

LED INDUSTRIAL NEMA4X & NSF RATED EXIT SIGN

IMPORTANT SAFEGUARDS

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

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Do not let power supply cords touch hot surfaces.
2. Do not mount near gas or electric heaters.
3. Turn off electrical power before and during installation.
4. Turn off electrical power before opening unit for maintenance or servicing.
5. Use caution when handling batteries. Battery acid can cause burns to the skin and eyes. Avoid possible shorting.
6. Equipment should be mounted in locations and at heights where it will not readily be subject to tampering by unauthorized personnel.
7. The use of accessory equipment not authorized by the manufacturer may cause an unsafe condition.
8. Do not use this equipment for other than its intended purpose.
9. Servicing of this equipment should only be performed by qualified service personnel.

WALL MOUNT INSTALLATION

1. Extend AC of rated voltage nearby to the unit into recessed junction box (supplied by others). This circuit should NOT be energized/live at this time.
2. Remove the six screw caps and the six mounting lens screws until the EXIT lens is detachable.
3. Separate the lens and EXIT panel assembly (three pieces) from the housing (Figure 1).
4. Determine the appropriate knockouts (K/O) to remove for mounting to the junction box. Support area around the knockouts and remove them using a hammer and screwdriver. Remove one of the 3/4" knockouts in the center and route the fixture supply wires through it.
5. Place the gasket provided, between the fixture's backplate and the junction box. Route the fixture supply wires through one of the circular holes in the center of the gasket.
6. Refer to the "Wiring Diagrams" section and make electrical connections inside the junction box using the wire nuts provided. Cap off the unused (Red or Black) lead. Complete battery connection for units with batteries.
7. Using the two screws provided and the previously removed K/O holes, mount the fixture to the surface over the recessed junction box. Tighten the screws enough to compress the gasket to ensure a good sealed joint.
8. Remove one or both of the directional indicators from the EXIT panel, as needed.
9. Reinstall the lens and EXIT panel assembly using the stainless screws kit (six plastic caps, six screws and twelve O-rings). Tighten the screws enough to compress the O-rings to ensure a good sealed joint. Be careful to not overtighten, as that could damage the front lens.
10. Apply power. For units with battery, allow the unit to charge for 24 hours before testing it in emergency mode.

CEILING OR END-MOUNT INSTALLATION

1. Extend AC of rated voltage nearby to the unit into recessed junction box (supplied by others). This circuit should NOT be energized/live at this time.
2. Remove the six screw caps and the six mounting lens screws until the EXIT lens is detachable.
3. Separate the lens and EXIT panel assembly (three pieces) from the housing. Detach the interior frame by removing the (4) frame mounting screws (Figure 2).
4. Remove the knockouts in the top or lateral side of the housing using a hammer and screwdriver. Detach the small gasket from the sheet and place it between the housing and the mounting canopy. Secure the canopy to the fixture housing using the nipple assembly and lock nuts.

CEILING OR END-MOUNT INSTALLATION (Contd.)

- Route the fixture supply wires through the gasket, canopy and spider plate. Refer to the "Wiring Diagrams" section and make electrical connections inside the junction box using the wire nuts provided. Cap off the unused (Red or Black) lead. Complete battery connection for units with batteries.
- Place the square gasket piece provided between the spider plate and the junction box. Secure the spider plate to the junction box using the mounting screws provided. Tighten the screws enough to compress the gasket to ensure a good sealed joint.
- Attach the canopy to the spider plate using the (4) screws and rubber O-rings. Tighten the screws enough to ensure a good sealed joint.
- Remove one or both of the directional indicators from the EXIT panels, as needed. Install the lens and EXIT panel assembly using the stainless screws kit (six plastic caps, six screws and twelve O-rings). Tighten the screws enough to compress the O-rings to ensure a good sealed joint. Be careful to not overtighten, as that could damage the front lens.
- Apply power. For units with battery, allow the unit to charge for 24 hours before testing it in emergency mode.

