



WALL-MOUNTED AIR PURIFIER MODEL SOTO-BK100

Operation Manual

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

SOTO 

CONTENTS

CONSUMER LIMITED WARRANTY	04
SAFETY PRECAUTIONS	05
STRUCTURE AND MAIN PARTS	06
HOW IT WORKS	07
INSTALLATION	08-09
Install the Metal Bracket	<u>08-09</u>
OPERATION	10-11
Voice Command and Control Display Panel	<u>10</u>
Remote Control	<u>11</u>
CARE AND MAINTENANCE	12-13
Replacement of the HEPA Filter	<u>12</u>
Replacement of the Activated Carbon Filter	<u>13</u>
Replacement of the UV Lamp	<u>13</u>
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 prevent electric shock, fire, or personal injury, please review and strictly adhere to the guidelines below.

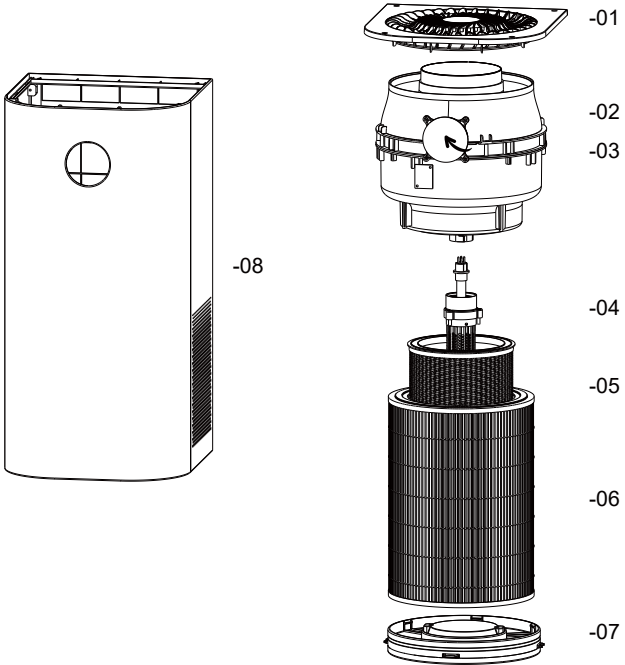
Guidelines for the Operating Environment

1. Use only with a 220-240V electrical outlet.
2. Avoid operating the device in confined areas where flammable, explosive, or toxic vapors are present, such as those released by oil-based paints, paint thinners, or certain mothproofing chemicals. Such conditions could lead to fire or explosion risks.
3. Do not use the device in environments with extreme heat or high humidity, as this may impair performance or cause damage. For optimal operation, maintain temperatures between 0~40°C and relative humidity below 75%.
4. To ensure safety, mount the device on a load-bearing wall in a minimally trafficked zone, reducing the chance of accidental dislodgment and potential injury.

Operation of the Device

1. Do not operate the device without first installing the filters. Ensure that all plastic packaging materials are completely removed from the filters before operation.
2. If the power cord or plug is damaged, or the wall outlet connection is unstable, do not operate the device. Handling outlets or plugs with wet hands can cause electric shock or fire. Ensure the device is powered off and disconnected during maintenance.
3. Avoid inserting fingers or any foreign objects into the air intake or exhaust outlet. Keep hair, loose clothing, fingers, and all body parts clear of openings and moving components.
4. Avoid direct exposure to UV lamp as this may result in eye damage or permanent blindness. Do not wash or reuse HEPA or carbon filters.
5. Do not disassemble the device unless you are a certified technician, as there is a risk of fire or electric shock.
6. Do not clean the device with flammable substances, as this may pose a fire hazard.

