



CEILING-MOUNTED UV STERILIZER MODEL SOTO-UX

Operation Manual

Before operating the system, please read this manual thoroughly and retain it for future reference.

SOTC 

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CONSUMER LIMITED WARRANTY

SOTO provides the following limited warranty for this device solely if it was originally purchased from SOTO or an authorized dealer.

SOTO warrants that, under normal use and proper maintenance, the device shall be free from defects in materials and workmanship throughout the applicable warranty period. Should any such defects be identified during this period, SOTO reserves the right, at its sole discretion, to repair or replace the device in accordance with the terms specified herein.

SOTO will repair or replace, free of charge, to the original purchaser, any part that is found to be defective in material or workmanship within one (1) year of the date of purchase. This limited warranty does not cover the replacement of expendable or consumable parts such as UV lamps, and other parts subject to normal wear unless they are defective in material or workmanship.

This Warranty Shall Not be Applicable If:

1. Any defects caused or repairs required because of abusive operation, negligence, accident, improper installation or inappropriate use as outlined in the operation manual.
2. Any product tampered with modified, adjusted or repaired by any party other than SOTO.
3. Damaged caused or repairs because of the use with items not specified or approved by SOTO.
4. Any damage caused by external or environmental conditions (such as a fire or an earthquake), including but not limited to the use of voltage other than indicated on the product.
5. Damage caused by incorrect electrical supply, voltage fluctuations, or use of power sources not specified on the product label.
6. Shipping damage occurring after delivery unless otherwise agreed in writing.
7. In situations where the product information fails to correspond to the product, or where adequate valid documentation is absent to prove that the defective product originated from SOTO or an authorized distributor.

SAFETY PRECAUTIONS

To minimize the risk of electric shock, fire, or personal injury, please carefully read and adhere to the following instructions.

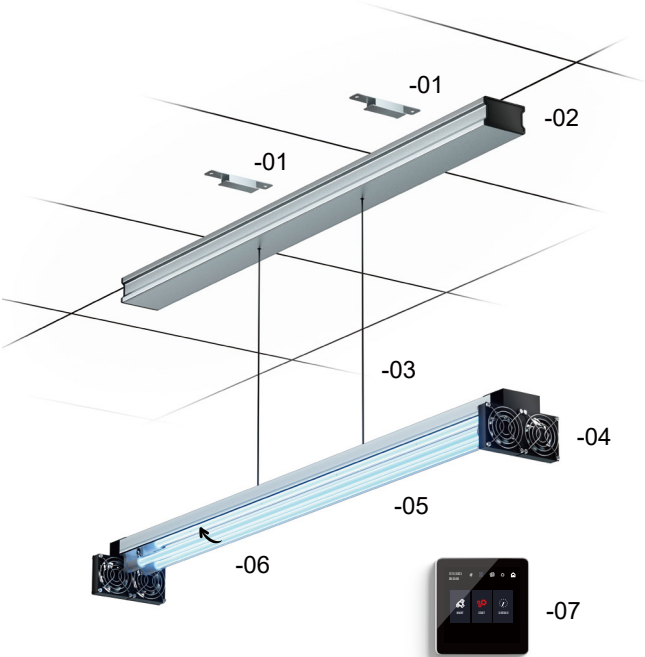
Guidelines for the Operating Environment

1. The device must only be operated in an unoccupied environment. Upon activation, all personnel must immediately vacate the area to avoid exposure to ultraviolet (UV) radiation.
2. Use a 220-240V outlet with grounding wire receptacle. Avoid high temperatures or humidity. Optimal conditions: 0~40°C, humidity <75%.
3. The device must not be operated in confined spaces containing flammable, explosive, or toxic vapors, as such environments may pose a significant risk of fire or explosion.

Operation of the Device

1. Please verify that the device is securely mounted on the load-bearing ceiling to prevent loosening and potential personal injury. Additionally, ensure the two UV lamp tubes are firmly installed to the lamp stand to prevent accidental detachment.
2. Before operating the device, ensure that the control display panel is securely mounted on the wall and that the Bluetooth connection between the device and the panel is properly established.
3. Before cleaning or replacing the UV lamps, power off the control display panel by pressing the button on the panel to avoid any potential electrical shock hazards.
4. Under no circumstances should users come into contact with the raising electrical wires, as this may pose a serious risk of electric shock.
5. Regularly wipe the UV lamps with a dry, soft cloth to maintain optimal sterilization performance. Avoid using flammable substances such as alcohol, gasoline, or paint thinner to clean the exterior, interior, or any components of the unit, as this may pose a fire hazard.