INSTALLATION WITH MOUNTING BRACKETS

- Extend AC of rated voltage nearby to the unit into recessed junction box (supplied by others). This circuit should NOT be energized/live at this time.
- Remove the (2) side gaskets from the gasket sheet provided and attach the sheet to the fixture backplate.
- Mount the (2) surface mounting brackets provided onto the backplate and secure using the screws provided.
- Place the housing on the required surface. Drill (4) holes using the brackets holes as a drilling template and fix the mounting anchors inside the holes.
- Remove the six screw caps and the six mounting lens screws until the EXIT lens is detachable.
- Separate the lens and EXIT panel assembly (three pieces) from the housing (Figure 1).
- Remove the appropriate knockout (K/O) on the backplate using a hammer and screwdriver. Route the fixture supply wires through the opening on the backplate and the gasket attached to it.
- Refer to the "Wiring Diagrams" section and make electrical connections inside the junction box using the wire nuts provided. Cap off the unused (Red or Black) lead. Complete battery connection for units with batteries.
- Remove one or both of the directional indicators from the EXIT panel, as needed.
- Reinstall the lens and EXIT panel assembly using the stainless screws kit (six plastic caps, six screws and twelve O-rings). Tighten the screws enough to compress the O-rings to ensure a good sealed joint. Be careful to not overtighten, as that could damage the front lens.
- Mount the fixture to the surface using the (4) mounting screws and previously installed screw anchors.
- Apply power. For units with battery, allow the unit to charge for 24 hours before testing it in emergency mode.

LED STATUS INDICATOR KEY and TROUBLESHOOTING

LED status	Indication	Action to take
Red	<ol style="list-style-type: none"> Battery connection is not made Battery has been diagnosed as dead or defective after 24 hours of continuous charging with AC power supplied 	<ol style="list-style-type: none"> Make connection; or if battery is connected, disconnect battery for eight seconds and then reconnect. Replace the battery.
Green	Battery is connected, AC power has been supplied and fixture is in charging state.	This is the normal state. No action required.
Unlit	AC power has not been supplied or unit is in EM mode	Supply AC power or wait until utility power is restored

