

120VAC/277VAC  
EMERGENCY OR AC ONLY  
LED CAST EXIT  
SINGLE OR DOUBLE FACE

INSTALLATION AND OPERATING  
INSTRUCTIONS

## IMPORTANT SAFEGUARDS

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

## READ AND FOLLOW ALL SAFETY INSTRUCTIONS

All servicing should be performed by qualified personnel only.

Do not mount near gas or electric heaters.

Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.

Do not use this equipment for other than intended use.

Do not let power supply cords touch hot surfaces.

Do not mount near open flames or sparks.

Do not install equipment in areas of excessive moisture.

## SAVE THESE INSTRUCTIONS

**WARNING** - Shut off AC power to branch circuits to which units will be connected. All wiring should be per National Electrical Code and local regulations.

To maintain warranty, equipment with batteries must be installed or placed on charge within prescribed period after shipment.

Determine mounting method required and select appropriate instructions. Electrical hookups are to be made inside outlet box. All parts needed to mount the exit are supplied with the exception of wire nuts for AC supply connections.

## INSTALLATION INSTRUCTIONS

- A. Door of exit sign is hinged at the bottom. To open, insert screwdriver near finger grooves located on top of exit and turn. Pull exit face open. (See Figure 1)

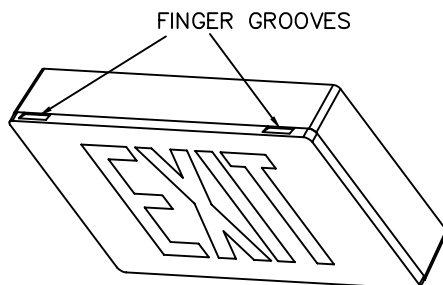


FIGURE 1

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- B. Remove Light Chamber Assy.
- C. Chevrons (left, right, or both) may be knocked out with a screwdriver and hammer. Bend back lens and knock out chevron from the **INSIDE** of the door.  
Support door when removing knockouts to prevent distortion.
- D. With appropriate chevron knockouts removed, peel backing from the double coated tape located around the exit stencil. Carefully install lens and press against tape to secure. (See Figure 2)
- E. Make provisions for assembling canopy (IF USED) to frame by removing top knockouts or either of the end knockouts as in Note 1C.
- F. If exit is to be SURFACE MOUNTED prepare frame backplate by removing appropriate knockouts in backplate as in Note 1C. (See Figure 3)
- G. Assemble canopy (IF USED) to exit frame with nipple and (2) nuts. **(See Figure 4 for proper orientation of canopy to exit frame.)**
- H. Replace Light Chamber Assy. Secure with (4) 8-32x3/8 Phillips pan head screws supplied in canopy kit. Be sure both green ground wires are secured if they were removed with chamber. (See Fig. 3) Dress wires to prevent shadowing.
- I. Route wires from light chamber through nipple or frame backplate.
- J. Secure crossbar to outlet box IF SURFACE MOUNTED.
- K. IF SURFACE MOUNTED, Route AC and Accessory wires, IF USED, thru knockout hole in backplate and mount exit frame to wall.
- L. Make AC service connections at this time as follows: (See Figure 5 & 6)

<b>120V INPUT</b>	<b>OR</b>	<b>277V INPUT</b>
Black wire to line		Red wire to line
White wire to common		White wire to common
Green wire to ground		Green wire to ground

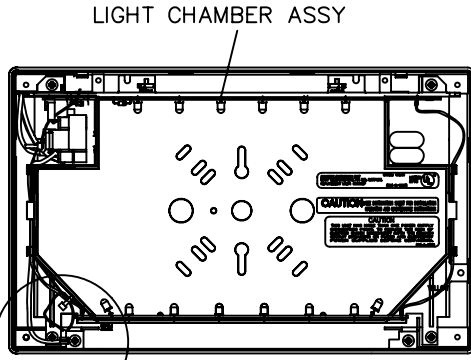
Unused primary wire must be insulated to preventing shorting.

**CAUTION:** At power up, if red and green led indicators toggle on and off in an alternating pattern, immediately turn off AC power and check AC wiring per the chart below. Fast flashing indicates high line voltage and slow flashing indicates low line voltage.

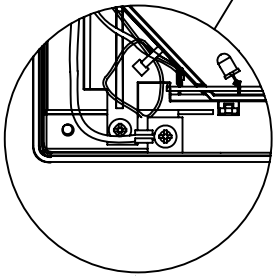
A hanger may be used to support exit while making AC service connections.

