

# Aluminum Edge-Lit HV Pictogram Sign

## 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. Installation and service should be performed by qualified service personnel.
2. Cap unused wires.
3. Do not use outdoors.
4. Do not let power supply cords touch hot surfaces.
5. Do not mount near gas or electric heaters.
6. Use caution when handling batteries.
7. Equipment should be mounted in locations and at heights where it is not subject to tampering by unauthorized personnel.
8. Do not use with unauthorized accessory equipment.
9. Do not use for other than intended use.
10. Units to be installed only as per manufacturer instructions.

## SAVE THESE INSTRUCTIONS



### IMPORTANT:

Only install where there is adequate colour contrast between the sign legend and the interior wall finish behind the sign, to provide for sufficient visibility.  
For AC/DC models only:  
Designed to operate in a cold temperature environment as low as -30°C with controlled humidity and temperature.

## Installation Instructions

1. Turn off AC power.
2. Route AC circuit of rated voltage into junction box and leave 6" of wire length.
3. Remove the 2 bottom screws (8) from the cover front and set aside to reinstall later. (See Figure 1)
4. Manually unsnap cover (11) by lifting the bottom of the cover and remove.  
Note: if the cover is too difficult to lift, use a flat head screw-driver to gently pry the cover at the point indicated in Figure 1.

### Wall Mount (See Figure 1)

- a. Attach the AC supply leads to the extension wires supplied (follow the electrical wiring in Figure 3).
- b. Feed the supplied wires through the center hole of the spider plate and attach spider plate to the junction box.
- c. Feed the supplied wires through the center hole of the canopy and attach the canopy to the spider plate using the screws provided (5).
- d. Use a screwdriver to push the knock out towards the inside of the housing. Feed the supplied wires through the center hole and mount the housing to the canopy with the screws provided (7).

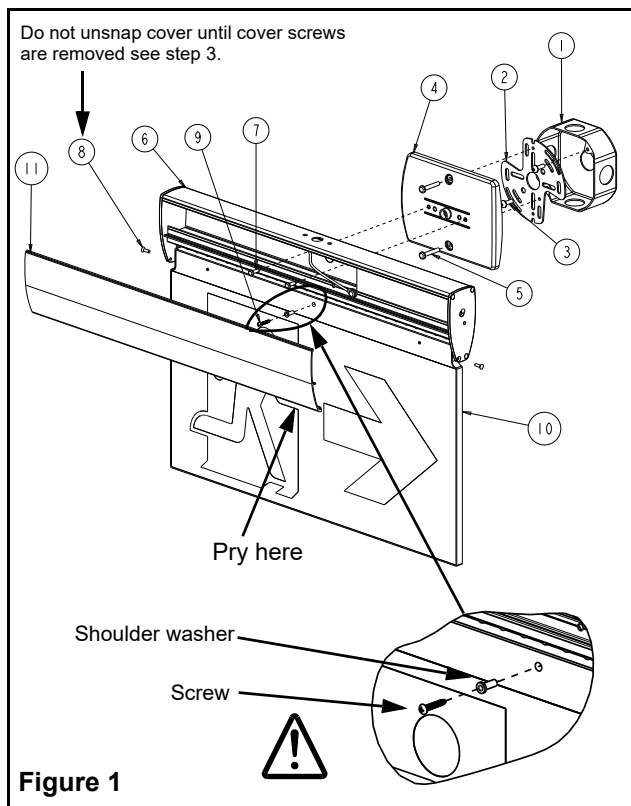


Figure 1

### Parts List

- |                                       |   |
|---------------------------------------|---|
| 1. Junction box (existing)            | 8. End cap screws                       |
| 2. Spider Plate                       | 9. Panel center screw & shoulder washer |
| 3. Junction box screws (not supplied) | 10. Pictogram panel                     |
| 4. Canopy                             | 11. Cover                               |
| 5. Canopy screws - long(2)            | 12. Lock Nuts                           |
| 6. Housing                            | 13. Plugs(3)                            |
| 7. Canopy screws - short(2)           | 14. Extension wires                     |

