

# Die Cast Edge-Lit Pictogram Sign

## AC, AC/DC and Self-Powered models

**WARNING:**  
Risk of Shock.  
Disconnect Power before Installation.

### IMPORTANT SAFEGUARDS

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

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

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

### SAVE THESE INSTRUCTIONS

**IMPORTANT:** This sign shall be installed only where there is adequate colour contrast between the sign legend and the interior wall finish behind the sign, to provide for sufficient visibility.

### Installation Instructions

Turn off AC power.

**IMPORTANT:** Wiring connections need to be done away from PCBA and in designated area as shown in figure 8 or 9.

#### Recessed mount installation (New construction or rear access) (Figure 2a & b)

1. Remove the proper knockout in the back box for the entry of the AC wires.
2. Assemble the recessed mounting brackets to the back box. Install the bar hangers in the adjustment brackets.

**IMPORTANT:** The back box must be flush with the wall or ceiling surface (see figure 2b). Contact customer service in the event where it's not possible to have the back box flush with the wall or ceiling.

3. Route AC circuit of rated voltage into the back box and leave 6" of wire length.
4. Connect the incoming ground to the short ground wire provided in the back box.

#### Surface mount installation (Figures 3a,b,c)

1. Remove the proper knockout in the canopy plate to mount to the junction box - check the orientation of the back box (see figures 3a, b or c).
2. Route the wires through one of the Ø5/8" knockout holes in the canopy plate and mount the plate to the electrical box using the junction box screws. Make sure that the canopy plate will mount so the securement screw is accessible.

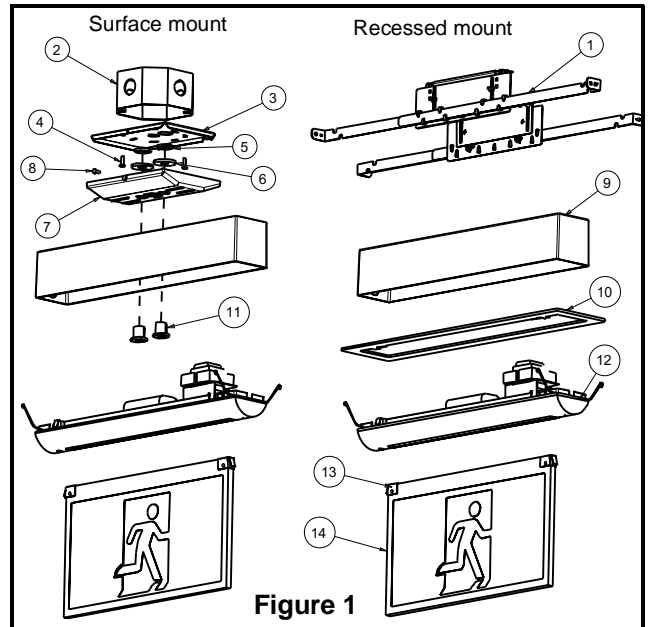


Figure 1

#### Parts List

- |  |                               |
|--|-------------------------------|
| 1. Recessed mount brackets (recessed only) | 8. Securement screw           |
| 2. Junction box                            | 9. Back box                   |
| 3. Canopy plate                            | 10. Trim ring (recessed only) |
| 4. Junction box screws(not provided)       | 11. Nipples (2)               |
| 5. Nuts (2)                                | 12. Trim plate assembly       |
| 6. Nylon washer (2)                        | 13. Clips (2)                 |
| 7. Canopy                                  | 14. Pictogram panel           |
|  | 15. Hook (refer to fig.7)     |