STRUCTURE AND MAIN PARTS



- 01 Ceiling Hanger
- 02 UV Lamp Stand
- 03 Raising Electrical Wires
- 04 Cooling Fan
- 05 UV Lamp
- 06 Mirrored Reflector
- 07 Display Control Panel

HOW IT WORKS

This device primarily consists of two UV-C lamps, a mirrored reflector, four cooling fans, a lamp tube lifting mechanism, and an intelligent control display panel. The vertical height of the lamp tubes is adjustable to accommodate operational requirements, thereby enhancing sterilization and disinfection performance. Cooling fans installed at both ends of the lamp tubes improve air circulation, increase disinfection efficiency, facilitate thermal dissipation, and reduce surface dust accumulation. Ultraviolet radiation disrupts the DNA and RNA of microorganisms, effectively inactivating their reproductive and metabolic functions to achieve efficient microbial elimination. To prevent potential harm from high-intensity UV exposure, the device must be operated exclusively in unoccupied spaces, and personnel are required to evacuate the area immediately upon activation.

Features

1. Adjust the Height of the Lamp Tube: The vertical height of the UV lamp tubes can be flexibly adjusted to meet specific operational requirements.
2. Cooling Fans: Cooling fans are installed at both ends of the lamp tubes to effectively enhance air circulation. This design not only improves disinfection efficiency but also facilitates cooling of the lamp tubes and removal of surface dust.
3. Intelligent Control Display Panel and WeChat Mini Program Control: The intelligent control display panel provides a comprehensive suite of functions with a user-friendly interface, allowing real-time access to and export of UV lamp disinfection records. Additionally, the device can be remotely controlled via a mobile WeChat mini program, offering greater convenience and enhanced safety.
4. Radar Surveillance: Equipped with a radar sensor protection system, the UV lights will automatically shut off immediately upon detecting personnel in proximity, preventing accidental UV exposure and potential injury to individuals.

INSTALLATION 1

Operational Environment

1. Power Supply Condition: Use only a 220–240 volt outlet equipped with a grounding wire receptacle.
2. Environmental Conditions: Temperature range of 0°C to 40°C; Relative humidity below 75%.
3. This device must be installed on a load-bearing ceiling and must be installed by qualified professionals.
4. The control display panel requires a **neutral wire (N)** for operation. Before installation, a qualified professional must confirm whether a neutral wire is present in the switch back box.

Installation of the Lamp Stand

1. Install Two Ceiling Hangers: Install the ceiling hangers on a ceiling with adequate load-bearing capacity. Accurately align the two mounting holes, and drill holes at the marked positions using an M8 impact drill bit. Insert $\Phi 8$ expansion anchors into the drilled holes, then securely fasten the ceiling hangers in a horizontal orientation using ST8 \times 60 self-tapping screws. *Maintain the specified distance between the two hangers to ensure a stable and reliable installation.*
2. Insert the Lamp Stand: Slide the lamp stand into place by aligning it with the two hangers through the middle opening. Ensure it slides in parallel and is securely fixed.

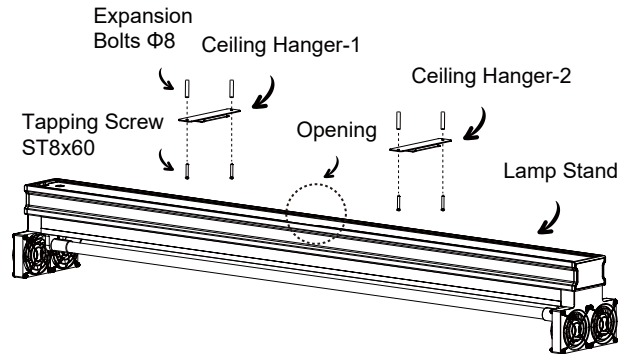


Diagram of Installation
of the Lamp Stand

INSTALLATION 2

Installation of the Control Display Panel

1. Choose a good spot on the wall, drill four $\Phi 4$ holes, insert the bolts, and tighten the box with ST4×30 screws.
2. Disconnect the panel from the power supply, then connect the N and L wires.
3. After turning the power supply board over, secure it to the mounting box using two M4×20 screws. Firmly insert the panel into the power supply board's socket to ensure a secure connection.

