

Lux-Ray - Dual-Mode Emergency Lighting

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. Use caution when handling batteries. Avoid possible shorting.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

Installation Instructions

This equipment includes two independent circuits, electrically isolated from each other. One is dedicated to the emergency lighting; the other one is for normal or security lighting.

1. Turn off the building emergency circuit and the breaker of the AC circuit for normal lighting.
2. Remove the back plate by inserting a flat head screwdriver into the tab located on the sides and twist to open (see figure 1).
3. Locate the TWO wire connectors on the housing, disconnect them and put them aside.
4. Choose the proper mounting below and continue to step 6.

Junction box mounting (Figure 1)

Knockout the desired holes in the back plate. Make the electrical connections as shown on point 5. Route the wire connectors through the large knockout and mount the back plate to the junction box.

Conduit entry mounting (Figure 2)

Remove plug on the back plate and knock out the desired holes in the back plate to secure the unit on the wall. Install the conduit and supply wires. For wet location: install a liquid tight fitting with teflon tape. Use wire nuts provided with the unit. Bigger wire nuts might interfere with internal components.

5. Electrical connections

a. Battery-operated (self-powered) units:

Connect the wire input for emergency lighting to the un-switched AC line.

Connect the wire input for normal lighting to the secondary (switched) AC line. If the application requires permanent security,

lighting, one may connect both circuits to the un-switched AC line. Go to step c.

b. DC-Remote emergency fixtures:

The DC input voltage marked on the unit must match the value of the building emergency circuit.

The AC and DC wire must come into the unit through two different openings.

If using the junction box, make the connections inside the junction box.

If using the conduit entry, make the connections inside the unit.

Connect the red (+) and the blue (-) leads to the DC voltage from the emergency unit.

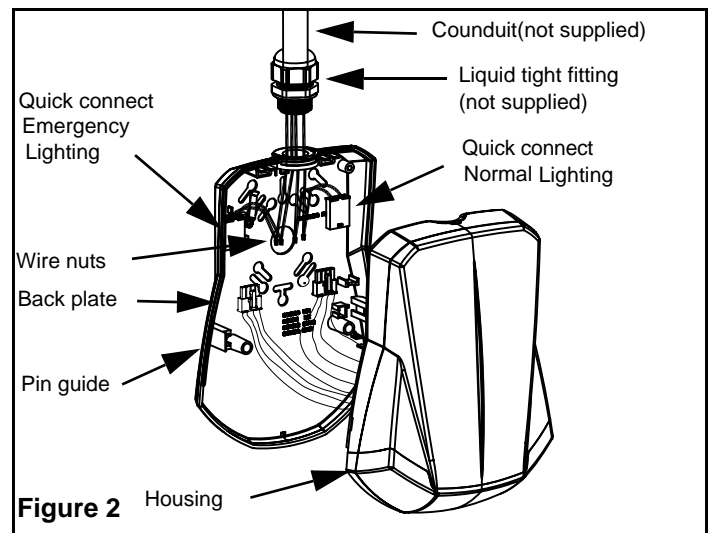
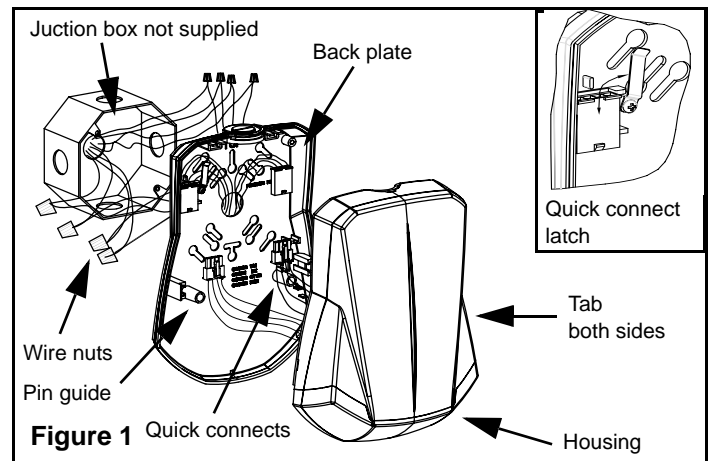
Connect the wires for normal lighting to the AC line.

c. Make the proper connections:

120 VAC-Connect the black (120 VAC), white (neutral) and ground (green) leads to the building utility. Insulate the orange wire.

