100W Explosion Proof Ultraviolet LED Light Fixture
C1D1 - 365NM - 100' SOOW Cord w/ EXP Plug

Instruction Manual

Thank you for your purchase of the Larson Electronics EPL-HB-100LED-RT-UVA-100C-EPP.

EPA Reg. No 98409-1
EPA Est. No. 98409-TX-1

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-HB-100LED-RT-UVA-100C-EPP 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.

WARNING:

USER SHOULD BE TRAINED IN THE PROPER USE AND MAINTENANCE OF THIS DEVICE. WHEN EXTENSION CORD IS CONNECTED TO A POWER SOURCE IN HAZARDOUS AREA, PLUG AND MATCHING RECEPTACLE MUST BE SUITABLE FOR HAZARDOUS LOCATION INVOLVED. IMPROPER USE OF THIS DEVICE, ASSOCIATED PLUG, RECEPTACLE, AND CORD CAN LEAD TO SERIOUS INJURIES OR DEATH TO PERSONNEL.

PERIODIC INSPECTION OF THE RECEPTACLE AND 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 OF THE UNIT.

ELECTRICAL POWER SUPPLY MUST BE “OFF” BEFORE AND DURING INSTALLATION AND MAINTENANCE. INSTALLATION AND MAINTENANCE PROCEDURE MUST BE PERFORMED BY A TRAINED AND COMPETENT ELECTRICIAN.

IF ANY PARTS OF THE RECEPTACLE OR PLUG APPEAR TO BE MISSING, BROKEN, OR SHOW SIGNS OR DAMAGE, DISCONTINUE USE IMMEDIATELY. REPLACE WITH THE PROPER REPLACEMENT PART(S) BEFORE CONTINUING SERVICE.

The Larson Electronics EPL-HB-100LED-RT-UVA-100C-EPP Explosion Proof Ultraviolet light fixture provides operators with a powerful and energy efficient alternative to traditional hazardous location luminaries with UV cutoff filters. LED technology and compact design makes this lamp an excellent replacement upgrade option for bulky and high maintenance cost older incandescent, metal halide and high pressure sodium lights. Equipped with 100 feet of 16/3 SOOW cord and an explosion proof cord cap, this fixture uses advanced LED light technology to produce ultraviolet light and is T6 rated for hazardous locations where UV lamps are used in paint and adhesive curing, food inspection or for non-destructive testing.

WIRING

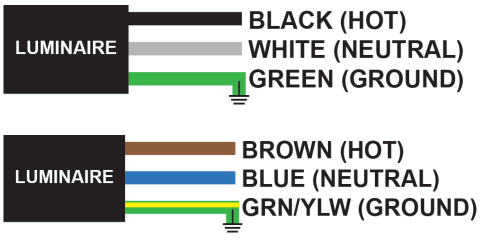
This explosion proof UV light is equipped with 100 feet of 16/3 chemical and abrasion resistant SOOW cord that is fitted with an explosion proof cord cap for easy connection to explosion proof outlets. Plug options include a 5-15 15 amp straight blade plug for use with 120V explosion proof outlets, a 5-20 20 amp straight blade plug for use with 120V explosion proof outlets, or a 6-20 20 amp straight blade plug for use with 220-240V explosion proof outlets.

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 100V - 277V AC, 50 or 60Hz except those factory ordered with low voltage 11V to 25V AC/DC.

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

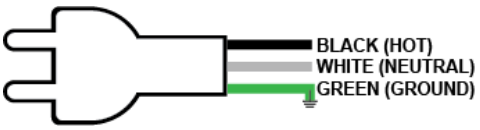
Attach supply line wires to the appropriate light fixture wires as shown in the diagram ➔



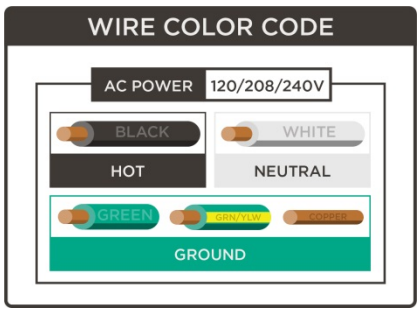
Secure each pair of wires according to the diagram. Utilize a junction box or similar device and take precautionary steps for weatherproofing all connections if installed in a location where water may come in contact with the unit. Ensure the unit is properly grounded and that wiring is done according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

For supply connections, use wire rated for at least 110°C

Recommended mounting height is 25-40 feet.

