

MINI Phantom: Concealed Emergency Lighting

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not use outdoors.
2. Do not let power supply cords touch hot surfaces.
3. Do not mount near gas or electric heaters.
4. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
5. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
6. Do not use this equipment for other than intended use.
7. All servicing should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

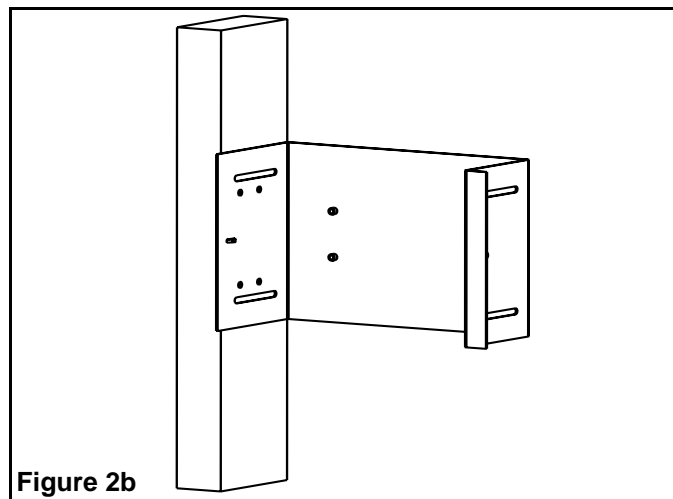
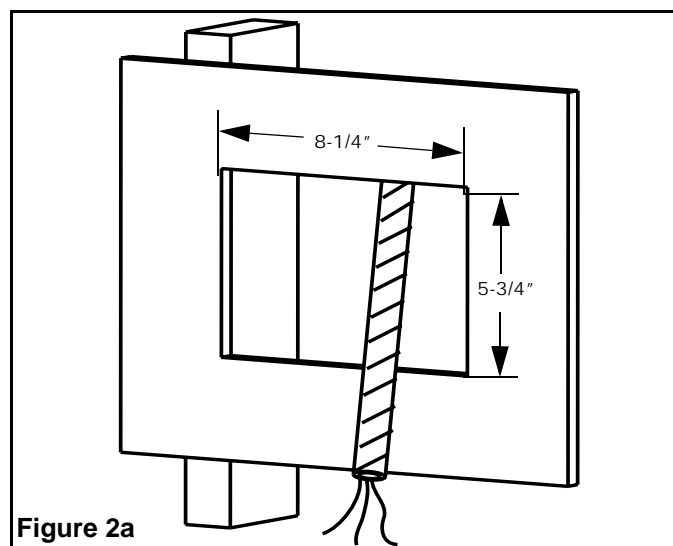
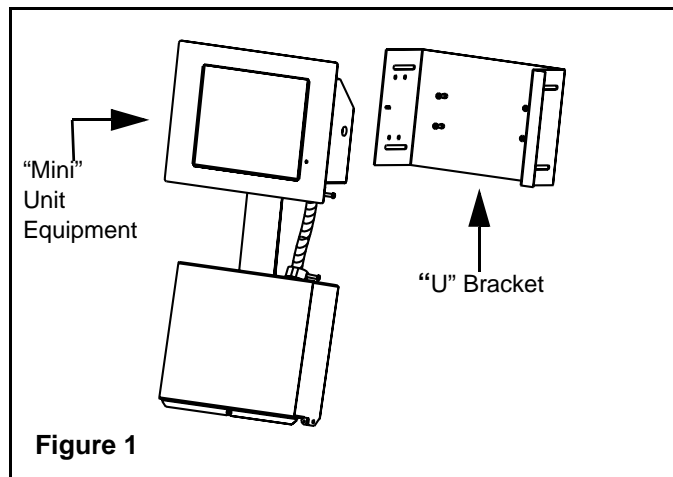
Installation Instructions (Figure 1)

The emergency lighting unit comes with a U-shaped metal bracket, for rigid mounting on wall studs and ceiling joists covered by drywall. This bracket can be installed (retrofit) after the drywall is put in. For installation, the cable(s) for AC power supply (and DC remote) must be passed near a wall stud or ceiling joist.

“U” Bracket Installation in the wall (Figures 2a, b, c)

1. Cut a rectangular opening (8-1/4 inch by 5-3/4 inch) in the drywall next to the wall stud. The opening must have the short side along the stud. Use the "U" bracket to mark the dimensions on the drywall.
2. Pass the electrical cable(s) out through the hole.
3. Slide the “U” bracket in the hole: enter the flange side first then push the other side to the stud.
4. Fix the “U” bracket on the stud with appropriate fasteners (not supplied).
5. Check that the four mounting screws are turned 2-3 threads in the pem-studs.

