



ONYX (SCA2000C)

OPERATION MANUAL

Read the manual thoroughly before operation and retain for future us.



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SAFETY PRECAUTIONS 1

Be sure to follow all precautions below:

Running Environment Cautions

- Use only a 120-volt outlet with grounding wire receptacle.
- Do not put it in rooms with high heat, damp or wet places.
- Best working condition is 10-40°C.
- This unit should be installed on a load bearing wall near the indoor personnel activity.
- 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.
- This product complies with the maximum allowable concentration of ozone of 0.050 parts per million by volume (ppmv) in a 24-hour period. The Health Canada Guideline 2010 recommends that the maximum exposure limit, based on an averaging time of 8 hours, is 0.020 ppmv or less when tested in a sealed, controlled room approximately 30 m³.

Ce produit est conforme avec la concentration maximale permise d'ozone de 0,050 parties par million par volume (ppmv) pendant une période de 24 heures. La Ligne directrice (2010) de Santé Canada recommande un niveau maximal d'exposition, basé sur un moyen de 8 heures, soit 0,020 ppmv ou moins dans une chambre de teste étanchée et contrôlée de 30 m³.

Unit Operation

- Do not insert fingers or foreign objects into the intake or air outlet.
- Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
- Do not block the air intake and air outlet.



The internal UV-C bulb contains a small amount of mercury which is contained inside the bulb unless broken. Mercury and mercury compunds are known to the State of California to cause cancer and birth defects or other repoductive harm.

For more information go to www.P65Warnings.ca.gov

SAFETY PRECAUTIONS 2

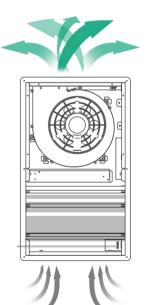
- Do not use the air purifier if the power cord or plug is damaged or the connection to the wall outlet is loose.
- When removing the power plug, always hold the plug and never pull by the cord.
- Do not use the unit near or on hot objects, such as range or where it may be exposed to steam.
- Stop the unit and unplug the power when maintenance.
- To avoid causing fire and/or shock do not attempt to disassemble the unit only certified technicians should do this.
- Do not wash or reuse the Pre-filter, HEPA-Rx filter and the Activated carbon filter.

HOW IT WORKS

When the DC fan motor is running, the indoor air will be drawn through the bottom of the unit. The air will then pass through the Pre-filter, the HEPA-Rx Filter, the Activated Carbon Filter, the UV-C+ Bulb and the Photo catalytic Nano-TiO $_2$ filter. The purified air is then released through the outlet on the top of the unit. The Revitalizing Negative Ion Generators near the air outlet releases revitalizing negative ions into the air.

The air is purified in six stages:

- 1. PRE-FILTER
- 2. ULTRAFINE HEPA-Rx PARTICULATE FILTER
- 3. ACTIVATED CARBON FILTER
- 4. UV-C+ BULB
- 5. PHOTO CATALYTIC NANO-TiO₂ FILTER
- 6. REVITALIZING NEGATIVE ION CHAMBER



FEATURES AND SPECIFICATIONS

The unit has a Pre-filter, HEPA-Rx Filter, Activated Carbon Filter, UV-C+ Bulb and Super Oxidizing Photocatalytic Nano-TiO₂ system and Revitalizing Negative Ion generator.

Automatic Function

The odor and particle sensor can let the unit automatically select the appropriate fan speed depending on the air quality detected.

Filters and UV Lamp Replacement Indicator Lights

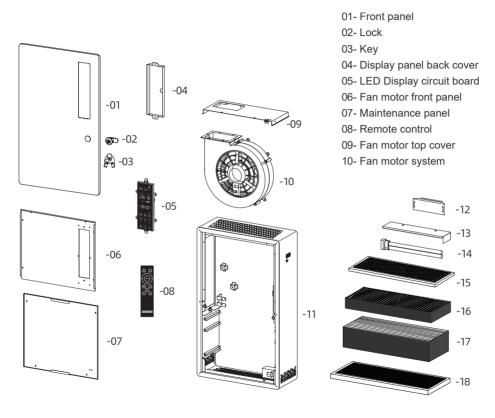
The indicator lights tell you when to replace the Pre-filter, HEPA-Rx filter and the Activated carbon filter or the UV-C+ lamp.

Easy Maintenance and Low Cost

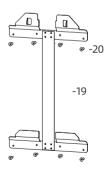
When the filters need to be replaced, simply open the front panel and pull out the filters and put the new ones in. No screws, hooks or tools are required.