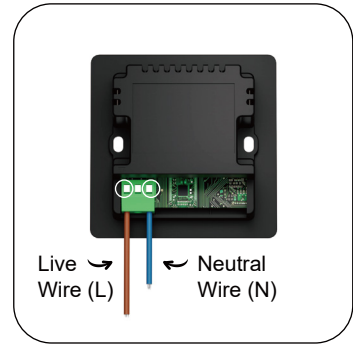
ATTENTION: Keep the control display panel and UV lamp tube clear of solid obstructions to avoid Bluetooth signal interference and ensure proper operation.

Install the UV Lamps

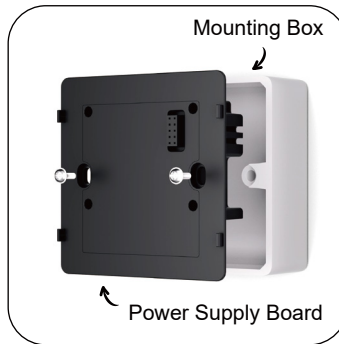
1. Power on the system via the control panel. Adjust the lamp stand to the needed height, and then **power off the system**.
2. Firmly hold both end of the lamp, align pins with base slots, and rotate 90° to lock.
3. Power on the panel, select "RAISE", and return the stand to its original position.



2-1. Disconnect the panel



2-2. Connect the N/L wires



3-1. Secure the power supply board

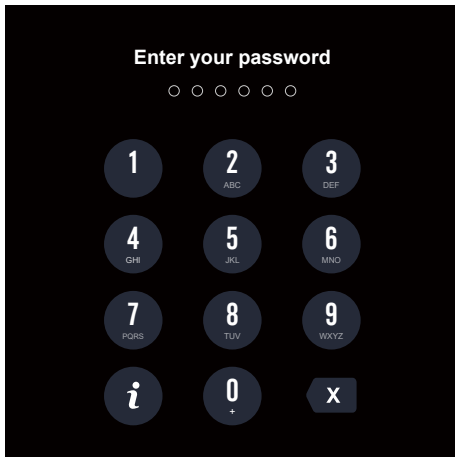


3-2. Insert the panel

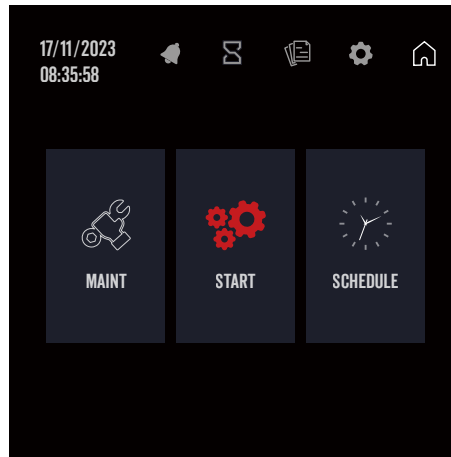
OPERATION 1

Initiate the Device Operation

Press the power button on the control panel to start the system. Enter the password to access the main interface. The default password is 123456, which users can change in the Settings menu.



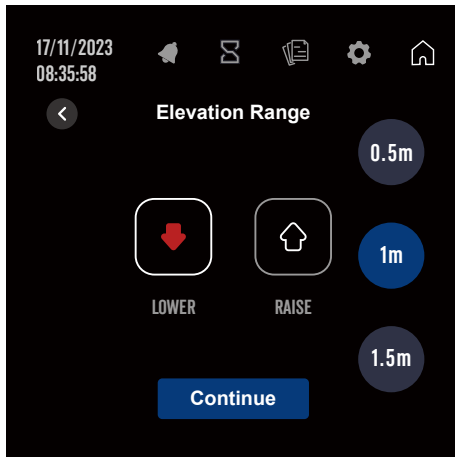
1. The default password is **123456**.



