EVENLITE
LIVES DEPEND ON US

SENTRY SEN

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

1. Install in accordance with all national and local electrical codes.
2. Disconnect power at circuit breaker or fuse before installing or servicing the unit.
3. DO NOT mount in hazardous locations, near gas or near electric heaters.
4. DO NOT let power cords contact hot surfaces.
5. Equipment should be mounted in locations and at heights where it will not be readily subject to tampering by unauthorized personnel.
6. DO NOT use accessory equipment not recommended by the manufacturer. The use of such equipment may cause unsafe conditions and will void the unit's warranty.
7. DO NOT use this equipment for other than its intended purpose.
8. All servicing should be performed by qualified personnel only.
9. Allow battery to charge for 24 hours before first use.
10. For indoor use only, unless WL (Wet Location) option is selected.

SAVE THESE INSTRUCTIONS

2575 Metropolitan Drive • Trevose, PA • 19053 U.S.A
Telephone: (215) 244-4204 • Fax: (215) 244-4208

FACEPLATE REMOVAL

Open the enclosure and separate panels using a flat blade screw driver (as shown below).

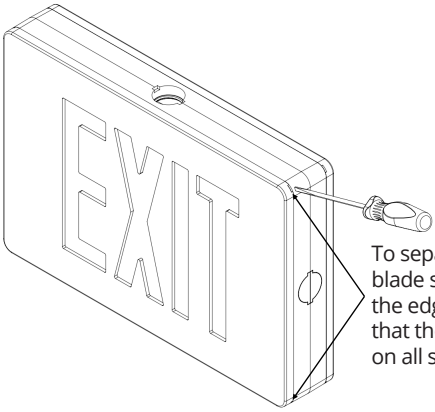


FIGURE 1: Opening the Sign

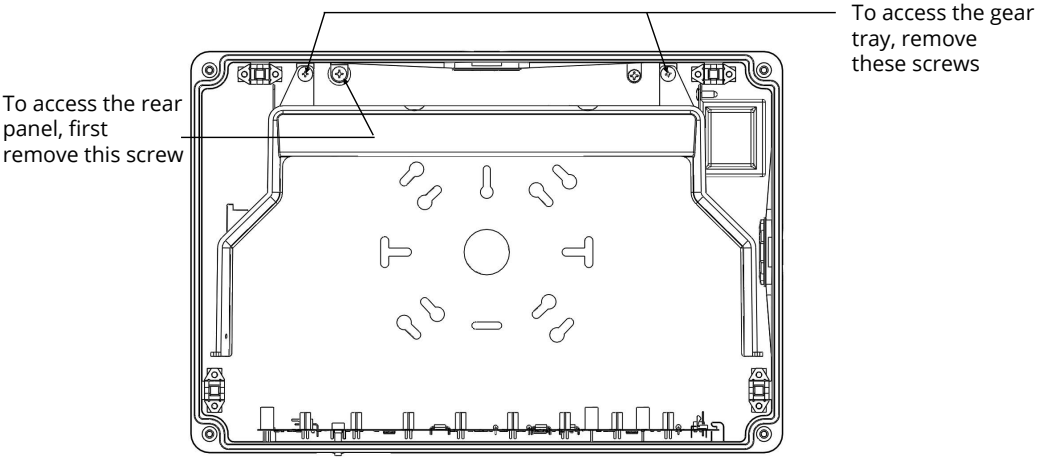


FIGURE 2: Removal of Screws to Open the Sign

KNOCKOUTS AND CHEVRONS

Support the rear panel on spacers and punch out appropriate knockouts to fix the junction box.

