Installation Instructions for the Sure-Lites CHX Combo Exit Sign-Emergency Light

⚠ 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.
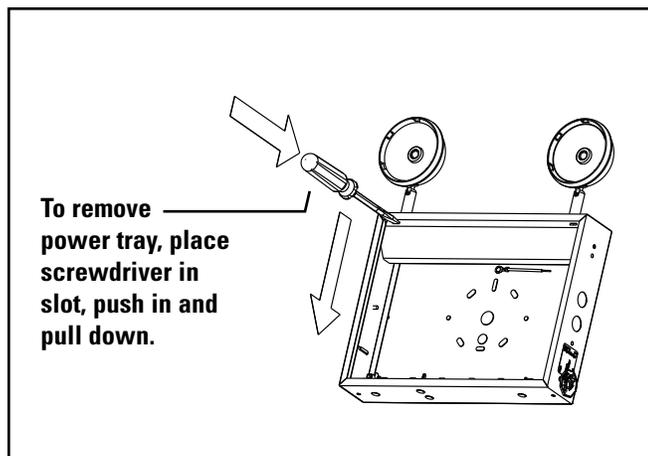
1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS

2. Do not use 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. Use caution when servicing batteries. Battery acid can cause burns to skin and eyes. If acid is spilled on skin or in eyes, flush acid with fresh water and contact a physician immediately.

6. Do not use this equipment for other than the intended use.

7. Installation is to be performed only by qualified personnel.

8. Install in accordance with National Electric Code and local regulatory agency requirements.

9. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.

10. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

11. SAVE THESE INSTRUCTIONS

MAX MOUNTING HEIGHT: 27.6 ft.

WALL MOUNT INSTALLATION

1. Extend unswitched 24 hour AC supply of rated voltage to junction box (by others). Leave at least 18 inches of slack. Circuit should not be energized at this time.

2. Disassemble sign by removing the screw holding the side cover and sliding the glass panel out. Remove power tray by placing a screwdriver in the rectangular slot in the upper left or right, pushing the tray in to disengage the snaps, and then pulling down (See Figure 1).

3. Knock out the appropriate mounting pattern and wire pass hole to match junction box. Insert bushing into wire access hole to prevent abrasion on supply wires. Mount wire saddle with peel off adhesive backing in a position that prevents wires from shadowing the EXIT face. Bring wires through back of fixture.

4. Connect power supply and ground in accordance with local codes. The CHX Combo has a universal input power supply, capable of accepting input voltages from 120 through 277V. Wire connections as follows: Hot to Black lead; Neutral to white lead. Ground to Green lead. Note: To avoid shadows on the sign face, connections should be made in the junction box or the power tray.

5. Select the appropriate voltage for the brownout circuit (see below).

6. Replace power tray into top of sign frame. Check to make sure that power tray is held securely in place. Reconnect battery, power supply, and LED head leads to LED circuit board if necessary.

