

## **39W Fluorescent UV-C Fixture - 120V AC** Instruction Manual

Thank you for your purchase of the Larson Electronics GAU-ID-36-1L-T5-FA8 Germicidal UV-C fixture.

### IMPORTANT

READ CAREFULLY BEFORE INSTALLING THIS FIXTURE. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE. THE GAU-ID-36-1L-T5-FA8 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: ULTRAVIOLET LIGHT IS HARMFUL TO EYES AND SKIN. DO NOT STARE DIRECTLY INTO THE ULTRAVIOLET BEAM WITHOUT WEARING PROTECTIVE GEAR TO PROTECT EYES FROM LONG TERM DAMAGE. UNPLUG LAMP BEFORE SERVICING.

**Note: Do not** touch bulb with bare hands. The oils in your skin will damage the lamp. Fingerprints will result in reduced performance and significantly reduce the lifespan of the lamp unless they are removed with alcohol.

The GAU-ID-36-1L-T5-FA8 from Larson Electronics is a UV-C Germicidal Fluorescent Fixture that offers high light output from a compact form factor, making it suitable for disinfecting bacteria in large facilities. This 39-watt germicidal fixture operates on 120 V AC and consists of one T8 fluorescent lamp that provides 13.8 watts of UV-C output at a range of 200nm - 280nm (254nm).

#### **Installation Guide**

- Remove lamp by rotating 1/4 turn to free from receptacles, and remove fixture cover by lifting up on the exposed edges of part. Start in the middle and work outward. Remove parts pack from inside fixture. Be sure power supply is off at the breaker!
- Determine appropriate knockout for removal depending on incoming power supply wiring. Knockouts are on each end and on the back of the fixture. Remove knockout by placing a flathead screwdriver at the edge of the circle opposite the retaining tabs, and strike gently with a hammer. Flex knockout back and forth until removed.



- 3. If using a strain relief bushing, install the bushing into the hole. Insert power supply wiring through the open hole or strain relief bushing.
- 4. Position the fixture against the desired mounting surface and mark the screw hole locations with a pencil. Be sure to make these marks in the narrow section of the key holes. Make two small pilot holes in these locations using a 1/16" drill bit. If you do not hit a stud, use toggle bolts or other suitable hardware capable of structurally supporting the load of the fixture. Be sure the surface is also capable of supporting the weight of the fixture. If hole is drilled into wood, #10 wood screws should be used.
- 5. Partially install screws, about half way in. Position the fixture housing against the mounting surface with screw heads through the keyholes. Slide the fixture until the screw heads are in the narrow section of the keyhole, and finishing tightening the screws to secure the fixture in place.
- 6. Use wire nuts from parts pack and complete connections with the supply wiring white to white, black to black, green to green or ground wire. Be sure supply voltage matches fixture rating. Bundle wiring inside fixture housing and replace the cover onto the fixture. Reinstall lamp(s) by sliding pins into open slots in receptacles and rotate 1/4 turn to secure.



# **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 cart 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 cart while not illuminated will not be exposed. Radiation is only emitted while the cart 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.

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 <u>SALES@LARSONELECTRONICS.COM</u> OR BY PHONE AT 1-800-369-6671 FOR FURTHER ASSISTANCE.

PLEASE VISIT LARSONELECTRONICS.COM FOR WARRANTY AND RETURN INFORMATION.