INSTALLATION INSTRUCTIONS
SURFACE MOUNT EDGE-LIT LED EXIT SIGN
Standard & New York Approved Model

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

CAUTION: The battery in this unit may not be fully charged. After electricity is connected to unit, let battery charge for at least 24 hours, then normal operation of this unit should take effect. To check, press the TEST button. The lamps on the unit should turn on.

IMPORTANT SAFEGUARDS: When using electrical equipment, basic safety precautions should always be followed, including the following:
1. Consult local building code for approved wiring and installation.
2. Disconnect AC power before servicing and installation.
3. Do not mount near gas or electric heaters.
4. Do not use outdoors.
5. Do not use this equipment for anything other than its intended use.
6. The use of accessory equipment not recommended by the manufacturer will void product listing and warranty and may cause an unsafe condition.
7. Any service on this equipment should be performed by qualified personnel only.
8. Equipment should be mounted in locations and at heights where it will not be subject to tampering by unauthorized personnel.
9. Use caution when servicing batteries.
10. Cap unused wires with enclosed wire nuts or other approved method.
11. Make sure wire terminations are secure and leads are properly tucked in appropriate wire channels.

INSTALLATION INSTRUCTIONS
Choose mounting configuration (end, top or back mount). Plug remaining holes with the appropriate color plugs.
1. Secure canopy bracket to ceiling or wall.
2. Open the housing cover.
3. Secure housing and canopy with screws (see mounting configuration).
4. Feed the AC input leads (red, black, white) through the housing and canopy's center hole. Refrence wiring diagrams on back and connect AC input leads to AC power supply leads.
5. Secure canopy into canopy bracket with 1-1/2" long #8-32 screws, then insert battery terminal wire into two-pin male connector.
6. Connect battery only after continuous AC power can be provided to the unit.
7. Snap housing cover into place.
8. Apply Chevron directional indicators as required. Remove application templates when finished.

INSTALLATION (END MOUNT):
1. Secure canopy to end plate of fixture using mounting holes C and E with (2) 3/4" # 10-24 screws (included).
2. Run connection wires through large hole between mounting holes C and D.
3. Make electrical connections and mount canopy to junction box (or spider plate if required) using the two recessed mounting holes and (2) 1-1/2" #8-32 screws (included).

INSTALLATION (TOP MOUNT):
1. Secure canopy to top of fixture using mounting hole A with 3/4" #8-32 screw and hex nut, and 1/2" center hole (between mounting holes B and C) with threaded nipple and hex nuts (included).
2. Run connection wires through threaded nipple.
3. Make electrical connections and mount canopy to junction box (or spider plate if required) using the two recessed mounting holes and (2) 1-1/2" #8-32 screws (included).

TOP MOUNT

BACK MOUNT

END MOUNT

SAVE THESE INSTRUCTIONS!

SURFACE MOUNT EDGE-LIT LED EXIT SIGN
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INSTALLATION (BACK MOUNT):
1. Mount canopy to junction box (or spider plate if required) using the two recessed mounting holes and (2) 1-1/2" #8-32 screws.
2. Run connection wires through large hole in center of canopy.
3. Secure fixture to canopy with (2) 3/4" #10-24 screws (included) by going directly into mounting holes A and C.
4. Make electrical connections.

TESTING:
National Electric Code (NEC) and NFPA life safety code regulations require that routine tests need to be performed as listed below:
Once every month, the unit needs to be tested for duration of 30 seconds. Push in and hold the test switch to perform this test.
Once every 12 months, a full 90 minute (per UL requirements) test needs to be performed on the unit. Disconnect power to the unit and leave it in the emergency mode. The lamps should stay ON for at least 90 minutes.