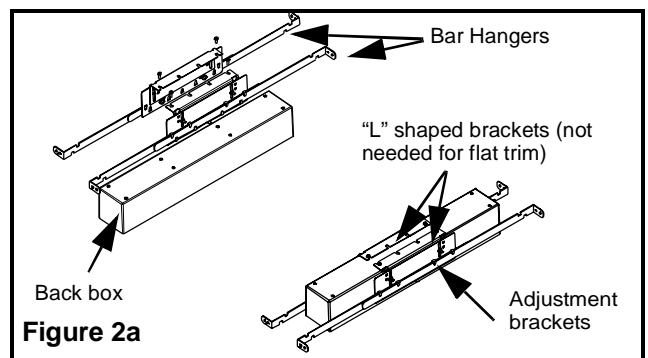


Figure 2a

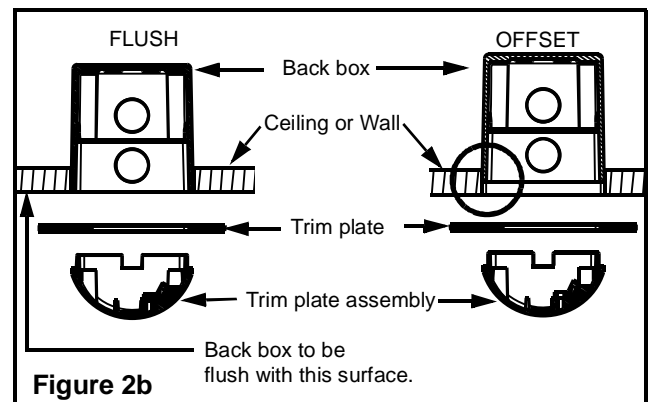
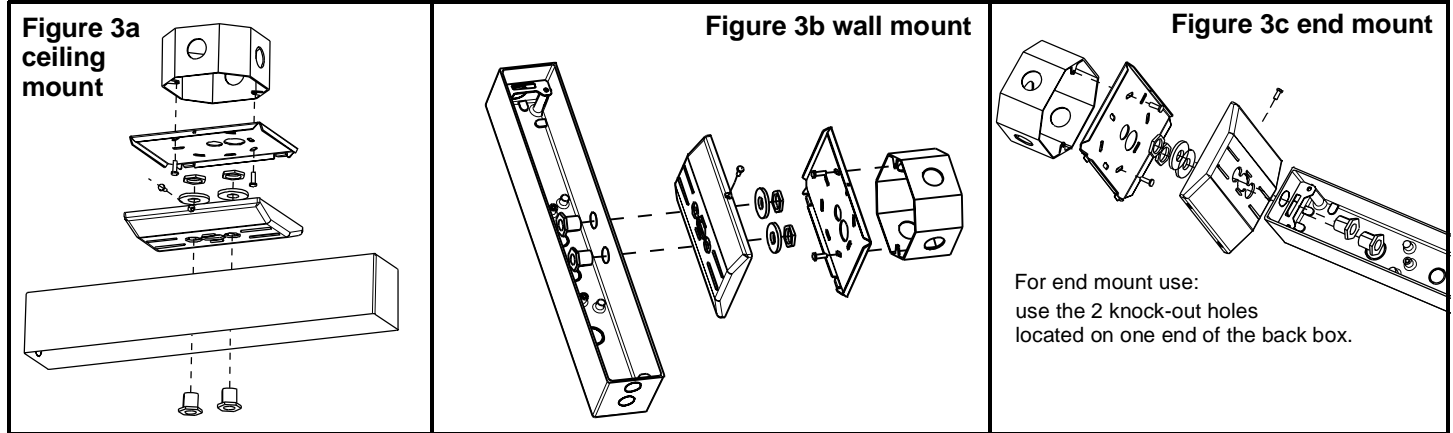