Model No.	ONYX (SCA2000C)
Power Requirement	120V, 60Hz
Rated Power	96W, 1.1A
Negative Ion	3x10 ⁶ /cm³
UV Lamp	24W
Dimensions	45cm x 78cm x D19.5cm (17.7 inches x 30.7 inches x D7.7)
Weight	18.5kg (40.8pounds)

PART NAME



- 11- Unit housing
- 12- UV ballast
- 13- UV light blocker
- 14- UV-C+ Bulb
- 15- Photo catalytic filter
- 16- Activated carbon filter
- 17- HEPARx filter
- 18- Pre-filter
- 19- Unit hanging board
- 20- Screws

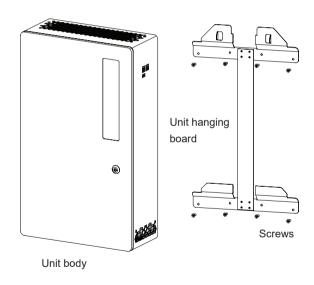


INSTALLATION

- 1. Power supply condition: Use only a 120-volt outlet with grounding wire receptacle.
- 2. This product should be installed on the wall. It must be installed on the wall of the load-bearing wall, otherwise it will cause the unit to fall and potentially harm someone.
- 3. Prior to using unit for the first time, you must remove the plastic bag from the Pre-filter, HEPA-Rx filter and the Activated carbon filter inside the unit.

Install the unit

- 1. Use an impact drill holes on the load-bearing wall according to the hole position on the unit hanging board
- 2. Use expansion bolts and self tapping screws to firmly fix the unit hanging board. Fix with at least 4 more screw holes on the hanging board (2 on top and 2 on bottom).
- 3. Carefully hang the unit on the upper and lower hooks of the hanging board. Pull the unit down with both hands to check whether the unit is firmly hung on the hook.



OPERATION 1

Button Operation and Display Indicator Lights



Button Operations

1. POWER Button

- Turns the unit On and Off.
- Hold the button for 2 seconds, the " "indicator light will light up with beeping. In this mode, the panel is locked. If you want to return to the default mode, do the reverse.

2. SPEED Button

When this button is pressed the airflow rate changes as shown below:

L-- M -- H -- Auto...

3. TIMER Button

Press this button to select the time for operation. The timer setting switches as shown: 1 -- 2 -- 4 -- C (timer cycle function) -- cancel timing.

Display Indicator Lights

4. SPEED indicator lights- low, medium and hight

5. AUTO mode indicator light

When this lights up, the unit is at Auto mode: the unit will operate on low speed and will adjust speeds accordingly base on what pollution the sensors pick up in the air.

6. UV-C+ Bulb indicator light

When this lights up the UV-C+ light is on. When the indicator light flashes, it is time for the UV-C+ Bulb to be replaced.

OPERATION 2

Display indicator lights

7. NEGATIVE ION indicator light

When this light is on, negative ions are discharged.

8. TIMER CYCLE indicator light

When this indicator is lighting up, the unit will start to work for 2 hours and stops 0.5 hour automatically - this schedule will repeat itself continuously while in this mode.

9. TIMER indicator light

- Displays the current clock time when the unit has no time set.
- When pressing the TIMER button on the display panel or the TIMER button on the remote control, the time is displayed, and the " (\$\sigma\$" indicator light is on.
- When the scheduled operation time is set, the "OFF" indicator will light up under the running state and display the shutdown time. When in the power off state, the "ON" indicator will light up and display the power on time.

10. PM2.5 display

Real-time display the indoor PM2.5 concentration (µg/m³).

- 11. Indoor humidity display
- 12. Indoor TVOC pollution level display
- 13. LOCK FUNCTION indicator light

In this mode, all the buttons will not work.

14. Pollutant level display (See the chart)

The different colors indicate the air quality:

Crass-Cood Orange-Mederate Bod-Do

Green=Good Orange=Moderate Red=Poor

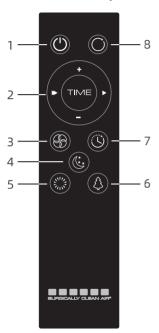
15. FILTERS LIFE indicator lights (See the chart)

Indicator	PM2.5	TVOC Level	Speed
Green	≤75µg/m³	■ ~ ■■	L
Orange	75~150µg/m³	111~111	М
Red	>150µg/m³		Н

Indicator	Instructions
E	Replace the Pre-filter
<u>H</u>	Replace the HEPA filter
<u>C</u>	Replace the Activated carbon filter

OPERATION 3

Remote Control Operation



1 Power (ON/OFF) Button

The unit will start operating when the POWER button is pressed. Pressing the button again will stop operation.

2 Scheduled operation time Buttons

- a. The first time press the "TIME" button, the digital clock on the display panel flashes calibrate the current time by pressing the "+" or "-" buttons then press the " ▶ " button, the minute display starts flashing. Also calibrate the current minute by pressing the "+" or "-" buttons.
- b. Press the "TIME" button a second time, the "ON" indicator light on the display panel is light on. At this point, press the "+" or "-" buttons to set the start time of the unit through the same time setting method.
- c. Press the "TIME" button a third time, the "OFF" indicator light on the display panel is light on. At this point, according to the same time setting method, press the "+" or "-" buttons to set the unt's shutdown time.
- d. Press the "▶" button to confirm the above time setting. At this time, the unit is turned on and off at the set time every day.

3 SPEED Button

The fan speed can be switched among L- M- H- Auto settings.

4 NIGHT Button

When pressed, all the indicator lights on the display panel will go out.

