Explosion Proof Fluorescent Emergency Light with Battery Backup
2' 2 Lamp Fixture - Bi-Axial Bulb
Instruction Manual

Thank you for your purchase of the Larson Electronics EPL-EMG-24-2L-BX.

WARNING:

READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.
CRITICAL SAFETY INSTRUCTIONS:

- INSTALLATION SHOULD ONLY BE CONDUCTED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH NEC AND ANY RELEVANT LOCAL BUILDING CODES.
- RISK OF FIRE OR ELECTRIC SHOCK. FIXTURE INSTALLATION REQUIRES KNOWLEDGE OF FIXTURE'S ELECTRICAL SYSTEMS. IF NOT QUALIFIED, CONTACT A QUALIFIED ELECTRICIAN.
- BE CERTAIN ELECTRICAL POWER IS OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.
- MAKE SURE THE SUPPLY VOLTAGE IS THE SAME AS THE FIXTURE'S RATED VOLTAGE.
- TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR SHARP OBJECTS. SUITABLE FOR DAMP LOCATIONS.

IMPORTANT

READ CAREFULLY BEFORE INSTALLING THIS FIXTURE. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE. THE EPL-EMG-24-2L-BX MUST BE WIRED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES. PROPER GROUNDING IS REQUIRED FOR SAFETY.

WE STRONGLY ENCOURAGE ONLY A LICENSED ELECTRICIAN INSTALL, OPERATE AND MAINTAIN THIS PRODUCT. IF YOU ARE NOT QUALIFIED OR UNFAMILIAR WITH ANY ASPECT OF THIS INSTRUCTION SHEET, CONSULT AN ELECTRICIAN. THERE ARE NO SERVICEABLE PARTS INSIDE.

WARNING: MAKE SURE POWER IS TURNED **OFF** BEFORE STARTING THE INSTALLATION OR PERFORMING ANY MAINTENANCE.

RISK OF FIRE/ELECTRIC SHOCK – DISCONNECT POWER AT BREAKER BEFORE INSTALLING OR SERVICING.
RISK OF PERSONAL INJURY – FIXTURE MAY BECOME UNSTABLE OR DAMAGED IF NOT INSTALLED PROPERLY.
RISK OF BURN – ALLOW FIXTURE TO COOL BEFORE SERVICING.

WARNING

TO AVOID THE RISK OF FIRE, EXPLOSION OR ELECTRIC SHOCK, THIS PRODUCT SHOULD BE INSTALLED, INSPECTED AND MAINTAINED BY A QUALIFIED ELECTRICIAN ONLY, IN ACCORDANCE WITH ALL APPLICABLE ELECTRICAL CODES.

TO AVOID ELECTRIC SHOCK:

- BE CERTAIN ELECTRICAL POWER IS OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.
- PRODUCT MUST BE CONNECTED TO A WIRING SYSTEM WITH AN EQUIPMENT-GROUNDING CONDUCTOR.

TO AVOID EXPLOSION:

- MAKE SURE THE SUPPLY VOLTAGE IS WITHIN THE VOLTAGE RATING.
- ENSURE THE MARKED T RATING IS LESS THAN THE IGNITION TEMPERATURE OF THE HAZARDOUS ATMOSPHERE.
- DO NOT OPERATE IN AMBIENT TEMPERATURES ABOVE THOSE INDICATED ON THE PRODUCT NAMEPLATE.
- DO NOT OPERATE IF THE LENS, CORD, SEALS, HOUSING, RECEPTACLES, ETC. IS CRACKED OR DAMAGED. IF SO, DISCONTINUE USE AND CONTACT MANUFACTURER FOR REPLACEMENT PARTS.
- ALL FASTENERS SHOULD BE PROPERLY SEATED.

The Larson Electronics EPL-EMG-24-2L-BX Explosion Proof Fluorescent Four Bi-Axial Bulb Light Fixture is NRTL Listed for United States and Canada Class 1 Division 1, Class 2 Division 1 and 2, carries a T6 temperature rating and ideal for hazardous locations where flammable chemical/petrochemical vapors exist or have the potential to exist.

WIRING

Standard pigtail(flying leads) wiring

We strongly encourage a licensed electrician install this product, in all locations especially in outdoor areas where weatherproofing may be required. Multi voltage driver permits operation at 120V-60Hz, 220V-50Hz, 240V-60Hz, or 277V-60Hz.

Warning: *Check product label for correct input voltage!*

Attach supply line wires to the appropriate light fixture wires as shown in the diagram ➔



Secure each pair of wires according to the diagram. Utilize a junction box or similar device and take precautionary steps for weatherproofing all connections if installed in a location where water may come in contact with the unit. Ensure the unit is properly grounded and that wiring is done according to all local and national electrical/building codes.

INSTRUCTIONS FOR WIRING LAMP

- Remove the upper center screw cap on the re-lamp end (field wiring compartment).
- Install approved cable connector or conduit fitting into ½" NPT hub on field wiring compartment.
- Install a three conductor cable into the connector, allowing 3 inches of wire inside compartment for connection.
- Using approved wire connectors, splice wires as per color codes: black to black (line) white to white (common) and green to green (ground).
- Replace end-cap, making sure there are no wires protruding that may be pinched causing a possible short circuit.