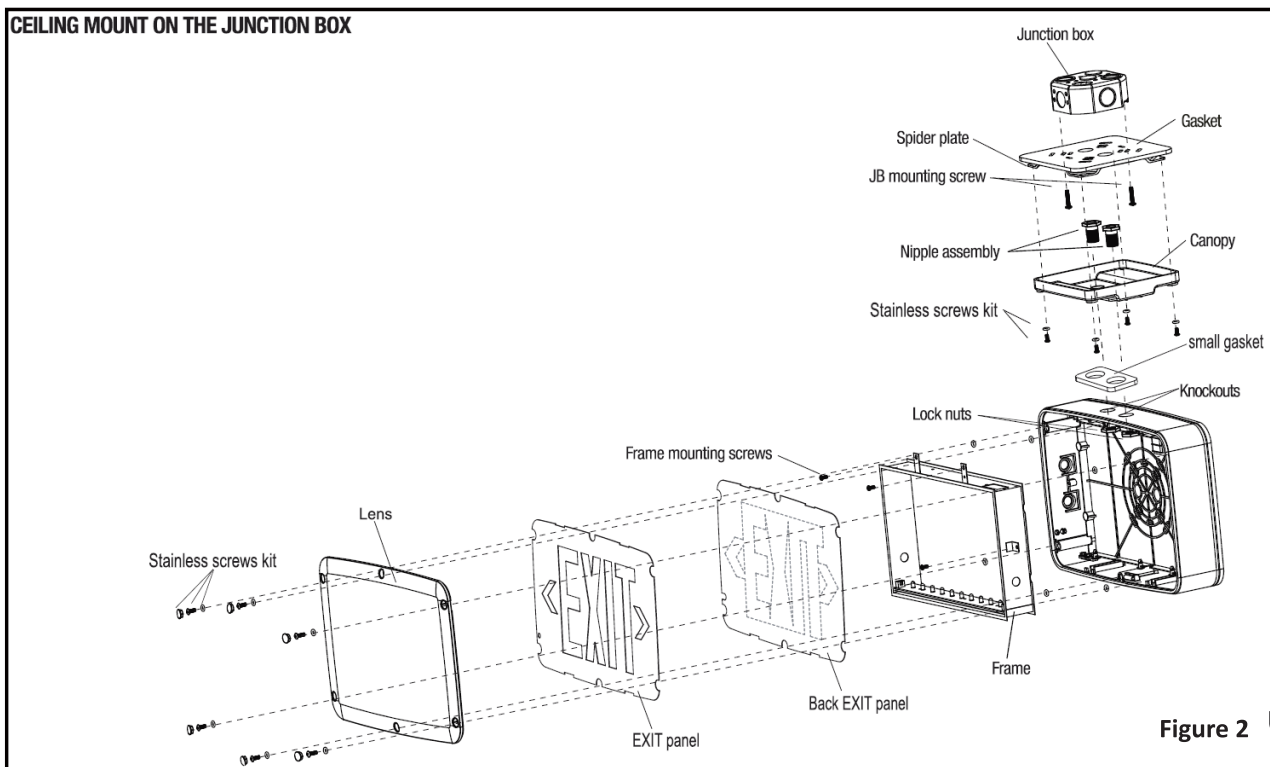
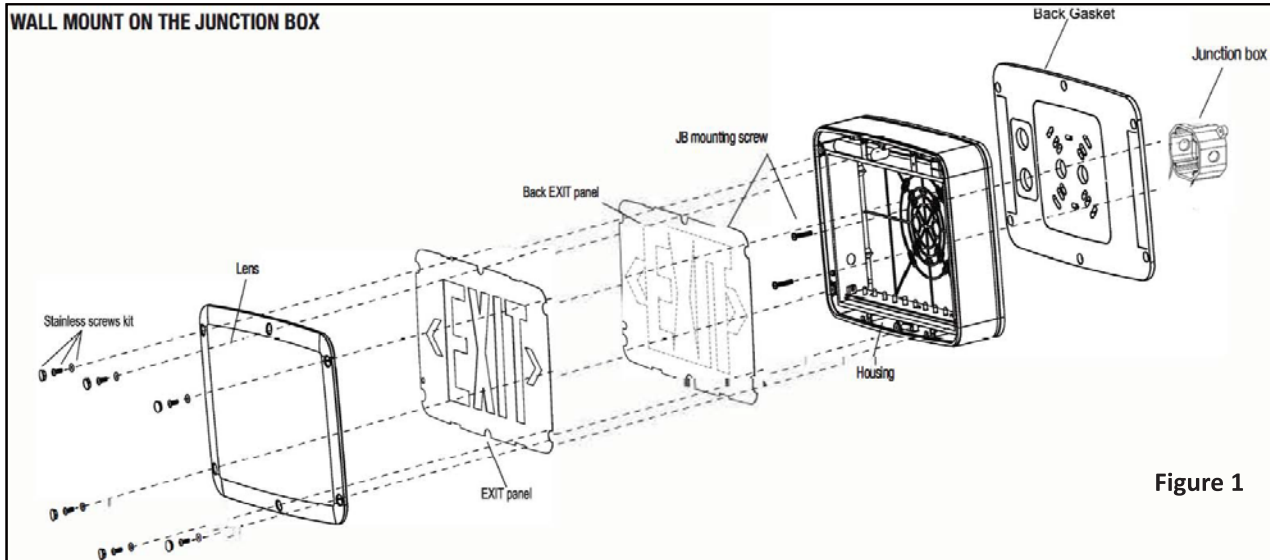
MAINTENANCE

