



UV AIR TREATMENT SYSTEM MODEL SOTO-KX PRO

Operation Manual

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

SOTC 

CONTENTS

CONSUMER LIMITED WARRANTY	04
SAFETY PRECAUTIONS	05
STRUCTURE AND MAIN PARTS	06
HOW IT WORKS	07
INSTALLATION	08-11
Before Operation	<u>08</u>
Unplug the Lamp Before Servicing	<u>09</u>
Duct Mounting	<u>10</u>
Install the Unit	<u>11</u>
OPERATION	12
Control Display Panel	<u>12</u>
CARE AND MAINTENANCE	13
TROUBLESHOOTING	14
SPECIFICATIONS	15

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.

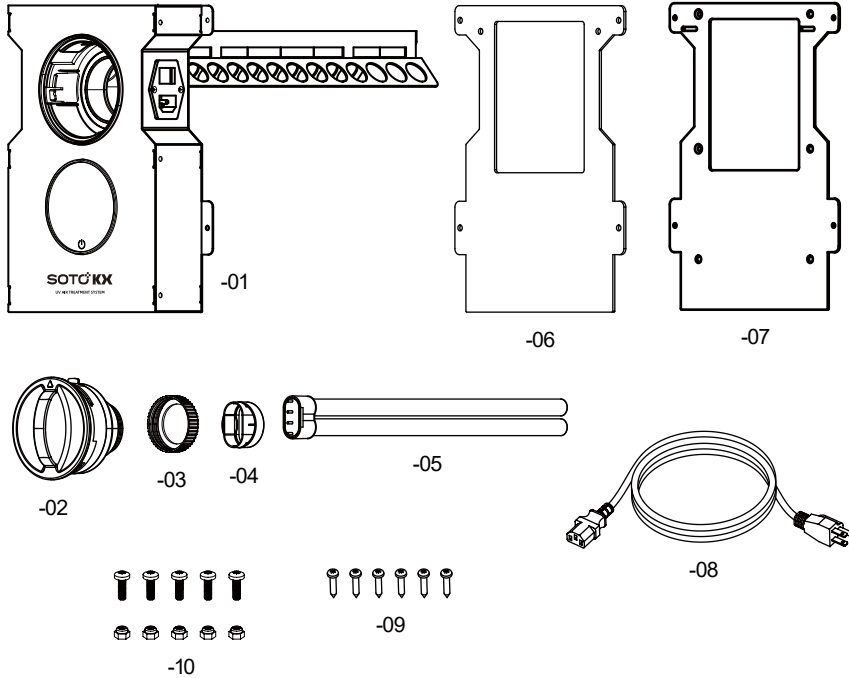
Guidelines for the Operating Environment

1. Use only a 220-240V outlet with grounding wire receptacle.
2. Do not operate the unit in enclosed spaces where oxygen-deficient, flammable, explosive, or toxic vapors are present, such as those emitted by oil-based paints, paint thinners, or certain mothproofing agents, as this may create a risk of fire or explosion.
3. The product is not suitable for use in high-temperature, humid, or wet environments. The optimal operating conditions are a temperature range of 0~40 °C and a relative humidity below 75%.
4. Altitude up to 2,000m.
5. The mains supply voltage may fluctuate by up to $\pm 10\%$ relative to the nominal voltage.

Operation of the Device

1. Operate the device strictly in accordance with the instructions specified in this manual.
2. Do not operate the unit if the power cord or plug is damaged, or if the connection to the wall outlet is insecure.
3. Avoid handling the plug or electrical device with wet hands, as this may result in electric shock or fire hazards.
4. To reduce the risk of electric shock, this equipment has a grounding type plug that has a third (grounding) pin. This plug will only fit into a grounding type power outlet. If the plug does not fit into the outlet, contact qualified personnel to install the proper outlet. Do not alter the plug in any way.
5. To avoid potential fire hazards, do not disassemble the device under any circumstances.
6. Turn off the unit and unplug it from the power source before performing any maintenance.