(For Back Mount Configuration)

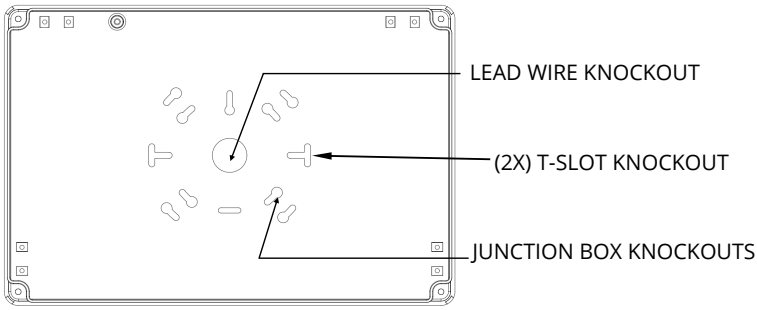


FIGURE 3: Rear Panel Knock Outs

To remove the directional indicators, remove light guide assembly and diffusers and set aside. Support front cover and knocked out desired indicators.

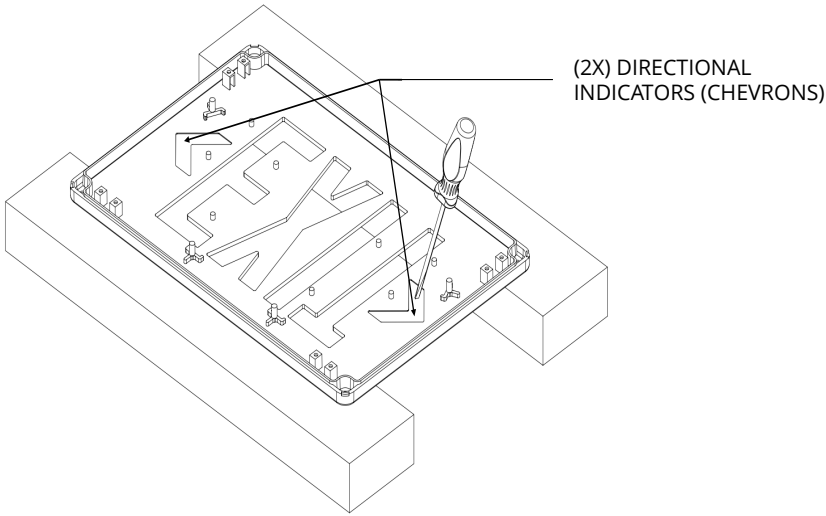


FIGURE 4: Removing the Directional Indicators

TRANSFORMER WIRING

****Before installing unit, disconnect power at breaker panel****

Dual Circuit Input: Mixed voltages may be used. (Example: 120V Utility Power, 277V Emergency Power)