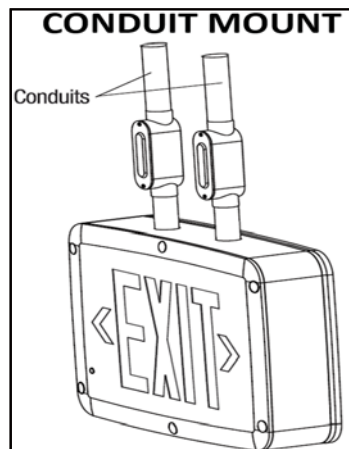
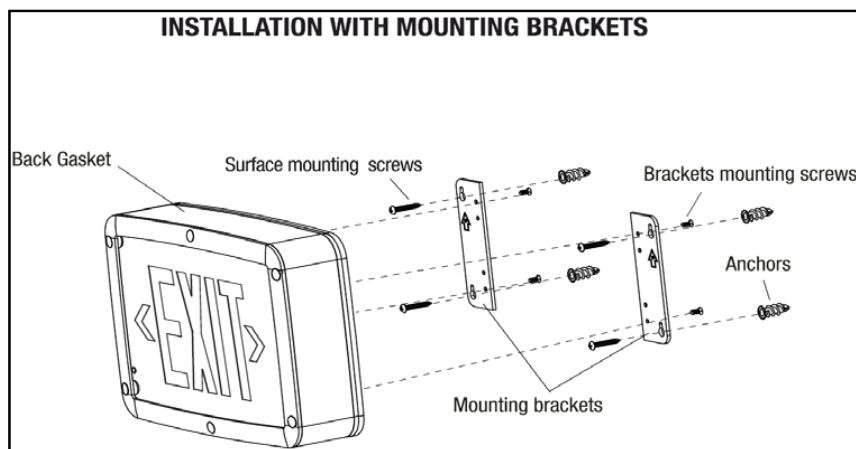
Caution: Always turn off AC power to the equipment before servicing. Servicing should be performed only by a qualified service technician. Use only MANUFACTURER supplied replacement parts.

BATTERY: The battery supplied requires no maintenance. However, it should be tested periodically and replaced when it no longer operates the connected unit for the duration of a 30-second or 90-minute test.

