



SLED/ALED Series LED Exit Signs

Installation Instructions

IMPORTANT SAFEGUARDS

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

READ AND FOLLOW ALL SAFETY INSTRUCTIONS:

NOT SELF TESTING PER ANSI/NFPA 101

- Do not use outdoors.
- Do not let power supply cords touch hot surfaces.
- Do not mount near gas or electric heaters.
- Use caution when servicing batteries. Battery acid can cause burns to skin and eyes. If acid is spilled on skin or in eyes, flush acid with fresh water and contact a physician immediately.
- Equipment should be mounted securely in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the MANUFACTURER may cause an unsafe condition.

CAUTION: When this equipment is furnished with a halogen cycle lamp, these additional safeguards apply:

- a. To avoid shattering, do not operate lamp in excess of rated voltage, protect lamp against abrasion and scratches and against liquids when lamp is operating. Dispose of lamps with care.*
 - b. Halogen cycle lamps operate at a high temperature. Do not store or place flammable materials near lamps.*
- The AC voltage rating of this equipment is specified on the product label. Do not connect equipment to any other voltage.
 - Do not use this equipment for other than its intended purpose.
 - Servicing of this equipment should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

PRE-INSTALLATION

1. Extend an unswitched, 24 hour AC supply of rated voltage to the area of exit sign installation. **Caution: Do not energize the AC supply until indicated.**
2. Remove the front metal stencil and diffuser panel from the exit sign. On **SLED** Series models, remove the screw at the bottom of the sign and slide the stencil and diffuser down and out of the retaining track. On **ALED** Series models, push the stencil and diffuser upwards and remove them by pulling them out at the bottom and then down.
3. Remove the canopy mounting kit from inside the exit sign (if provided)
4. On double face (-3) models, remove front and rear stencils and diffusers. On universal (-5) single/double face models being converted to double face configuration using spare stencil and diffuser supplied, remove the backplate in the following manner:
 - a) On **SLED** Series models, remove the screw at the bottom of the backplate, then slide it down and out of the retaining track.
 - b) On **ALED** Series models, push the backplate upwards and remove by pulling it out at the bottom and then down.
5. On **SLED** and **ALED** Series models supplied with top-mounted power packs, remove the power pack cover and any packing material from inside of the housing. On high capacity (**HBP-SLED** and **HBP-ALED**) emergency models, remove all packing material from the power pack housing and if the sign is to be ceiling canopy mounted, remove the unit battery as well for ease of assembly.
6. **SLED** and **ALED** Series models are designed for wall, ceiling or end mounting (except as noted in literature sheets). Mount the sign according to the following appropriate procedures:

WALL MOUNTING

1. Remove the appropriate mounting pattern knockouts in the exit backplate to accommodate the electrical box screws. Also remove the round center wire pass knockout in the mounting pattern.
2. Route the transformer input wires (including ground) neatly through the sign, out through the wire pass knockout and into the electrical box.
3. Make electrical connections as follows:

All standard models are furnished with a dual voltage 120/277VAC field selectable input.

- a) **For 120VAC operation**, connect the **black** transformer lead to the utility AC supply hot conductor.
- b) **For 277VAC operation**, connect the **orange** transformer lead to the utility AC supply hot conductor.

Note: A brown lead is used in place of black and orange leads on special models with voltages from 200V to 250 V.

- c) Connect the **white** transformer lead to the utility AC supply neutral conductor.
- d) Make **green** wire building ground connection in compliance with governing code.

CAUTION: Cap and tape unused transformer lead. Failure to do so will create an unsafe and potentially harmful condition.

4. Secure the exit housing to the electrical box using the screws supplied with the box.
5. Follow "**FINAL ASSEMBLY**" procedures as outlined in this manual to complete the installation.

CEILING OR END MOUNTING (USING CANOPY KIT)