STRUCTURE AND MAIN PARTS



- 01 Air Outlet
- 02 Fan Motor System
- 03 Display Control Panel
- 04 UV-Photocatalytic System
- 05 Activated Carbon Filter
- 06 HEPA Filter
- 07 Filter Clamp
- 08 Plastic Enclosure

HOW IT WORKS

The device primarily consists of a fan motor system, a filtration system, and a UV-photocatalytic oxidation (UV-PCO) system. During operation, the fan motor draws indoor air into the unit through an inlet located at the base, directing it sequentially through the filtration assembly and the UV-PCO system for purification. The pre-filter and HEPA filter are designed to capture large particles and fine particulate matter with diameters of 0.3 microns and above, while the activated carbon filter effectively adsorbs and removes harmful gaseous pollutants. The UV-PCO system, centrally integrated within the filtration module, 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. DC Brushless Motor: Achieves low noise levels while delivering high airflow output performance.
2. Filtration System: The device's filtration system incorporates a high-efficiency HEPA filter and an independent activated carbon filter, enabling separate replacement and thereby improving long-term cost-effectiveness.
3. UV-PCO System: The UV-Photo system maximizes air purification and disinfection performance.
4. Plasma Generator: Releases plasma to help inactivate airborne microorganisms.
5. Multiple Sensors: The device is equipped with multiple sensors, enabling precise monitoring and real-time display of air quality conditions.
6. Multiple Operational Modes: The touchless voice command functionality prevents cross-contamination among users. The device is equipped with a remote control, and the mobile application enables intelligent remote management, supporting scheduled operation settings.

INSTALLATION 1

Operational Environment

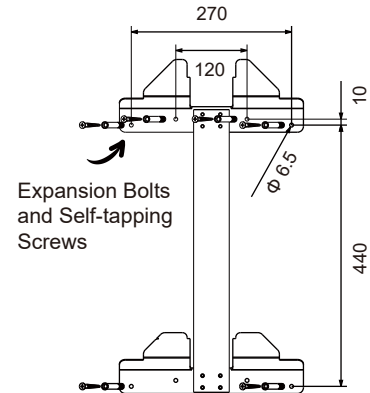
1. Power Supply Condition: Use only a 220–240V electrical outlet.
2. Environmental Conditions: Temperature range of 0°C to 40°C; Relative humidity below 75%.
3. Wall-mounted Installation: For safety purposes, the device should be installed on a load-bearing wall in a low-traffic area to reduce the risk of accidental displacement and potential harm. Operation of the device is strictly prohibited in environments containing flammable, explosive, or other hazardous gases.

Installation Steps

Upon receipt, verify that the device and all accompanying components are complete and in satisfactory condition. Promptly report any missing or damaged items to the customer service center. Secure the metal bracket to a load-bearing wall, and firmly attach the device to the bracket using the mounting hanger located at the rear of the device.

1. Mount the Metal Bracket: Select a wall area with minimal foot traffic. Utilize an impact drill to create holes (6.5mm diameter) in the load-bearing wall, aligning them precisely with the mounting bracket's hole pattern. Secure the bracket firmly using expansion bolts and self-tapping screws. Establish no fewer than six fixed points to ensure balanced support, with at least four located in the upper region and two in the lower region.

After installing the metal bracket, it is recommended to manually apply vertical pressure with both hands to verify its secure attachment and ensure proper installation.



