

## Installation Instructions for the Sure-Lites AEL2SD Wall Sconce Emergency Light Suitable for Wet Locations, -30°C (-22°F) to +50°C (122°F) Ambient

### **⚠ WARNING**

#### **Risk of Fire/Electric Shock**

If not qualified, consult an electrician.

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

### Important Safeguards

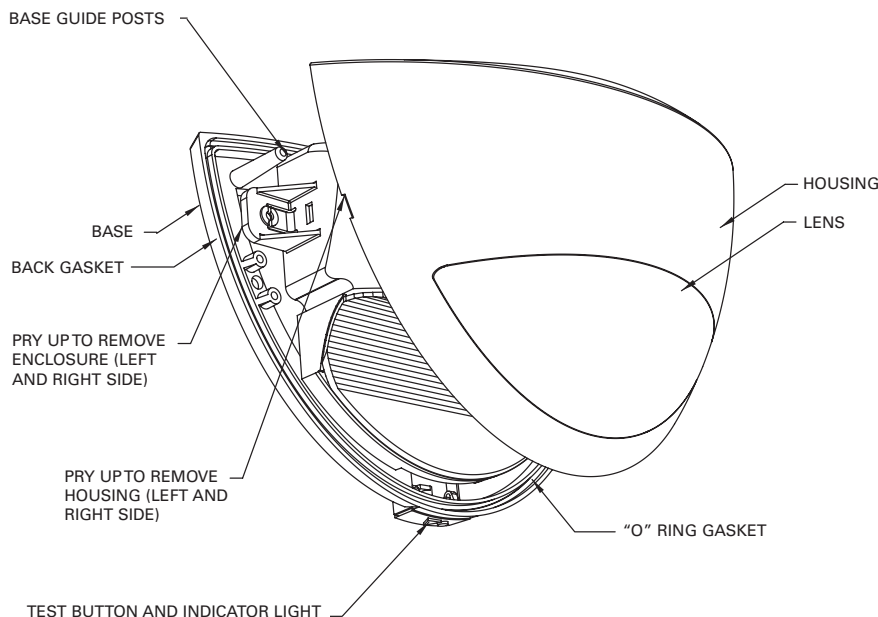
WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE OBSERVED INCLUDING THE FOLLOWING.

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS
2. Do not use in hazardous locations, or near gas or electric heaters.
3. Do not let power supply cords touch hot surfaces.
4. Do not use this equipment for other than the intended use.
5. Installation is to be performed only by qualified personnel.
6. Install in accordance with National Electric Code and local regulatory agency requirements.

7. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
8. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
9. SAVE THESE INSTRUCTIONS

### Installation

1. De-energize the circuit at the junction box (J-box) where the emergency light is to be installed.
2. Remove housing from base by placing a flat head screwdriver in the two slots on the side and turning.
3. Remove the inner enclosure by placing a flat head screw driver under the two snap latches and pry off. Remove the plug from the test button and indicator light as the inner enclosure is pulled away.
4. For wall mounting to an outlet box, knock out the appropriate mounting pattern on the base and back gasket to match the junction box being used. Route wire approximately 2 inches through wire access hole and back gasket. Securely fasten the mounting base and back gasket with screws to the junction box.
5. When mounting the AEL2SD on uneven masonry surfaces such as brick or stucco, the base should be sealed properly with silicone caulking to prevent water from seeping in.
6. For conduit mount, unscrew the 1/2" NPT plug located at the top of the fixture, and screw in the user supplied conduit hub.



# Installation Instructions – AEL2 Wall Sconce Emergency Light

7. Connect the ground wire to the green screw on the base.
8. Connect the white wire to neutral.
9. If operation as a standard emergency light is desired (lights are only on in an emergency) then connect 120 through 277V hot wire to the black lead (Labeled H on the terminal block). The AEL2SD utilizes a sophisticated universal power supply, so either voltage can be applied to the black wire.
10. If operation as an unswitched wall sconce and emergency light is desired, connect the black and the red wires to the incoming power wire.
11. If operation as a switched wall sconce and emergency light is desired, first connect the black wire to incoming power. Next, connect a switch between the red wire and the black wire / incoming power.
12. Unsnap the plastic cover on the back of the plastic enclosure, and plug in the battery. Replace the plastic cover.
13. Snap the enclosure back onto the base. Snap the housing back onto the base. Make sure the housing is fully seated against the backplate in order to insure rain resistant seal.
14. Energize AC supply, the green indicator LED will begin to blink to show that the batteries are charging. Press the button briefly (less than 2 seconds) to perform a 10 second installation test.

