



CEILING-MOUNTED AIR PURIFIER MODEL SOTO-XD

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 placement 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

For safety, please carefully read and adhere to these instructions to reduce the risk of electric shock, fire, or personal injury.

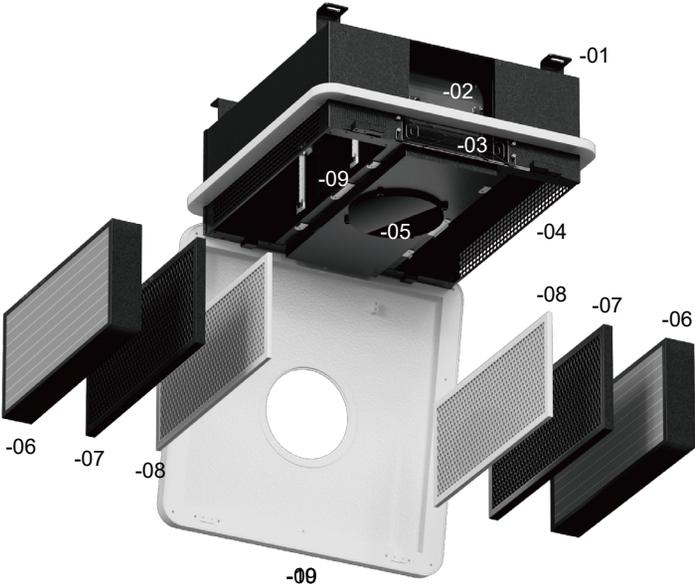
Guidelines for the Operating Environment

1. Use only a 220-240V outlet equipped with a grounded receptacle.
2. Avoid operating in extreme heat or humidity. Optimal conditions: 0-40°C, with relative humidity below 75%.
3. Do not operate this device in enclosed environments containing flammable, explosive, or toxic gases (such as gasoline, paint, or paint thinner) to prevent safety hazards such as fire or explosion.

Operation of the Device

1. Do not operate the unit if the power cord or plug is damaged, or if the connection to the wall outlet is loose.
2. Always power off and disconnect the device from the power supply before conducting any maintenance.
3. Avoid handling the power plug with wet hands to prevent electric shock.
4. The device must be installed by a qualified professional and securely mounted to a load-bearing concrete ceiling. It is advisable to choose a location with minimal foot traffic for installation.
5. The device must not be operated without filters. All plastic packaging must be removed from the filters prior to operation.
6. Keep fingers and objects clear of vents. Ensure hair, clothing, and body parts stay away from openings and moving parts during installation.
7. Avoid UV lamp exposure to prevent eye damage, including blindness.
8. Do not clean the device with flammable substances, as this may pose a fire hazard.
9. HEPA and activated carbon filters must not be washed or reused.
10. Unauthorized disassembly is prohibited. Only certified technicians may perform maintenance or repairs.

STRUCTURE AND MAIN PARTS



- 01 Ceiling-mounted Hanger
- 02 Fan Motor System
- 03 Air Outlet
- 04 Air Inlet
- 05 Display Control Panel
- 06 HEPA Filter
- 07 Activated Carbon Filter
- 08 Photocatalyst filter
- 09 UV Lamp
- 10 Front Panel

HOW IT WORKS

The ceiling-mounted intelligent air purifier features a high-capacity, low-noise dual-inlet/outlet fan system, combining efficient air purification with advanced UV sterilization for optimal space utilization. During operation, the dual-fan draws in indoor air through the intake ports. The air undergoes sequential treatment via HEPA filter, activated carbon filter, and UV irradiation, enabling multi-stage purification and comprehensive disinfection. The pre-filter and HEPA filter capture coarse and fine particles (0.3 microns and above), while the activated carbon filter adsorbs gaseous pollutants, including VOCs. The UV+Photocatalyst system centrally integrated within the filtration system, helps inactivate airborne microorganisms and decomposes certain airborne chemical compounds. Additionally, the plasma generator releases plasma into the surrounding air to help enhance overall air purification performance.

