Industrial UV Sanitation Light
Kills 99% of Viruses - UV-C - Digital Timer
Instruction Manual

Thank you for your purchase of the Larson Electronics IND-SM Series UV Sanitation Light.

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

IMPORTANT

READ CAREFULLY BEFORE INSTALLING THIS FIXTURE. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE. THE IND-SM SERIES 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.
WARNING: 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 removed with alcohol. Be sure fixture is disconnected from power source and cooled off before servicing.

The Larson Electronics IND-SM Series is an Industrial UV Sanitation Light which can disinfect kill 99% of viruses, bacteria, mold, and spores and bacteria in large facilities. UV-C output is at a range of 200nm - 280nm (254nm).

POWER

The IND-SM Series come from the factory pre-configured with cord cap chosen at purchase by the customer. Simply mate this plug with a compatible receptacle outputting the correct voltage for your light cart. Refer to the product nameplate for voltage rating. If you chose flying leads instead of a cord cap, complete these connections with supply wiring, or install your own cord cap. Be sure power is off at the breaker before wiring, and adhere to all local and national electrical codes.

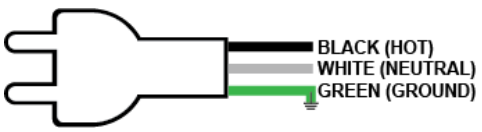
Warning: Check product label for correct input voltage!

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

Secure each pair of wires according to the diagram. Ensure the unit is properly grounded and that wiring is done according to all local and national electrical/building codes.







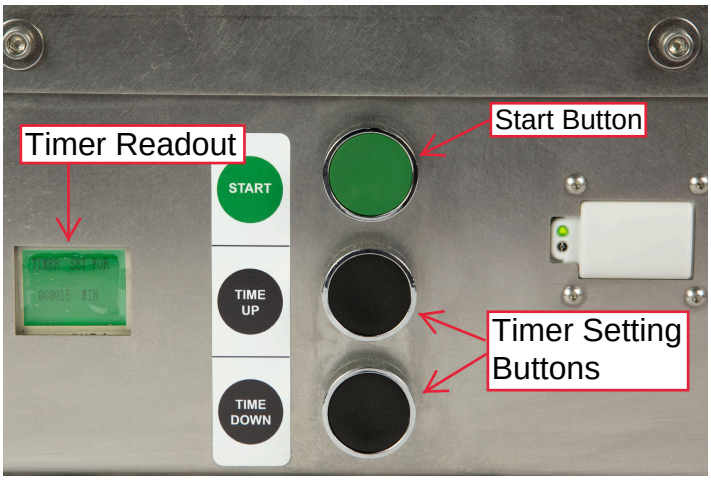
MOUNT

This UV sanitation desktop light is equipped with a top-located carrying handle, which can be used to transport the unit around the work site. The bottom of the light contains pads to reduce slippage on surfaces. Select models come secured on a mini tripod stand, which can be removed for compact storage. In a fully extended position, the tripod raises the entire unit to a height of 6'. Other models also come secured on a scissor lift stand, which can be removed for compact storage. The stand is constructed from durable Q235 steel and can support up to 300 pounds. With a pedal-operated hydraulic lift, the scissor lift stand can be easily adjusted from 13.75 inches up to 34 inches. The top mounting plate on the stand measures 16 inches by 13.75 inches. For best results, the light should be setup in the middle of the area to be sanitized on a flat surface.

VERSION 1

OPERATION

Once the unit is in the desired location to be sanitized, connect the power cord to the supply power. This will power on the timer readout adjacent to the buttons at the bottom of the unit. Some models of this unit are furnished with a wireless remote for controls as well. Set the timer to the desired amount of sanitation time using the two black buttons. The top black button will increase sanitation time by 15 minutes, and the bottom one will decrease it by 15 minutes. Once the desired time is displayed on the readout, press the green button to activate the 90-second delayed start timer. The unit will count to 90 seconds, and then illuminate. You can cancel the 90-second delayed start timer by pressing one of the black buttons. Once the elapsed time is equal to that set on the timer, the unit will power off on its own. ***During setup, if a menu prompting language selection displays, unplug the unit and plug it back in.***



MOTION SENSOR

The IND-SM Series light is equipped with microwave motion sensors the will automatically shut the light off if motion is detected in the area. This is to protect the user or anyone unaware that sanitation is in progress by shutting the light off if you enter the area. This shut off does not interrupt the timer, it will keep counting. Once motion stops and goes undetected, the unit will power back on and finish out the time remaining on the timer. This may be affected by motion in adjacent rooms to the one being sanitized, so be mindful of that when using the cart in small rooms or near walls that adjoin rooms.