7. Mount to junction box.

8. Replace glass panel, side cover, and screw.

9. Energize AC supply, LED display will come on.

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Figure 1

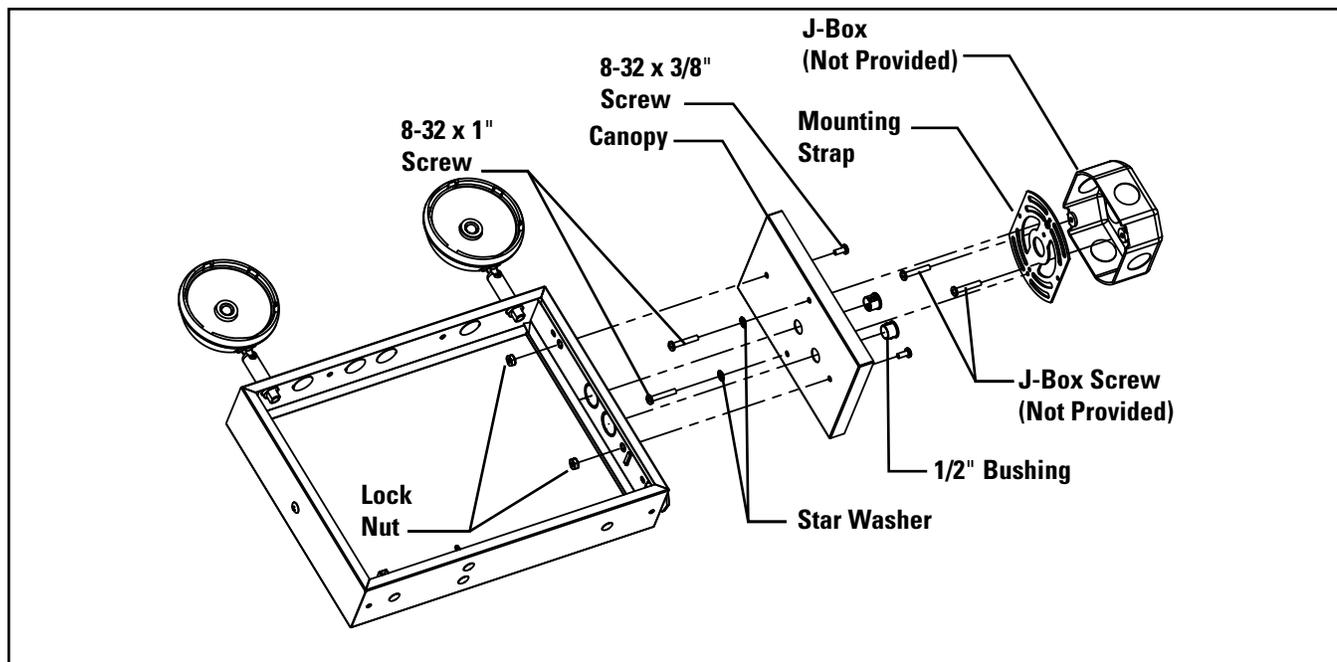**To remove power tray, place screwdriver in slot, push in and pull down.**

END MOUNT INSTALLATION

1. Extend unswitched 24 hour AC supply of rated voltage to junction box (by others). Leave at least 18 inches of slack. Circuit should not be energized at this time.

2. Disassemble sign by removing the screw holding the side cover and sliding the glass panel out. Remove power tray by placing a screwdriver in the rectangular slot in the upper left or right, pushing the tray in to disengage the snaps, and then pulling down (See Figure 1).

3. Knock out the appropriate mounting pattern on the side of exit sign to accommodate the canopy (See Figure 2).

4. Fasten canopy to exit frame by means of two 8-32 by 3/8" screws and lock nuts (See Figure 2).

5. Mount mounting strap to junction box by choosing proper slots and using screws supplied with junction box (See Figure 2).

6. Feed wires through exit-canopy combination and fixture center of adapter plate.

7. Screw the two 8- 32 X 1" screws and lock washers into mounting strap (See Figure 2).

8. Connect power supply and ground in accordance with local codes. The CHX Combo has a universal input power supply, capable of accepting input voltages from 120 through 277V. Wire connections as follows: Hot to Black lead; Neutral to white lead. Ground to Green lead. Note: To avoid shadows on the sign face, connections should be made in the junction box or the power tray.