Metal Bracket Diagram

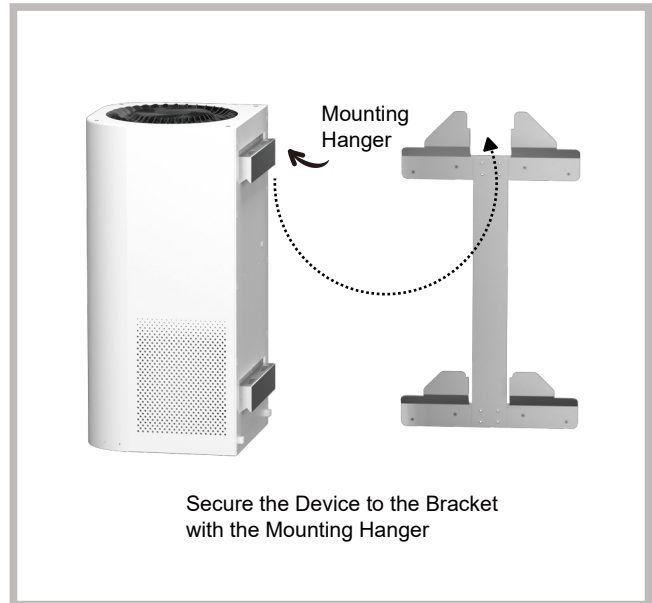
INSTALLATION 2

2. Attach the Device: Securely hold the device with both hands, align the mounting hanger situated at the rear of the device with the metal bracket, and firmly attach it. Securely hold the unit with both hands and apply downward force to confirm proper attachment to the metal bracket.

3. Remove the Plastic Packaging from the Filter: Before the initial operation of the device, it is imperative to remove the plastic packaging from the filter assembly situated inside the device.

A. Rotate the bottom plate counterclockwise to unlock it, then pull downward to remove the filter assembly along with the bottom plate. Carefully peel off the protective plastic covering from the filters.

B. Reinsert the assembly into the designated compartment, then rotate the bottom plate clockwise until an audible click confirms proper engagement.



OPERATION 1 VOICE COMMAND AND CONTROL DISPLAY PANEL

1. Voice Commands (English only) - For detailed instructions, please refer to the **Voice Command Operation Guide**.

2. Power Button: Press the power button to turn the device on or off. Upon powering on, the fan will operate at speed level 1.

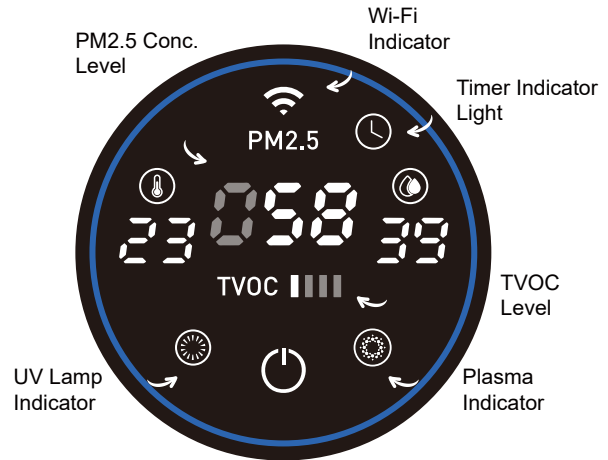
When the PM2.5 indicator flashes, replace the HEPA filter. If the TVOC indicator flashes, replace the activated carbon filter immediately. A flashing UV lamp indicator requires UV lamp replacement. After replacing the filters or UV lamp, press and hold the button for about three minutes during startup to reset the service life indicator.

3. Indicator Lights

A. UV Lamp Indicator Light: When the UV lamp is activated, the indicator light illuminates, signifying that the lamp is operational. Pressing the UV lamp button on the remote control deactivates the lamp, and the indicator light turns off subsequently.

B. Plasma Indicator Light: Press the plasma button on the remote control to activate or deactivate the plasma generator. The indicator light will turn on or off accordingly.

C. Timer Indicator Light: When the operation time is set via remote control, the indicator light turns on.



Indoor Air Quality Level Display

The circular indicator light around the display panel visually represents indoor air quality with color changes: blue signifies good air quality, while red indicates unhealthy or hazardous conditions.

