



IMPORTANT SAFEGUARDS READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

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

- **DISCONNECT AC POWER SUPPLY BEFORE SERVICING.**
- Installation and servicing of this equipment should be performed by qualified service personnel only.
- Ensure that the electrical wiring conforms to the National Electrical Code NEC® and local regulations, if applicable.
- Do not mount near gas or electrical heaters.
- Do not use outdoors.
- Do not let power cords touch hot surfaces.
- Equipment should be mounted in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Any modification or use of non-original components will void the warranty and product liability.
- Do not use this equipment for other than intended use.
- Use caution when servicing batteries. Battery acid can cause burns to skin and eyes. If acid is spilled on skin or eyes, flush with fresh water and contact a physician immediately.

SAVE THESE INSTRUCTIONS!

CMD Series

Installation Instructions

Wall Mount

1. Drill 7/8" hole in area provided for AC supply and/or remote load and install bushing provided. (Fig. 3)
2. Mount the fixture securely into place. Install four (4) mounting feet to the back of the cabinet. Fasten each foot with an appropriately sized screw or mounting bolt (not supplied) through each hole and into the mounting surface/wall. Each fastener must be securely in place to properly support the fixture.
3. Open the fixture by unscrewing the (2) cover screws on the one side of the fixture. The hinged door can then be swung down. (Fig. 1 & 2)
4. Make electrical connections; see **Electrical Connections** section.
5. Make battery connections; see **Battery Connections** section.
6. Close the cover and secure the cover screws.
7. Turn on AC line voltage supply.
8. Position the lamps/heads to provide the best lighting distribution by loosening the head set screws to adjust the angle and swivel. Manually rotate or twist the heads to the desired position, then tighten the set screws to lock the position.

CAUTION

WARNING! Before servicing parts, ensure area is known to be non-hazardous.

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 full load testing.

Operation

1. To test, pass a magnet over the test marking to initiate the test (Fig. 1). The charge indicator will go out and the DC lamps will come on.
2. A bright charge indicator indicates a high charge rate. After the battery has reached full charge, the indicator light will go out. Under normal operation, the high charge indicator will turn off and on intermittently while the unit is in standby mode (regular/mains AC present) since the charge rate will vary in order to maintain an optimal battery charge.

Fig. 1

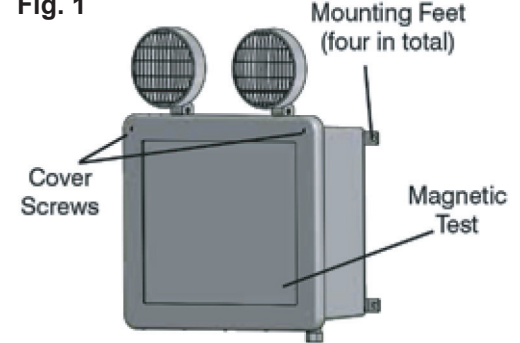


Fig. 2

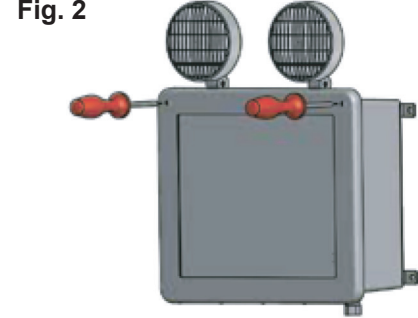
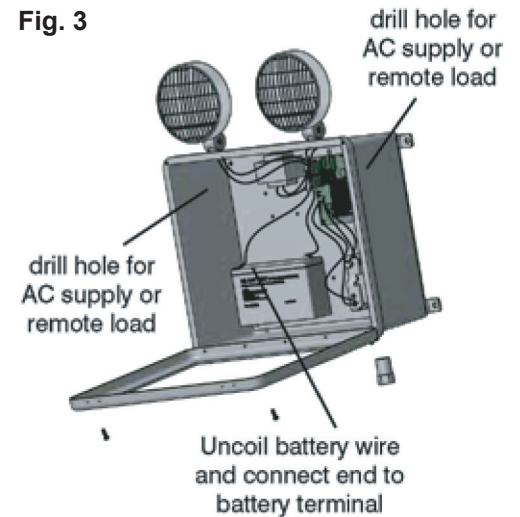


