Explosion Proof LED Lights on Cart w/ Wheels
2nd Gen - 4' 4 LED lamps - Paint Spray Booth Certified
Instruction Manual

Thank you for your purchase of the Larson Electronics EPLC-48-4L-LED-G2.

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 EPLC-48-4L-LED-G2 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:

USER SHOULD BE TRAINED IN THE PROPER USE AND MAINTENANCE OF THIS DEVICE. THIS LINE CORD IS INTENDED TO ALLOW OPERATORS TO EXTEND POWER TO EQUIPMENT WHEN STATIONARY OUTLETS ARE NOT READILY AVAILABLE.

IMPROPER USE OF THIS CORD, PLUG, AND RECEPTACLE CAN LEAD TO SERIOUS INJURIES OR DEATH TO PERSONNEL.

PERIODIC INSPECTION OF THE CORD IS NECESSARY.
THE CORD MUST BE ROUTINELY CHECKED FOR CUTS, BREAKS, OR ANY SEVERE ABRASIONS, AND IF ANY ARE FOUND, THE CORD MUST BE REPLACED BEFORE RESUMING USE.

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 EPLC-48-4L-LED-G2 Explosion Proof LED Light Cart is U.S./Canada UL Listed Class 1 Division 1, Class 2 Division 1 and offers exceptional LED lamp durability, efficiency, 50,000 hour lamp life, and versatile explosion proof protection for operators working in hazardous locations.

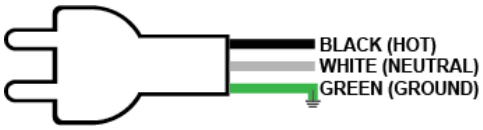
WIRING

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. Universal voltage driver permits operation at 120V 60 Hz, 220V 50 Hz, 340V 60 Hz, 277V 60 Hz, or 12 or 24V DC.

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.

Exp Cord Cap

Position device near work area for operation. Run cable to nearby power source. Insert and twist-lock explosion-proof plug into a compatible receptacle within the hazardous environment. See *plug operation* below.

PLUG OPERATION

Electrical connection between plug and compatible receptacle is accomplished after plug fully inserts into receptacle and rotated clockwise.

1. Lift receptacle door and locate polarization on mating plug pin and receptacle face. Insert plug straight all the way into receptacle until it cannot go further.
2. Rotate plug clockwise limit (37º), this closes internal contacts and completes circuit. This also mechanically locks plug into receptacle so it cannot be pulled out.
3. To remove plug, push plug inward and turn to counterclockwise, pull plug straight out.

Low Voltage DC

Connect power to power supply outputting low voltage at 12 or 24 Volts DC, depending on product voltage. This variable voltage allows greater versatility without affecting light output. Ensure deutsch connectors are properly connected (If applicable).

INSTALLATION PRECAUTIONS

- Do not operate 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.
- 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 or maintaining 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.

OPERATION

This unit comes preconfigured from factory with selected voltage, and co lor temp.

- Roll the cart like a mechanic creeper. The lights can be positioned upright or horizontal (parallel to the ground). Useful for illuminating large machinery such as tall vehicles and aircraft maintenance areas.



Position cart on a flat area near worksite to minimize risk of cart rolling unexpectedly. Locking casters are available on most models allowing the user to lock the wheels to keep cart from rolling.

- Once cart is in the desired area, run power cord to compatible outlet outputting voltage listed on fixture nameplate. This will either be low voltage (12/24V DC) or high voltage (120/240/277V AC) depending on model purchased. For models with switch, turn the switch on to illuminate the lamp. Otherwise, this dolly cart light is “instant-on” and will illuminate once connected to a live power source.

Take necessary caution when running cable as to not cause trip hazards or the potential to get damaged or snagged by high foot or machinery traffic.

To adjust light head

- Locate the two hand screws on top of cart.
- Loosen both hand screws and adjust lights in any position. Handles located on the back of the light head allow for better grip while position light heads.
- Tighten both hand screws once light is in the desired position.