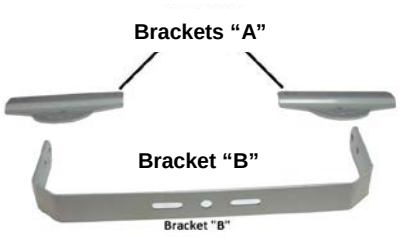
MOUNTING

This fixture offers an adjustable mounting system that allows this fixture to be mounted to any flat surface including walls and ceilings. A single ½-13 bolt is used to mount the fixture to the surface.

Check to ensure that all mounting hardware is included.

- 2 Small Brackets
- 1 Large Trunnion Bracket
- 8 Bolts
- 8 Lock-Washers
- 4 Nuts

1. Using four bolts, washers and the four nuts provided, attach brackets “A” to both sides of bracket “B”.
2. The LED fixture has 9 holes for a versatile mount option. Select the holes that you would like to use.
3. Brackets “A” will then be bolted to the LED fixture with the remaining bolts and washers.
4. The fixture is now ready for installation.



Trunnion Bracket

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-HB-100LED-RT-UVA-100C-EPP 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.

Ultraviolet Radiation Safety

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

OPERATION PRECAUTIONS

- **UV LIGHT WARNING:** UV-C light can cause temporary or permanent loss of vision, and temporary acute redness or ulceration (mild to severe sunburn) to exposed skin. To prevent exposure, do not operate the device in any application that allows UV-C light to be visible during operation.
- **UV LIGHT CAUTION:** UV light may degrade plastic and rubber components after longterm exposure.
- Currently, there are no work place related rules and regulations that are set by OSHA (Occupational Safety and Health Association) in regard to UVC environmental health and safety.
- **NEVER LOOK DIRECTLY AT THE BULB OR DISINFECTING TARGET ZONE**

OPERATION SAFETY

- People and animals are forbidden from being exposed to the light output of this light for extended periods of time. Long term exposure will case damage to the eyes and skin.
- This product produces UV radiation. Anything in front of the unit will be exposed to UV radiation. Operators positioning the light while not illuminated will not be exposed. Radiation is only emitted while the light is turned on. Radiation will not linger in the environment when the lamps have been powered off. Safety equipment is only required when the device is in-use.
- Wear eye protective gear when operating the equipment. Polycarbonate safety glasses at minimum are required during all operations. Full frontal polycarbonate or UV-preventative face masks are recommended.
- Wear long sleeves and gloves when operating the equipment. Personal protective gear is required for long term exposure.

OPERATION SAFETY STRATEGIES

- Instruct service personnel to never look directly at UV-C light without adequate eye protection.
- Make it a policy to never enter areas being disinfected with UV lighting systems without powering the system down first. Methods of powering down depends on the options of the device purchased and may include unplugging the light source, operating the power switch to power the lamps off, or turning the system off via a wireless remote control or wireless application.
- Place warning labels near all openings/entrances to areas being disinfected with UV lighting systems. When possible, lock access doors to prevent unexpected guests from entering the area.
- Close blinds/curtains of areas being disinfected with UV lighting systems if available. If not available, block off direct access to windows/doorways to prevent access to the area. If you cannot fully block off all access (hallways with visible windows, etc) place exterior warnings in areas prior to the exposed windows (hall pedestals, banners, posters) explaining what areas are being disinfected and to not look into the room.
- Educate non service personnel about the intended operations for UV disinfecting and what signage will be posted. Instruct non service personnel to never look directly at UV-C light.
- Instruct service personnel to always wear personal protective gear (as outlined above) when they must operate in an area that has UV-C exposure, for short or long term work.

These safety precautions will help ensure service personnel are protected from accidental exposure while maintaining the effectiveness of UV-C to eradicate biological contaminants.

In the event of UV exposure, the following actions are recommended.

- See an ophthalmologist if eye damage is suspected.
- Treat skin lesions immediately.
- For severe skin lesions, seek local medical treatment and follow their recommendations for treatment.
- Follow your organization's incident reporting procedure. These often require documentation of the date and time of the incident, persons involved, equipment involved and type of injury.

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