IMPORTANT: If the electrical cables pass in the wall from the ceiling, make sure they are long enough to go out **at least 3 to 4 feet** through the rectangular hole. This will ensure the flexible cables will loop and access the bottom of the equipment about 1 ½ feet below the rectangular hole.



"U" Bracket Installation in an open ceiling

CAUTION: This unit equipment has a typical weight of 6.5 kg (14.5 lbs). It can only be installed in an open ceiling that can support this weight, or an equivalent load pressure of minimum 33 lbs/sq.ft (160 kg/m2) between two joists.

1. Cut a rectangular opening (8-1/4 inch by 5-3/4 inch) next to the ceiling joist. The opening must have the short side along the joist. Use the "U" bracket to mark the dimensions on the ceiling (Figures 2a, b, c).
2. **CAUTION:** Install a chain or "pencil rod" wires (provided by others) to a joist above the rectangular opening.
3. Slide the "U" bracket in the opening: enter the flange side first then push the other side to the joist.
4. Fix the "U" bracket on the joist with appropriate fasteners (not supplied).
5. Check that the four mounting screws are turned 2-3 threads in the pem-studs.
6. Pass the chain and electrical cable(s) out through the opening.

Equipment preparation (Figure 3)

1. Remove the cover of the transformer box.
2. If the unit requires DC connection: remove the knockout and install a second conduit bushing (provided in the hardware kit).
3. Disengage the two hooks at the bottom of the housing.
4. For installation in open ceilings: bend slightly the flexible bracket connecting the two metal housings to align them roughly along the same axis.

Equipment installation in the wall (Figures 4 and 5)

1. Suspend the unit upside-down from the "U" bracket using the metal hooks (see Figure 4). Do not hang the unit directly on the drywall edge as this can damage the drywall.
2. Pass the electrical cable(s) through the bushings into the unit housing.
3. Connect the GREEN wire from the charger module and the back box to the GROUND supply wire.
4. Connect the WHITE wire (labelled Neutral) to Neutral.
5. For 120VAC connect the BLACK wire (labelled 120VAC) from the unit to Line.
6. For 277VAC connect the ORANGE wire (labelled 277VAC) from the unit to Line.
7. For 347VAC connect the RED wire (labelled 347VAC) from the unit to Line.
8. If there are any remote heads to be connected to the unit, connect the RED wire (labelled L+) and the BLUE wire (labelled L-) to the load wires.
9. Make sure all unused wires are properly capped.
10. **CAUTION:** failure to cap the wires may cause an unsafe condition.
11. If the equipment includes a battery, connect the battery positive wire (labelled: "Connect battery positive terminal") to the battery or printed circuit board, as indicated by the second label.
12. Install the door on the housing and secure with the screw.