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.

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.

NOTE: This fixture requires a minimum of 50 inches of clearance from re-lamp end for lamp replacement. An optional drop mounting kit that will allow for end to end row mounting is available, please consult factory.

WARNING: Do not let fixture hang on one bracket at any time. Failing to comply can result in breakage of end casting or mounting bracket, allowing the fixture to fall, which can cause serious injury or death.

- The mounting brackets are shipped installed on the fixture.
- Install the brackets to wall or ceiling with two 3/8" bolts (not supplied) at center measurements.
- Fixture is now ready for mounting.

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 46lbs (21.0 kg) and will be slightly 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.

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 control/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

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:

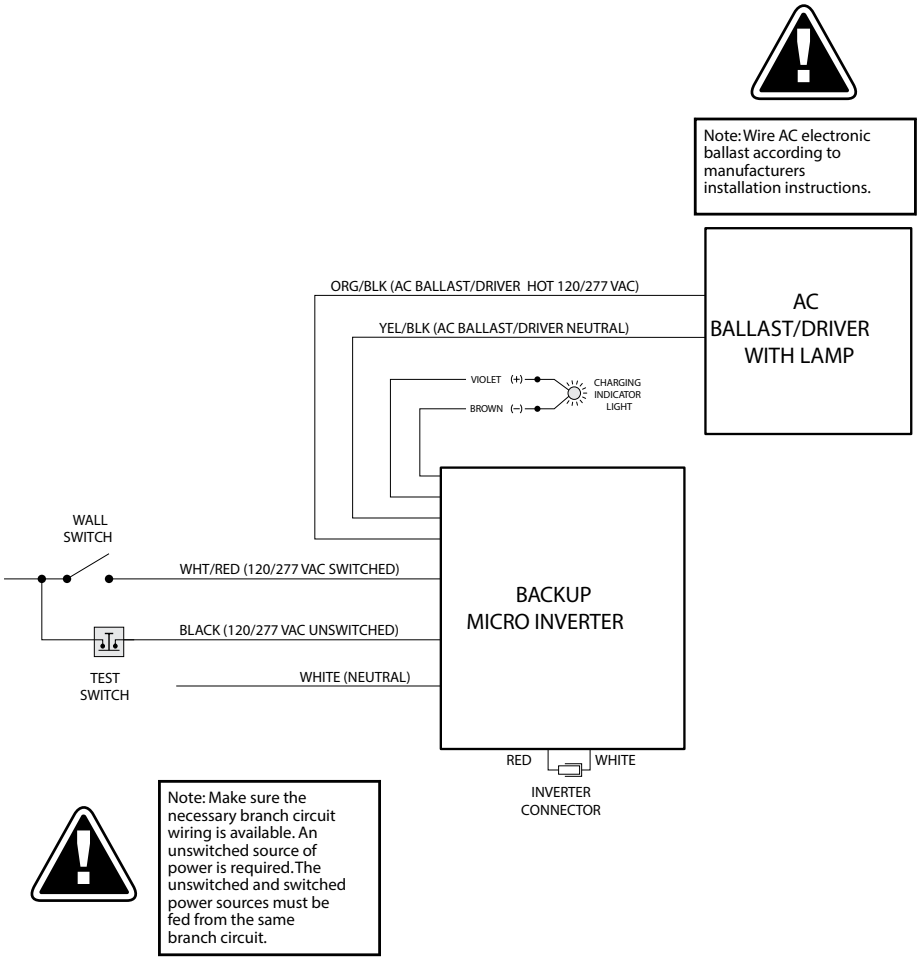
1. Visually inspect the charging indicator light monthly. It should be illuminated.
2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds. The lamp should operate at full illumination.
3. Conduct a 90-minute discharge test once a year. The lamp should operate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

! REFER ANY SERVICING INDICATED BY THESE CHECKS TO QUALIFIED PERSONNEL

BACKUP MICRO INVERTER AND AC BALLAST/DRIVER MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

WIRING DIAGRAM



INSTRUCTIONS FOR RELAMP

⚠WARNING

- To avoid risk of fire, explosion or electric shock, this product should be maintained by a qualified electrician only, in accordance with all applicable codes and regulations.
- To avoid electric shock: Be certain electrical power is OFF before and during maintenance.