## HIGH/LOW MODE (ALWAYS ON MODE ONLY):

If the unit is used as a combination wall sconce and emergency light, it can be adjusted in sconce mode to power the white LEDs for high or low illumination. The AEL2SD ships from the factory in high illumination mode. To change to low illumination, press and hold the test button for 10 to 20 seconds, and the illumination will change. To change back, press and hold the test button for another 10 seconds.

**NOTE:** High and low modes do not alter operation in an emergency. When power fails, the white LEDs will always illuminate at max brightness.

## ACTIVATING TIME DELAY

The AEL2SD has an integrated time delay circuit that allows them to remain in emergency mode 15 minutes after power is restored. To activate the time delay, remove the jumper on the circuit board labeled TDI.

## OPERATION

The Sure-Lites Eagle Eye Self Diagnostics is continuously monitoring your emergency fixture, 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, indicated by the indicator LED pulsing green. Once the unit has fully charged, it will perform a self-calibration, after which the LED will change to steady green, indicating the unit is fully charged and float charging the battery to maintain readiness.

## AUTOMATIC TESTING

The unit will perform a battery capacity, lamp/LED, and charge circuit test every 30 days for 30 seconds. During this time, the indicator LED will change to a steady yellow. It will perform a full battery capacity (90 minute) test once per year. During this

time, the indicator LED will change to a blinking yellow.

## MANUAL TESTING

- 10 Second "Installation" test – Press and release the test button once during fast charge (blinking green) to initiate a 10 second quick test. The sign will switch to emergency mode for 10 seconds allowing the installer to verify proper installation of the unit, and the LED indicator will turn solid 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 this test, the LED indicator will change to blinking yellow, and the circuit will perform a full battery capacity, charge circuit, and LED test.
- Canceling Test – Press and release the test button during the 90 minute test (flashing yellow) to return the fixture to its original state (fast charge or float charge).

## LASER TEST

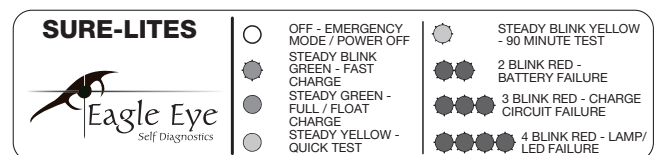
The AEL2SD is equipped with a Laser Test function, that allows the unit to be manually tested without the need to physically press the test button. Shining a laser pointer in the hole marked "LASER TEST" on the bottom of the unit has the same effect as a press and release of the test button.

## CLEARING FAILURE CODES

- 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, it 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, 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 - Lamps have burned out, or on an EXIT/Combo, 50% or more of the LEDs have 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:**

None required. Replace the batteries as needed according to ambient conditions. However, we recommend that the equipment be tested regularly in accordance with local codes.

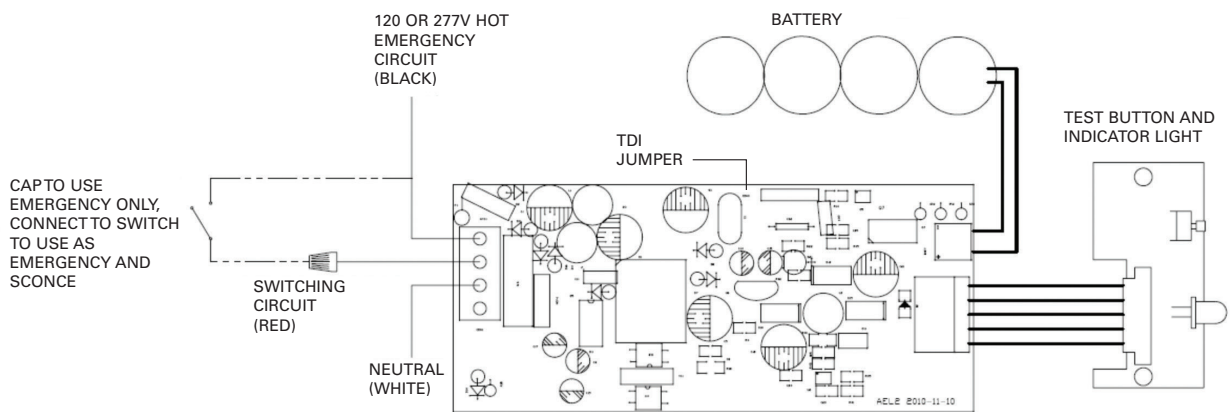
**NOTE:** Servicing of any parts should be performed by qualified personnel. Only use replacement parts supplied by Cooper Lighting Solutions.

**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 HINTS:**

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

- 1. Check AC supply – verify that unit has a 24 hour AC supply.
- 2. Unit is shorted or battery is not connected.
- 3. Battery is 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.



## Warranties and Limitation of Liability

Please refer to [www.cooperlighting.com](http://www.cooperlighting.com) for our terms and conditions.

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