

Installation Instructions for the Sure-Lites SELDW Emergency Luminaire for Hazardous Locations

WARNING

Risk of Fire/Electric Shock

If not qualified, consult an electrician.

WARNING

Risk of Electric Shock

Disconnect power at fuse or circuit breaker before installing or servicing.

Important Safeguards

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE OBSERVED INCLUDING THE FOLLOWING.

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS
2. Do not use this equipment for other than the intended use.
3. Installation is to be performed only by qualified personnel.
4. Install in accordance with National Electric Code and local regulatory agency requirements.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.

6. SAVE THESE INSTRUCTIONS

MAX MOUNTING HEIGHT: 27.6 ft.

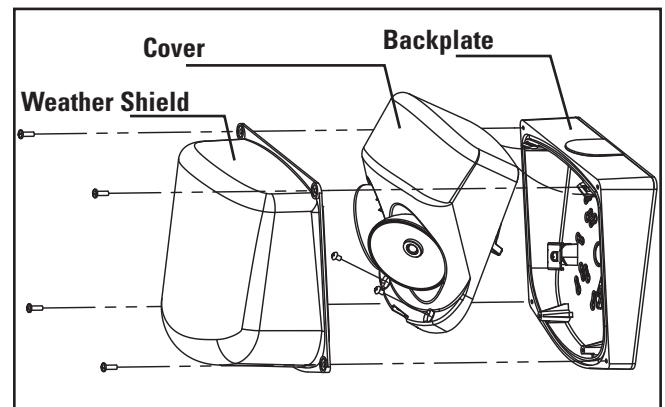
INSTALLATION – HAZARDOUS LOCATIONS

NOTE: For hazardous location compliance, the SELDW must be installed using the provided conduit hub. The SELDW should not be directly mounted to a junction box when used in hazardous locations.

NOTE: Only proceed with installation to hazardous areas when area is non-hazardous.

1. Extend AC supply of rated voltage to conduit opening. Leave at least 18 inches of supply connection slack. Circuit should not be energized. Use a wiring method suitable for hazardous location areas.
2. Remove the weather shield by removing the 4 screws in the corners (See Figure 1). Due to the airtight nature of the exit sign, the weather shield may be held on by a slight vacuum. If this occurs, carefully pry the corners of the shield with a flat head screwdriver, but do no damage the water shield or inner gasket.

Figure 1



Installation Instructions for the Sure-Lites SELDW Emergency Luminaire for Hazardous Locations

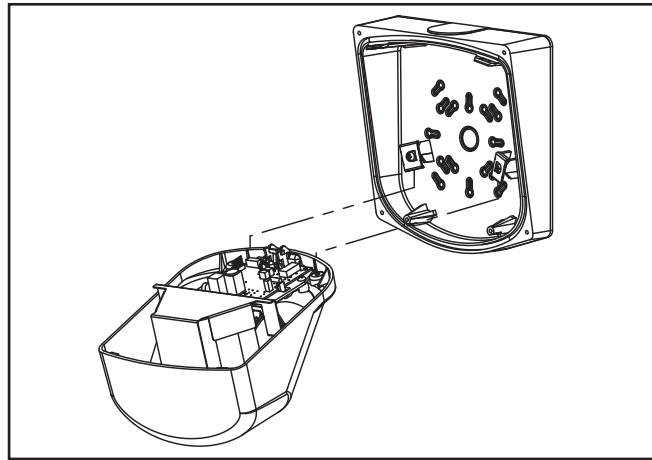
3. Remove the cover by removing two screws at the bottom, and lifting the cover hooks from the slots on the backplate.
4. Remove the conduit plug at the appropriate location for the mounting (left side, right side, or top or backplate). Remove only one plug and replace with hub and conduit for hazardous location. If additional conduit mounts are needed, a second Myers STGK 1 hub should be ordered. Unscrew the conduit plug from the backplate using a 5/8" or 15mm wrench. Connect conduit using the 1/2" liquid tight fitting provided (See Figure 3). Both the Myers STGK 1 and HUB1 by Cooper Lighting Solutions Crouse-Hinds are approved for hazardous location use with this exit sign. Conduit hubs must engage at least 3 and a half threads for supply connections.
5. Secure the emergency light to the wall using one or more of the knockouts provided. Remove the knockouts using a hammer and flat blade screw driver.

NOTE: When mounting the SELDW, it is necessary to consider the weight of the emergency light, about six pounds. A suitable anchor is recommended, or mounting directly to a stud, for the unit itself.

NOTE: The foam gasket on the back of the SELDW is suitable for smooth surfaces, but for rough surface mounting, silicone caulk should be used to prevent water from entering the emergency light.

6. Once the backplate is secured, the housing can be held in place during installation using the EZ Hang feature. (see Fig. 2)
7. Connect incoming ground to the green ground wire.
8. Connect the incoming wires to the SELDW's power supply wires using the wire nuts provided. Connect the white wire to neutral. Connect the black wire to the hot lead. The SELDW uses a universal input power supply that will accept from 120-277VAC (see Schematic).
9. Connect the battery leads to the PCB (see Schematic).
10. Replace the cover assembly, and adjust the heads as needed. Once the area is returned to a hazardous condition, do not adjust the heads for danger of spark.
11. Replace the weather shield. To insure a water tight fit, make sure the gasket and weather shield edge are clean and free of debris.
12. Energize AC supply. The test button should illuminate, and LED heads will illuminate briefly when the test button is pushed or laser test is engaged.

Figure 2



ACTIVATING TIME DELAY

The SELDW has an integrated time delay circuit that allows the emergency lights to remain in emergency mode 15 minutes after power is restored. Remove the jumper on the circuit board labeled TDM/J4 to activate the time delay.