STRUCTURE AND MAIN PARTS



- 01 Main Unit
- 02 UV Lamp Fixing Knob
- 03 Rotating Cover
- 04 UV Lamp Clamp
- 05 UV Lamp
- 06 Gasket Sponge
- 07 Mounting Plate
- 08 Power Cord
- 09 Self-tapping Screws
- 10 machine screws with self-locking nuts

HOW IT WORKS

The UV air treatment system primarily consists of a high-power H-shaped UV lamp and activated carbon-based photocatalytic modules. Integrated into the HVAC system, the device effectively inactivates a wide range of pathogens and disrupts the transmission routes of pathogenic microorganisms. Upon exposure to UV radiation, the photocatalyst immobilized on the activated carbon modules demonstrates effective degradation of odor-causing compounds. Fitted with an airflow sensor, the UV lamp automatically activates and deactivates in coordination with the operation of the HVAC system, thereby enhancing energy efficiency and prolonging the service life of the lamp.

Features

1. Easy to install and maintain
2. 36W UV germicidal lamp
3. Photocatalytic activated carbon modules
4. Smart control display system with mobile application remote control
5. Whole-house air purification
6. Effectively suppresses mold growth within HVAC systems

INSTALLATION 1

Before Operation

Please read and carefully follow all instructions. All installation procedures must comply with the electrical codes established by your provincial authorities. Improper installation may result in damage to the filtration system. Before beginning any installation work, ensure that the main electrical switch is turned off and that the power plug is disconnected from the power outlet. Failure to observe these safety precautions may result in electric shock or personal injury.

Electrical Shock – Your system has been installed by your service company and has been wired or plugged into 220-240VAC electrical power with grounding means (we suggest you contact your service company for all service work). Plug is used as the disconnecting device, it shall be readily identifiable and easily reached by the OPERATOR after installation.

UV Light is Harmful – Never look at a lit UV lamp without UV protective glasses and skin coverings.

UV Lamp May Cause Injury – UV lamps are made of glass and therefore somewhat fragile. Safety glasses and gloves should be worn when handling a UV lamp. In addition, UV lamps can be very hot and cause skin burns. Allow lamp to cool before handling.

INSTALLATION 2

Unplug the Lamp Before Servicing

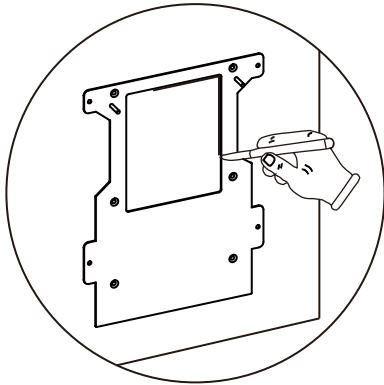
The UV air treatment system is designed for air disinfection and installs into the air handling system or ductwork. Select a mounting location that offers sufficient space for the mounting plate 31.0cm x 23.0cm and enough internal space 41.0cm H x 11.0cm D. Installation also requires access to 120 VAC electrical power.

1. Do not install where UV lamp is visible
2. Do not install in outdoor applications
3. Do not expose wiring or plastic to UV light
4. Do not install beneath a humidifier
5. If installed near an air filter, check with the filter manufacturer for UV properties & safety.

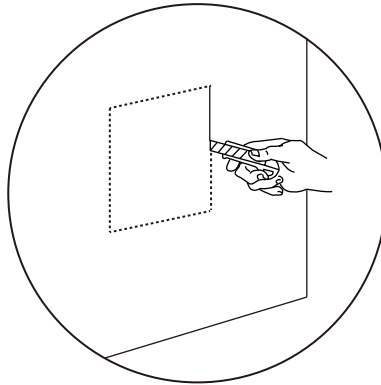
INSTALLATION 3

Duct Mounting

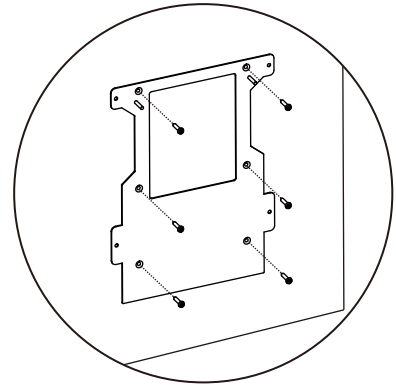
1. Use the mounting plate to trace the cut line onto the duct.
2. Utilize a suitable tool to cut an opening in the duct along the designated cutting line.
3. Secure the mounting plate to the duct using six screws.