Features

1. High Airflow, Low Noise: The dual-inlet/outlet fan system delivers high airflow with low noise, enabling fast and efficient air purification and disinfection.
2. Purification and Disinfection: The pre-filters and HEPA filters capture particles ≥ 0.3 microns, while activated carbon filters adsorb gases (e.g., VOCs, odors). LED UV lamps disinfect the air by inactivating pathogens.
3. Plasma Generator: Releases plasma to help inactivate airborne microorganisms.
4. Large LED Display Panel: The large display panel ensures clear, high-impact visibility for effective long-distance information presentation.
5. Multiple Sensors: The device monitors and displays real-time air quality data accurately.
6. Supports Multiple Operation Modes: This device supports three operational modes-remote control, mobile application control, and voice command control.

INSTALLATION 1

Operational Environment

1. Power Supply Condition: Use only a 220–240V outlet equipped with a grounding wire receptacle.
2. Environmental Conditions: Temperature range of 0°C to 40°C; Relative humidity below 75%.
3. Ceiling-mounted Installation: The device must be installed by a qualified and certified professional. To ensure safety, the device must be securely installed on a load-bearing concrete ceiling. If not installed correctly, the device could fall, potentially harming personnel.
4. Operating Environment: The device must be installed on a load-bearing concrete ceiling in a low-traffic area. Operation is strictly prohibited in environments containing flammable, explosive, or other hazardous gases.

Before Operation

1. Upon receipt, verify that the device and all accompanying components are complete and in satisfactory condition. Immediately report any missing or damaged items to the customer service center.
2. Before operating the device for the first time, *it is essential to remove the plastic packaging from the filter assembly located within the device.*
 - A. Open the front panel of the device and carefully remove the left and right HEPA filters, as well as the activated carbon filters.
 - B. Remove the plastic protective packaging from the filters, reinstall them into their designated positions within the device, and securely close and lock the front panel.

INSTALLATION 2

WARNING

The device must be securely mounted to a load-bearing concrete ceiling to prevent falling hazards and personnel injury. Installation must be performed by authorized personnel only.

Installation Procedure

Install the device strictly following the steps below, using only the specified accessories to ensure stability and safety.

1. Install Ceiling-mounted Hangers:

Take out four ceiling-mounted hangers from the package and install them securely around the device. Anchor each hanger firmly with four M6 screws. After installation, apply external force in all four directions (up, down, left, and right) to verify secure attachment through a stability test.

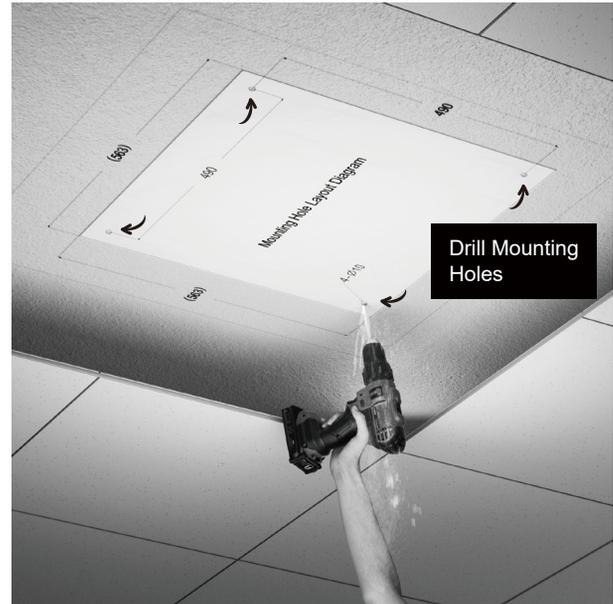


INSTALLATION 3

When ceiling panels are present at the top of the room, remove the panels at designated locations to provide access. Securely attach the mounting hole layout diagram to the ceiling and drill four holes precisely as marked. For uneven ceilings, follow the reference points even without the diagram. If no ceiling panels are installed, drill directly into the structural ceiling as indicated.

2. Drill Mounting Holes in the Ceiling:

Drill four 10mm mounting holes into the load-bearing concrete ceiling as per the layout diagram using an impact drill, then install expansion bolts into each mounting hole.