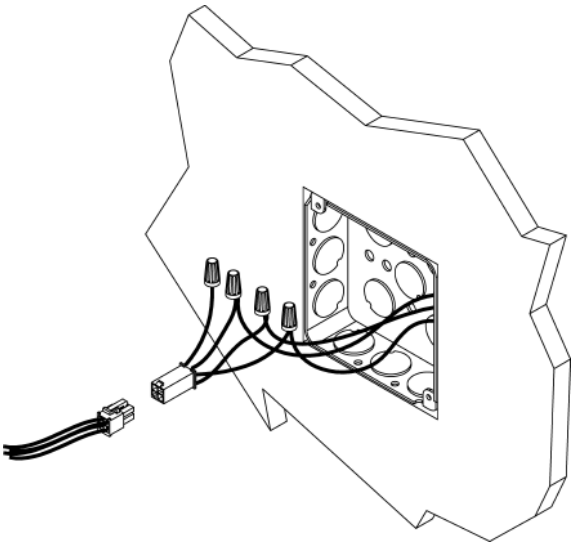


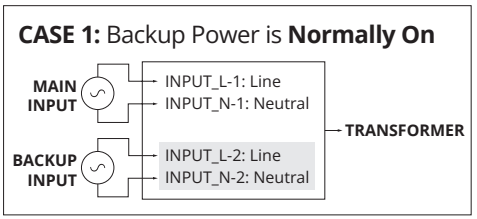
FIGURE 5: SINGLE CIRCUIT APPLICATION - LEAD WIRE CONNECTIONS TO TRANSFORMER

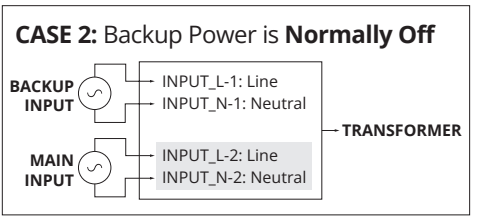
TWO CIRCUIT INPUT OPTION (AC VERSIONS ONLY)

For AC versions with dual circuit input, connect power to the input wires as follows (refer to case 1 and case 2 diagrams below):

Case 1 (Backup power is Normally On): Connect main power to input 1 and backup power to input 2.

Case 2 (Backup power is Normally Off): Connect backup power to input 1 and main power to input 2.





INSTALLATION INSTRUCTIONS

BACK MOUNT:

1. Remove the panels (Refer to Figure #1 and #2) and route the transformer's primary leads through the center knockout of the sign. NOTE: When connections are being made local regulations must be followed.

2. Connect the power plug from the sign to the power receptacle, then push it back into the junction box.

3. Ensure that the wires are routed towards the rear of the sign and are not visible when inspecting the sign from the front face.

4. Snap the front panel into place to complete the assembly process.

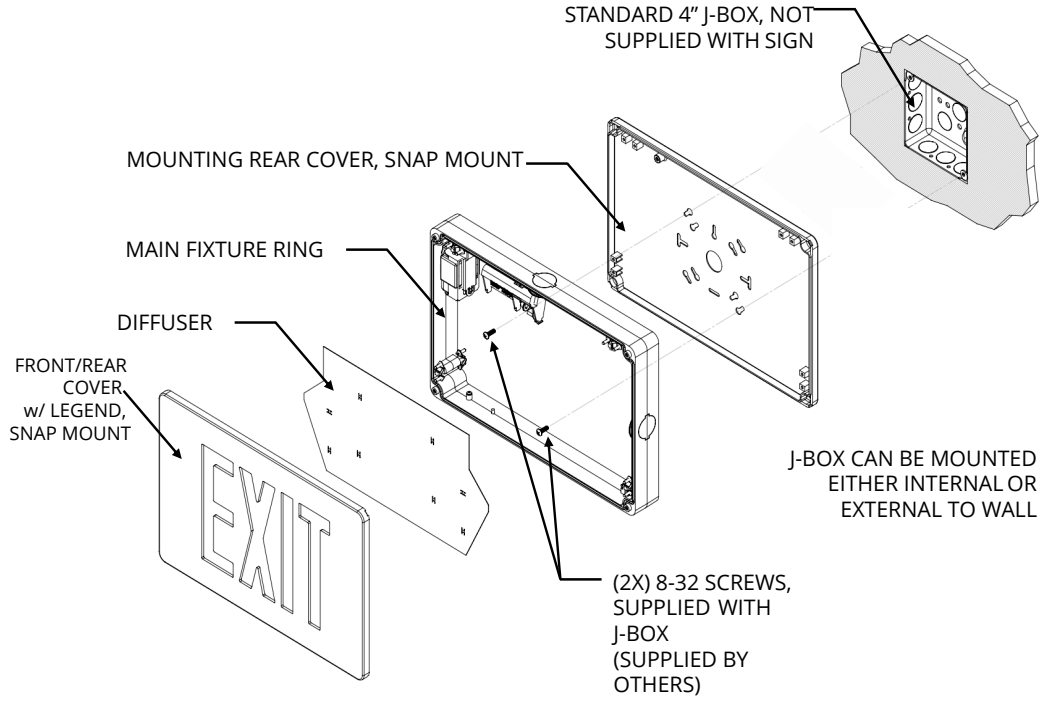


FIGURE 6: BACK MOUNT ASSEMBLY (SINGLE FACE)

CEILING MOUNT:

1. Remove the panels (Refer to Figure #1 and Figure #2) and begin by attaching the power plug to the power receptacle and then push it back into the junction box. Install the spider plate onto the junction box.