9. Select the appropriate voltage for the brownout circuit (see below).

10. When end mounting, route wires along top and side edges of exit frame and secure wires into adhesive wire saddle.

11. Reconnect battery, power supply, and LED head leads to LED circuit board if necessary.

12. Replace glass panel, side cover, and screw.

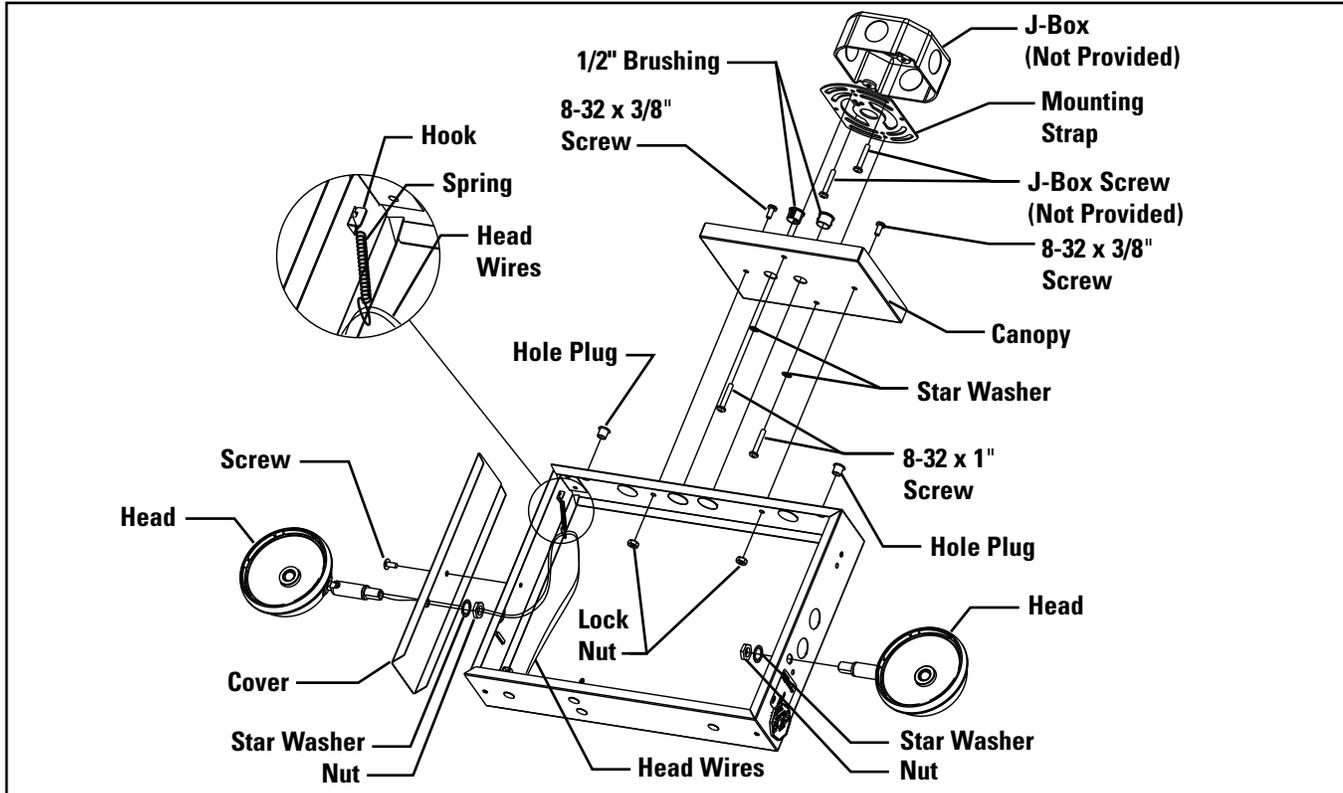13. Energize AC supply, LED display will come on.

Figure 2

J-Box (Not Provided)

8-32 x 3/8" Screw

Canopy

Mounting Strap

8-32 x 1" Screw

J-Box Screw (Not Provided)

1/2" Bushing

Lock Nut

Star Washer

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CEILING MOUNT INSTALLATION

1. Extend unswitched 24 hour AC supply of rated voltage to junction box (by others). Leave at least 18 inches of slack. Circuit should not be energized at this time.

2. Disassemble sign by removing the screw holding the side cover and sliding the glass panel out. Remove power tray by placing a screwdriver in the rectangular slot in the upper left or right, pushing the tray in to disengage the snaps, and then pulling down (See Figure 1).

3. Unplug the heads from the LED sign board (see Schematic). Remove the heads from the top of the fixture by unscrewing the nuts holding them in place (see Figure 3). Place the plastic plugs from the parts bag in the now open holes.

4. Knock out the appropriate mounting pattern on the top of exit sign to accommodate the canopy (See Figure 3).

5. Fasten canopy to exit frame by means of two 8-32 by 3/8" screws and lock nuts (See Figure 3).

6. Knock out the holes on the side of the frame and the side cover. Feed the head wires through, and secure the heads by installing the nut. (See Figure 3). Place the small loop from the spring from the parts bag on the hook at the upper left of the frame (See Figure 3).

