



EVENLITE

LIFE SAFETY LIGHTING SOLUTIONS

SOVEREIGN SOV SERIES

DIE CAST ALUMINUM LED EDGELIT EXIT SIGN

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. Do not use outdoors.
2. Do not mount near gas or electric heaters.
3. Equipment should be mounted in locations and at heights where it will not readily be subject to tampering by unauthorized personnel.
4. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
5. Do not use this equipment for other than intended use.
6. Supply connections must be made either inside the junction box for surface mount or the splice box in the recessed mount backbox.
7. Install using recommended junction box only.
8. Servicing of this equipment should be performed by qualified service personnel.

SAVE THESE INSTRUCTIONS

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FIELD INSTALLED DIRECTIONAL INDICATORS (CHEVRONS)

Directional Indicators (chevrons) are supplied with the sign, if requested. The chevrons are affixed to the sign at the factory or supplied with an alignment template, chevrons (qty 2 or 4) and a tool for field installation.

Signs can be ordered in various configurations such as single or double face and with a background color (clear, white or mirrored). The appropriate chevron will be supplied based on the ordered configuration.

Prior to installation of the chevrons, make sure the sign is clean with no dust particles in the application area. To install the chevron(s) on a single face sign, temporarily adhere the alignment template's tacky surface to the back (printed) side of the Legend panel - *Figure 1*- (chevron's used in this application will have a white backing). Remove the adhesive backing from the chevron(s) and adhere to the panel in the location determined by the template - *Figure 2*. The white backing of the legend should correspond with the white backing of the chevron. Lay the tool provided on it's side and perpendicular to the chevron - *Figure 4*. Apply even pressure and push any air bubbles to the edge of the chevron starting from the middle to the top. Repeat this process for the bottom half also.

For signs which consist of two panels (double face or white/ mirrored background) use the alignment template (*Figure 1*) to determine the location of the chevron(s) - *Figure 3*. Chevrons' used in this application will be the same color on the front and back (adhesive) side. Remove the adhesive backing and adherer to panel. Use the tool provided to remove any air bubbles - *Figure 4*.

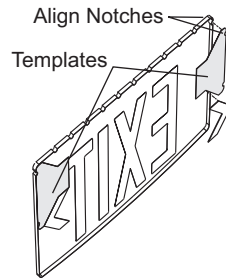


Figure 1: Alignment Template

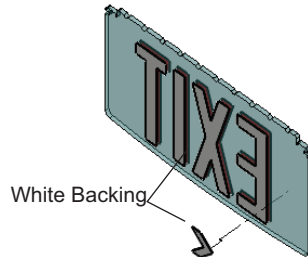


Figure 2: Single Face Application

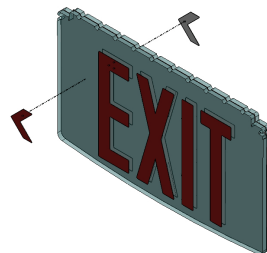


Figure 3: Double Face or Clear/White/ Mirror Background Single Face

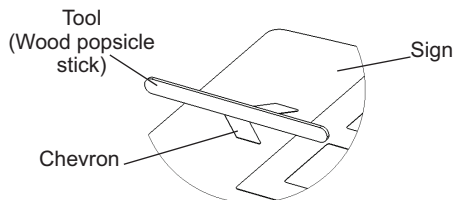


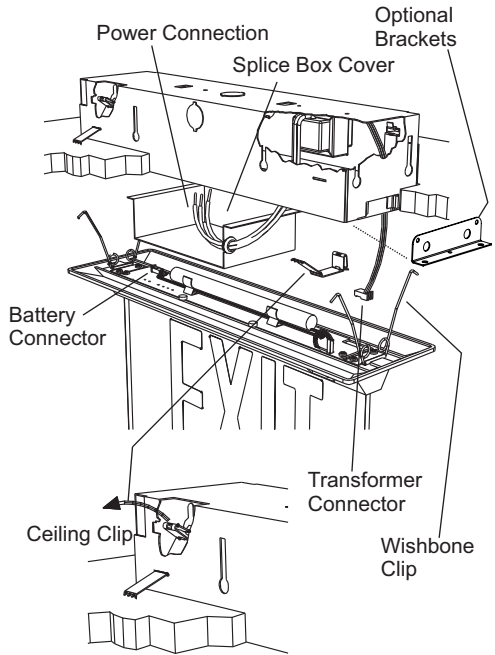
Figure 4: Removing air bubbles using tool provided.