1. Remove the appropriate mounting hole and wire pass knockouts from the top or side of the exit sign housing to accommodate the mounting canopy.
 2. Fasten the canopy to the exit sign housing as shown in **Fig.1** or **Fig.2** using the supplied 8-32 x 5/8" screws, lockwashers and nuts.
 3. Install the two 8-32 x 5/8" screws in the tapped outer holes spider plate as shown in **Fig.1** or **Fig.2**.
 4. Route the transformer input wires (including ground) neatly through the sign, out through the wire pass knockout, through the center hole of the spider plate (with screws facing towards the canopy) and into the electrical box.
 5. Make electrical connections as follows:
All standard models are furnished with a dual voltage 120/277VAC field selectable input.
 - a) **For 120VAC operation**, connect the **black** transformer lead to the utility AC supply hot conductor.
 - b) **For 277VAC operation**, connect the **orange** transformer lead to the utility AC supply hot conductor.**Note:** A brown lead is used in place of black and orange leads on special models with voltages from 200V to 250 V.
 - c) Connect the **white** transformer lead to the utility AC supply neutral conductor.
 - d) Make **green** wire building ground connection in compliance with governing code.
- CAUTION: Cap and tape unused transformer lead. Failure to do so will create an unsafe and potentially harmful condition.**
6. Fasten the spider plate to the electrical box as shown in **Fig.1** or **Fig.2**.
 7. Guide excess wire through spider plate and mount the canopy/exit sign assembly to the spider plate using the acorn nuts supplied as shown in **Fig.1** or **Fig.2**.
NOTE: if spider plate screws do not extend far enough through canopy mounting holes to allow installation of the acorn nuts, loosen the electrical box screws securing the spider plate a few turns.
 8. Follow "**FINAL ASSEMBLY**" procedures as outlined in this manual to complete the installation.

FINAL ASSEMBLY

Battery Powered Exit Signs (without power pack)

1. Insert battery lead plug into LED board connector. **Failure to make this connection will prevent the LED module from illuminating in emergency mode.**

Battery Powered Exit Signs (with power pack)

1. Re-install battery into power pack if removed during mounting and secure using retaining strap.
2. Connect red battery lead to the positive (+) battery terminal and the blue battery lead to the negative (-) battery terminal. **Failure to make battery connections will prevent the LED module (and lighting heads if supplied) from illuminating in emergency mode.**
3. Re-install power pack cover.
4. Adjust unit mounted lighting heads (if supplied) as required.

All Models

1. Remove appropriate directional arrow knockout(s) from the exit stencil face(s).
2. Re-install stencil face(s) and diffuser(s) into the exit sign housing. Re-install power pack cover (if supplied).
3. Apply utility power to the exit sign. The exit will illuminate. See "**TROUBLESHOOTING**" if exit fails to illuminate.
4. Check for proper emergency operation (if applicable), see "**EMERGENCY MODEL TESTING**".

EMERGENCY MODEL TESTING

1. Following the application of utility power, the exit sign and charge indicator lamp will illuminate.
2. Allow the battery to charge for 24 hours prior to performing any test. After the charging cycle, test emergency operation by either removing utility power or pressing the unit test switch. The exit sign will remain illuminated. If the exit is supplied with optional lighting heads, the emergency lamps will illuminate as well and will remain illuminated until utility power is restored or the test switch is released.
3. Following the return of utility power or the release of the test switch, the exit charger will automatically return the battery to a fully charged state.

IMPORTANT: Flashing Options

Exit signs may be supplied with optional flashing or flashing/audible signaling capability. All flashing options comply with UL924 sections 40.14 and 40.15 for flashing rate and duty cycle requirements. Exits supplied with the -FA option will be cycled on and off by the connected fire alarm panel.

ROUTINE TEST CYCLES

Paragraph 31-1.3.7 of NFPA 101-1985, Life Safety Code requires that all emergency lighting equipment be functionally tested every 30 days for a minimum of 30 seconds and tested once a year for a full 90 minute discharge cycle. Written records of monthly and annual testing are to be kept for examination by the authority having jurisdiction.

Exception: 30 day testing and written test records are not required on units equipped with the Highlites self-diagnostic (-SX) option.

MAINTENANCE

CAUTION: Always turn off AC power to the equipment before attempting any service procedure. Servicing should be performed only by a qualified technician.

Use only **MANUFACTURER** supplied or **RECOMMENDED** replacement parts.

