATION WITH MOUNTING BRACKETS**

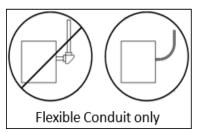
- 1. Extend AC of rated voltage nearby to the unit into recessed junction box (supplied by others). This circuit should NOT be energized/live at this time.
- 2. Remove the (2) side gaskets from the gasket sheet provided and attach the sheet to the fixture's backside.
- 3. Mount the (2) surface mounting brackets onto the fixture's backside and secure using the screws provided.
- 4. Place the housing on the required surface. Drill (4) holes using the brackets holes as a drilling template and fix the mounting anchors inside the holes.
- 5. Remove the screw caps and loosen the four mounting lens screws until the lens is detachable. **Note:** Do not detach the four screws and eight O-rings from the lens' mounting holes.
- 6. Separate the lens from the fixture. Pull out the luminaire housing. Unscrew the battery brackets and pull the batteries out.
- 7. Remove the appropriate knockout (K/O) from the fixture's back using a hammer and screwdriver. Route the fixture supply wires through the opening on the backplate and the gasket attached to it.
- 8. Refer to the "Wiring Diagrams" section and make electrical connections inside the junction box using the wire nuts provided. Cap off the unused (Red or Black) lead.
- 9. Install the batteries back using the brackets previously removed. Complete battery connection using the leads or connector from the PCB inside the housing. For SLA (Lead acid) battery models, refer to Fig. 1 to make the correct battery connections.
- 10. Attach the luminaire housing back onto the fixture. Adjust the lamps to the desired position.
- 11. Reinstall the lens using the four screws and eight O-rings. Tighten the screws enough to compress the gasket to ensure a good sealed joint. Replace the four screw caps.
- 12. Mount the fixture to the surface using the (4) mounting screws and previously installed screw anchors.

13. Apply power. For units with battery, allow the unit to charge for 24 hours before testing it in emergency mode.

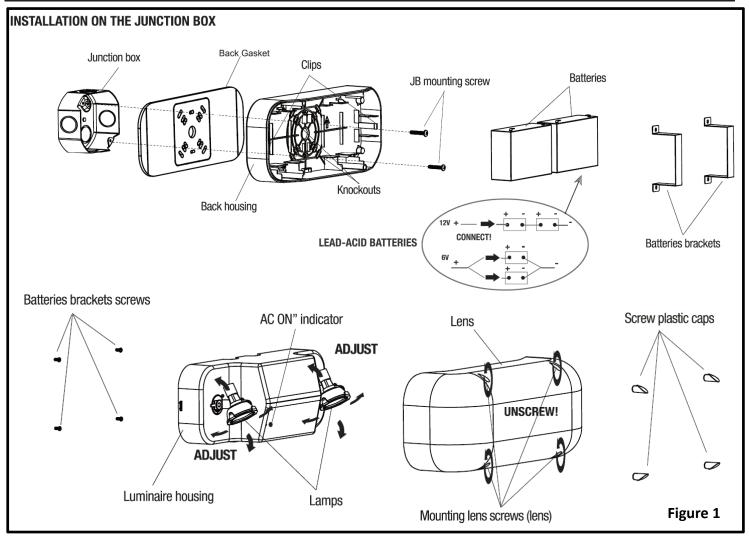
## **CONDUIT MOUNT INSTALLATION**

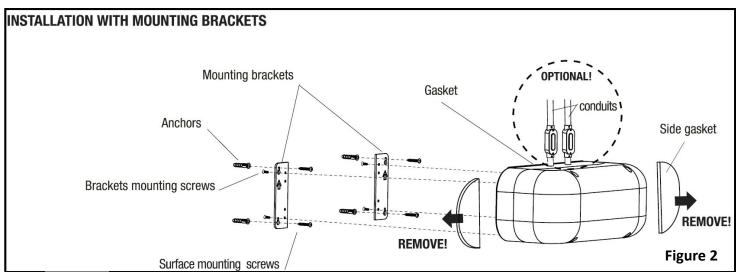
- 1. Remove the screw caps and loosen the four mounting lens screws until the lens is detachable. **Note:** Do not detach the four screws and eight O-rings from the lens' mounting holes.
- 2. Separate the lens from the fixture. Pull out the luminaire housing. Unscrew the battery brackets and pull the batteries out.
- 3. Remove the knockouts in the top side of the housing using a hammer and screwdriver.
- 4. Attach UL LISTED and SUITABLE FOR WET LOCATIONS conduit to the fixture housing.