RECESSED CEILING MOUNT

INSTALLATION OF ROUGH-IN SECTION

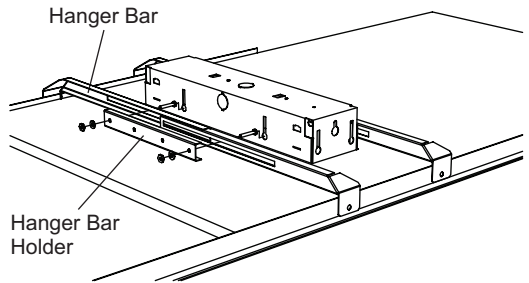
Hanger bars are adjustable from 13 1/4" to 22" and may be mounted on either the long sides or the ends of the Back Box. Attach with #8 screws from inside, through slots and into hanger bar holder. Remove Splice Box Cover, select and remove desired knockout for AC power input. Refer to wiring instructions below.

Cut 3 5/8" x 14 1/2" hole in ceiling. Position Back Box with open edges flush with outer surface of ceiling. Fasten hanger bar assembly to either ends or sides of Back Box by tightening four mounting screws into hanger bar holder.



WOOD JOISTS - Adjust hanger bars to fit against joists. Drive nails into wood.

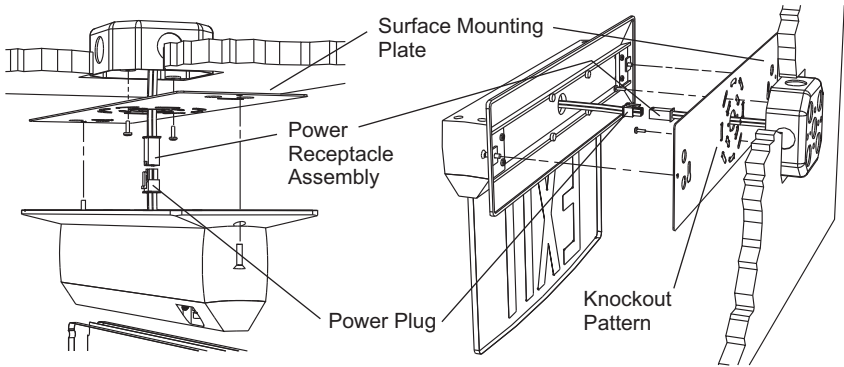
SUSPENDED CEILING - Snap ends of hanger bars over T-bar rails and fasten with screw. To secure Back Box to ceiling material, insert four ceiling clips into slots provided in sides of Back Box.



INSTALLATION OF FIXTURE INTO ROUGH-IN SECTION

Position fixture with desired orientation. Squeeze spring wires of one "Wishbone" clip and insert into formed legs at one end of Back Box. For Battery Back-up (Self Powered) sign, plug battery connector and transformer connector into plugs on Printed Circuit Board. Attach Power Plug into power receptacle assembly wired as per wiring instructions below. Insert second "Wishbone" clip into remaining formed legs in Back Box and push fixture flush with ceiling.

SURFACE CEILING / WALL MOUNT



INSTALLATION OF SURFACE MOUNTING PLATE

Wire power receptacle assembly to AC supply as per wiring instructions below. Remove two keyhole knockouts from Surface Mounting Plate. Locate, align and mount Surface Mounting Plate to junction box and secure to wall with screws through keyhole slots into suitable wall fastening devices.