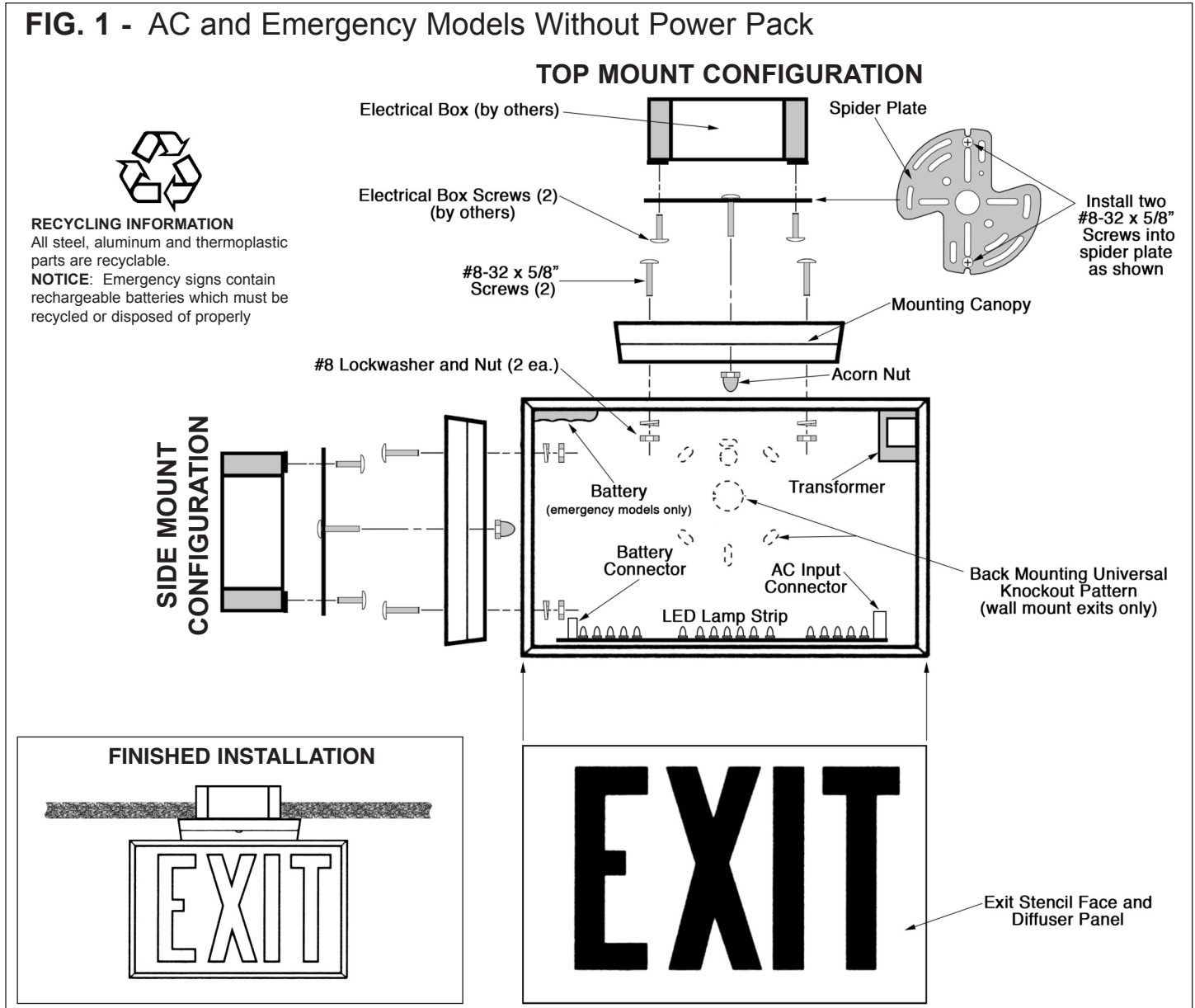
1. **BATTERY:** The battery supplied in this equipment requires no maintenance. However, it should be tested periodically (see **TESTING**) and replaced when it no longer operates the exit sign lighting load for the full duration of a 90 minute test. The battery supplied in this equipment will provide its full rated life expectancy when used in a temperature range of 68 to 86°F (20 to 30°C).

TROUBLESHOOTING

1. The exit sign fails to illuminate:

- a. If LED strip fails to illuminate (and the charge indicator light is off on emergency models): Check that the AC supply circuit breaker is on. Check wiring connections.
- b. If the charge indicator light is on:
 - Check that battery is properly connected.
 - If problem persists, Replace battery.