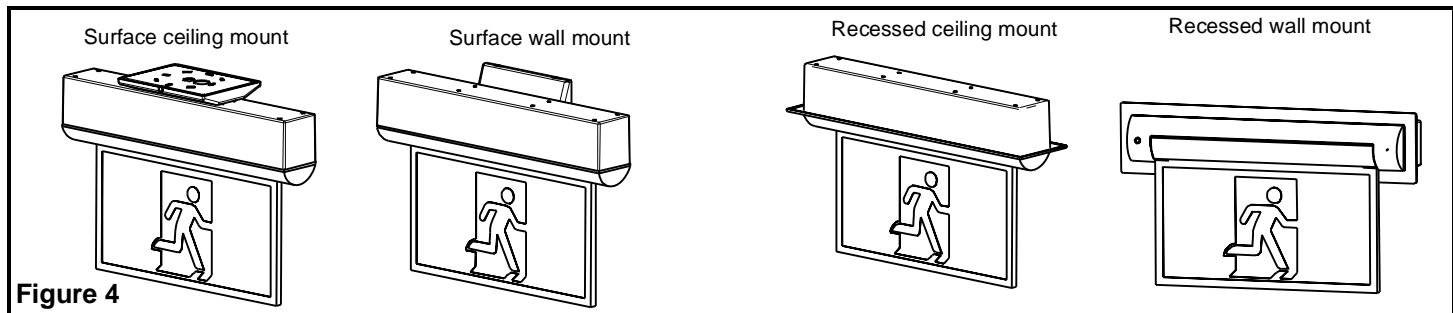
Figure 2b

3. Remove the proper knockouts in the back box to mount the canopy (see figures 3a, b or c).
4. Mount the canopy to the back box using the hardware supplied. Insert the threaded nipples through the back box knockouts, canopy and nylon washer. Thread a nut on each nipple; the nuts should be in the canopy (see figures 3a, b or c).
5. Route wires from the harness through the back box/canopy assembly.
6. Using the hook provided, hang the canopy/back box assembly to the canopy plate (figure 7).
7. Go to electrical connections for wiring information.
8. Mount the canopy/back box assembly to the canopy plate using the securement screw provided.



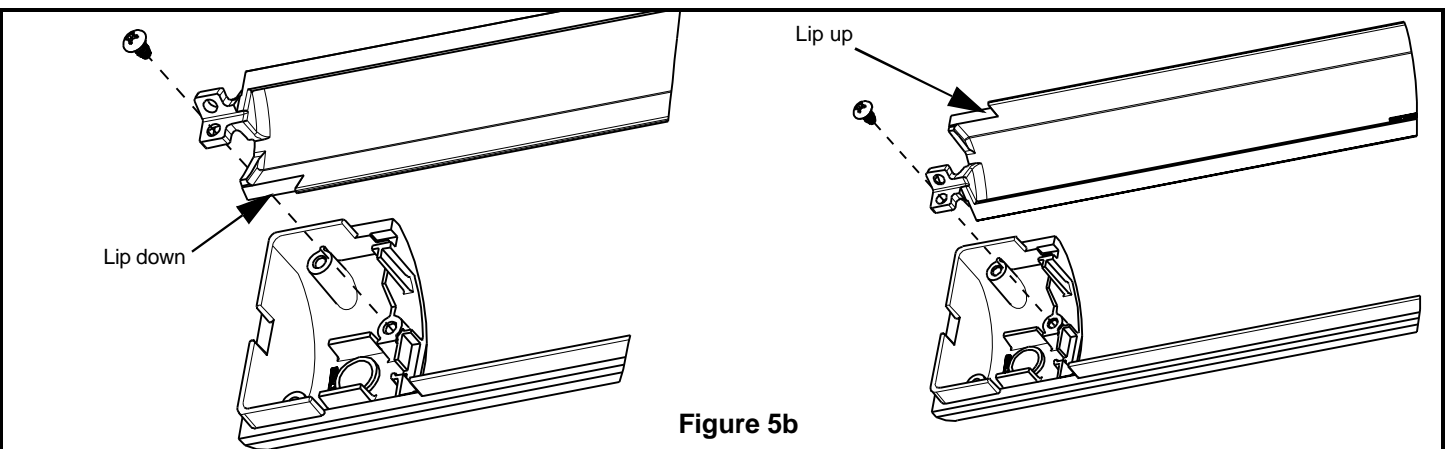
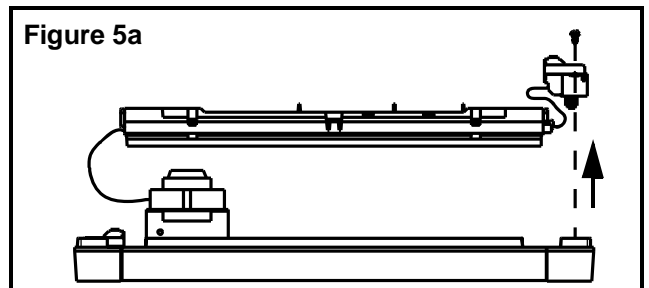
**Trim plate installation**