OPERATION 2 REMOTE CONTROL AND MOBILE APPLICATION

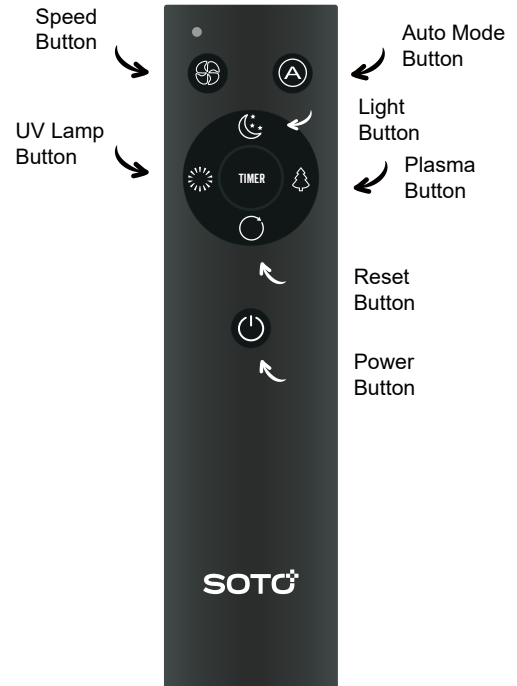
The device is equipped with an infrared remote control.

The functions of the buttons are described below.

1. Power Button: Press the power button to turn the device on or off.
2. Speed Button: Each button press cycles the fan speed sequentially through levels 01, 02, 03, 04, and then back to 01.
3. AUTO Button: Press the Auto mode button to enable Auto mode. The device will automatically adjust speed (01-03) based on airborne pollutant levels detected by its sensors.
4. Timer Button: Each press of the button cycles the timer through the following settings in sequence: 01h, 02h, 04h, C2 (Cycle Mode), and cancel. In C2 mode, the device runs on a repeating cycle of 2 hours of operation followed by a 30-minute pause. The timer indicator light turns on whenever a timer setting is active.
5. Reset Button: *After replacing the filters or UV lamp, press the button three times consecutively during startup to reset the service life indicator.*

Mobile Phone Application Control

To connect the device to the Wi-Fi network: While the device is *in standby mode*, press and hold the power button for 3 seconds until the Wi-Fi indicator light starts flashing. For detailed instructions, refer to the **Tuya Application User Manual**.



Remote Control Diagram

CARE AND MAINTENANCE 1

To maintain optimal air purification performance, promptly replace the HEPA filter, activated carbon filter, and UV lamp when their respective indicator lights on the control panel begin flashing. Before performing any maintenance, always disconnect the power supply by unplugging the device from the electrical outlet. Never touch the plug with wet hands, as this may result in electric shock or serious injury.

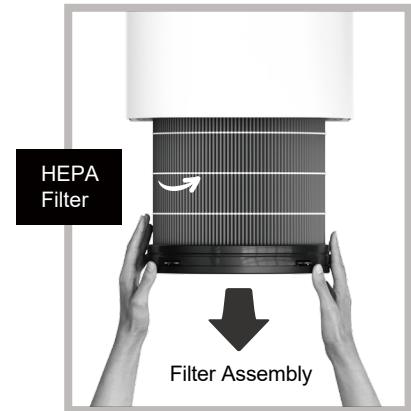
For Routine Maintenance

For surface cleaning, gently wipe stains or dirt using a soft, dry cloth. Never use volatile solvents, benzene-based compounds, paint thinners, or abrasive polishing powders, as these may cause permanent damage to the device finish. Keep the device away from water during cleaning to prevent liquid ingress and internal component corrosion.

Replacement of the HEPA Filter

A flashing PM2.5 indicator on the control display panel signifies that the HEPA filter requires replacement.

1. Stop the operation and unplug the unit.
2. Rotate the bottom plate counterclockwise to unlock it, then pull downward to remove the filter assembly with the bottom plate. Replace the used HEPA filter with a new one and insert it into the bottom housing. Finally, rotate the bottom plate clockwise to securely reattach it to the unit with a click.
3. *After replacing the HEPA filter, reconnect the power cord, power on the device, and press and hold the power button on the control panel or press the reset button on the remote control three times in a row to reset the service life indicator.*



Replacement of the Filters

Rotate the bottom plate to unlock it, then pull downward to remove the filter assembly together with the bottom plate.