- M. If Fire Alarm Flasher option is Supplied:  
Connect one grey wire to 24VDC POSITIVE  
Connect other grey wire to 24VDC NEGATIVE  
Use wire nuts for connection, (not supplied)
- N. Mount canopy to crossbar using (2) 8-32x3/8 combo screws supplied in canopy kit.
- O. Energize AC and check that exit is illuminated.
- STEPS P AND Q FOR EMERGENCY OPERATION UNITS ONLY
- P. Press test switch and verify that pilot lamp shuts off and exit is illuminated.
- Q. Leave AC connected for a minimum of 24 hours before performing any extended testing. Full recharge of batteries may take up to one (1) week.

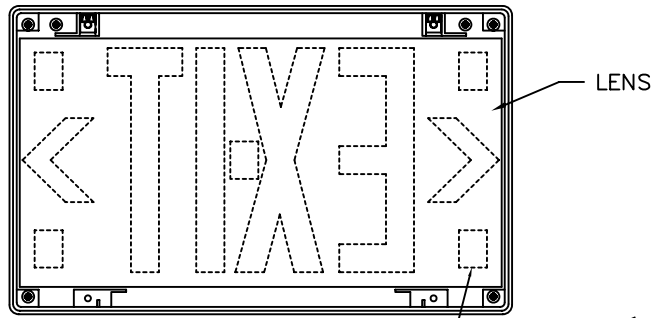
# CAST LED EXIT



EXIT DOOR NOT SHOWN.  
**FIGURE 3**

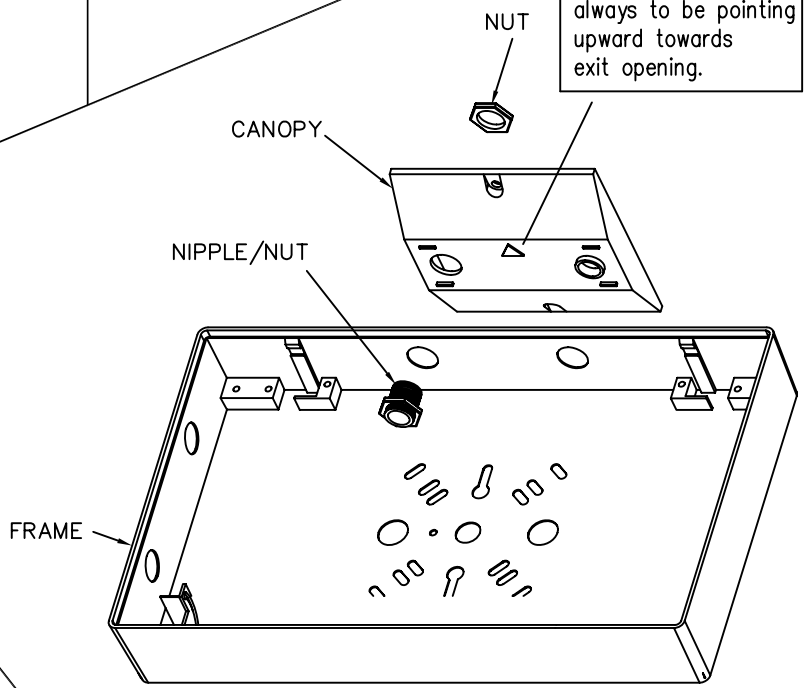


SECURE GROUND WIRES AND SMALL SQUARE PLATE ON TALL POST (ONLY IF THEY WERE REMOVED WHEN REMOVING KNOCKOUTS IN HOUSING)