1. The trim plate module comes assembled for surface mount or recessed ceiling mount installation (figure 4). If surface or recessed ceiling mount, continue with step 3.

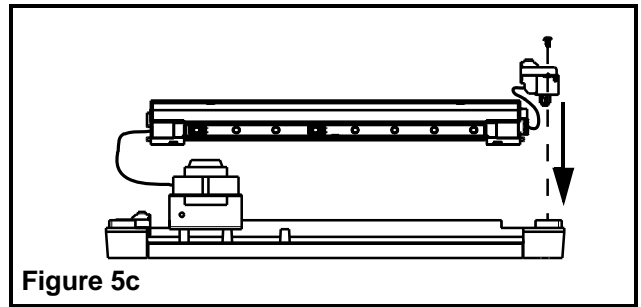


**2. Recessed wall-mount installation (Figures 5a,b,c)**

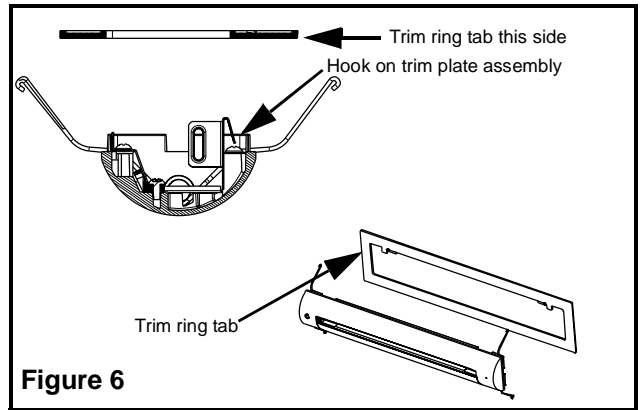
- a. To remove the electronic module, unscrew the bracket on either end of the module. Disconnect the transformer harness from the electronic module in the plastic housing. Remove the electronic module.
- b. Unscrew the side plate of the trim plate body. Turn the side plate around and screw it back in place, this time flush with the trim plate body.