2. Secure the spider plate firmly to the junction box. Next, route the transformer's primary leads through the top knockout of the sign.

3. Secure the canopy to the spider plate by using (2) screws supplied.

4. Remove the screw and washer holding the top plug assembly together. Then raise the sign to the canopy and ensure the sign sits flush to the canopy., Secure using canopy conduit nut ensuring it is tighten securely.

5. Ensure that the wires are not visible when inspecting the sign from the front face.

6. Snap on the front and rear panel to complete the assembly process.

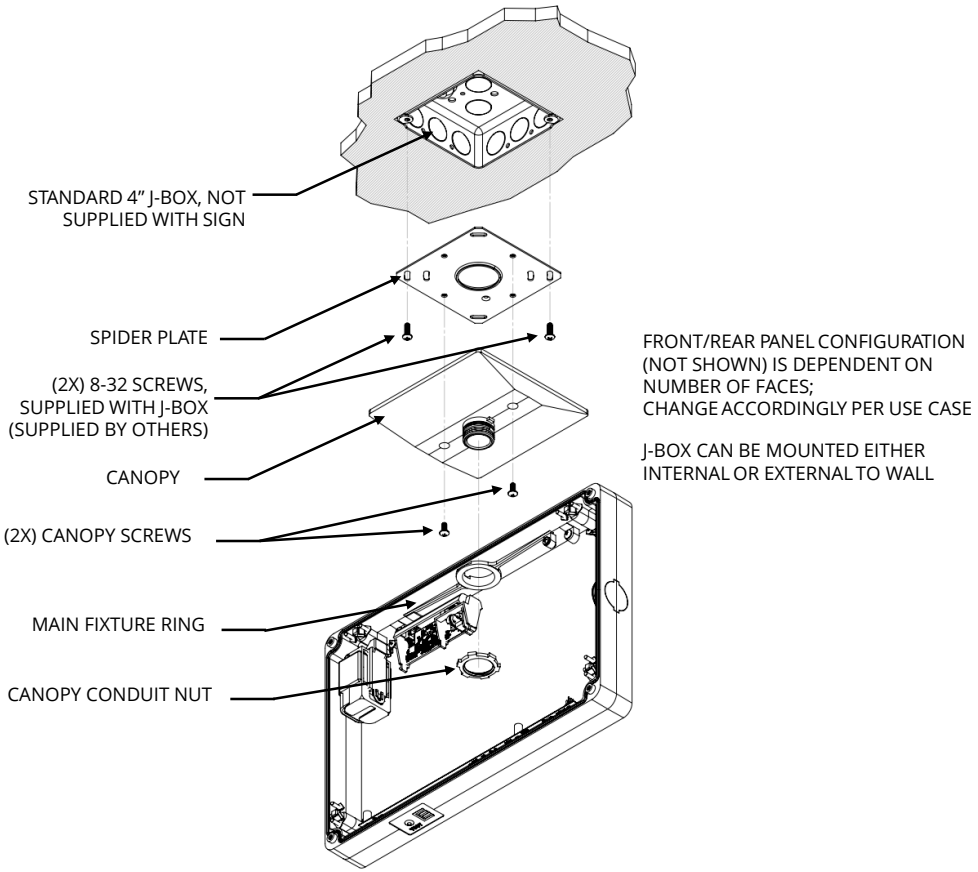


FIGURE 7: CEILING MOUNT (SINGLE OR DOUBLE FACE)

FLAG MOUNT:

1. Remove the panels (Refer to Figure #1 and #2) and begin by attaching the power plug to the power receptacle and then push it back into the junction box. Install the spider plate onto the junction box.
2. Secure the spider plate firmly to the junction box.
3. Secure the canopy to the spider plate by using (2) screws supplied.
4. Remove the screw and washer holding the side plug assembly together. Next, route the transformer's primary leads through the side knockout of the sign.
5. Then raise the sign to the canopy and ensure the sign sits flush to the canopy.
6. Secure using canopy conduit nut ensuring it is tighten securely.
7. Ensure that the wires are not visible when inspecting the sign from the front face.
8. Snap on the front panel and rear panel to complete the assembly process.

