

# New Preceptor Series Die Cast LED Exit Sign

*AC, AC/DC or Self-Powered*

## IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be taken 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

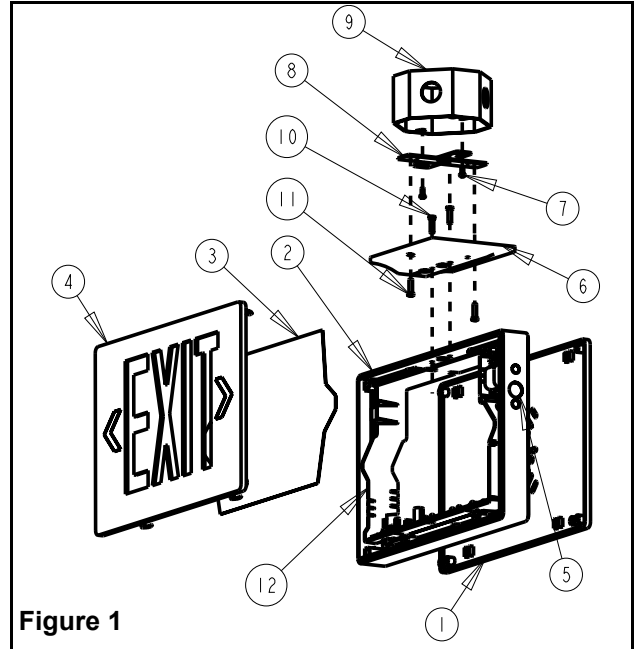
### Installation Instructions

1. Turn off AC power.
2. Route AC unswitched circuit of rated voltage into electrical box and leave 6" of wire length.
3. Remove the exit door by inserting a coin or a screwdriver in a notch at the top or bottom of the door.  
Note: back plate is screwed to the housing.
4. Remove plastic frame with everything attached on the plastic housing.
5. Determine the mounting position (end, wall or ceiling).  
Note: canopy is required for end or ceiling mount.
6. Our system can accept input voltages of 120 VAC or 277 VAC. Therefore, connect the Black (120 VAC) or Orange (277 VAC) and White (common) leads to the building utility. Connect the green wire to the ground.  
Note: for dual curcuit option, there will be two sets of wires.

**⚠** Unused primary wire must be insulated to prevent shorting.

#### Wall mounting

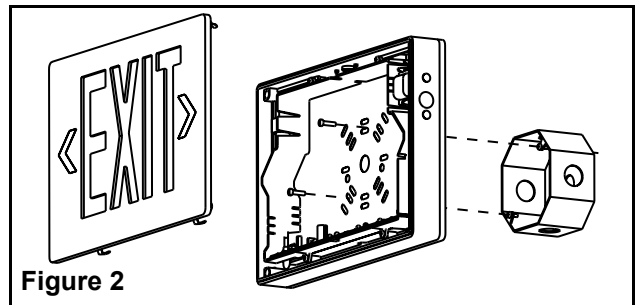
- a. No canopy required.
- b. With the help of a flat head screwdriver, knock out the proper hole pattern, including the center hole, in the back cover to mount to a standard junction box (See Fig. 2).
- c. Feed the AC supply leads out through the center hole and make the proper connections (See step 5 and Fig.5).
- d. Feed the excess wire into the junction box and secure the back cover to the junction box using the junction box screws.



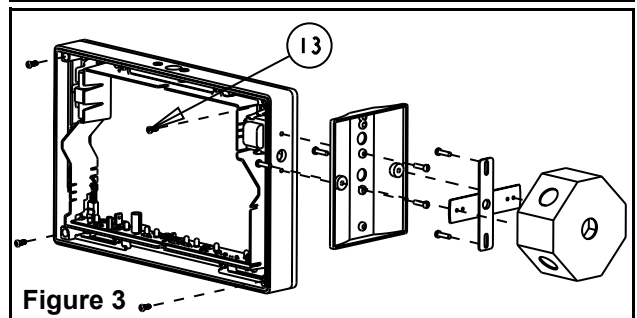
**Figure 1**

#### Part List

- |                                       |                            |
|---------------------------------------|----------------------------|
| 1. Back plate                         | 8. Cross-bar               |
| 2. Frame                              | 9. Junction box            |
| 3. Diffuser panel                     | 10. Canopy housing screw   |
| 4. Exit door                          | 11. Canopy cross-bar screw |
| 5. Hole plugs for Canopy              | 12. Plastic housing        |
| 6. Canopy                             | 13. Back plate screws      |
| 7. Junction box screws (not provided) |                            |



**Figure 2**



**Figure 3**

### End or ceiling mount

- a. Canopy required. Attach the cross bar to junction box with the junction box screws.
  - b. Remove appropriate hole plugs according to mounting position and screw canopy on to the frame.
  - c. Feed AC supply leads through hole and make the proper connection (See step 5 and Fig.5)
  - d. Feed the excess wire into the junction box and secure the canopy to the cross-bar using the canopy housing screws.
7. When required, lift the tip of the diffuser panel (3) to access the chevron to remove. Support the door around the chevrons with two blocks of wood. Strike chevron from the inside with a hammer and screwdriver (See Fig. 4).
  8. Connect the battery.
  9. Reinstall exit door(s). It is important to direct the green ground wire, installed in the lower right corner of the unit, before clipping the front door to the frame.
  10. Energize AC. Sign will illuminate.