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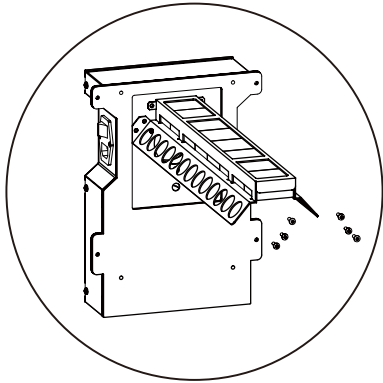


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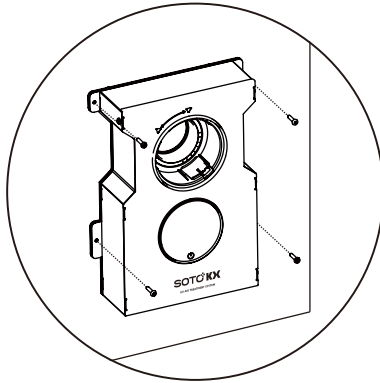
INSTALLATION 4

Install the Unit

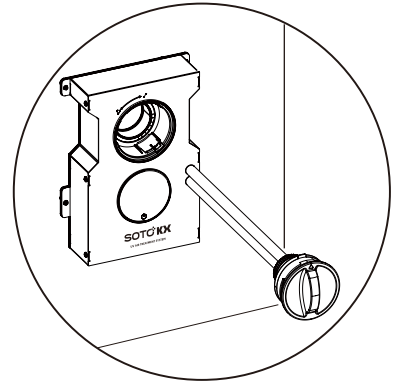
1. Secure the carbon filter bracket to the rear of the device using six screws.
2. Attach the device to the mounting plate and secure it to the duct using four screws.
3. Insert the UV lamp into the UV lamp fixing knob and secure it by tightening the rotating cover. Then, insert the assembly into the device and rotate it clockwise until fully seated.



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OPERATION

1. Auto Button

By default, the machine enables this function, causing the UV lamp to operate automatically according to airflow conditions.

Specifically, the UV lamp turns on when airflow is detected in the duct and turns off when no airflow is present. Pressing this button disables the automatic mode, resulting in the continuous operation of the UV lamp.

2. Reset Button

After replacing the UV lamp, press and hold this button for three seconds to reset the lamp's operational lifetime.

3. Alarm Button

When the UV lamp reaches the end of its operational life or experiences a failure, the system will activate an audible alarm. Pressing this button will deactivate the alarm.

4. Timer Button

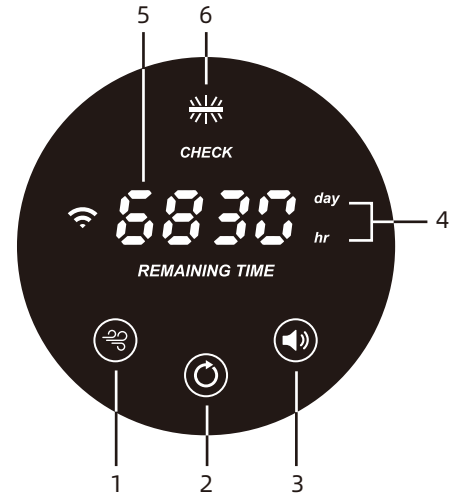
Press "day" or "hr" to switch the display format of the remaining UV lamp operating time.

5. UV Lamp Remaining Service Life Indicator

Display the remaining operating time of the UV lamp.

6. UV Lamp Indicator Light

When the UV lamp is deactivated, the indicator displays a gray color, when the lamp is activated, the indicator shows white. In the event of a malfunction, the indicator light flashes red.