OPERATION:
1. Apply AC power to the sign. The LED Indicator should turn RED.
2. After the battery has been left to charge for 2 hours, test the sign by pushing the switch. The LED indicator turns OFF and the sign should remain ON.
3. When the switch is released, the lamps turn OFF and the LED indicator turns back to RED.
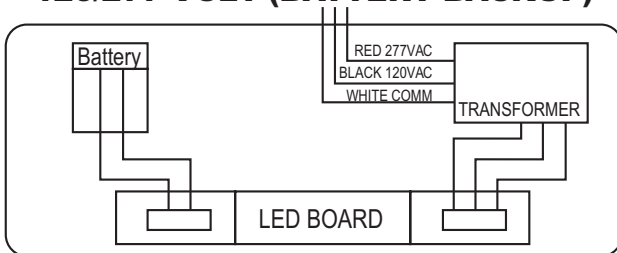
MAINTENANCE:
Caution: Always turn off AC power to the equipment before servicing. Servicing should be performed only by a qualified service technician. Use only MANUFACTURER supplied replacement parts.
1. BATTERY: The battery supplied in this equipment requires no maintenance. However, it should be tested periodically (see TESTING) and replaced when it no longer operates the connected fixtures for the duration of a 30-second or 90-minute test. The battery supplied in this equipment has a life expectancy of 5-7 years when used in a normal ambient temperature of 72°F.
2. OTHER: Clean exit panel with non-abrasive cloth and cleaner when required.
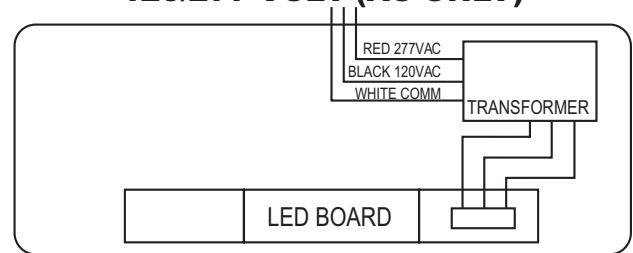
WIRING DIAGRAMS:
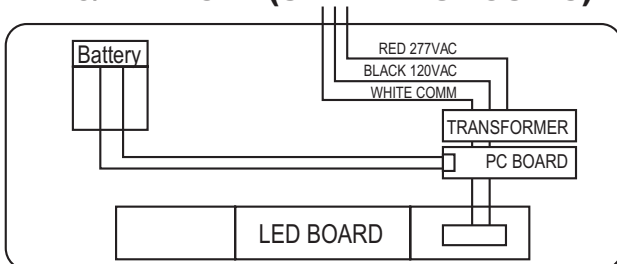NOTE: Unused input lead must be properly insulated with wire nut or other approved method.
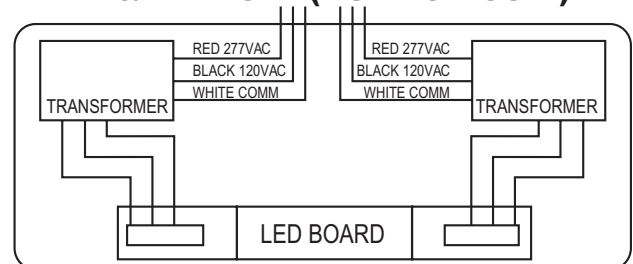
120/277 VOLT (BATTERY BACKUP)

Battery
RED 277VAC
BLACK 120VAC
WHITE COMM
TRANSFORMER
LED BOARD

120/277 VOLT (AC ONLY)

RED 277VAC
BLACK 120VAC
WHITE COMM
TRANSFORMER
LED BOARD

120/277 VOLT (SELF DIAGNOSTIC)

Battery
RED 277VAC
BLACK 120VAC
WHITE COMM
TRANSFORMER
PC BOARD
LED BOARD

120/277 VOLT (DUAL CIRCUIT)*

RED 277VAC
BLACK 120VAC
WHITE COMM
RED 277VAC
BLACK 120VAC
WHITE COMM
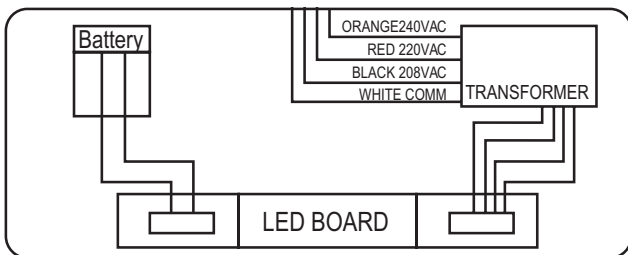TRANSFORMER
TRANSFORMER
LED BOARD

SURFACE MOUNT EDGE-LIT LED EXIT SIGN
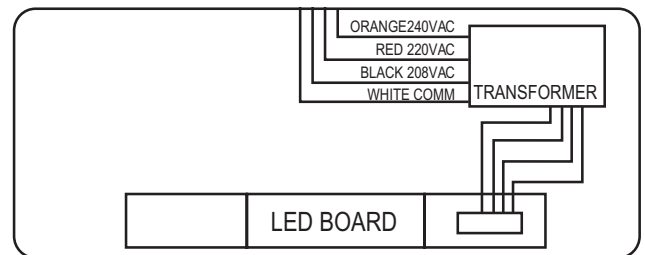### Standard & New York Approved Model