BULB REPLACEMENT

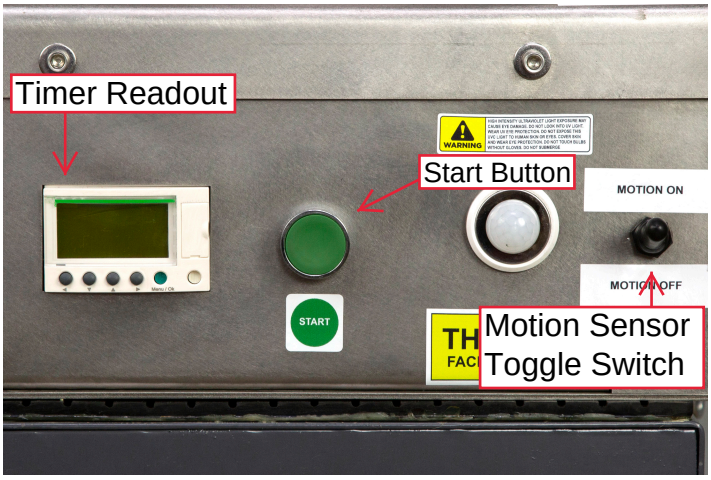
Warning: *Do not touch bulb with bare hands. The oils in your skin will damage the lamp. Fingerprints will result in reduced performance and significantly reduce the lifespan of the lamp unless removed with alcohol. Be sure fixture is disconnected from power source and cooled off before servicing.*

To replace a bulb in your light, you must first remove the cage protecting the bulbs. Remove the 4 corner bolts on top of the unit, and the 4 bolts at the bottom corners of the cage. Lift the cage straight up and over the top of the cart to remove it, taking care not to damage any bulbs in the process. Remove the bulb to be replaced by grabbing the ends and pressing either up or down against one of the spring loaded bulb receptacles. This will free the other end and allow you to remove the bulb. Replace the bulb with one of the same type and rating. Install the new bulb by aligning the 2-pin connector with the slots in the bulb receptacle at the bottom. Press the bulb down against the spring loaded receptacle to create room at the top, and align the two top pins on the bulb with the top receptacle and release. Repeat this process for any remaining bulbs that need to be replaced. Test the new bulbs before reinstalling the protective cage.

VERSION 2

OPERATION

Once the unit is in the desired location to be sanitized, connect the power cord to the supply power. This will power on the timer readout adjacent to the buttons at the bottom of the unit. Some models of this unit are furnished with a wireless remote for controls as well. Set the timer to the desired amount of sanitation time using the controller panel. Once the desired time is displayed on the readout, press the green button to activate the 90-second delayed start timer. The unit will count to 90 seconds, and then illuminate. You can cancel the 90-second delayed start timer by pressing one of the black buttons. Once the elapsed time is equal to that set on the timer, the unit will power off on its own. During setup, if a menu prompting language selection displays, unplug the unit and plug it back in. Simply plug the unit in, set the motion sensor in desired position, set the timer to desired time, and press the start button. The unit will power on after 90 second countdown.



This will power on the timer readout adjacent to the buttons on the the unit. Some models of this unit are furnished with a wireless remote for controls as well.

- The controller has four main buttons, START, DOWN, UP, and STOP.
- To set the time, use the DOWN and UP buttons to increase or decrease sanitation time in 15 minute increments.
- Once the desired time is selected press START. The unit will count to 90 seconds, and then illuminate. You can cancel the 90-90-second delayed start timer by pressing the fourth button, with the right arrow and labeled STP on the interface.
- Once the elapsed time is equal to that set on the timer, the unit will power off on its own. ***During setup, if a menu prompting language selection displays, unplug the unit and plug it back in.***

MOTION SENSOR

The IND-SM Series light cart is equipped with microwave motion sensors the will automatically shut the light off if motion is detected in the area. This is to protect the user or anyone unaware that sanitation is in progress by shutting the light off if you enter the area. This shut off does not interrupt the timer, it will keep counting. Once motion stops and goes undetected, the unit will power back on and finish out the time remaining on the timer. This may be affected by motion in adjacent rooms to the one being sanitized, so be mindful of that when using the cart in small rooms or near walls that adjoin rooms.

BULB REPLACEMENT

Warning: *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 removed with alcohol. Be sure fixture is disconnected from power source and cooled off before servicing.*

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VERSION 3

OPERATION



Once the unit is in the desired location to be sanitized, connect the power cord to the supply power. This will power on the timer readout adjacent to the buttons at the top of the unit. Some models of this unit are furnished with a wireless remote for controls as well.

- The controller has four main buttons, START, DOWN, UP, and STOP.
- To set the time, use the DOWN and UP buttons to increase or decrease sanitation time in 15 minute increments.
- Once the desired time is selected press START. The unit will count to 90 seconds, and then illuminate. You can cancel the 90-second delayed start timer by pressing the fourth button, with the right arrow and labeled STP on the interface.
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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 IND-SM Series is designed to provide years of reliable performance. Should the need for replacement parts arise, please contact Larson Electronics.

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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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