Keep objects free while adjusting light head to avoid damage or injury as light heads are heavy and can drop rapidly when loosening hand screws.

Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation. Instead of heating a small filament or using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current applied and emitting light. With LED lights, there is no warm up time or cool down time before re-striking and provide instant illumination when powered on, adding to the reliability of LED technology. By nature, LED light sources run significantly cooler than traditional lamps, reducing the chance of accidental burns and increased temperatures due to heat emissions. This solid state design of light emitting diodes provides a more reliable, stable, durable, and energy efficient light source over traditional lighting.

Suggested Applications: Paint Spray Booths, Aircraft Maintenance, Oil Drilling Rigs, Refineries, Solvent and Cleaning Areas, Gas Processing Plants, Chemical Manufacturing, Waste Treatment Plants, Gas Processing Plants.

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.

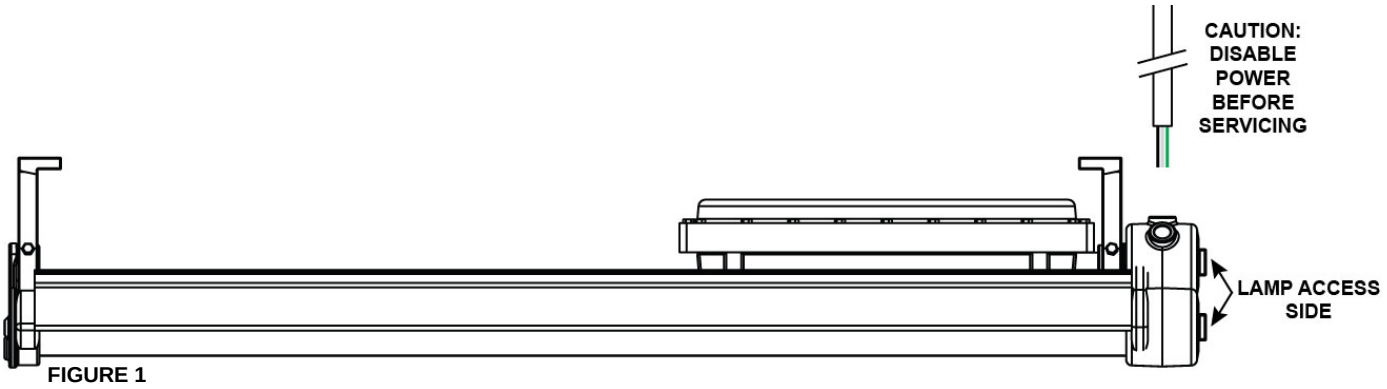


FIGURE 1

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**

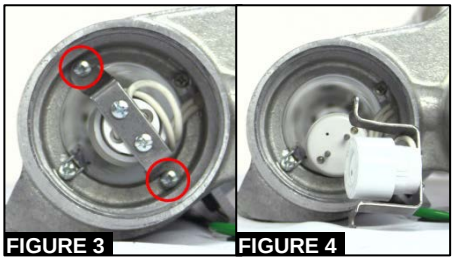
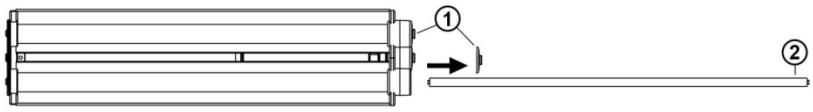


FIGURE 3 FIGURE 4

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



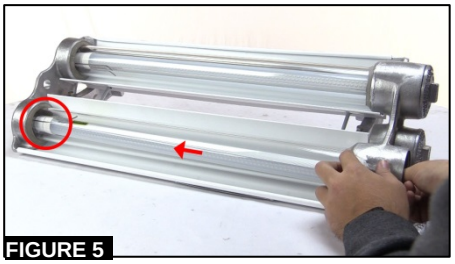


FIGURE 5

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 EPLC-48-4L-LED-G2 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.