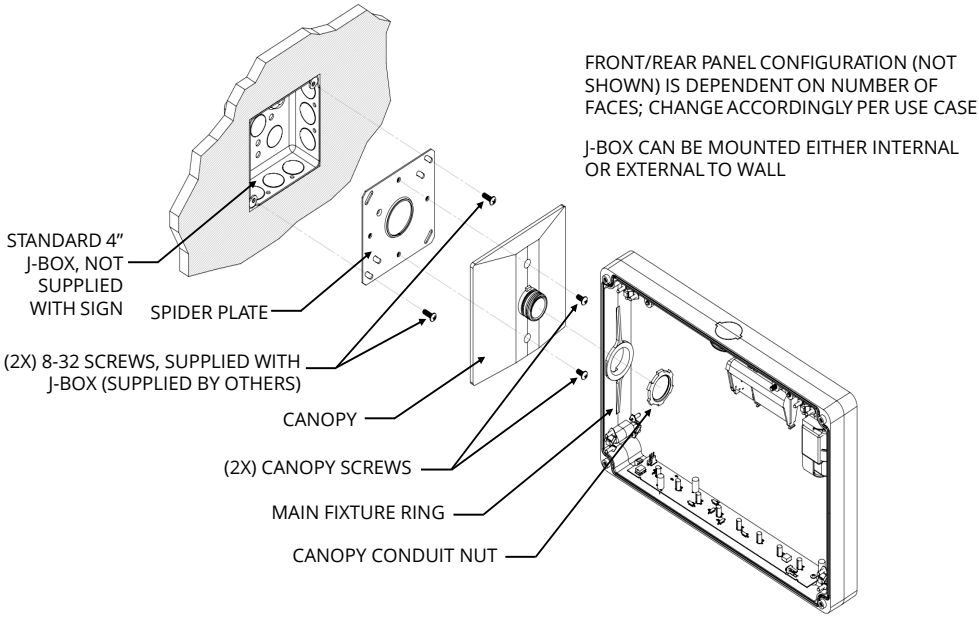


FIGURE 8: FLAG MOUNT (SINGLE OR DOUBLE FACE)

CONDUIT ENTRY MOUNT INSTALLATION (SINGLE FACE SIGN)

1. Remove the panels (Refer to Figure #1 and Figure #2) and begin by plugging the provided wire whip into the power receptacle located in the main-frame. **NOTE: When connections are being made local regulations must be followed.**

2. Thread the conduit adapter onto the conduit (supplied by others).

3. Feed conduit nut over transformer lead inside the unit.

4. Remove the screw and washer holding the side plug assembly together. Next, route the transformer's primary leads through the side knockout of the sign.

5. Feed the transformer plug through the top or side plug and connect to wire whip.

6. Insert the sign into the conduit adapter, ensure sign sits flush to the adapter. Secure using canopy conduit nut ensuring it is tighten securely.