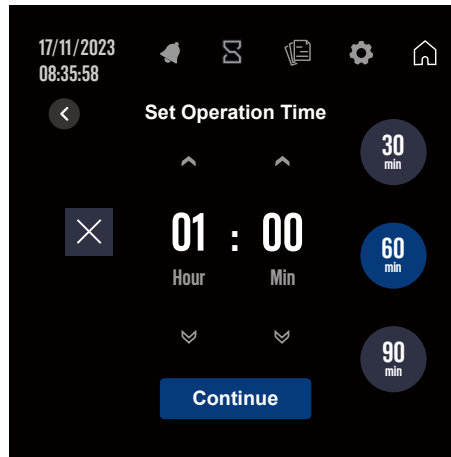
2. To begin the operation, press the **START** button on the main interface.

OPERATION 2

Please select and set the lamp tube's descent height, operating duration, and input the operator information.



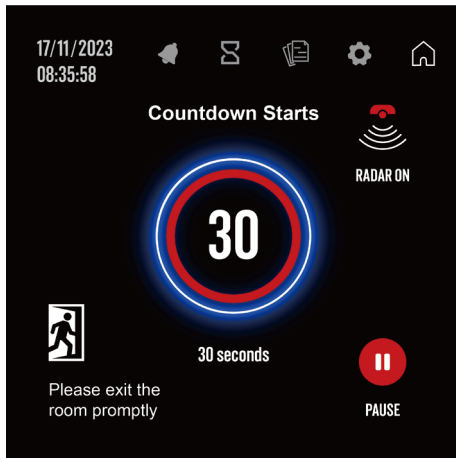
1. Set the lamp tube's lowering distance as needed.



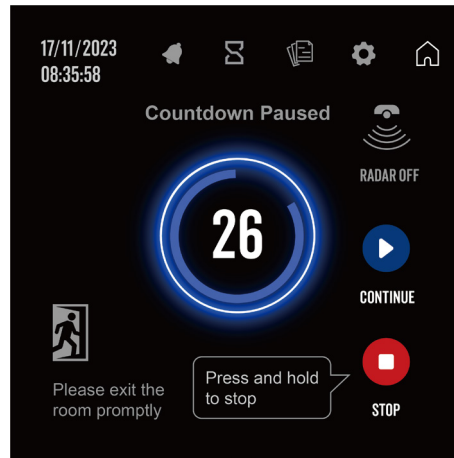
2. Set the operational time.

OPERATION 3

Upon completion of the above settings, the UV lamp will initiate a countdown and commence operation. The PAUSE button can be pressed to temporarily suspend operation, or the STOP button may be pressed and held to terminate the process entirely. Once the countdown begins, all personnel must immediately evacuate the area to prevent potential harm from exposure to UV radiation.



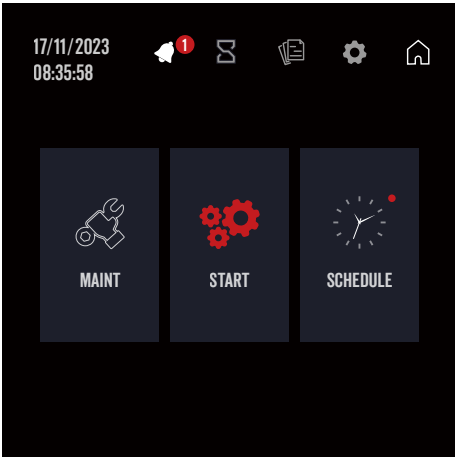
1. Press the "PAUSE" button to suspend the countdown process.



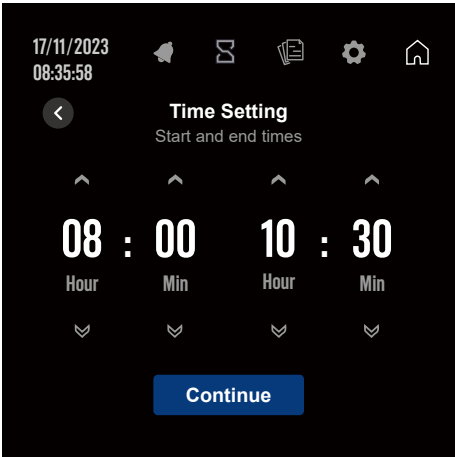
2. Press and hold the "STOP" button to stop the process.

