

## Pictogram Sign for Hazardous Locations



### IMPORTANT SAFEGUARDS

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

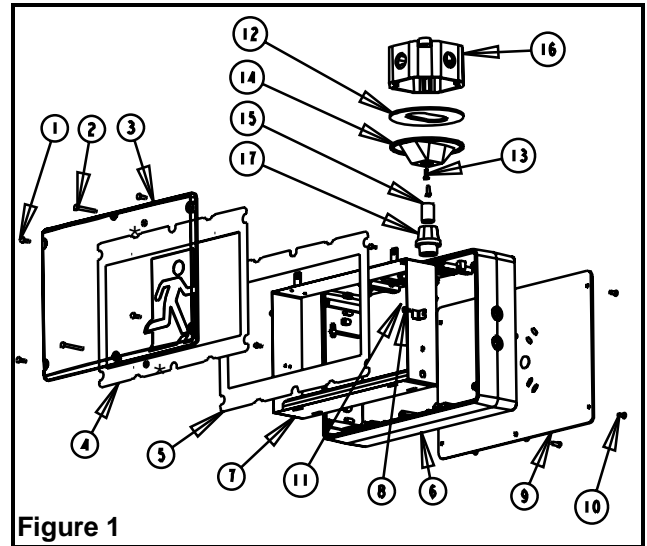
### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Servicing of this equipment should be performed by qualified service personnel.
2. Make sure the area is clear of all HAZARDS before installing or servicing the unit.
3. Turn off electrical power before and during installation and maintenance.
4. Before conducting maintenance, turn off the unit and wait for it to cool.
5. Do not install where the marked operating temperatures (T-Code) exceed the ignition temperature of the hazardous atmosphere.
6. Do not operate in ambient temperatures above those indicated on the rating labels.
7. Keep tightly closed when in operation.
8. Do not use outdoors.
9. Do not let the power cords touch hot surfaces.
10. Do not mount near gas or electric heaters.
11. Use caution when handling batteries. Battery acid can cause burns to the skin and eyes. If acid is spilled on the skin or eyes, flush acid with fresh water and contact a physician immediately. Avoid possible shorting.
12. Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
13. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
14. Do not use this equipment for other than intended use.
15. Unit to be installed only as per configuration described in this instruction manual.

### SAVE THESE INSTRUCTIONS

#### Installation Instructions

1. Turn off AC power.

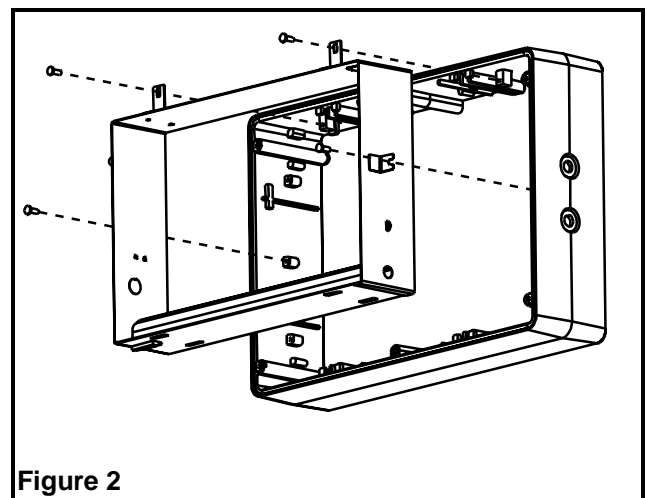


**Figure 1**

\*Note: Install o-rings on the screws between the lens and the frame.

#### Part List

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| 1. Tamper-proof screws             | 9. Backplate (single face sign)   |
| 2. Tamper-proof screws with o-ring | 10. Backplate tamper-proof screws |
| 3. Lens                            | 11. Lock-nuts                     |
| 4. Pictogram panels                | 12. Junction box gasket           |
| 5. Opal diffuser                   | 13. Junction box screws           |
| 6. Frame                           | 14. junction box Cover            |
| 7. Frame insert                    | 15. Nipple                        |
| 8. Frame insert mounting screws    | 16. Junction box                  |
|                                    | 17. Hub                           |



