Explosion Proof LED Bug Eyes with Exit Sign
Instruction Manual

INTRODUCTION

This document covers the operation and maintenance for an EXP-EMG-EXT-12W-3L series Explosion Proof LED Bug Eyes with Exit Sign.

WARNING: Do not attempt installation until you are familiar with all warnings, precautions, and procedures outlined within this instruction sheet.

Refer to the National Electric Code (NEC) NFPA 70 for more information on hazardous locations.

INSTALLATION PRECAUTIONS

- Do not install fixture in any classified location where the marked operating temperature exceeds the ignition temperature of the hazardous atmospheres.
- Consult fixture nameplate for the suitability ambient temperature shown on the nameplate.
- Refer to fixture nameplate for minimum supply wire temperature rating.
- Verify that the supply voltage agrees with fixture rating as indicated on nameplate.
- All local and national electrical/building codes must be followed when installing this lighting fixture. For code interpretation, consult your local authority.
- Product must be used only with glass tubes intact and all cap threads fully engaged. Do not use if glass tubes are cracked or damaged.

Caution: Only use lamp size, type and /or wattage as shown on fixture nameplate.

INSTRUCTIONS FOR INSTALLING

We strongly recommend that only a licensed electrician install this product.

WARNING: Make sure that the power is disconnected before installing. This fixture is extremely heavy and must be mounted to a surface that can structurally support the load. **Do not let fixture hang on one bracket at any time. Failing to comply can result in breakage of mounting bracket, allowing the fixture to fall, which can cause serious injury or death.**

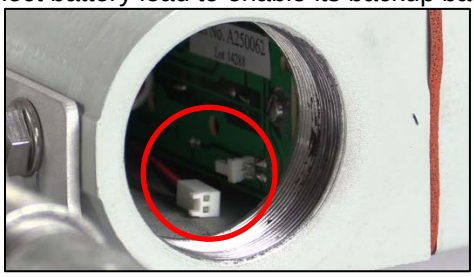
It is strongly suggested to use two licensed electricians to proceed with the final mounting of the fixture to avoid any possible personnel injury or damage to the fixture as the unit weights up to 56lbs and will be awkward to hold in position and attach to brackets mounted on wall or ceiling. Depending on mounting height and scaffolding, a hydraulic man–lift or two good quality ladders should be used.

INSTRUCTIONS FOR WIRING LAMP

- Install approved cable connector or conduit fitting into 3/4" NPT hub on field wiring compartment.
- Install cable into the junction box, allowing 3 inches of wire inside compartment for connection.
- Using approved wire connectors, splice wires as per color codes and wire labels.
- Connect battery leads labeled “Battery 2” to enable the bug eye battery circuit.



- Open the left junction box cover of the exit sign and connect battery lead to enable its backup battery.



- Make sure there are no wires protruding that may be pinched causing a possible short circuit.
- Reinstall covers and fittings to maintain a sealed fixture.

WARNING: Fixture must be grounded as required per paragraph 410-21 and article 250 of the National Electric Code and/or rule 30-500. Failure to properly ground this fixture will create an electrical shock, which can cause serious injury or death.

EMERGENCY BACKUP BALLAST OPERATION

During normal operation, AC power is supplied to the ballast through the backup micro inverter and the inverter charges the battery. Connecting the inverter wires (red and white) enables the emergency circuit and supplies power to the control/monitor circuit. The backup micro inverter detects AC input voltage (120-277V AC) and automatically set the output voltage during emergency operation.

When AC power fails, the backup micro inverter automatically switches to emergency mode, keeping the

load illuminated for a minimum of 90 minutes. When AC power is restored, the backup micro inverter returns to charge mode to recharge the battery.

The backup micro inverter consists of a low-battery voltage disconnect which is reset when AC power is restored. The unit can also detect an abnormal load condition (open or shorted load) during emergency mode operation and will protect the inverter from damage.

BALLAST OPERATION

During normal operation, AC power is supplied to the AC ballast/driver through the backup micro inverter and the inverter charges the battery. Connecting the inverter

connector wires (red and white) enables the emergency circuit and supplies power to the co-n trol/monitor circuit.

The backup micro inverter detects AC input line voltage (120/277) and automatically sets the output voltage during emergency mode.

When AC power fails, the backup micro inverter automatically switches to emergency mode, keeping the load illuminated for a minimum of 90 minutes. When AC power is restored, the backup micro inverter returns to charging mode. The backup micro inverter consists of a low-battery voltage disconnect which is reset when AC power is restored. The unit can also detect an abnormal load condition (open or shorted load) during emergency mode operation and will protect the inverter from damage.

MAINTENANCE:
WARNING: It is very important that only qualified personnel perform maintenance and repair operations in a NON-HAZARDOUS area. The integrity of the component assembly and flame-path must be maintained in order to provide adequate protection for personnel using this light. Comply with all NEC Rules and Regulations when performing maintenance operations. Failure to comply with these could result in an explosion, electrical shock, or personal injury.

BALLAST MAINTENANCE:
Although no routine maintenance is required to keep the backup micro inverter functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

1. Visually inspect the charging indicator light monthly. It should be illuminated.
2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds. The lamp should operate at full illumination.
3. Conduct a 90-minute discharge test once a year. The lamp should operate at full illumination for at least 90 minutes.

Refer any servicing indicated by these checks to qualified personnel!

CLEANING:
WARNING: DO NOT use any solvent or cleanser that contains alcohol, hydrocarbons, or has potential to cause an explosion. Using this type of cleanser could cause an explosion or serious personal injury.

CAUTION: Clean external parts of light only; internal parts do not require cleaning. Applying solvent could result in damage to the electrical equipment.

The EXP-EMG-EXT-12W-3L can be cleaned by applying Simple Green® or an equivalent cleanser and wiping any dust or grease off with a rag. After cleaning process is performed, allow adequate time for light to completely dry before placing in operation.

WARNING: When performing maintenance operations disconnect power. Failure to do so could result in electrical shock.

USAGE INSPECTION: Prior to use make a thorough visual inspection of the light for any chips, cracks, or burns within the glass, and enclosure. If there are any cracks in the glass or disturbances in the aluminum outside of normal wear, remove the light from service immediately and contact Larson Electronics.

Should further information not covered by these instructions be required, please contact Larson Electronics at 1-800-369-6671 or sales@larsonelectronics.com for further assistance.

Please visit LarsonElectronics.com for Warranty and Return information.