OPERATION 4 SCHEDULING SETTING

This device features a scheduled start function, allowing users to program tasks by pressing the SCHEDULE button on the main touchscreen interface to configure designated operations.



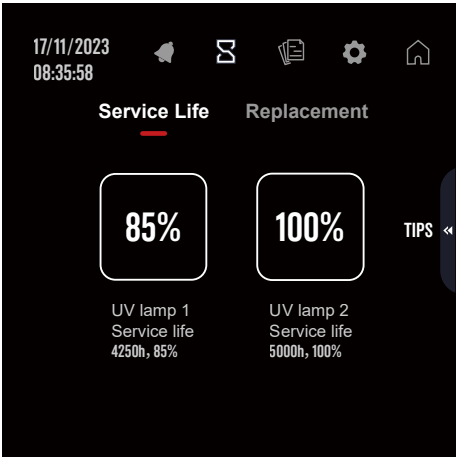
1. Press the "SCHEDULE" button to schedule a task.



2. Set the start and end times.

OPERATION 5 SERVICE LIFE & DISINFECTION RECORDS

By selecting the UV lamp management and record management options from the navigation menu, users can access detailed information on the service life and replacement history of UV lamps, as well as view and export disinfection records for further analysis.



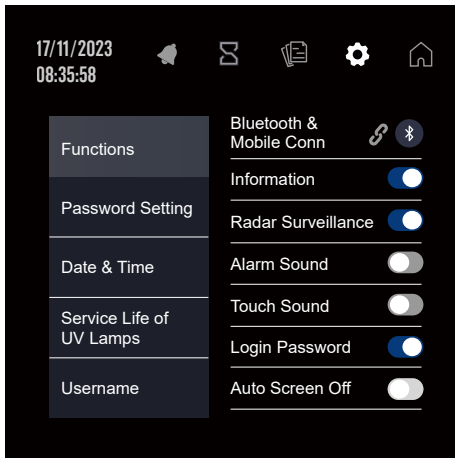
1. View the service life of the UV lamps by clicking the "Service Life" icon.



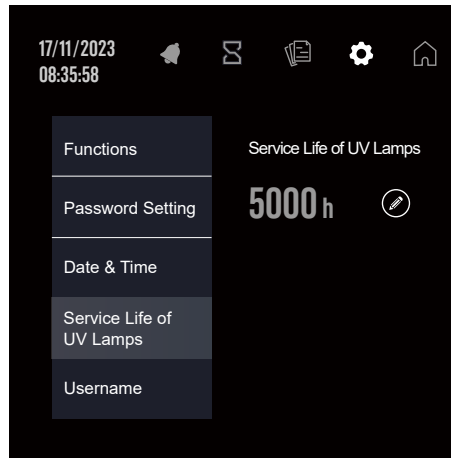
2. View and export UV lamp disinfection records.

OPERATION 6 VARIOUS SETTINGS

Access the Settings interface through the navigation menu to configure various functional options, including password modification and UV lamp service life settings.



1. Switch functions as needed.



2. Adjust the operational service life of the UV lamps.

CARE AND MAINTENANCE 1

To ensure optimal device performance, regular maintenance and timely replacement of UV lamps are essential. Before performing any maintenance procedures, such as cleaning or replacing the UV lamps, ***the control display panel must be powered off to ensure safety and prevent potential hazards. Do not touch the raised electrical wires to avoid the risk of electric shock.***

Regular Maintenance

1. For persistent stains or accumulated dirt on the device, gently wipe the surface with a dry, soft cloth. Avoid using volatile solvents like benzene or paint thinner, as they may damage the surface finish.
2. Clean the UV lamps regularly with a cotton swab moistened with 75% alcohol to remove accumulated dust. Avoid using wet wipes or damp cloths, as residual moisture may leave watermarks that could affect sterilization efficacy. The procedures for cleaning the lamp tubes are as follows:
 - A. Power on the control panel, enter the password for the main interface, and press MAINT to access the lamp tube lifting control.
 - B. Select the descent distance, press LOWER, and start lowering the lamp tubes.
 - C. After operation, ***power off the display***, and clean the UV lamp tubes carefully.
 - D. Reconnect power, power on the panel, and press RAISE in the lifting interface to raise the lamp tubes back.