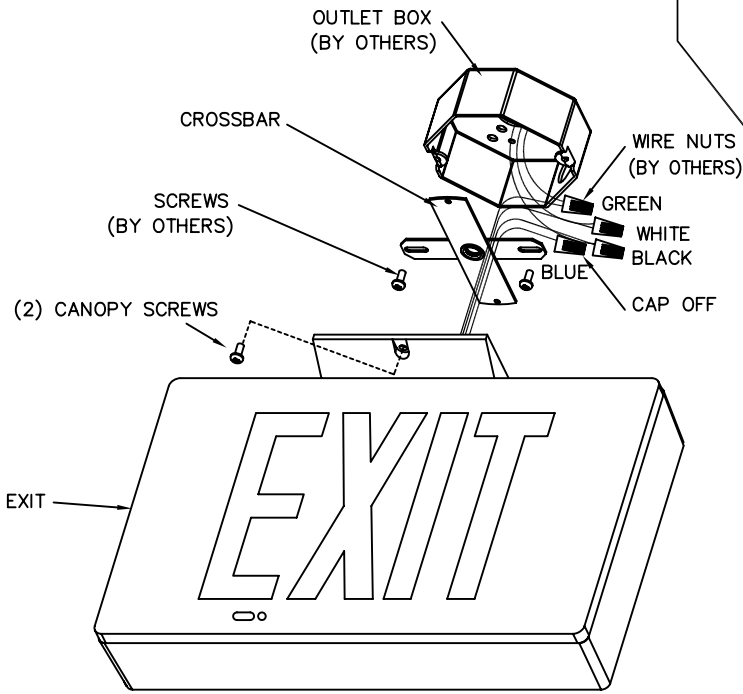


INSIDE VIEW OF DOOR  
**FIGURE 2**

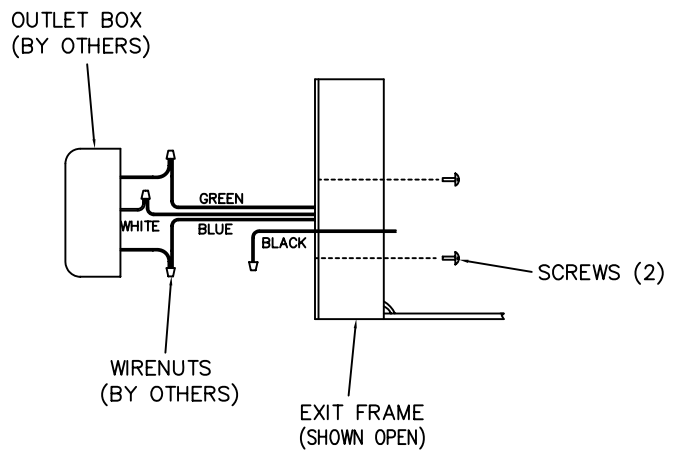
Canopy mounting orientation indicator always to be pointing upward towards exit opening.



DOOR NOT SHOWN.  
**FIGURE 4**



120V CONNECTIONS SHOWN  
**FIGURE 5**



277V CONNECTIONS SHOWN  
**FIGURE 6**

# SMARTCHARGER SYSTEM OPERATION

## (EMERGENCY OPERATION UNITS ONLY)

**Normal Power-Up Sequence** At power-up, the red and green LED indicators will alternately flash for one to two seconds. Next, the unit will go thru a "Power-Up Quick Test" with the green LED flashing quickly. If no power-up faults were detected, the green led will then flash slowly for up to 36 hours to indicate that the battery is charging. If any faults were detected during the "Power-Up Quick Test", these will be indicated by a flashing red LED indicator (see below for interpretation of flashing sequences). The red LED may be accompanied by a buzzer. This buzzer may be disabled by a short press of the test switch and will remain disabled for a period of 196 hours. After the fault has been corrected, the red led flash and buzzer will be cleared automatically and the unit will return to normal operation.

**Emergency Operation** Emergency operation occurs when AC power fails. The unit remains in this mode until AC power is restored. During emergency operation, both red and green LED indicators are disabled. Upon restoration of AC power, the green led will flash for up to 36 hours to indicate that the unit is in battery charging mode.

## User Interface

### Green LED indicator

- Steady On - AC power is present and battery is fully charged
- Slow Flash - Battery charging
- Fast Flash - Unit is performing an automatic or manually initiated self-test

### Red LED indicator

- Single Flash - Battery fault
- Double Flash - Lamp failure
- Triple Flash - Charger fault
- Quad Flash - Emergency transfer failure

(If more than one fault condition is present simultaneously, the red LED will flash each fault pattern in sequence, then repeat)

### Red and Green LED indicators together

- Slow flashing red and green - Low line voltage
- Fast flashing red and green - High line voltage

### Pushbutton test switch

- Long press (over 0.5 second) - Transfers unit to emergency (battery) operation as long as button is depressed
- Short press - initiates various self-tests.
  - One press - Cancel any self-test currently running
  - Two presses - Start 1 minute self-test
  - Three presses - Start 90 minute self-test
  - Seven presses - Forces a complete system reset

(The unit will allow up to seven 60-second tests during the first 24 hours of operation. Allow at least 24 hours for battery charging before performing any extended amount of testing.)

Buzzer - Sounds in unison with the flashing red LED if a fault is detected. May be disabled for up to 196 hours by a short press of the test switch.

IR Receiver - Used with the optional hand-held IR remote tester to initiate or cancel manual testing.