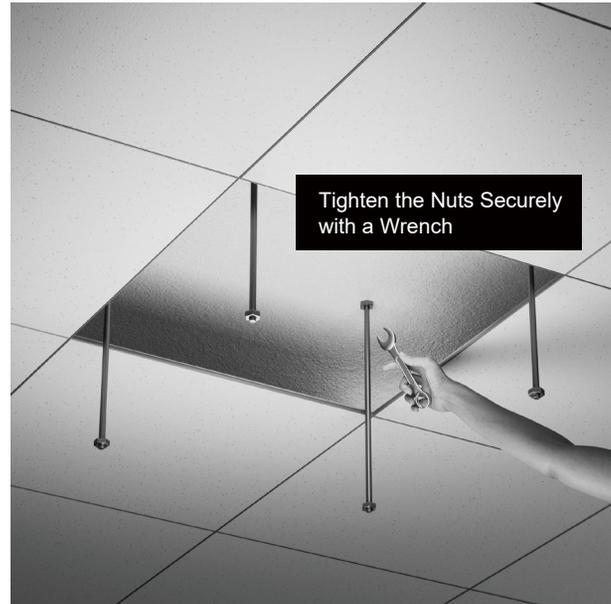


INSTALLATION 4

It is recommended to use high-strength steel rods with a diameter of 10 mm (M10), cut to the required length according to specific installation requirements. *When determining the rod length*, ensure that the device's bottom air inlet and outlet remain outside the ceiling partition to prevent obstruction and ensure proper ventilation system operation.

3. Install the Mounting Steel Rods:

Insert the pre-cut steel rods one by one into the four preset mounting holes in the ceiling and tighten them securely with M10 hex nuts. After installation, conduct a pull test by applying vertical tension to confirm the stability and reliability of the setup.



INSTALLATION 5

4. Install the Device: After installing the mounting steel rods, use a dedicated lifting device or two personnel to smoothly lift the device, ensuring the ceiling-mounted hangers properly engage with the rods. Secure each connection point between the rods and hangers with appropriate M10 hex nuts. Adjust the device to the specified installation height as per technical requirements. Upon completion, inspect the installation by gently moving the device vertically and horizontally to confirm it is securely mounted and free of any looseness.



OPERATION 1 CONTROL DISPLAY PANEL

1. Power Button: Press the power button to turn the device on or off. Upon powering on, the fan will operate at speed level 1.
2. Wi-Fi Icon Button: To connect to the Wi-Fi network, press the button first. Once the indicator light starts flashing, proceed to connect via the mobile app.
3. Voice Command Button: Press the button to turn voice commands on or off.

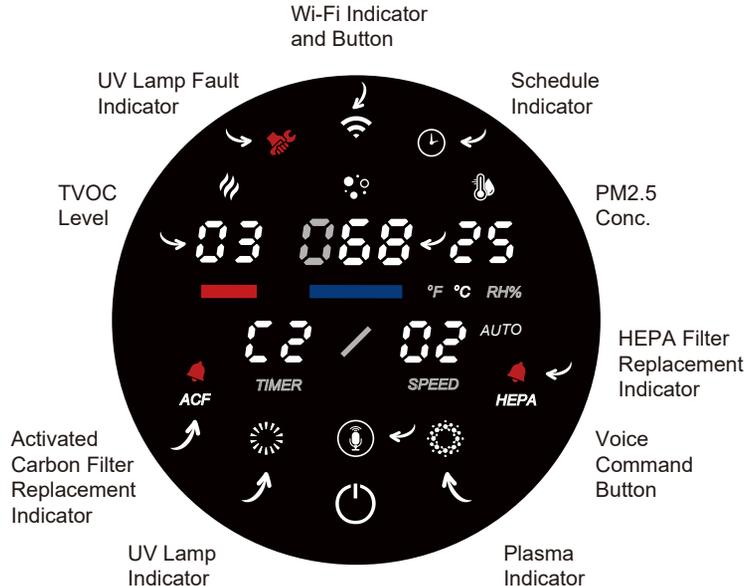
4. Main Indicator Lights

A. Schedule Indicator: The indicator light will turn on once schedules are set via the App control.

B. Filter Replacement Indicators:
The indicator light will flash red when either the HEPA or activated carbon filter needs replacement.