WIRING DIAGRAMS:

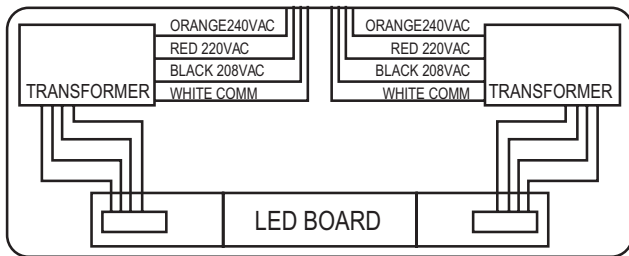NOTE: Unused input lead must be properly insulated with wire nut or other approved method.

208/220/240 VOLT (BATTERY BACKUP)

```
Battery
                    ORANGE 240VAC
                    RED 220VAC
                    BLACK 208VAC
                    WHITE COMM   TRANSFORMER

           LED BOARD
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208/220/240 VOLT (AC ONLY)

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                    ORANGE 240VAC
                    RED 220VAC
                    BLACK 208VAC
                    WHITE COMM   TRANSFORMER

           LED BOARD
```

208/220/240 VOLT (DUAL CIRCUIT)*

```
              ORANGE 240VAC        ORANGE 240VAC
              RED 220VAC           RED 220VAC
              BLACK 208VAC         BLACK 208VAC
TRANSFORMER   WHITE COMM           WHITE COMM    TRANSFORMER

                    LED BOARD
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* Not available in New York Approved models.

INSTRUCTION FOR SELF-DIAGNOSTIC TEST:

1. Introduction
Once the unit is properly installed according to the Installation instruction sheet and AC power is supplied, the EXIT will come ON. The dual-color LED indicator will also come ON, automatically initiating the self-diagnostic test function. The LED indicator points out the current unit status. A STEADY GREEN on the LED indicator indicates a normal service; BLINKING GREEN indicates that the unit is in testing mode; GREEN/RED FLASHING indicates that the battery is charging; RED (STEADY and BLINKING) would indicate a fault or a service alert. Refer to section 3 – Fault Indication for more details. The LED indicator would be OFF when the unit is in Emergency mode.

2. Self – Diagnostic Service
The self-diagnostic function is factory preset without any field adjustment. The automatic self-diagnostic feature serves the following tests –
a.   On-line real time monitoring of battery and LED(s): Identifies battery charging, disconnection and failure along with LED failures.
b.   Self-testing and a 30-second discharge once every 30 days (conforming to NFPA code requirements), after AC power has been supplied for a minimum of 24 hours.
c.   Self-testing and a 30-minute discharge once every 180 days, after AC power has been supplied for a minimum of 24 hours.
d.   Self-testing and a 90-minute discharge once every 365 days (conforming to NFPA code requirements), after AC power has been supplied for a minimum of 24 hours.

3. Fault Indication

FAULT DESCRIPTION	LED INDICATION
Battery disconnection	STEADY Red
Battery recharge failure	FLASHING Red
Battery failure	Red BLINKING '2' times
LED failure	Red BLINKING '3' times

* A battery recharge failure is more likely seen after a monthly or annual auto-discharge
** A battery failure is more likely seen when the unit goes into a monthly/annual discharge test and/or fails to run the LED strip for the designated amount of time in Test/Emergency mode

4. Manual Testing
This unit also provides for manual testing by pushing the test switch in a specific pattern. The different patterns and the resulting tests are listed in the table below.

ACTION	REACTION AND LED INDICATION
Push test button Once (within 2 seconds)	30-second test: FLASHING Green
Push test button Twice (within 2 seconds)	30-minute test; Green BLINKING '2' times
Push test button Thrice (within 2 seconds)	90-minute test; Green BLINKING '3' times
Push and Hold test button (for 3-5 seconds)	Interruption
Push and Hold test button (for more than 6 seconds)	System reset

5. Operation
During an electrical power failure, the LED strip will transfer into Emergency mode and stay LIT for a minimum of 90 minutes. To test this unit, the battery needs to be charged initially for 2 hours before depressing the test switch (to do manual test). On pressing the test switch, the LED strip will transfer into a SIMULATED Emergency mode with the LED indicator FLASHING/BLINKING Green. The LEDs will turn OFF after 30 seconds/30 minutes/90 minutes respectively.