

Installation Instructions for the Sure-Lites LEM2 and LEM4 Emergency Lights

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 outdoors.
3. Do not use in hazardous locations, or near gas or electric heaters.
4. Do not let power supply cords touch hot surfaces.
5. Do not use this equipment for other than the intended use.
6. Installation is to be performed only by qualified personnel.
7. Install in accordance with National Electric Code and local regulatory agency requirements.
8. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
9. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

10. SAVE THESE INSTRUCTIONS

WARNING

Risk of Fire/Electric Shock

If not qualified, consult an electrician.

INSTALLATION

Step 1 De-energize the circuit at the junction box (J-box) where the emergency light is to be installed.

Step 2 Open the emergency light by inserting a screwdriver in the two slots at the bottom of the unit, then tipping the cover up off of the backplate.

Step 3 To mount to a junction box - Drill out the appropriate mounting pattern and the wire pass hole in the backplate to fit the J-box being used.

Step 4 To mount to conduit - Cut out the U shaped knockout on the cover using snips, then attach the 1/2" conduit hub to the backplate

Step 5 Once the backplate is secured, the housing can be held in place during installation using the EZ Hang feature. (see Fig. 1)

Step 6 Connect the incoming wires to the LEM power supply wires using the wire nuts provided. Connect the white wire to neutral. If using 120V, connect the black wire to the hot lead. If using 277V, connect the orange wire to the hot lead. Cap the unused lead. Secure the emergency light to the wall and/or junction box using installer supplied hardware.

Step 7 Snap the cover onto the backplate.

Step 8 Remove the EZ key battery disconnect.

Step 9 Energize AC supply. The test button should illuminate, and LED heads will illuminate briefly when the test button is pushed.

Step 10 Adjust the heads as needed. The LEM heads utilize a highly directional beam, so the head is adjustable in 3 axes, not the usual 2. (see Fig. 2)

Step 11 If the LEM is to be powered down for an extended period after initial installation, replace the EZ Key. This will prevent the battery from discharging when AC power is removed. However, it will also prevent the battery from charging when AC power is restored, so it must be removed once the unit is ready for regular operation.

Figure 1

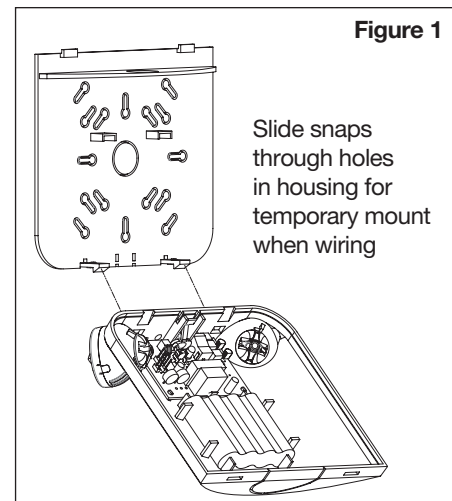
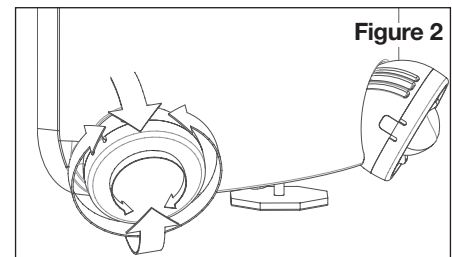


Figure 2



CONNECTING REMOTE HEADS

The LEM2 and LEM4 have a Class 2 rated output that can be connected to remote heads in most jurisdictions without using conduit, as long as plenum rated wire is used. The LEM2 can drive 2 LEM remote heads, and the LEM4 can drive 4 remote heads.

Step 1 De-energize the circuit at the emergency light driving the remotes.

Step 2 Open the emergency light by inserting a screwdriver in the two slots at the bottom of the unit, then tipping the cover up off of the backplate.

Step 3 If connection using standard wire is preferred, connect the purple and yellow wires on the PCB to the wires leading to the remote. Purple is positive(+). Yellow is negative(-). Maximum wire length will depend on wire gage. See Table 1. Connect the wires using wire nuts.

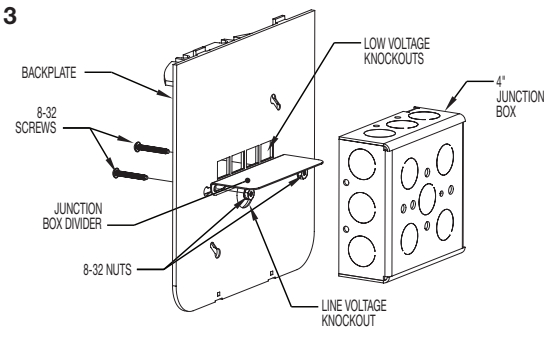
Step 4 If connection using RJ45 ethernet cable is desired, simply click the connectors into the receptacles on the PCB. Use TIA/EIA-568-B, T568A or T568B straight-through cabling only. DO NOT USE CROSSOVER CABLING. Maximum wire length will depend on wire gage. See Table 1.

NOTE: If the incoming line voltage wires and outgoing Class 2 remote wires will be sharing a junction box, then the 4" Junction Box Divider (provided) must be used to separate the high and low voltage. See Figure 3.

Table 1

	Maximum Circuit Distance per Head (ft.)			
	1	2	3	4
10 Gage	800.8	400.4	266.9	200.2
12 Gage	503.8	251.9	167.9	125.9
14 Gage	316.8	158.4	105.6	79.2
18 Gage	125.2	62.6	41.7	31.3
24 Gage CAT5	132	66	44	33
24 Gage CAT5e	132	66	44	33

Figure 3



OPERATION

Depress the test switch. The LED heads will light and the charge LED will extinguish. LED heads will illuminate as long as the button is pushed. Release the test switch. The charge LED will illuminate and the LED heads will turn off.

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.

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 representative for assistance.

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