FIG. 1 - AC and Emergency Models Without Power Pack



SCHEMATIC 1- AC and Emergency Models Without Power Pack

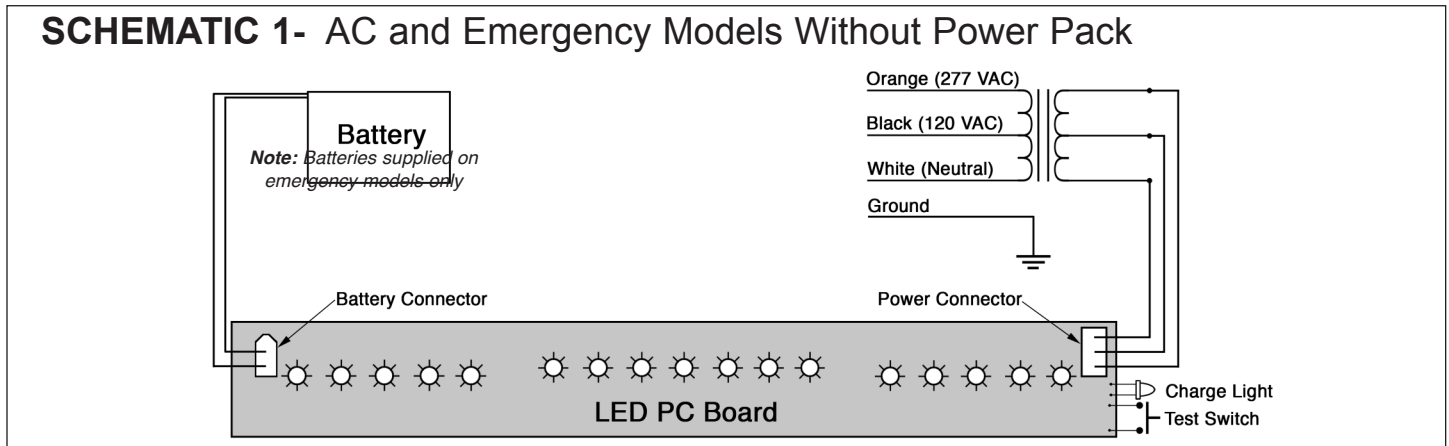
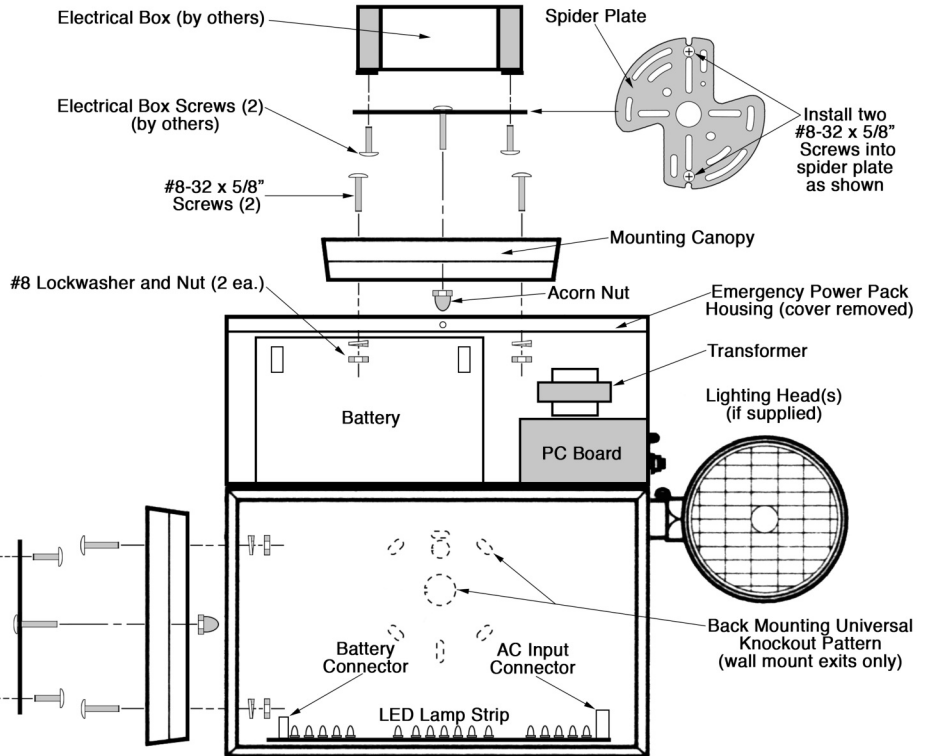


FIG. 2
Emergency Models
With Power Pack

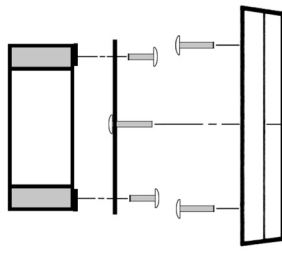


RECYCLING INFORMATION
All steel, aluminum and thermoplastic parts are recyclable.
NOTICE: Emergency signs contain rechargeable batteries which must be recycled or disposed of properly

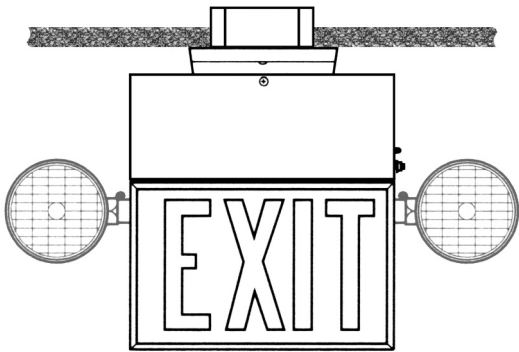
TOP MOUNT CONFIGURATION



SIDE MOUNT CONFIGURATION



FINISHED INSTALLATION



EXIT

Exit Stencil Face and Diffuser Panel

SCHEMATIC 2- Emergency Models With Power Pack