7. Thread on the nut to complete the assembly process.

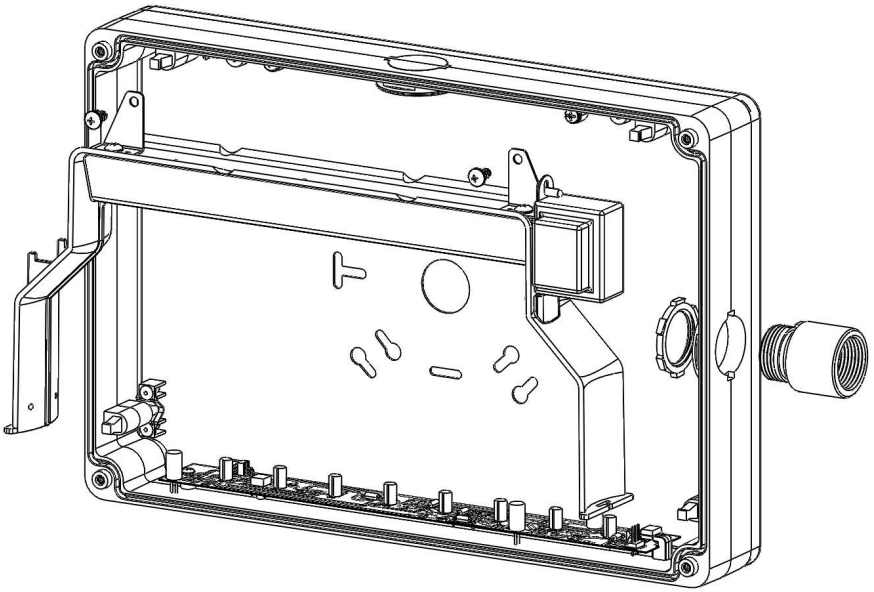


FIGURE 9: CONDUIT ENTRY MOUNT (SINGLE FACE)