CARE AND MAINTENANCE 2

Replacement of the Activated Carbon Filter

When the TVOC indicator on the control panel flashes, it indicates that the carbon filter needs to be replaced.

1. Turn off the device and disconnect the power cord.
2. Rotate the bottom plate to release the filter assembly, then remove the activated carbon filter from inside the HEPA filter. Replace the used activated carbon filter with a new one and insert the assembly into the designated compartment. Secure the bottom plate by rotating it clockwise until it audibly clicks into position.
3. *After replacing the activated carbon filter, reconnect the power cord, power on the device, and press and hold the power button on the control panel or press the reset button on the remote control three times in succession to reset the service life indicator.*

Replacement of the UV Lamp

If the UV lamp button on the control panel flashes, replace the UV lamp.

1. Turn off the device and unplug the power cord.
2. Rotate the bottom plate to detach the filter assembly along with the bottom plate. Unscrew the photocatalytic cover counterclockwise, followed by loosening the UV lamp spiral fastener in the same direction, and then carefully pull the lamp straight down. Replace with a new UV lamp. Reinstall the filter assembly and bottom plate into the housing, ensuring correct alignment. Finally, rotate the bottom plate clockwise until it securely clicks into place.
3. *Reconnect the power cord and turn on the device, then press and hold the power button on the control panel, or press the reset button on the remote control three times consecutively to reset the service life indicator.*



UV Lamp Replacement Procedures

1. Rotate the bottom plate counterclockwise to unlock, then pull downward to remove the filter assembly and bottom plate. Unscrew the photocatalytic cover counterclockwise.
2. Loosen the spiral fastener and carefully remove the lamp by pulling it straight downward.

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

First, ensure the bottom plate is securely fastened. If not, close it completely.

Then, verify the power cord is firmly connected to both the device and the outlet.

If the connection is secure but the device still doesn't power on, test the outlet with another device to check the power supply.

If you suspect the power cord is faulty, contact an authorized service center immediately for a replacement.

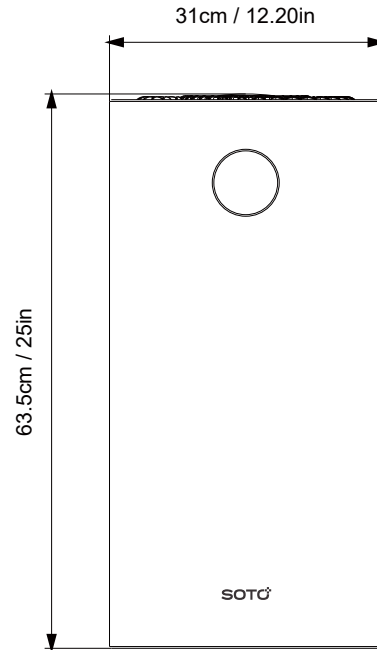
2. The Device is Not Performing Purification and Disinfection Effectively

If the device's purification or disinfection performance is inadequate, check the filters for dust buildup and verify the replacement schedule for the filters and UV lamp.

Clean or replace them as needed.

SPECIFICATIONS

Product Name	Wall-Mounted Air Purifier
Model No.	SOTO-BK100
Power Req	220-240V, 50/60Hz
Rated Power	63W
UV Lamp	10W / UV-C, 254nm
Plasma	$\pm 2 \times 3 \times 10^6 / \text{cm}^3$
Dimensions	31cmx31cmxH63.5cm
Weight	9.3kg / 20.50lb
Power Cord	2m
Operation	Voice / Button Remote Control / App
Display	PM2.5 / TVOC / Timer / TEMP RH / WiFi / UV Lamp / Plasma Filters & UV Lamp Replacement Notification



SOTO AIR PURIFICATION TECHNOLOGY (LANGFANG) CO., LTD.

Add: Certification Industrial Park, Dachang, Langfang City,
Hebei Province, China

Customer service: +86 400-626-8883

E-mail: customerservice@soto.com.cn

Web: www.soto.cn



Version 1.0