Fig. 3



CMD Series

Installation Instructions

Electrical Connections

All electrical connections should be made inside the J-box. Make electrical connections as follows (Fig. 4):

120VAC

White - Common
Black - 120VAC
Green - Ground

277VAC

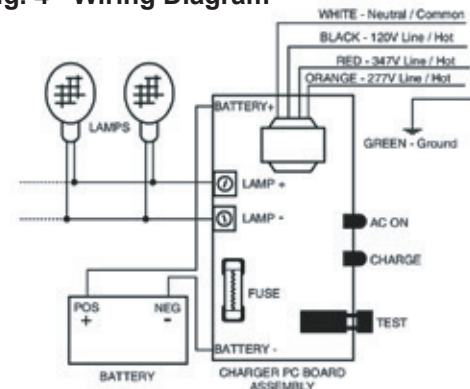
White - Common
Orange - 277VAC
Green - Ground

347VAC

White - Common
Red - 347VAC
Green - Ground

Note: Cap unused leads to prevent shorting.

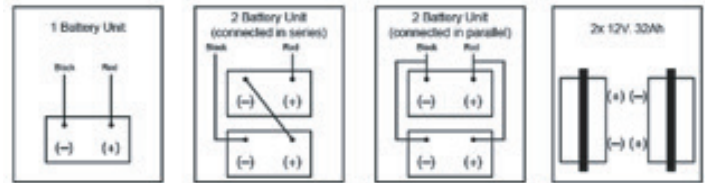
Fig. 4 - Wiring Diagram



Battery Connections

Connect the wire lead(s) from the positive (+) circuit board terminal to the positive (+) terminal connector on the battery (Fig. 3). For large units, the batteries may be shipped separate from the cabinet. Install the batteries into the cabinet and make the appropriate inter-battery connections. (Fig. 5).

Fig. 5



Troubleshooting

IMPORTANT NOTE: If the Time Delay optional feature is installed, the emergency lamps will remain lit for up to 10 minutes following the resumption of regular/mains AC power to the fixture.

EMERGENCY LAMPS DO NOT COME ON AT ALL LED "AC ON" indicator is out before test

Pilot Light is out before test...

1. Check AC supply - be sure the fixture has 24 hour AC supply (unswitched).
2. AC supply is OK, and indicator light is out, replace the PCBA.

Pilot Light is on before test...

3. Either the output is shorted or overloaded, or the battery is not connected.
4. Battery is severely discharged. Allow 24 hours for recharge and then retest. **NOTE:** This could be the result of a switched AC supply to the fixture (which has been turned off at some point), a battery with a shorted cell, an old battery or a battery which has been discharged due to a long power outage and is not yet fully recharged.

EMERGENCY LAMPS COME ON DIM WHEN TEST SWITCH IS ACTIVATED

1. Battery discharged - permit the fixture to charge for 24 hours and then retest. If the lamps are still dim, check the charger for proper function. If the charger functions correctly, replace the battery.

EMERGENCY LAMPS COME ON WHEN BATTERY IS FIRST CONNECTED

1. Battery may be connected in reverse polarity. Check connections. Connect Positive (+) lead to Positive (+) battery terminal and Negative (-) lead to Negative (-) battery terminal. The lamps should then turn off and the charge indicator should light when AC power is applied.

EMERGENCY LAMPS COME ON DIM WHEN AC POWER IS ON

1. Check supply voltage and AC connections. This emergency light is provided with brownout protection. The AC supply must be at least 80% of nominal (96VAC on a 120VAC line) for equipment to function normally. At lower voltages, the emergency lamps will begin to glow dimly until the source voltage drops below the full "turn-on" point. **NOTE:** This condition may also be caused by incorrectly connecting a 120VAC supply line to the wrong voltage transformer lead.