INDOOR HANG-STRAIGHT PENDANT MOUNT ASSEMBLY

1. Insert pendant stem/universal joint assembly through the saddle.

2. Attach the housing to the pendant coupling with the attachment nut, set aside the assembly.

3. Affix the spider plate to the junction box.

4. Attach the saddle (from the pendant assembly) to the canopy with the provided screws.

5. Connect wires according to local codes.

6. Attach canopy to the spider plate with the provided screws.

7. Remove the top and side housing plugs and interior washers from the sign.

8. Raise the sign.

9. Snap on the front and rear covers.

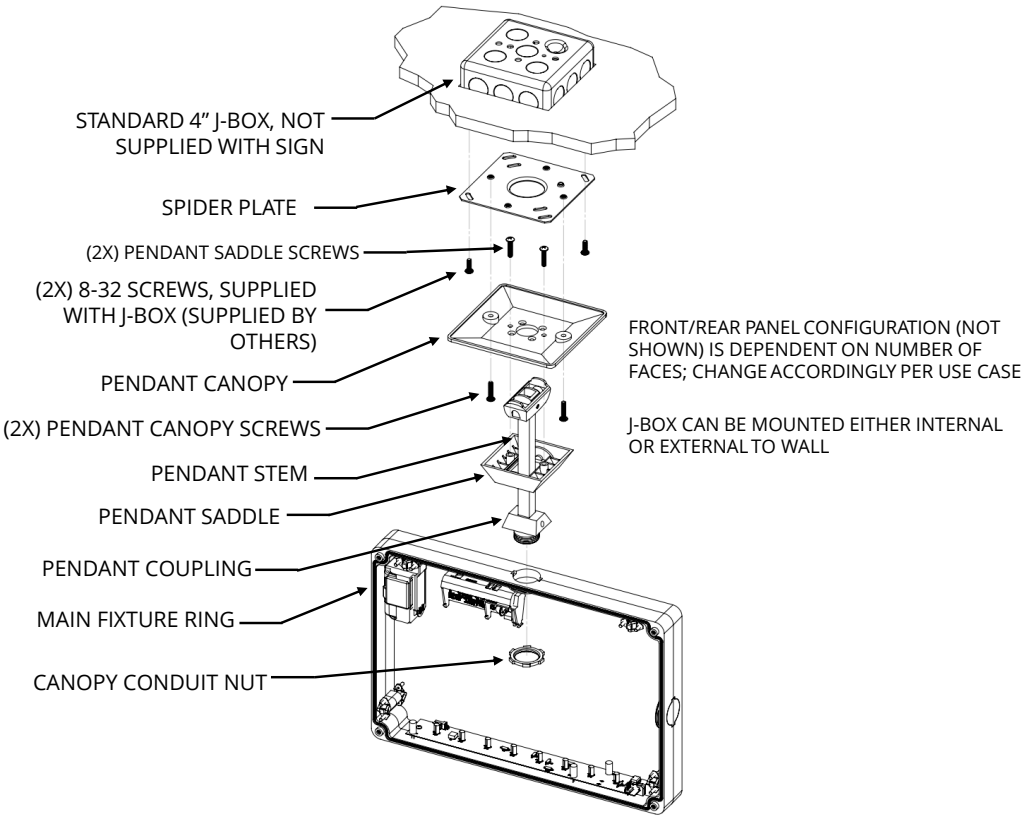


FIGURE 10: PENDANT MOUNT (SINGLE OR DOUBLE FACE)

FLASHER AND FIRE ALARMS

Battery backup signs equipped with “FLASH IN EMERGENCY MODE” option which will automatically flash/beep in emergency mode but not flash/beep on AC operation. AC only signs equipped with the flasher option which will flash continuously while power is supplied.

AC only and Battery Backup signs equipped with the FIRE ALARM SIGNAL or FLASH options will automatically flash/beep in both AC and emergency modes upon application of a fire alarm signal to the BLACK & RED 22 AWG leads. The fire alarm signal can be either AC or DC of either polarity and range from 12 to 24 volts. The current draw from the fire alarm signal is less than 10 milliamps.

Units that include one of the above options are intended in locations where such features are permitted by local codes. Flash rate 60/min, duty cycle: 50%

TEST FOR BATTERY BACKUP WITHOUT SELF-DIAGNOSTICS FEATURE

The test (EM) battery backup units, use the test switch to simulate AC power outage. The indicator light will go out and the sign will remain lit, indicating transfer to emergency mode; and remain lit on battery power until switch is released. Release of switch will automatically restore AC/battery charge mode, with indicator light on. Testing for longer periods is best accomplished by turning off AC circuit power. Signs should be tested in accordance with National Electrical Code and NFPA 101 Life Safety Code requirements, which specify monthly testing for 30 seconds and yearly testing for 90 minutes. Note that the batteries will take some time to reach full charge after a prolonged test, and that the unit cannot provide full duration operation should a real power outage occur before the batteries have had an opportunity to reach full charge. It is recommended that long duration tests be limited to once yearly and be conducted when the area will be unoccupied afterwards.

SELF-DIAGNOSTICS OPERATING INSTRUCTIONS

This unit meets requirements of NFPA 101 for period testing of emergency lighting equipment. It provides visual indication of unit malfunctions including “Charger Fault”, “Transfer Fault” and “Lamp Fault”.

SELF-DIAGNOSTICS

The unit will perform a self-test and diagnostic function at least once every 28 days. The self-test will disable the charger and turn on the LEDs for 5 minutes to check the lamp load and battery. The test will be performed only if the battery is fully charged. If not, the test will automatically reschedule. Charger function is monitored continuously.

USER-TEST

A user-test may be performed at any time the status display is continuously green. On initial power-up, it could take up to 72 hours for the status display to reach continuous green.

With a fully charged battery, pressing the test switch momentarily will initiate a 30 second test. Holding the test switch for 4 seconds will initiate a 90 minute test.

Either test can be canceled by pressing the test switch again for 1 second.

INFRARED REMOTE TESTING

To activate TRANSMITTER, remove tab from the back of the device.

The USER-TEST can be performed up to 20 feet away using the optional "INFRARED REMOTE TESTING TRANSMITTER". By aiming the transmitter at the legend face and pushing either the "30 SECOND" or "90 MINUTE" button for 1 second. The behavior of the exit sign is the same as when the user tests are initiated from the local test button.