Message Center

A notification will appear on the display panel immediately if the UV lamp malfunctions or requires replacement. Users can also check the Message Center for detailed information.

CARE AND MAINTENANCE 2

Replace the UV Lamps

Before replacing the UV lamp with a new one, ensure that the device is powered off and the power cord is disconnected to avoid potential safety hazards.

1. Power on the control display panel, enter the password to access the main interface, and press the MAINT button to navigate to the lamp tube lifting control interface.
2. Select the desired descent distance, press the LOWER button, and initiate the lamp tube lowering procedure.
3. Upon completion of the lowering operation, **power off the control display panel** and disconnect the power supply to prevent potential electrical hazards. It is strictly prohibited to touch the raising electrical wires.
4. Firmly hold both ends of the lamp tube and rotate it 90 degrees in opposite directions to detach it.
5. When installing the lamp tube, hold both ends with both hands, align the pins with the slots in the lamp socket, and rotate the tube 90 degrees to secure it in place.
6. Reconnect the power and power on the control display panel, then press the RAISE button in the lifting control interface to raise the lamp tube back to its original position.

Reset the UV Lamp Service Life Timer

After replacing the UV lamps, reset the service life timer to ensure accurate monitoring of operational hours.

1. Click the UV lamp service life icon in the navigation menu to access the UV lamp management interface.
2. Press the remaining service life percentage indicator box to reset the service life of the corresponding UV lamp.

TROUBLESHOOTING

Many service issues that seem serious can often be fixed with simple steps. Try troubleshooting using this guide first. For all other repairs, contact an authorized service center.

1. The Device is Not Powered On

Please ensure the device is securely connected to the power cord. If the connection is intact, check other appliances to confirm if there's a power outage.

2. The UV Lamp is Not Functioning Properly

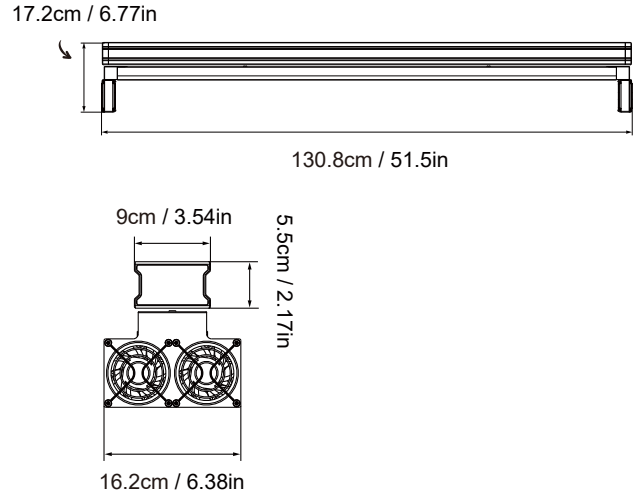
Please confirm the UV lamp tube is securely installed. If installed correctly, the issue may be with the lamp tube or ballast. If you suspect a ballast malfunction, contact customer service immediately for assistance.

3. Bluetooth Connection Lost, Causing the Control Display Panel to Malfunction

Please ensure there should be no solid obstruction between the control display panel and the ultraviolet lamp tube to prevent interference with Bluetooth signal transmission and ensure proper operational functionality. Then go to the Settings page via the navigation bar, select Bluetooth, and choose the device named "SOTO" from the list. A "Connected" status will appear next to the device name. Once connected, return to the main interface to proceed with remote control.

SPECIFICATIONS

Product Name	Ceiling-Mounted UV Sterilizer
Model No.	SOTO-UX
Power Req	220-240V, 50/60Hz
Rated Power	135W
UV Lamp	2x40W
Dimensions	130.8cmx16.2cmxD17.2cm
Weight	4.75kg / 10.47lb
Operation	Smart Screen Control / Mobile WeChat Mini Program Control
Display	Timer / Start Countdown Radar Surveillance Disinfection Records Elevation Range UV Lamp Service Life UV Lamp Replacement Records



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