**Figure 2**

### Ceiling Mount (Figure 1)

- a. Remove junction box assembly from carton. Remove junction box cover from junction box assembly and retain securement screw.
- b. Install junction box and route AC circuit wires into the junction box and leave 6" of wire length.
- c. Remove lens, two pictogram panels and the opal diffuser on the front of the unit (use the supplied bit to remove the tamper-proof screws).
- d. In order to access the knockouts of the frame, remove the 4 screw(s) holding the frame insert to the frame and separate them (see Figure 2).
- e. Ensure that the retaining screw is accessible (see Figure 1, Part No. 13). Use the screws from the junction box to secure the cover to the junction box.
- f. Remove the left knockout on top of the frame. Determine which holes in the frame will be used for mounting (see Figure 1). Support frame with two blocks of wood, maximum one inch apart. Strike knockouts with a hammer and screwdriver. Clear holes of burrs to allow proper assembly of nipple/wire assembly.
- g. Thread nipple/wire assembly into the frame.
- h. Secure junction box cover to the frame using the provided nut.
- i. Reassemble the frame insert inside the frame.

### Wall Mount (Single Face Model Only)

- a. Remove junction box assembly from carton. Remove junction box cover from junction box assembly, install hub on junction box and retain securement screw.
- b. Remove the backplate (9) from the packaging. Determine the proper knockouts to remove for mounting to the junction box (see Figure 3).
- c. Support area around knockouts with two blocks of wood. Strike knockouts from the inside with a hammer and a screwdriver.
- d. Reinstall the backplate to the frame using the 6 tamper-proof screws (use the supplied bit).

2. **Electrical connections:** Connect one end to the leads inside the enclosure and the other end to AC line voltage inside the junction box. Connect the white lead to neutral and the purple lead to AC line voltage (the input is universal). (See Figure 4). Connect the ground (green wire) to the junction box.

**Optional:** For AC models with DC remote power, one end connects to the LED-STRIP leads inside the enclosure and the other end to the DC input inside the junction box. Connect the red lead to the positive and the blue lead to the negative of the remote DC input (see Figure 4).

**For ceiling mount:** Mount the frame and junction box cover assembly to junction box by using the provided securement screw.

**For wall mount:** Attach the frame (6) to the junction box, using the junction box supplied screws. Install 2 stem washers to ensure bonding.

3. Select the desired pictogram panel and install it with the opal diffuser behind. The pictogram panel without arrow shall be installed facing right (see Figure 5).

4. Install the lens by using the 6 tamper-proof screws. The o-ring has to be installed on the center screws between the lens and the frame as shown in figure 1.

**The tamper-proof screws should be equally torqued to approximately 10 - 15 in-lbs (1.1 - 1.7 N-m).**

5. Energize AC. Sign will illuminate.

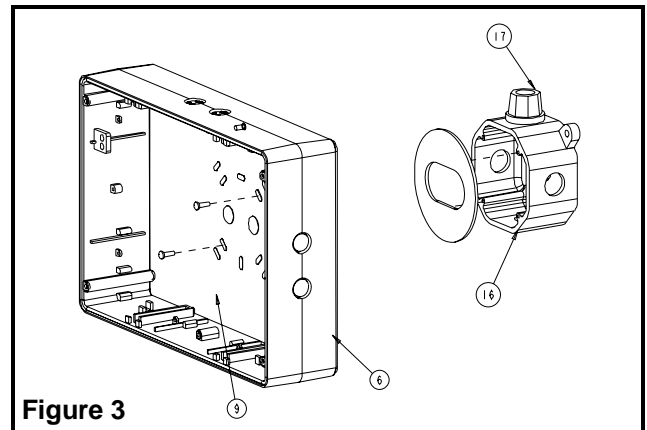
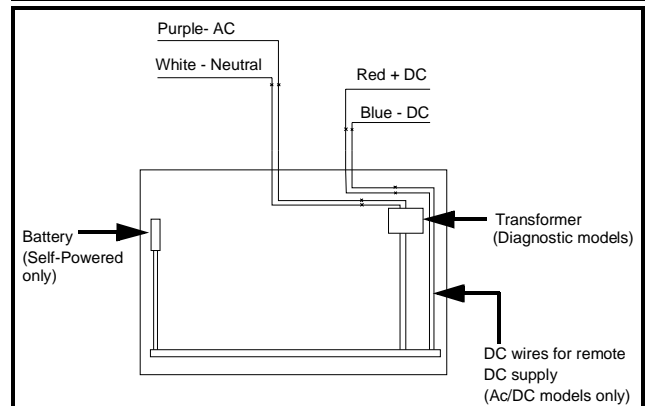


Figure 3



Primary wire connections must be isolated from charger.