STATUS INDICATORS:

STATUS DISPLAY	MEANING	ACTION
Continuous Green	Battery in Float / Trickle Charge	None
Continuous Red	Battery High Charging	Wait for Green Status
Flashing Green	In Test Mode	Wait for Test to Complete
Alternate Red & Green	Insufficient Charge for User Test	Wait for Full Charge
Red Single Blink (ON / Pause)	Transfer System Failure	Factory Service
Red Three Blinks (ON / Pause)	Charger Failure	Factory Service
Red Five Blinks (ON / Pause)	Lamp Failure	Check Remote Connection / Factory Service

BATTERY REPLACEMENT

To replace battery, disconnect branch circuit and detach unit from junction box. Unplug battery connector from printed circuit assembly.
For the **EM Sentry II**, the unit will be supplied with a Nickel Cadmium (Ni-Cd) battery, replace with part number **B310023** only.

For the **SD Sentry II**, the unit will be supplied with a Nickel Metal Hydride (Ni-MH) battery, replace with part number **B350009** only. Do not interchange battery types.

Used batteries may not be disposed of in the municipal solid waste stream. For information on local recycling drop-off points, phone toll free 1-800-BATTERY (1-800-228-8379).

Sentry II SD Battery Replacement Only:
Using the Remote:

- Press and hold the 90 seconds test button for up to 10 seconds until the LEDs turn off on their own.

Using the Test Button:

- Press and hold the switch for up to 10 seconds until the LEDs turn off on their own. During both procedures: The red/green **INDICATOR** light will **FLASH** erratically for 10 seconds and then change to solid red once the main LEDs turn off. This indicates that the battery reset has been triggered.

NOTE: The fixture will not respond to any remote or switch operations until the battery conditioning is complete, which may take a few hours. However, it will respond to power loss, but full run-time is **NOT** guaranteed until both conditioning and 24-hour charge cycles are completed.

MASTER CONFIGURATION

The self-diagnostic system "learns" the exit load when the unit reaches full charge for the first time. It is therefore necessary to have any remote exits already connected when first applying AC power. Subsequent self-tests and user-tests will compare the actual exit load to the "learned value".
If the remote exit load is changed once it has been learned, it is necessary to disconnect AC power at the circuit breaker panel and unplug the internal battery. Once these are reconnected, the unit will "learn" the new exit load.

The SENII has the capability to power a Remote Lamp **OR** a low-level Exit sign, not both at the same time.

REMOTE SIGN CONFIGURATION

The remote sign is assembled in the same manner as the master sign, without a spider plate assembly. An option connector is also installed in the remote sign for interconnection to the master sign.

Interconnect the signs with a 2-conductor cable (**22 awg minimum, supplied by contractor**), per the National Electric Code, White (Positive) and Blue (Negative) wires. The run should be a distance of 50 feet or less.

REMOTE LAMP CONFIGURATION

To install remote lamp (3.6V,3W max - not shown), the option connector is installed similarly in the master sign as shown in (Figure 13). Terminate remote lamp leads to the option connector in mating pins labeled "Remote Lamp". Remote Lamp max mounting height to be 11ft or the

equivalent.

COMPATIABLE REMOTE LAMPS:

1. TELESIS PRW LED
   (PRWLED1MV)

2. (TCRH1)

TROUBLESHOOTING

PROBLEM
Lamp failure indicated when there's no lamp failure.

SOLUTION
The product may have calculated a larger lamp load when the lamp load calculation was performed at the first self-diagnostic function test. To reset the lamp failure status, remove the unit from the wall, disconnect the battery, wait 30 seconds, reconnect the battery, reinstall the unit onto the mounting plate.

The lamp current calculation will be perfrmed on the next self-test/self-diangostic test.

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