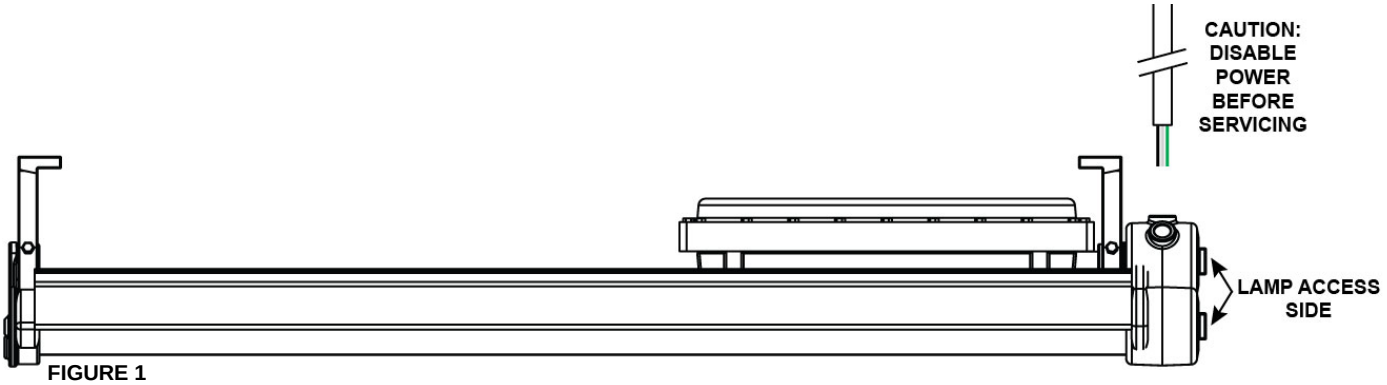


FIGURE 1

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

1. Disconnect power to the fixture prior to servicing. **FIGURE 1**

2. With a wrench, remove end-cap (lamp access cover) for the lamp you wish to replace. Rotate counter-clockwise. **FIGURE 2**



FIGURE 2

3. Loosen the two lamp holder bracket screws holding the old lamp. **FIGURE 3** Twist and remove the lamp holder bracket. **FIGURE 4**

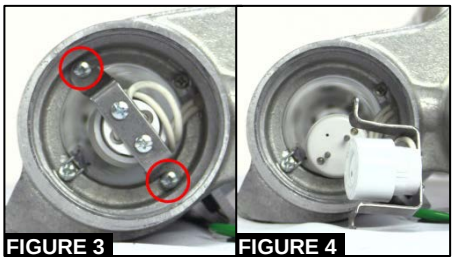
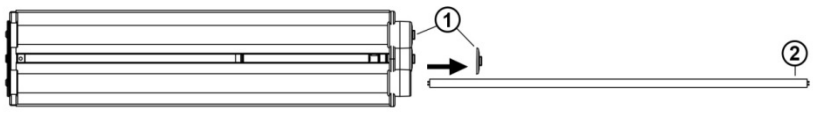


FIGURE 3 FIGURE 4

4. Remove the old lamp and install the new lamp, seating lamp in opposite lamp holder. **FIGURE 5**



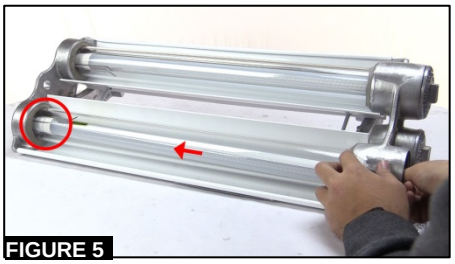


FIGURE 5

5. Replace lamp holder into position on the lamp. Twist slightly to place the lamp holder bracket under screw heads and tighten the screws. **FIGURE 3**

6. Reattach end-cap. Rotate clockwise. **FIGURE 6**



FIGURE 6

MAINTENANCE

Caution: To avoid personal injury, disconnect power to the light and allow the unit to cool down before performing maintenance.

Warning: No user serviceable parts inside of fixture. Risk of electric shock. Removal of the lens will void the warranty.

1. Perform visual, mechanical and electrical inspections on a regular basis. We recommend routine checks to be made on a yearly basis. Frequency of use and environment should determine this. It is recommended to follow an Electrical Preventive Maintenance Program as described in NFPA 70B: Recommended practice for Electrical Equipment.
2. The lens should be cleaned periodically as needed to ensure continued photometric performance. Clean the lens with a damp, non-abrasive, lint-free cloth. If not sufficient, use mild soap or a liquid cleaner.
3. Inspect the cooling fins on the luminaire to ensure that they are free of any obstructions or contamination (i.e. excessive dust build-up). Clean with a non-abrasive cloth if needed.
4. Do not operate if the lens is cracked or damaged. All fasteners should be properly seated.

USE AND CARE

Unauthorized modification may impair the function and/or safety of this device and could affect the life of the equipment. Always check for damaged or worn out parts before using the device. Store it in a secure place out of the reach of children when not in use. Inspect for good working condition prior to storage and before re-use.

REPLACEMENT PARTS

The EPL-EMG-24-2L-BX is designed to provide years of reliable performance. Should the need for replacement parts arise, please contact Larson Electronics.

THESE INSTRUCTIONS MAY NOT COVER ALL DETAILS OR VARIATIONS OF THIS PRODUCT FOR YOUR EQUIPMENT OR INSTALLATION REQUIREMENTS. SHOULD FURTHER INFORMATION NOT COVERED BY THESE INSTRUCTIONS BE REQUIRED, PLEASE CONTACT LARSON ELECTRONICS BY EMAIL AT SALES@LARSONELECTRONICS.COM OR BY PHONE AT 1-800-369-6671 FOR FURTHER ASSISTANCE.

PLEASE VISIT LARSONELECTRONICS.COM FOR **WARRANTY** AND **RETURN** INFORMATION.