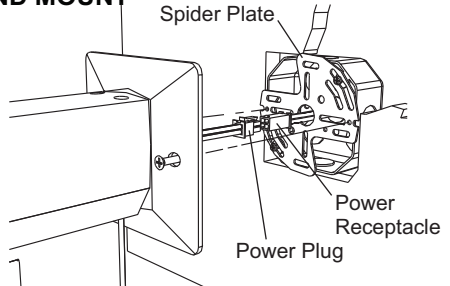
INSTALLATION OF FIXTURE TO SURFACE MOUNTING PLATE

Attach Power Plug to receptacle and push back into fixture. Fasten fixture to surface mounting plate with a screws supplied.

SURFACE END MOUNT

INSTALLATION OF JUNCTION BOX and SPIDER PLATE

Surface End Mount requires a 4" Octagon Junction Box to be securely mounted in the wall. The box should be rigidly supported to the wall framework with either brackets or studs. Wire power receptacle assembly to AC supply as per wiring instructions below. Securely fasten spider plate to junction box with the two 8-32 tapped holes parallel to the floor.



WIRING

Connect Power Receptacle to AC supply per local codes.

Black Lead for 120V or Orange Lead for 277V CAP UNUSED LEAD

White Lead for Neutral

Green/Yellow Lead for Ground

SWIVEL PENDANT MOUNT ASSEMBLY

Thread tapped half-ball on to one end of pendant tube and lock firmly in place with one square nut provided.

Insert other end of pendant tube through cross bar bracket so that half-ball is inside hat section of cross bar bracket.

Insert same end of pendant tube through center hole of canopy / cover so that cross bar bracket will be on inside of canopy / cover.

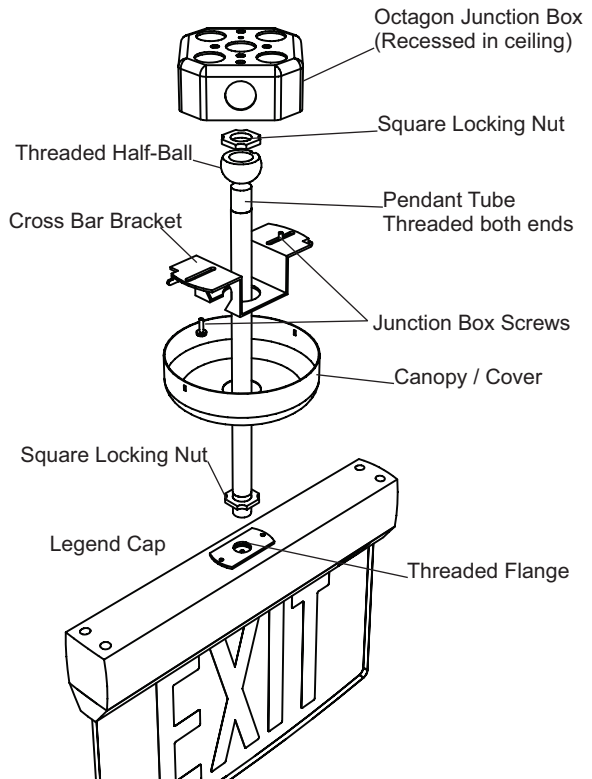
Thread one provided square locking nut on to fixture end of pendant tube with flat side toward fixture. Snake wires up through pendant tube.

Screw pendant tube on to threaded flange on legend cap. Do not tighten lock nut yet.