5 UV-C+ LAMP Button: Turns UV-C+ lights on and off.

6 NEG.ION Button: Turns Negative Ions on and off.

7 TIMER Button

The set time switches every time the button is pressed as shown below: 1hr - 2hr - 4hr - Cycle - Cancel.

8 RESET Button

Pressing the reset button 3 times will reset the replacement indicator lights.

CARE AND MAINTENANCE 1

To maintain optimum performance of this air purifier, the Pre-filter, the HEPA-Rx Filter, the Activated Carbon Filter and the UV-C+ Bulb need to be replaced when the indicator lights are flashing. If in an atmosphere with heavy dust, particulate or pet dander, you may need to periodically vacuum the filters for optimal performance.

Make sure all the filters are installed properly before operating the unit.

Filters Life

- 1. Pre-filter needs to be replaced once every 6 months (running 24/7).
- 2. Activated Carbon Filter needs to be replaced once every 6 months (running 24/7).
- 3. HEPA-Rx Filter needs to be replaced once a year (running 24/7).
- 4. UV-C+ Bulb needs to be replaced once a year (running 24/7).

Main Unit

Wipe with a dry, soft cloth for stubborn stains or dirt. Do not use **volatile fluids**, **benzene**, **paint thinner or polishing powder** as this may damage the surface.

Do not use detergents as detergent ingredients may also damage the unit. Keep the unit away from water.

Warning

- 1. Turn off and unplug the power cord before cleaning the body, air outlet or opening the front panel to avoid electric shock.
- 2. Turn off and unplug the power cord before replacement of the Pre-filter, HEPA-Rx Filter, Activated Carbon Filter and the UV-C+ Bulb or unit maintenance. If the power cord is damaged, it must be replaced by the service center or a similarly qualified person.

CARE AND MAINTENANCE 2

Replace the Pre-filter and the HEPA-Rx filter

When the " \underline{E} " indicator light on the control panel flashes, the Pre-filter needs to be replaced. When the " \underline{H} " indicator light on the control panel flashes, the HEPA-Rx filter needs to be replaced.



- 1 Open the front panel
- Stop the operation and unplug the unit.
- Rotate the door key and open the front panel.



- 2 Take off the maintenance panel
- Turn the plastic holder to the right and remove the maintenance panel.



- 3 Removing the Pre-filter
- Pull the Pre-filter out slightly.



- 4 Removing the HEPA-Rx filter
- Pull the HEPA-Rx filter out slightly.

CAUTION:

- DO NOT reuse or clean the Pre-filter or the HEPA-Rx filter with alcohol, gasoline, paint thinner or other flammable substances. It may cause fire!
- Remove plastic packaging from the Pre-filter and the HEPA-Rx filter before operation.
- After replacing the Pre-filter or the HEPA-Rx filter, hold the SPEED button on the display panel 3 seconds or press the RESET button on the remote control 3 times to reset the time for the Pre-filter or the HEPA-Rx filter.

CARE AND MAINTENANCE 3

Replace the Activated carbon filter and the UV-C+ Lamp

When the " \subseteq " indicator light on the control panel flashes, the Activated carbon filter needs to be replaced. When the " \otimes " indicator light on the control panel flashes, the UV-C+ bulb needs to be replaced.



- 1 Removing the Activated carbon filter
- Stop the operation and unplug the unit.
- Open the front panel and take off the maintenance panel.
- Pull out the activated carbon filter.



- 2 Replace the UV-C+ lamp
- Take off the photo catalytic filter.
- Hold the UV-C+ bulb, pull it up and remove it from UV-C+ lamp holder.

Reset the filters life

After replacing the Activated carbon filter or the UV-C+ bulb, hold the SPEED button 3 seconds or press the RESET button on the remote control 3 times to reset the time for the Activated carbon filter or the UV-C+ bulbs.

WARNING:

- Never look directly at UV-C+ bulbs. Direct exposure to germicidal light can cause temporary or chronic damage to your eyesight, or even blindness.
- Do not dispose of the UV-C+ bulb with normal household waste, hand it in at an official collection point for recycling.

Photo Catalytic Filter

Photo catalytic filter is permanent, never needs replacing. When there is dust on it, clean the dust off using a vacuum cleaner dusting brush. Do not wash it in water.

TROUBLESHOOTING

Service problems that appear to be major can often be solved easily. You can be your own troubleshooter by reviewing the following guide. All other servicing should be done by a SCA authorized service center.

Failure phenomenon	Checking	Method
The unit does not operate.	Power plug disconnected?	Make sure plug is fully inserted.
	Maintenance panel or interlock switch failure?	The unit does not operate when the maintenance panel is detached. Install properly. Check interlock switch.
	Power failure?	Check other electrical appliances.
When functions do not work properly.	There is too much dust on the Pre-filter, HEPA -Rxfilter or the Activated carbon filter?	Replace the Pre-filter, HEPA-Rx filter or the Activated carbon filter.

UV-C+ Bulbs should only be purchased from Surgically Clean Air or an authorized dealer at Surgically Clean Air. This will ensure that you are receiving UV bulbs that do not produce ozone. Many after-market sellers are selling ozone-generating UV bulbs.



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