Figure 4

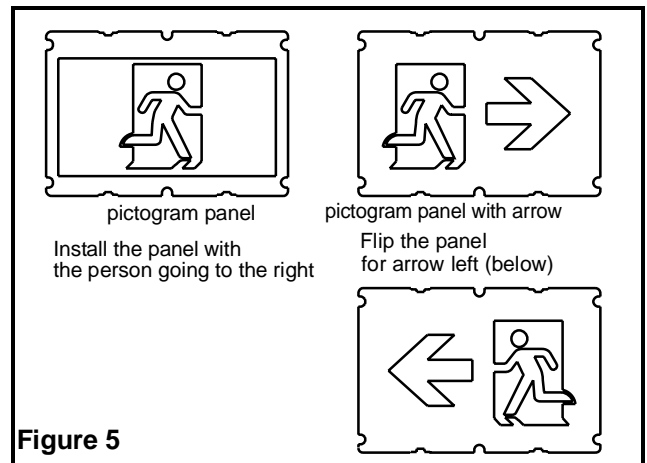


Figure 5

## Manual Testing (Self-Powered Models)

Operate the magnetic “test switch” by holding the provided magnet underneath the unit where indicated on the frame. The AC pilot lamp will go out, the legend will flicker, but remain lit. Remove the magnet. The AC pilot light will turn on, the legend will flicker but remain lit.

## Automatic testing and diagnostics

A built in micro-controller will self-test the unit and identify display failures of the unit on a monthly basis and identifies as well as displays failures of the electrical components: battery, battery charger and 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.

### Diagnostic function

The diagnostic function uses a bi-color pilot LED indicator. Service is required if the LED turns red indicating that an alarm condition is detected (see Figure 6).

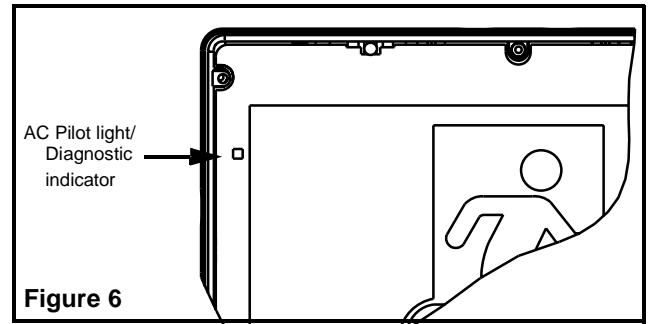


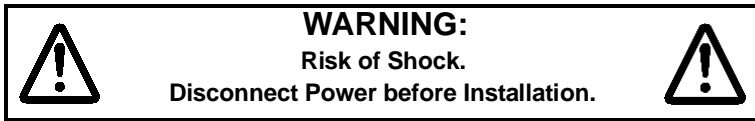
Figure 6

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 (All Models)

None required. For battery-operated units: if AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.

**Note**(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.



## Double Face Installation

### Conversion from single-face to double-face sign.

1. Turn off AC power.
2. Remove backplate by unscrewing the six tamper-proof screws holding the backplate to the frame (see Figure 7).
3. Install the four backpanel retention screws (see Figure 8).  
*Note: The four screws may already be installed.*
4. Select the desired pictogram panel and install it with the opal diffuser behind. The pictogram panel without arrow shall be installed facing right (see Figure 5). Snap the top edges under the two top retention screws and then snap the bottom edges under the two bottom retention screws (see Figure 9).
5. Install the lens by using the 6 tamper-proof screws. The o-ring has to be installed on the center screws between the lens and the frame as shown in figure 10.  
**The tamper-proof screws should be equally torqued to approximately 10 - 15 in-lbs (1.1 - 1.7 N-m).**
6. Energize AC. Sign will illuminate.