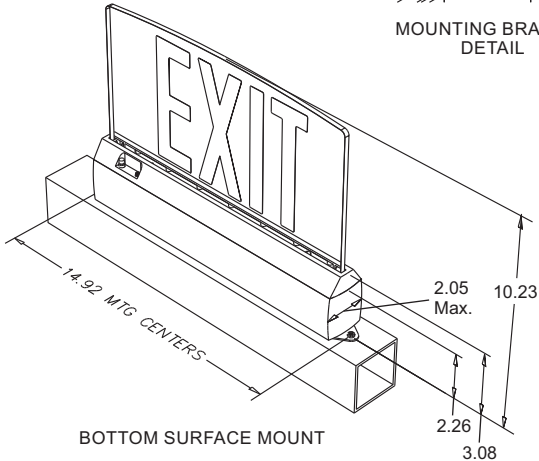
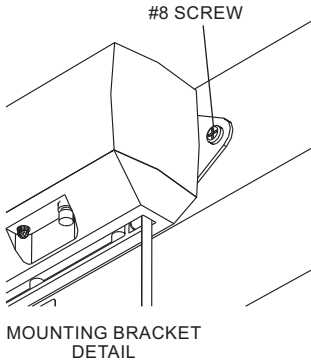
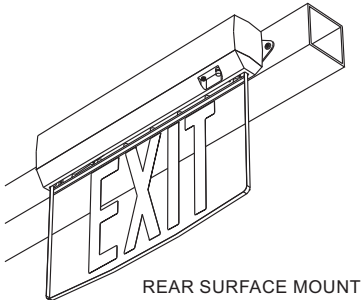
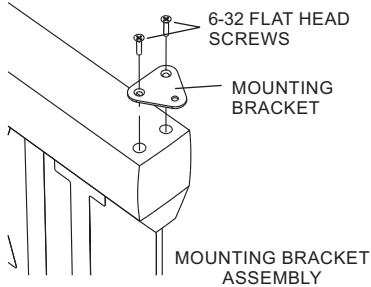
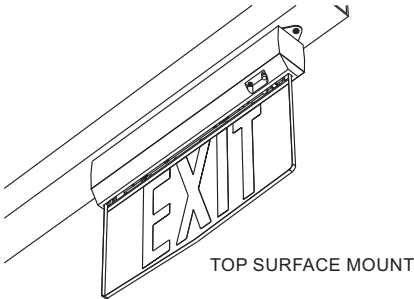
Attach cross bar bracket to junction box with junction box screws (not provided). Threaded half-ball groove must be registered on tab in cross bar to prevent unwanted rotation of pendant tube assembly.

Connect wires according to local codes.

Position canopy cover over cross bar and snap in place by aligning slots in cover over protruding tabs on cross bar bracket. Adjust direction of exit sign and tighten lock nut.



MOUNTING BRACKET ASSEMBLY FOR MULLION INSTALLATION

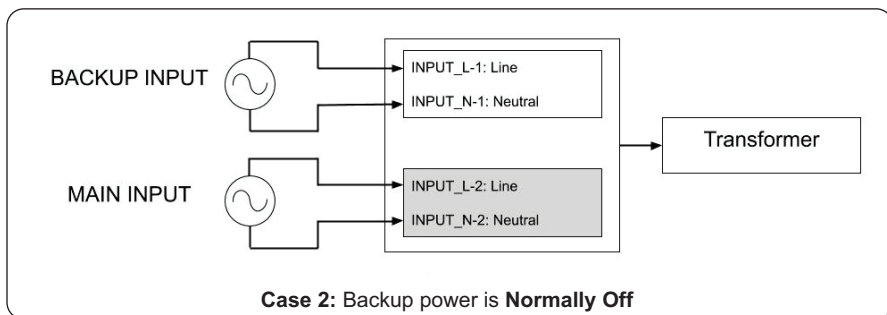
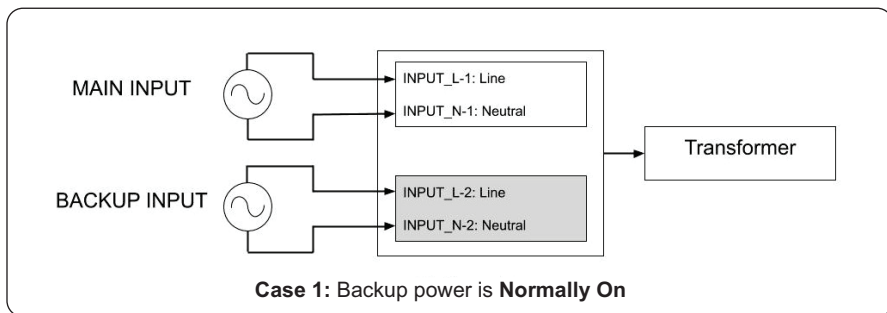


