

## Installation Instructions for the Sure-Lites LEM Single and Double Head Dry Location Remotes

### 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.

### 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 or junction boxes, 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** Determine where the remote head(s) will be mounted. Distance from the emergency light will be limited by the size or type of wire used. See Table 1.

**Step 2** The LEM dry remote does not need to be mounted to a junction box because it is driven by a Class 2 power source. However, if junction box mounting is desired, knock out the mounting holes on the backplate corresponding to the junction box used.

**Step 3** For conduit mounting, remove the large center knockout, and install a 1/2" conduit hub in the hole.

**Step 4** De-energize the circuit at the emergency light driving the remotes.

**Step 5** 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.

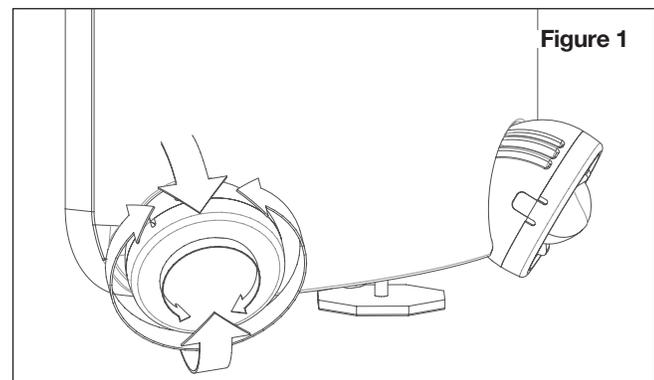
**Step 6** If connection using standard wire is preferred, connect the purple and yellow wires on the PCB to the wires leading to the remote. Purple is positive(+). Yellow is negative(-). Connect the wires using wire nuts. Maximum wire length will depend on wire gage. See Table 1.

**Step 7** 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.

**Step 8** 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. 1)

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



## OPERATION

Depress the test switch briefly. The LED heads will light and the charge LED will extinguish. Afterwards, the charge LED will illuminate and the LED heads will turn off.

**MAINTENANCE:** None required.

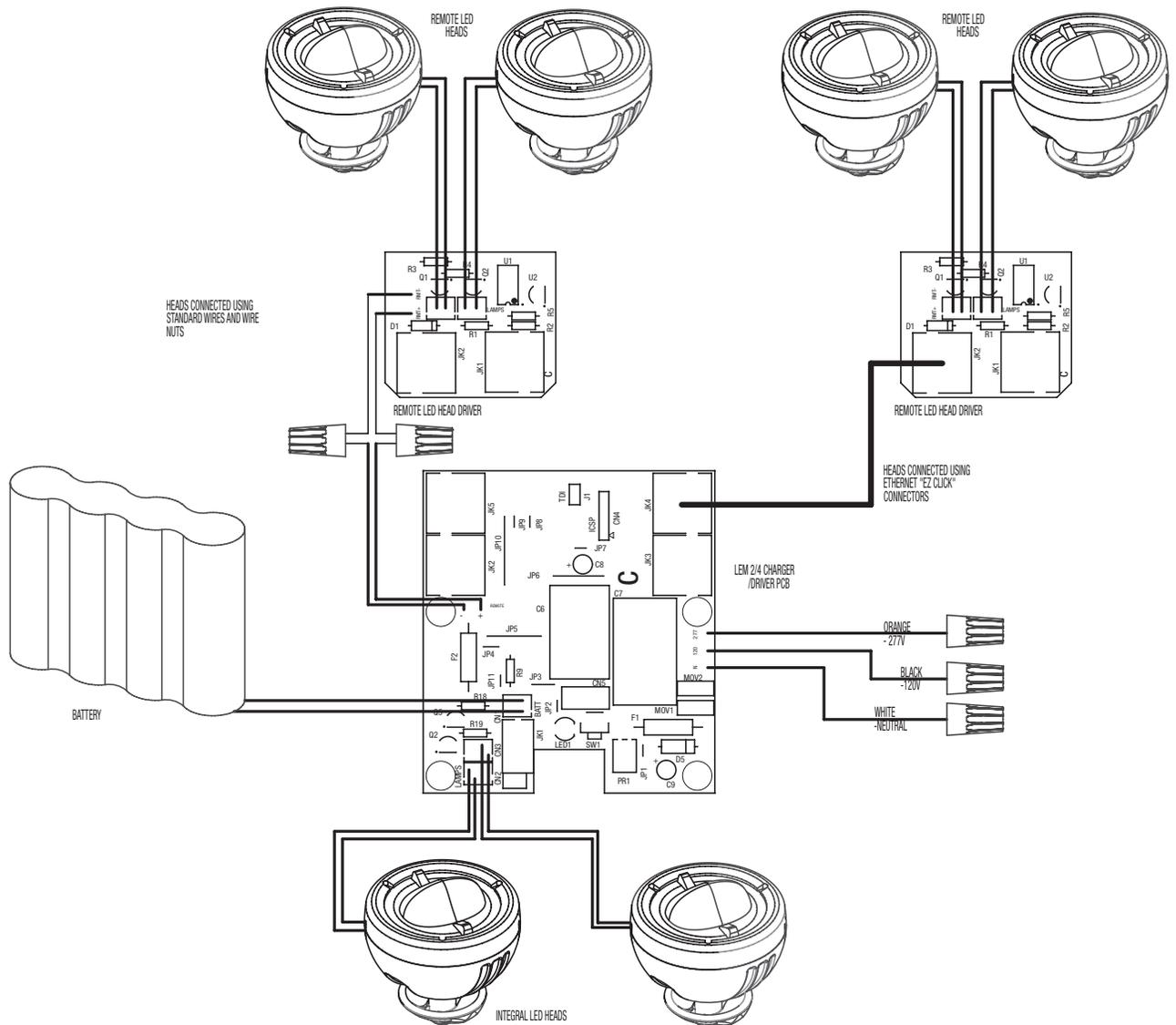
**NOTE:** Servicing of any parts should be performed by qualified personnel. Only use replacement parts supplied by Cooper Lighting.

## 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.

## SCHEMATIC



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