SETTING BROWN OUT CIRCUIT

Because of the universal input of the SELDW, the battery charger will continue to function if voltage sags, even if the normal power lights in the area fail. Selecting the appropriate incoming voltage sets the voltage threshold for the brownout circuit, so that the emergency lights will come on if voltage sags. The SELDW ships with the circuit set to 120V. Determine the incoming voltage, and select the appropriate jumper for the brownout circuit (see Schematic).

OPERATION

The Sure-Lites Eagle Eye Self Diagnostics is continuously monitoring your emergency light and will signal any failure through the 3 color indicator LED.

Initial Operation

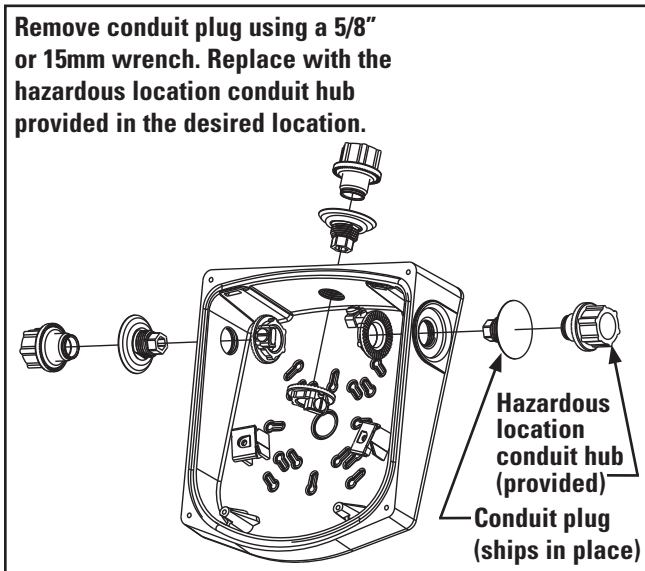
When the unit is first powered up it will go into a 24 hour fast charge as indicated by the indicator LED pulsing green. Once the unit has fully charged it will perform a self-calibration as indicated by the steady green indicator LED. At this point the unit will be float charging the battery to maintain a full charge.

Automatic Testing

The unit will perform a battery capacity, lamp/LED, and charge circuit test every 30 days for 30 seconds. During testing the indicator LED will change to a steady yellow. The unit will perform a full battery capacity test for 90 minutes once per year. During testing the indicator LED will change to a blinking yellow.

Installation Instructions for the Sure-Lites SELDW Emergency Luminaire for Hazardous Locations

Figure 3



Manual Testing

- 10 Second "Installation" test – Press and release the test button once during fast charge (blinking green). The light will switch to emergency mode for 10 seconds illuminating the emergency lights allowing the installer to verify proper installation of the unit. During testing the LED indicator will turn steady yellow.
- 30 Second Test - Press and release the test button once during float charge (steady green). The indicator LED will turn steady yellow to indicate the unit is performing a 30 second test of the batteries and lamps/LEDs.
- 90 Minute Test – Press and release the test button a second time during a 30 second test (steady yellow) to change to a 90 minute test. During testing the LED indicator will change to blinking yellow and the circuit will perform a full battery capacity, charge circuit and LED test for 90 minutes.
- Canceling Test – Press and release the test button during the 90 minute test (steady blink yellow) to return the emergency light to its original state (fast charge or float charge).

Laser Testing

The SELDW is equipped with a Laser Test function that allows the unit to be manually tested without physically pressing the test button. Shining a laser pointer in the hole marked "LASER TEST" on the bottom of the unit has the same effect as using the test button. Only use a laser pointer properly labeled to be suitable for the hazardous environment.

Clearing Failure Code

- A battery failure (LED two blink red) can be cleared by replacing the battery. Disconnecting the battery and AC power or performing a full 90 minute discharge will reset the error code. However, the error code will return if the battery is faulty.

- Charge Circuit (LED three blink red) and lamp/LED failure (LED four blink red) will clear when the unit successfully passes a manual or automatic 30 second test.

Indicators

- LED Off - No power to unit or in emergency mode.
- LED Steady Green - Unit is fully charged and is float charging the battery to maintain readiness.
- LED Green Pulse - Unit is in a 24 hour fast charge of the battery.
- LED Two Blink Red - Battery has failed a capacity test or the battery is disconnected. See "Clearing Failure Codes" above.
- LED Three Blink Red - Battery charge circuit has failed. See "Clearing Failure Codes" above.
- LED Four Blink Red - One or more of the lamps has failed. See "Clearing Failure Codes" above.
- LED Steady Yellow - 30 second test or 10 second quick test (Fast Charge only).
- LED Blinking Yellow - 90 minute test.

MAINTENANCE

Replace the batteries as needed according to ambient conditions. However, we recommend that the equipment be tested regularly in accordance with local codes.

NOTE: Servicing of any parts should be performed by qualified personnel. Only use replacement parts supplied by Cooper Lighting Solutions.

CAUTION: This equipment is furnished with a sophisticated low voltage battery dropout circuit to protect the battery from over discharge after its useful output has been used. Allow 24 hours recharge time after installation or power failure for 90 minute testing.

TROUBLE SHOOTING GUIDE

If LED heads or charge indicator LED does not illuminate, check the following:

1. Check AC supply – verify that unit has 24 hour AC supply.
2. Unit is shorted or battery is not connected.
3. Battery discharged. Permit unit to charge for 24 hours and then re-test.
4. If following the above trouble shooting hints does not solve your problem, contact your local Cooper Lighting Solutions representative for assistance.