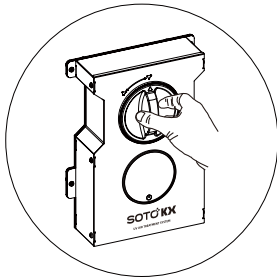
CARE AND MAINTENANCE

To ensure optimal device performance, the UV lamp should be replaced promptly when the indicator light begins flashing. Prior to replacing the fuse, always disconnect the appliance connector from the appliance inlet. The replacement fuse must match the original specifications: 250 VAC, 2 A, $\phi 5.2 \times 20$ mm. When performing maintenance on the unit, ensure that the power cord is unplugged.

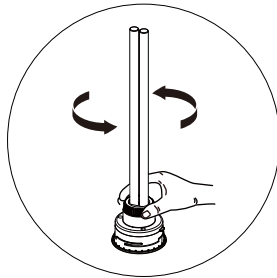
Replacing the UV Lamp

When the REMAINING TIME indicator on the control display panel flashes white and is accompanied by an audible alarm, the UV lamp should be replaced.

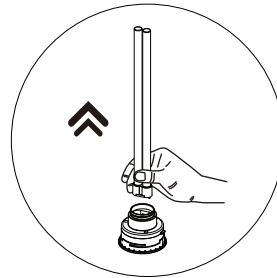
1. Disconnect the unit from the power source to cease operation.
2. Rotate the UV lamp fixing knob counterclockwise to remove the UV lamp.
3. Rotate the cover counterclockwise to unscrew and remove the UV lamp.
4. Replace the UV lamp with a new one, ensuring it is installed in the same manner as the original.
5. After replacing the UV lamp, press and hold the RESET button to reset the lamp operating time.
6. Avoid direct skin contact with the new lamps during handling.



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TROUBLESHOOTING

Service issues that may initially appear significant can often be resolved through simple measures. Users are encouraged to consult the following guide to address common concerns promptly and effectively. For all other maintenance or repair requirements, please contact an authorized SOTO service center.

1. The Device is Not Powered On

Please verify that the unit is receiving power by confirming its proper connection to a functioning AC outlet or ensuring it is correctly wired in accordance with applicable electrical specifications. Please ensure that the UV lamp fixing knob is securely tightened, as failure to do so may activate the interlock switch, thereby preventing the power supply from being established.

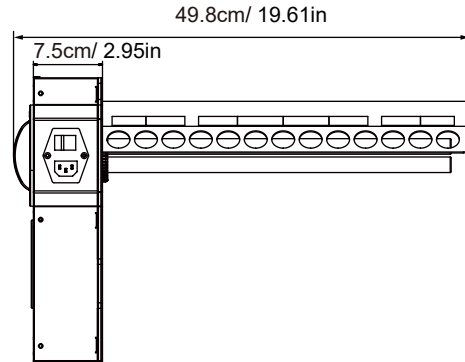
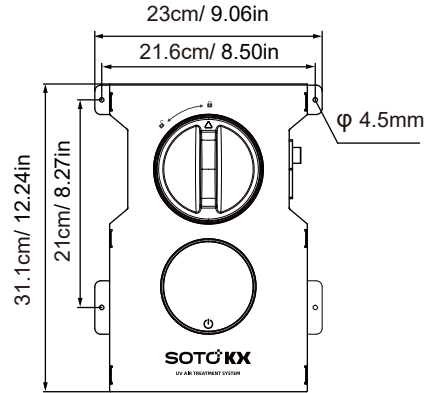
2. The UV Light is Currently Not Operational

Please verify that the AUTO function is activated and ensure proper airflow through the duct. When the AUTO function is enabled, the UV lamp will not operate if there is insufficient or no airflow within the duct.

Please ensure that the ballast and UV lamp are in proper working condition and correctly installed. Should issues persist, please contact customer service for assistance.

SPECIFICATIONS

Product Name	UV Air Treatment System
Model No.	SOTO-KX PRO
Power Req	220-240V, 50/60Hz
Rated Power	40W
UV Lamp	36W (H-shaped) 41cm / 16.14in
Dimensions	23cmx31.1cmx49.8cm
Weight	3.0kg / 6.61lb
Power Cord	2.5m
Operation	Touch Button / Mobile App
Smart Control	UV Lamp Service Life
Display	UV Lamp Malfunction Notification
Airflow Sensor	Yes (UV Lamp Automatically On / Off by Airflow)



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