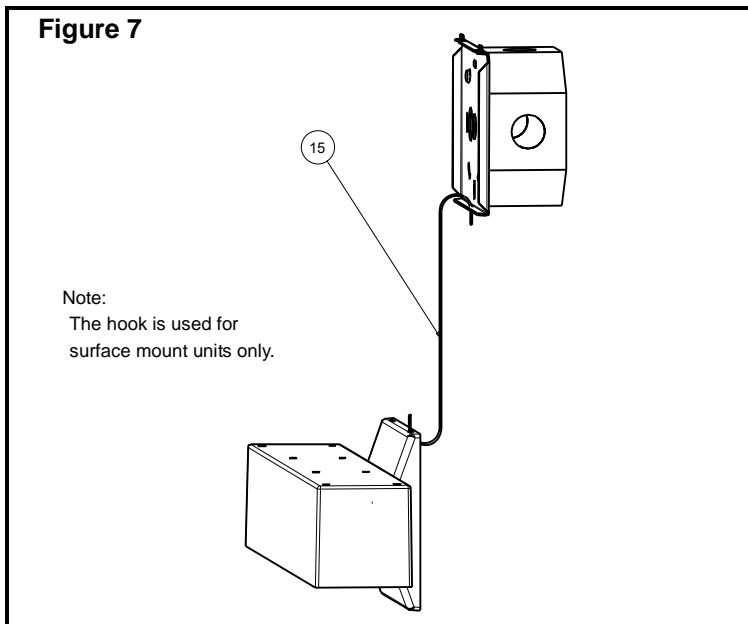
- c. Re-install the electronic module and the bracket, this time oriented as in (Figure 5c). Reconnect the transformer harness to the electronic module.
3. Recessed installation (figure 6). Attach the flat trim ring to the trim plate. Orient the trim ring and snap it with the two tabs behind the hooks of the side brackets.
4. **Electrical connection (Figures 8,9)**
  - a. Connect the long ground lead with eyelet from the back box to the trim plate assembly with the hardware provided.
  - b. Make the proper connections. The system can accept input voltages of 120 VAC to 347 VAC. For regular models connect the purple (line) and white (common) leads to the building utility (figure 8). For models with diagnostic feature connect the white (common) and black (120 VAC) or red (347 VAC) leads to the building utility (figure 9).
  - c. For remote power DC unites, connect the red wire to the positive of the DC supply and the blue to the negative (6 to 24 volts).
5. Take the trimplate assembly and connect the harnesses together with the back box mating colors.
6. Compress the retention springs and insert the trim plate assembly in the back box. Align the trim plate assembly flush with the back box, wall or ceiling installation.