7. Mount mounting strap to junction box by choosing proper slots and using screws supplied with junction box (See Figure 3).

8. Feed wires through exit-canopy combination and fixture center of adapter plate (See Figure 3).

9. Screw the two 8-32 x 1" screws and lock washers into mounting strap (See Figure 3).

10. Connect power supply and ground in accordance with local codes. The CHX Combo has a universal input power supply, capable of accepting input voltages from 120 through 277V. Wire connections as follows: Hot to Black lead; Neutral to white lead. Ground to Green lead. Note: To avoid shadows on the sign face, connections should be made in the junction box or the power tray.

11. Select the appropriate voltage for the brownout circuit (see below).

12. Slide the power tray back into place. Be careful to keep the large loop on the spring accessible after the power tray is in place.

13. Connect the wires for the right hand head on the frame to the LED PCB (see Schematic). Use the hook built into the frame to hold the wires in place to prevent shadowing.

14. Feed the wire from the left head through the hole in the frame, through the loop in the spring, and connect to the PCB (See Figure 3 and Schematic).

15. Slide the glass lens into place, and secure the side cover using the screw provided.

16. Energize AC supply, LED display will come on.

Figure 3

SETTING BROWN OUT CIRCUIT

Because of the universal input of the CHX Combo, 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 fixture ships with the circuit set to 120V. Determine the incoming voltage, and select the appropriate jumper for the brownout circuit (see Schematic).
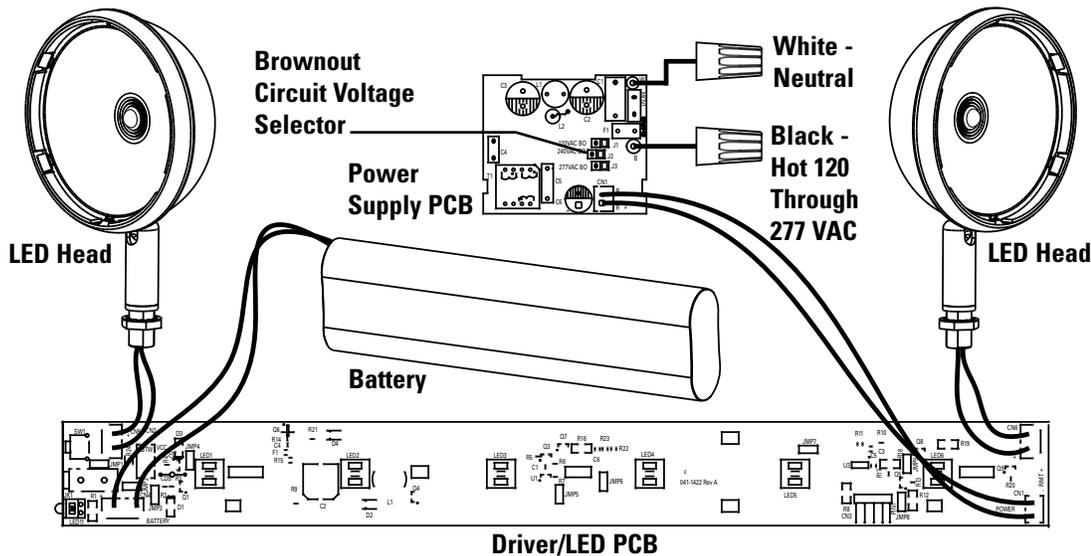
OPERATION

Depress the test switch. The LED heads will remain lit 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

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

SCHEMATIC

NOTE: Servicing of any parts should be performed by qualified personnel. Only use replacement parts supplied by Eaton 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 Eaton Lighting representative for assistance.

Brownout Circuit Voltage Selector

White - Neutral

Black - Hot 120 Through 277 VAC

Power Supply PCB

LED Head

LED Head

Battery

Driver/LED PCB

Warranties and Limitation of Liability

Please refer to **www.cooperlighting.com/LightingWarrantyTerms** for our terms and conditions.

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