# **Installation Instructions**



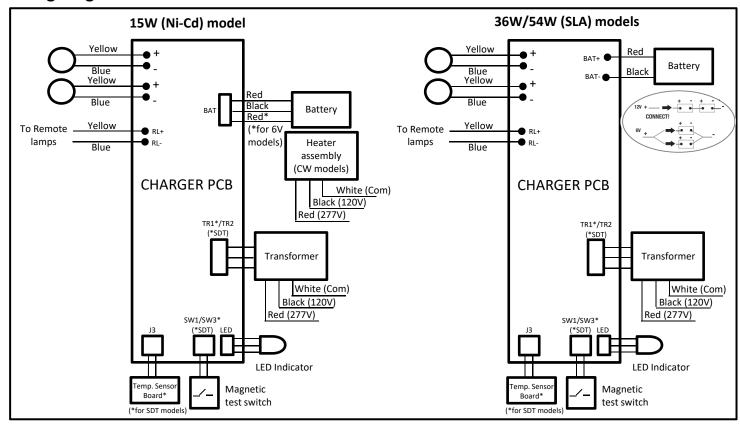


## **OPERATION**

- 1. Apply AC power to the unit. The LED indicator will be GREEN.
- 2. After the battery has been left to charge for 2 hours, test the unit using the magnetic test switch. The LED indicator turns OFF and the lampheads should turn ON at this time.
- 3. When the magnet is removed, the LED indicator turns back to GREEN, and the lampheads should turn OFF at this time.

# **Installation Instructions**

## **Wiring Diagrams:**



## LED STATUS INDICATOR KEY and TROUBLESHOOTING

LED status	Indication	Action to take
Red	<ol> <li>Battery connection is not made</li> <li>Battery has been diagnosed as dead or defective after 24 hours of continuous charging with AC power supplied</li> </ol>	Make connection; or if battery is connected, disconnect battery for eight seconds and then reconnect.     Replace the battery.
Green	Battery is connected, AC power has been supplied and fixture is in charging state.	This is the normal state. No action required.
Unlit	AC power has not been supplied or unit is in EM mode	Supply AC power or wait until utility power is restored

## **MAINTENANCE**

**Caution:** Always turn off AC power to the equipment before servicing. Servicing should be performed only by a qualified service technician. Use only MANUFACTURER supplied replacement parts.

**BATTERY**: The battery supplied requires no maintenance. However, it should be tested periodically and replaced when it no longer operates the connected unit for the duration of a 30-second or 90-minute test.

#### **TESTING**

National Electric Code (NEC) and NFPA 101 current Life Safety code requirements require that routine tests need to be performed as listed below: Once every month, the unit needs to be tested for duration of 30 seconds. Place and hold the magnet near the magnetic switch on the fixture to perform this test. Once every 12 months, a full 90 minute (per UL requirements) test needs to be performed on the unit. Disconnect power to the unit and leave it in the emergency mode. The lamps should stay ON for at least 90 minutes. Written records of the testing are to be kept for examination by the authority having jurisdiction.

## **LED Hazardous Location Emergency Light | Self-Testing Model**

## Introduction

Once the unitis properly installed according to the Installation instructions and AC power is supplied the dual-color LED indicator will come ON, automatically initiating the self-diagnostic testfunction. The LED indicator points outthe current unit status. Refer to "Fault Indication" section for more details. The LED indicator would be OFF when the unitis in Emergency mode.

## **Self-Diagnostic Service**

The self-diagnostic function is factory preset without any field adjustment. The automatic self-diagnostic feature serves the following tests -

- On-line real time monitoring ofbattery and LED(s): Identifies battery c harging, disconnection and failure along with lamphead failures.
- Self-testing and a 30-second discharge once every 30 days (conforming to NFPA code requirements), after AC power has been supplied for a minimum of 24 hours.
- Self-testing and a 30-minute discharge once every 180 days, after AC power has been supplied for a minimum of 24 hours.
- Self-testing and a 90-minute discharge once every 365 days (conforming to NFPA code requirements), after AC power has been supplied for a minimum of 24 hours.

#### Fault Indication

Function	LED Indication
Battery fully charged	STEADY Green
Unit in test mode	Flashing Green
Battery Recharge	Red and Green (flashing alternatively)
Battery Disconnected	STEADY Red
Lamphead failure	Flashing Red ('3' times)
Battery Recharge Failure*	Flashing Red ('4' times)
Battery Failure**	Flashing Red

<sup>\*</sup> A battery recharge failure is more likely seen after a monthly or annual auto-discharge.

## **Manual Testing**

This unit can also be manually tested using the magnetic test switch. Place the magnet (provided) on the unit (near the section marked as "Magnetic Test") and pull away (at least 3 cm from the unit). This will force the unitto run a 30-second discharge test. Test can be interrupted by placing the magnet again on the unit and pulling it away. To resetthe unit, place and hold the magnetfor 6 second s and the pull away.

## Operation

During an electrical power failure, the lampheads will transfer into Emergency mode and stay LIT for a minimum of 90 minutes. The battery needs to be charged initially for 24 hours before using the magnetic test switch (to do manual test). In the test mode, the lampheads will transfer into a SIMULATED Emergency mode with the LED indicator FLASHING Green for 30 seconds. After the testis completed, the lampheads would turn OFF.

<sup>\*\*</sup> A battery failure is more likely seen when the unit goes into a monthly/annual discharge test and/or fails to run the lampheads for the designated amount oftime in Test/Emergency mo de.