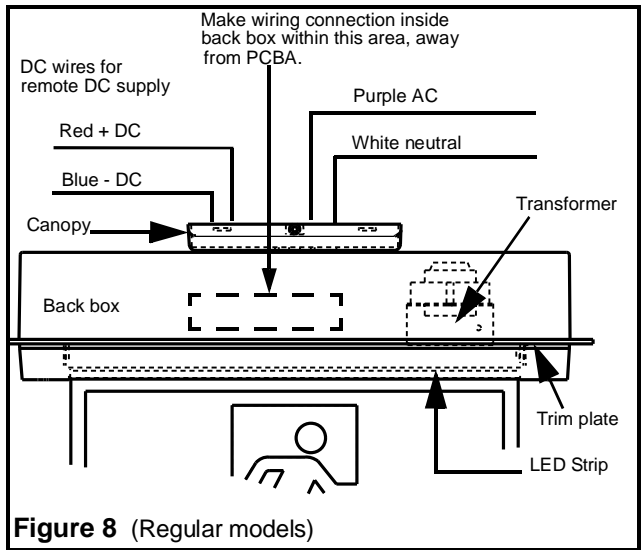
**Figure 5c**



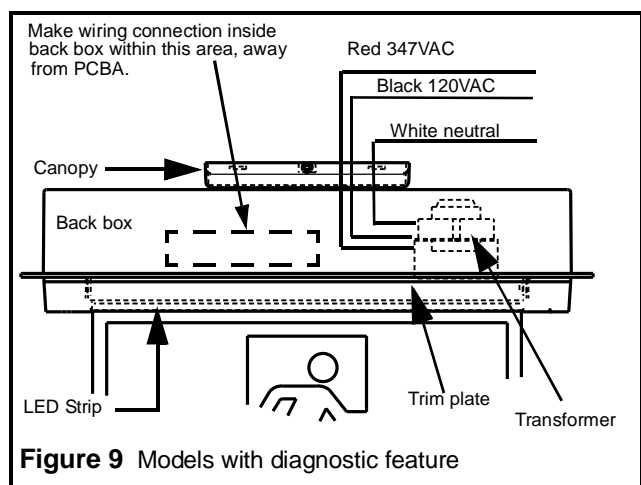
**Figure 6**



**Figure 7**



**Figure 8 (Regular models)**

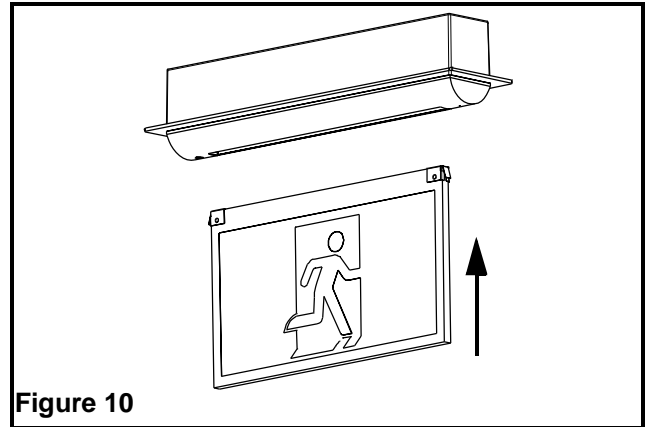


**Figure 9 Models with diagnostic feature**

**Pictogram panel installation (Figure 10)**

1. Remove the pictogram panel from its carton, do not remove the protective sleeve until the installation is complete.
2. Partially remove the protective sleeve at the top of the pictogram panel. Push the pictogram panel, with the clips, into the slot in the trim plate assembly until it snaps. Gently try to pull out the panel to ensure that it is engaged in the trim plate assembly. Remove the protective sleeve.
3. For self powered models, connect the two terminals (located on the red wires) together.
4. Energize AC circuit. Pictogram and green pilot indicator (self-powered models) will illuminate.

**IMPORTANT:** The pictogram panel can only be removed by lowering the trim plate and pushing on the end clip located on the opposite side of the test switch with a screwdriver.



**Self Powered models**

**Manual testing (Figure 11)**

Press test switch. Legend will flicker then will remain lit. On release an external green LED will illuminate and the automatic charger will restore battery to full power.

**Automatic testing and diagnostics (optional)**

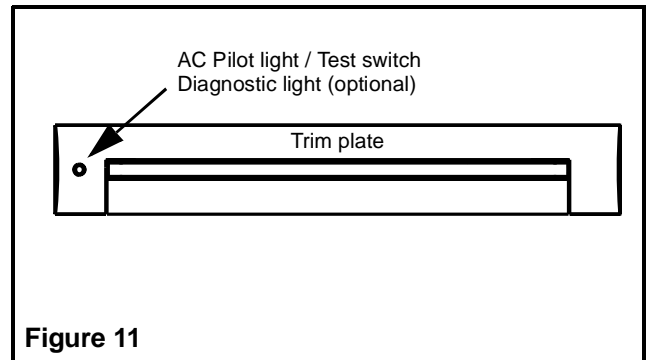
The models with the automatic testing and diagnostic option include a micro-controller which tests the unit on a monthly basis and identifies as well as displays failures of the electrical components: battery, charger circuit, LED lamps.

**Self-test**

The self-test is performed every 30 days for 30 seconds, every 60 days for 30 minutes, and annually for 90 minutes.

**Diagnostic function (Figure 11)**

The diagnostic function uses the pilot light LED indicator. Service is required if the green LED changes color to red indicating that an alarm condition is detected.



Pilot light	Status	Diagnostic
Green	Steady	Normal (AC On)
Green	Blinking	Auto Test
Red	Steady on	Battery Disconnect
Red	One Blink	Battery Failure
Red	Two Blinks	Charger Failure
Red	Four Blinks	LED Lamp Failure

**Maintenance**

None required. Models equipped with batteries: if AC supply is to be disconnected for 2 months or more, the battery must be disconnected (Self-Powered Models only).

**Note** — For safety reasons Nickel Cadmium batteries are shipped discharged. The units may require 10 minutes of connection to AC supply before start-up test procedure, and two to seven days to reach full charge.

**Warranty:** For the complete warranty information, please refer to the landing page of our website (<http://www.tnb.ca/en/products/emergency-lighting/>).