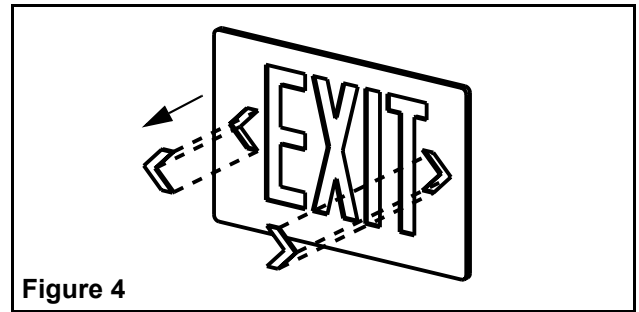


Figure 4

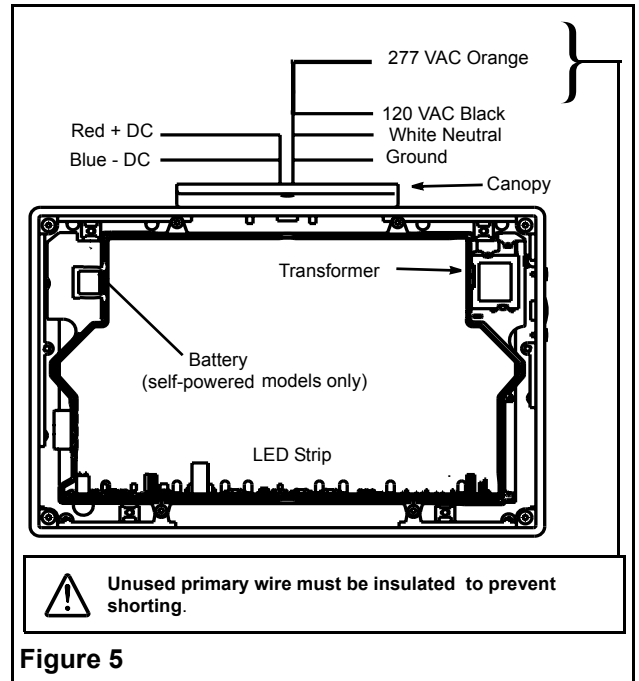


Figure 5

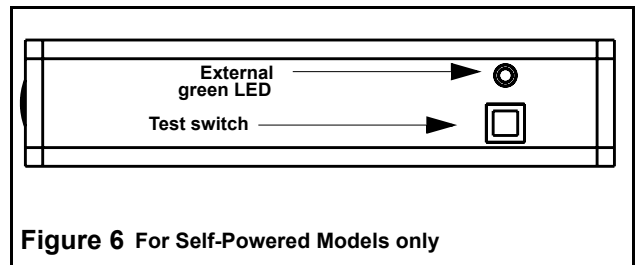


Figure 6 For Self-Powered Models only

### AC/DC Models

Refer to Fig. 5 for AC & DC wiring.

**For DC portion** Wire the Red (+) to the positive DC input voltage and the Blue Lead (-) to the negative DC input voltage. Note: DC input voltage range is 6 volts to 48 volts.

### Self-Powered Models

#### Manual testing

Press test switch. Legend will flicker, but remain lit. On release, external green LED will illuminate, and automatic charger will restore battery to full charge. For models equipped with diagnostic function the LED will blink to indicate an alarm (see table below).

#### Automatic testing and diagnostic (optional)

The models with the automatic testing and diagnostic option include a micro-controller which self-tests the unit on a monthly basis and identifies as well displays failures of the electrical components: battery, battery charger, lamps, LEDs.

##### Self-test

The self-test is performed every 30 days for 1 minute, every 6 months for 30 minutes, and annually for 90 minutes.

##### Automatic Diagnostic function

The diagnostic function uses an external green LED indicator. The DEL normally green turn red when an alarm condition is detected; that mean service is required (See Fig. 6).

o	Green	Steady On	AC On
-o	Green	One Blink	In Test
o	Red	Steady On	Battery Disconnect
-o	Red	One Blink	Battery Failure
o-o	Red	Two Blinks	Charger Failure
o-o-o-o	Red	Four Blinks	LED Strip Failure

### Maintenance

None required. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected, Self-Powered Models only.

**Note:** NiCd (Nickel Cadmium) batteries are shipped discharged and may require 10 minutes of connection to AC supply before start-up test procedure, and 96 hours to reach full charge.