C. UV Lamp Indicator: The UV lamp indicator light illuminates when activated and flashes when replacement is needed.

D. Indoor Air Quality Level Display:
The color bars below PM2.5 and TVOC readings show air quality: blue for good, red for unhealthy/hazardous.



Display Panel Diagram

OPERATION 2 REMOTE CONTROL AND MOBILE APPLICATION

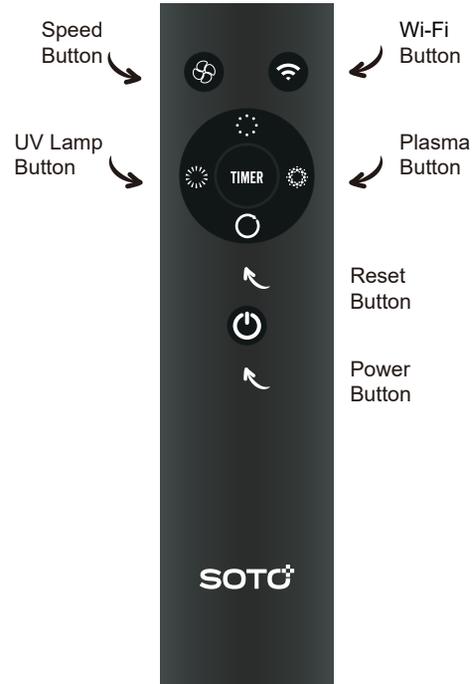
The device comes with an infrared remote control.
The functions of each button are as follows.

Remote Control Buttons

1. Speed Button: Press the button to cycle through the available fan speed settings sequentially: 01, 02, 03, 04, 05, 06, Auto.
2. Timer Button: Press the timer button to set duration (1–12 hours). First press activates C2 mode: 2 hours on, 30 minutes off, repeating cycle.
3. UV Lamp and Plasma Button: Press the button to turn the UV lamp and plasma generator on or off.
4. Reset Button: Press the button three times in a row to reset the indicator after replacing filters or the UV lamp.
5. Wi-Fi Button: After pressing this button three times consecutively, the Wi-Fi icon starts flashing, indicating the device is initiating a Wi-Fi connection.

Mobile Phone Application Control

To connect to Wi-Fi: Power on the device and press the Wi-Fi button on the display panel or press it three times on the remote control. The indicator light will start flashing. For detailed instructions, refer to the **Tuya Application User Manual**.



Remote Control Diagram

CARE AND MAINTENANCE 1

To achieve and sustain the highest level of air purification and disinfection efficacy, it is recommended to replace the HEPA filter, activated carbon filter, and UV lamp periodically. Before performing any maintenance on the device, always disconnect the power supply by unplugging the power cord from the outlet.

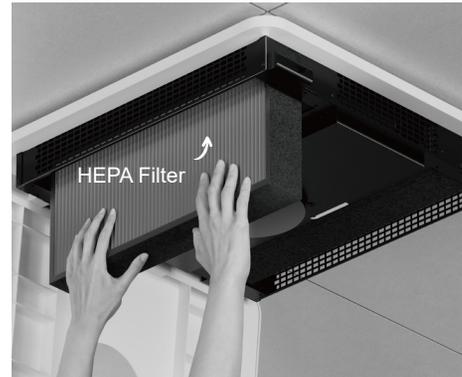
Routine Maintenance

Clean stains gently with a soft cloth. Avoid volatile solvents, benzene, paint thinners, and polishing powders to prevent surface damage. Keep the device dry and away from water during cleaning.

Replacing the HEPA Filter

The HEPA filter should be replaced promptly when the replacement indicator light on the display panel flashes red.