TWO CIRCUIT INPUT OPTION (AC VERSIONS ONLY)

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

1. **Case 1** (BACKUP power is Normally **On**): Connect MAIN power to **Input 1** and BACKUP power to **Input 2**.
2. **Case 2** (BACKUP power is Normally **Off**): Connect BACKUP power to **Input 1** and MAIN power to **Input 2**.

Note that both the MAIN and BACKUP voltage must be specified for the particular TWO CIRCUIT OPTION as ordered. Connect to the **Black leads for 120V** or **Orange Leads for 277V**, and **White** lead for neutral.



FLASHER / FIRE ALARM / BUZZER OPTIONS

Battery Backup Signs equipped with FLASH IN EMERGENCY MODE OPTION or BUZZER IN EMERGENCY MODE option will automatically flash/beep in emergency mode but not flash/beep on AC operation. AC Only signs equipped with the flash or buzzer options will flash/beep continuously while power is supplied.

AC Only and Battery Backup signs equipped with the FIRE ALARM SIGNAL MODE FLASH or BUZZER options will automatically flash/beep in both AC and emergency modes upon application of a fire alarm signal to the YELLOW 18 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 milliamperes.

Units that include one of the above options, are intended for installation in locations where such features are permitted by local codes. Flash Rate: 60/min Duty Cycle: 50%

REAPPLY POWER AND NOTIFY THE AUTHORITY HAVING JURISDICTION

TEST FOR BATTERY BACKUP WITHOUT SELF-TEST / SELF-DIAGNOSTICS

To test (EM) Battery backup units, use 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 Electric 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-TESTING / SELF DIAGNOSTIC OPERATING INSTRUCTIONS

This unit meets the requirements of NFPA 101 for Periodic Testing of Emergency Lighting Equipment. It provides visual indication of unit malfunctions including Battery Fault, Charger Fault, Transfer Fault and Lamp Fault.

STATUS INDICATIONS SHOWN ON FOLLOWING PAGE

SELF-TEST

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 continuous 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. Pressing the test switch continuously for 4 seconds and releasing it will initiate a 90 minute test.

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

REMOTE EXIT OPERATION

The self-diagnostic system “learns” the exit load when the unit reaches its first full charge. 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.

INFRA RED REMOTE TESTING

To activate TRANSMITTER, remove tab from back of device.

The USER-TEST can be performed up to 20 feet away using the optional “INFRA RED REMOTE TESTING TRANSMITTER”. By aiming the TRANSMITTER at the legend face, and pushing either the “30 SECOND” or “90 MINUTE” button for 1 second, all the “TEST SWITCH” functions can be performed.

STATUS INDICATIONS

STATUS DISPLAY	FUNCTION	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 and Green	Insufficient Charge for User Test	Wait for Full Charge
Red One Blink ON / Pause	Transfer System Failure	Factory Service
Red Two Blinks ON / Pause	Battery Failure	Check Connections Replace Battery
Red Three Blinks ON / Pause	Charger Failure	Factory Service
Red Four Blinks ON / Pause	Lamp Failure	Check Remote Connection / Factory Service

BATTERY REPLACEMENT

To replace battery, disconnect branch circuit, detach unit from junction box, and cut plastic strap securing battery inside power supply chassis. Unplug battery connector from Printed Circuit assembly. Replace battery only with part number B310013.

This product contains Ni-Cd batteries. Used Ni-Cd batteries may not be disposed of in the municipal solid waste stream. Ni-Cd batteries must be recycled or disposed of properly. For information on local recycling drop-off points, phone toll free 1-800-BATTERY.