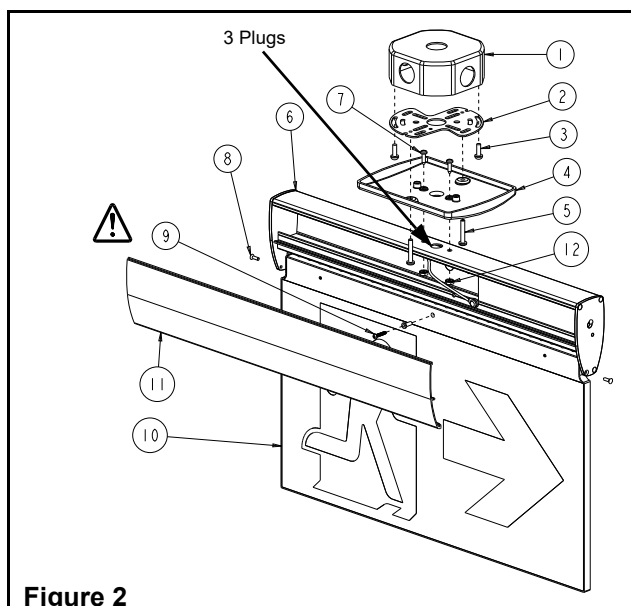


Figure 2

## Ceiling mount (See Figure 2)

- Remove plugs.
  - Fasten the canopy to the housing using screws (7) and lock nuts provided (12).
  - Attach the AC supply leads to the extension wires supplied (follow the electrical wiring in Figure 3).
  - Route the supplied wires through the center hole of the spider plate.
  - Fasten the spider plate to the junction box using the junction box screws (3).
  - Feed wires into the unit through the center hole of canopy.
  - Fasten the canopy/housing assembly to the spider plate using the screws provided (5).
- Electrical connections (see Figure 3):
    - For 120 to 347 VAC: Connect the purple and white leads to the building utility. Connect green ground wire to service ground or ground connection in junction box.
    - For 6 to 24 VDC (AC/DC models only): connect red wire to positive of DC supply and blue to negative.
  - Reinstall panel by placing on the 2 pins.  
Note: Ensure panel orientation is correct before completing step 9.
  - Attach panel to the center hole on housing using screw and shoulder washer provided.



### WARNING:

#### RISK OF SERIOUS INJURY.

Screw and shoulder washer (item 9 in Figures 1 & 2) must be installed to secure panel and prevent slippage during installation and maintenance.  
Front cover (11) must be secured using screws (8)(see step 10) except during installation or maintenance.

- Attach battery connector to its mating connector. (self-powered models only)  
Note: AC power must be initiated within 6 hours.
- Replace cover (11) by inserting it into the hinge groove at the top of the housing and pushing down until it latches. Secure cover with end cap screws (8).
- Reconnect the AC power.

## For self-powered models only

When unit is energized for first time or when charging the battery:

- The Green Pilot light will flash slowly (once every 4 every seconds)
  - When the battery is charged completely, the Green Pilot light will be ON steady
- Note: Allow unit 24 hours to charge before initial duration testing.

### Manual Testing (self-powered models only)

#### \*Function used on AD models only

Press test button as shown in table below for manual testing.

Action	Pattern	Time/Hold	System State	Description
Start a Test	Press Once	N/A	Normal	Start a 1 min. test
Stop a Test	Press Once	N/A	In Test	Stop the Test
*Reset test calendar	Press and Hold	3s	Normal	Next test is pushed back 8 hours
Soft Restart	Press and Hold	10s	Normal	System Reboot

### Manual annual test (self-powered non AD models only):

Disconnect the AC power. The unit will remain illuminated for 120 minutes.  
Once test is completed, reconnect AC power.

Note:

Final connections are to be made inside unit using extension wires provided.

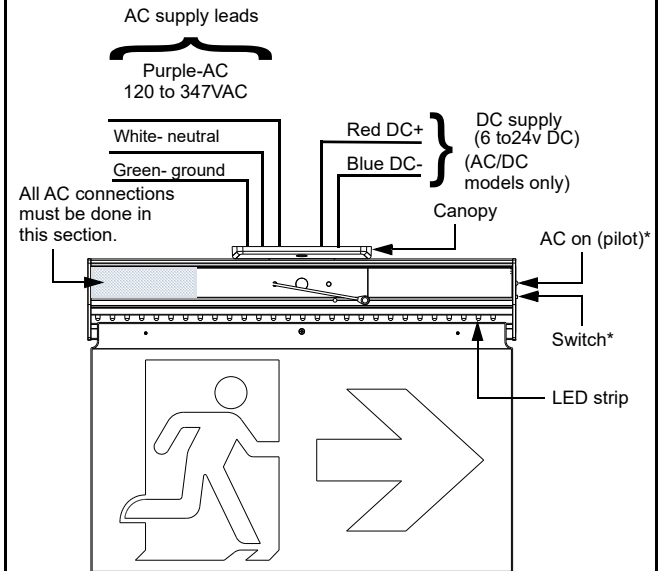


Figure 3

### Automatic Testing:

When AC power is first initiated the unit will perform a self-diagnostic test to verify that the battery, charger board and LEDs are functioning properly.

Once first test is completed an automatic self-diagnostic will be performed as per the following:

- 1 minute self-test every month
- 120 minutes self-test once a year

### Automatic Diagnostics:

If no faults are detected, the LED indicator will be steady green. If a fault is detected, check the tri-color LED indicator and the status description table for fault message.

### Status Description: \* status used for AD models only

Color	State	Message
○	Blank	AC OFF
●	*Red-Steady	Battery Disconnect
●	*Red-Flash slow 1X	Battery Failure
●	*Red-Flash slow 2X	Charger Failure
●	*Red-Flash slow 4X	LED Strip Failure
●	*Yellow-Flash slow 1X	Battery Low but Charging
●	Green-Steady	AC ON or Battery Fully Charged
●	Green- Flash slow Continuous	Battery Charging
●	Green- Flash fast Continuous	In Test

## Maintenance

None required. Unit should be tested monthly in accordance with safety codes and local codes. If AC supply to the unit is to be disconnected for 2 months or more, the battery must be disconnected.

**Warranty:** Refer to <https://tnb.ca.abb.com/en/brands/lumacell> in the Technical Information section.