1. Stop the operation and disconnect the power cord.
2. To replace the HEPA filter, first ensure safe access using a compliant ladder. After carefully opening the front panel, remove the old filter by pulling it downward from both sides of the fan motor assembly. Insert the new filter, then reinstall the panel by reversing the removal steps.
3. *After replacing the HEPA filter, turn on the device and press the reset button on the remote control three times consecutively to reset the filter's service life indicator.*



CARE AND MAINTENANCE 2

Replacing the Activated Carbon Filter

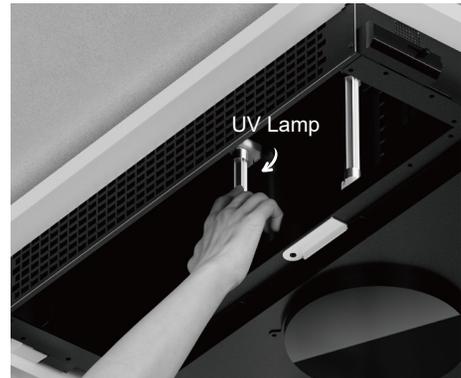
Replace the activated carbon filter immediately when the replacement indicator light on the display panel flashes red.

1. Stop the operation and disconnect the power cord.
2. Use a safety-compliant ladder to access the device, ascend with caution, and open the front panel. Carefully remove the activated carbon filter by pulling it downward from both sides of the fan motor assembly. Replace the old filter with a new one, then reinstall the panel by reversing the removal procedure.
3. *Once the activated carbon filter is replaced, power on the device and press the remote reset button three times to reset the filter's service life indicator.*

Replacing the UV Lamp

If the UV indicator on the display panel flashes, replace the UV lamp promptly.

1. Turn off the device and unplug the power cord.
2. Safely use a ladder to reach the device. Open the front panel and remove the UV lamps by turning and pulling them down. Properly install the new lamps, ensuring they are securely positioned, then close the front panel.
3. *Reconnect the power cord, turn on the device, and press the remote reset button three times to reset the UV lamp service life indicator.*



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 Fails to Power On

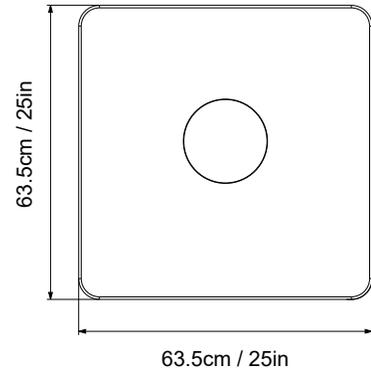
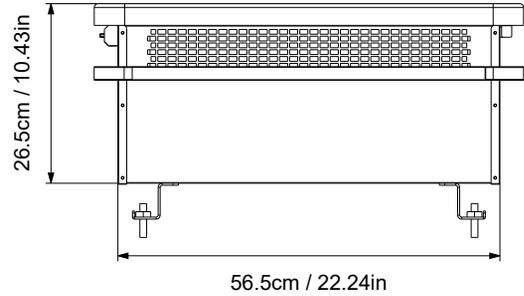
Ensure the front panel is securely closed, if not, close it firmly. Verify the device is properly connected to a stable power source. If the power cord appears correctly connected, test other nearby electrical appliances to check the power supply. If you suspect a fault in the power cord, contact an authorized service center for professional inspection and replacement.

2. Purification and Disinfection Performance is Substandard

If the device's purification/disinfection performance drops below standards, check for excessive dust on filters and confirm timely replacements of filters or UV lamps.

SPECIFICATIONS

Product Name	Ceiling-Mounted Air Purifier
Model No.	SOTO-XD
Power Req	220-240V, 50/60Hz
Rated Power	65W
LED UV Lamp	4x5W / LED UV
Plasma	$\pm 2 \times 3 \times 10^6 / \text{cm}^3$
Dimensions	63.5cm x 63.5cm x D26.5cm
Weight	23kg / 50.71lb
Power Cord	2.5m
Speed	Speed 1~6+AUTO
Operation	Voice / Button / Remote Control / App
Display	PM2.5 / TVOC / Speed / Timer TEMP / RH / WiFi / LED UV Lamp Plasma / Filters & LED UV Lamps Replacement Notification



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