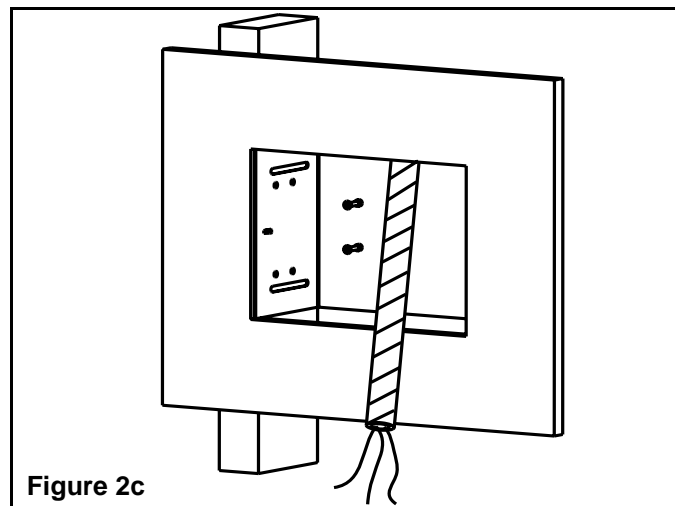


Figure 2c

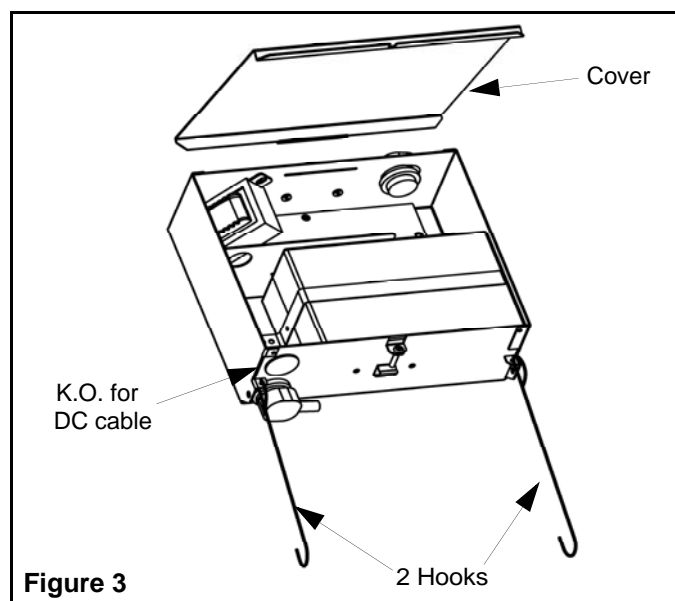


Figure 3

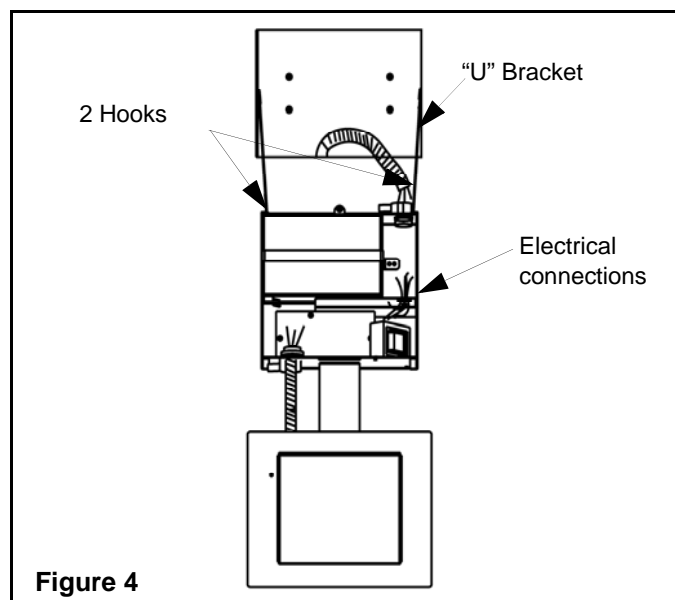
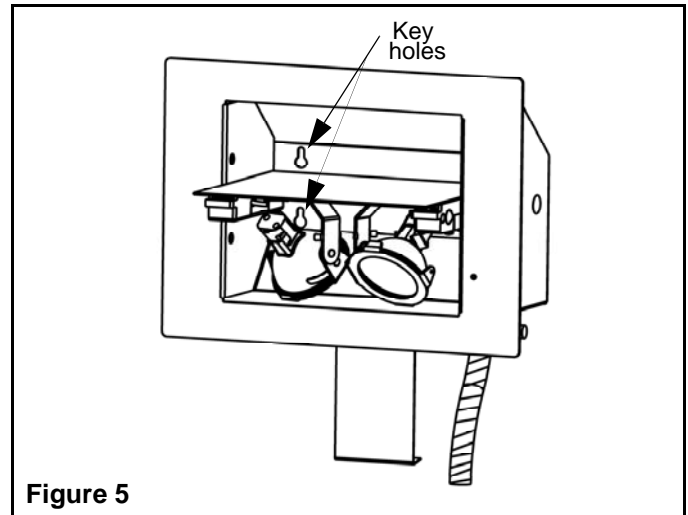


Figure 4

13. Hold the unit with one hand; disengage the two hooks and secure them to the unit housing.
14. Turn the unit to normal position, with the transformer box at the bottom.
15. Force the door of the lamp module half-open to hold the unit and locate the four key holes in its housing (see Figure 5).
16. Push the electrical cable and the unit into the wall, and engage the key holes of the lamp module onto the four screws of the "U" bracket. Slide the lamp module so that the heads of the screws are in the slotted end of the key holes (see Figure 6).
17. Align the unit frame then tighten the four screws until the trim is flush with the drywall surface. For easy access to the screws, the door can be rotated one full turn of 360 degrees.
18. Orient the two lamps in their swivels and check that they are plugged into the sockets.
19. Close the door and make sure it is flush with the trim.



Equipment installation in an open ceiling

1. Suspend the unit upside-down, from the "U" bracket using the metal hooks. Secure the unit with the chains or "pencil rod" wires. Continue by following the steps 2 to 19 above.

Testing the Equipment

Self-powered equipment

1. Activate the AC power.
2. The recessed pilot light/test switch will light in green.
3. Allow 24 hours to fully charge the batteries.
4. Push the test button. The door will open and the lamps will illuminate for one minute, then the door will close. Orient the lamps to the desired position at this time. If more time is needed, push the test button again, for 5 to 10 seconds. This will ensure a test duration of three minutes.



AC-only equipment, powered from a remote AC generator

1. Activate the AC power generator. The equipment door will turn and open, then the lamps will illuminate. Orient the lamps to the desired position at this time.
2. Disable the AC generator. The lamps will turn off and the equipment door will turn and close.

Maintenance

The equipment requires no maintenance, but should be tested regularly in accordance with the local codes.