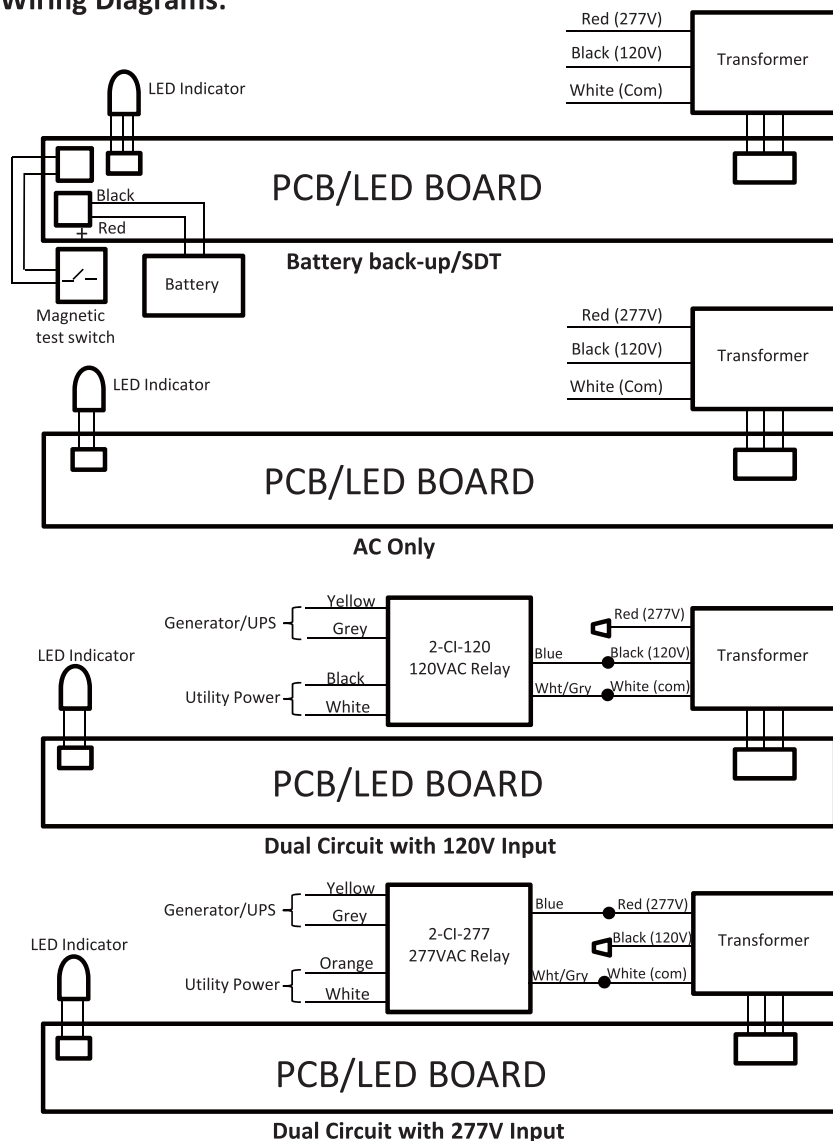
OPERATION & TESTING

National Electric Code (NEC) and NFPA 101 current Life Safety code requirements 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. Place and hold the magnet near the magnetic switch on the fixture 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 EXIT should stay ON for at least 90 minutes. Written records of the testing are to be kept for examination by the authority having jurisdiction.



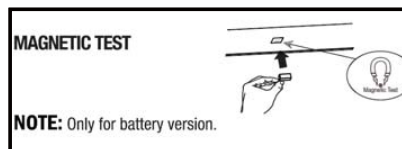
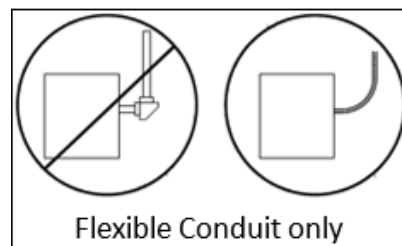


Wiring Diagrams:



CONDUIT MOUNT INSTALLATION

1. Remove the six screw caps and the six mounting lens screws until the EXIT lens is detachable.
2. Separate the lens and EXIT panel assembly (three pieces) from the housing. Detach the interior frame by removing the (4) frame mounting screws (Figure 2).
3. Remove the knockouts in the top or lateral side of the housing using a hammer and screwdriver.
4. Attach UL LISTED and SUITABLE FOR WET LOCATIONS conduit to the fixture housing.



LED INDUSTRIAL EXIT SIGN SELF-DIAGNOSTIC INSTRUCTION SHEET

Introduction

Once the unit is properly installed according to the Installation instructions 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. Refer to "Fault Indication" section for more details. The LED indicator would be OFF when the unit is in Emergency mode.

Self-Diagnostic Service

The self-diagnostic function is factory preset without any field adjustment. The automatic self-diagnostic feature serves the following tests -

- On-line real time monitoring of battery and LED(s): Identifies battery charging, disconnection and failure along with LED strip failures.
- 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.
- Self-testing and a 30-minute discharge once every 180 days, after AC power has been supplied for a minimum of 24 hours.
- 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.

Fault Indication

Function	LED Indication
Battery fully charged	STEADY Green
Unit in test mode	Flashing Green
Battery Recharge	Red and Green (flashing alternatively)
Battery Disconnected	STEADY Red
Battery Recharge Failure*	Flashing Red ('4' times)
Battery Failure**	Flashing Red
LED Strip Failure	Flashing Red ('2' 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.

Manual Testing

This unit can also be manually tested using the magnetic test switch. Place the magnet (provided) on the unit (near the section marked as "Magnetic Test") and pull away (at least 3 cm from the unit). This will force the unit to run a 30-second discharge test.

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 24 hours before using the magnetic test switch (to do manual test). In the test mode, the LED strip will transfer into a SIMULATED Emergency mode with the LED indicator FLASHING Green. The LED strip will continue to stay on after 30 seconds.