277 VAC-Connect the orange (277 VAC), white (neutral) and ground (green) leads to the building utility. Insulate the black wire.

DO NOT cap together the unused wires of the two input circuits.



6. Place the connector of the un-switched emergency line in the slot at the LEFT SIDE of the back plate (see figure 3). Lock in place with the latch.
7. AC must be off when plugging in the quick connects. Take the housing and make sure the battery is connected to the board. Mate each AC connector of the housing with the corresponding connector on the back plate.
8. Reinstall the housing on the back plate. The housing is aligned to the back plate with the two guiding pins. For alignment maintain the housing parallel to the wall. Press together until it snaps. For conduit entry mounting, make sure the wire nuts provided with the unit have been used. Bigger wire nuts might interfere with internal components.
9. Energize the circuits. The pilot light located under the cover will illuminate. Depending on the switched AC line, the central lamp of the unit may also light.

Testing the emergency lights

Allow unit to charge for 24 hours before initial testing. Press the test switch. The two emergency lamps will illuminate. When the switch is released, lamps will go off (standard models).

Special models equipped with self-diagnostic/self-test features: the lamps stay "on" for one minute after releasing the test button. To abandon the test press the test switch again.

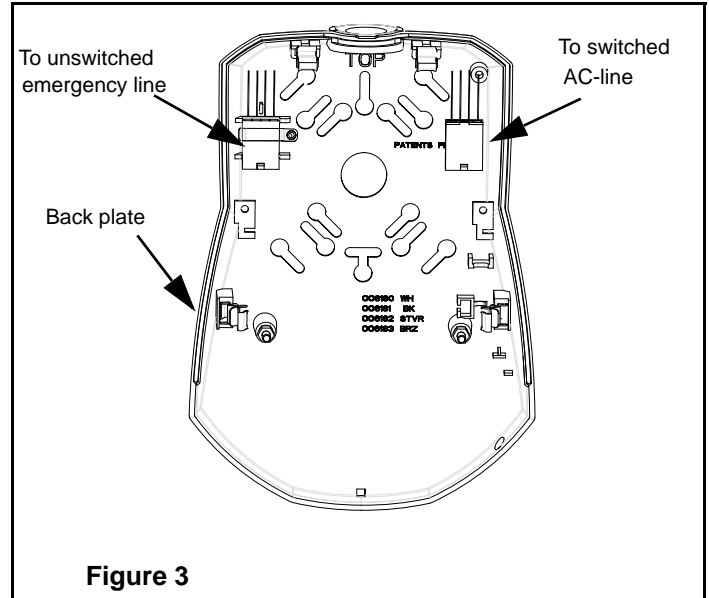
Testing the normal lighting

1. If connected to un-switched security line: the unit will light permanently with the central lamp.
2. If connected to switched AC line: turn the switch on. The unit will light with the central lamp.

Maintenance

None required.

Disconnect the battery if the emergency power supply is disabled for two months or more.



Self-diagnostics / self-test circuitry (optional)

1. Once supplied with power the unit will automatically initiate self-diagnostic routines and a self-test calendar as follows:
 - a. Verifies battery disconnection, charger board failure, lamps failure and battery failure
 - b. Executes one-minute monthly tests
 - c. Executes a 30-minute self-test every 6th month
 - d. Executes a 90-minute self-test every 12th month
2. The LED pilot light is bi-color and indicates the following status:
 - a. Green color: AC-on / self-test (see figure 4)
 - b. Red color: Service alert
3. Transfer time delay (TD option)
 This function acts when the AC power was restored: it keeps the emergency lights "on" for a period of: 5, 10 or 15 minutes (factory-set). If the battery depletes before the end of the time delay, the lamps turn off and the unit goes in stand-by mode.

○ green	Steady	AC On
○ green	Blinking	Testing Mode
○ red	Steady on	Battery Disconnect
○ red	One Blink	Battery Failure
○ ○ red	Two Blinks	Charger Failure
○ ○ ○ red	Three Blinks	Lamp Failure

Figure 4