

## **SCA14000 (COBALT)**

# **OPERATION MANUAL**

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

## TABLE OF CONTENTS

DISCLAIMER .....	2
SAFETY PRECAUTIONS .....	3-8
HOW IT WORKS .....	9
FEATURES AND SPECIFICATIONS .....	10
PART NAMES .....	11
INSTALLATION REMARKS .....	12-14
UNIT OPERATION .....	15-18
REMOTE CONTROL .....	18
CARE AND MAINTENANCE .....	19-28
REPLACING THE FILTERS .....	20-25
CLEANING THE UNIT .....	26-28
TROUBLESHOOTING .....	29-30

## **DISCLAIMER**

A printed copy of all the electronic materials is included in the unit packaging.

Read the label on the unit and operating manual before use and make sure to follow all the precautions outlined in the manual.

The manufacturer disclaims all liability for damage or injury incurred by disregarding the instructions in this document, negligence in the installation, use, maintenance, or repair of the product identified in this document, or by failure to strictly abide by these safety precautions and instructions.

The product's user is always totally responsible for adhering to any local safety laws and regulations that may be in effect.

## **INTENDED USE**

The SCA14000 Air Purifier is intended to remove particles from the air.

Using attachments, filters and/or any other components not recommended and approved by Surgically Clean Air™ will void the warranty.

For Commercial or Industrial Use Only.

## **DIRECTIONS FOR USE**

Follow the instructions to ensure proper installation. The display panel will turn on and the “Surgically Clean Air™” LED will light up if the unit is powered on.

## **DISPOSAL INSTRUCTIONS**

Dispose of filters according to local regulations based on the location of use (e.g., medical waste if used in a medical setting such as dental clinics, laboratories, etc.).

## **SAFETY PRECAUTIONS**

### **FIRST AID INSTRUCTIONS**

In case of injury, clean the area using soap and warm water, apply antibiotic ointment and a bandage, and seek immediate medical attention.

### **FCC Warning Statements**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in commercial and residential installations. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

This equipment complies with relevant RF radiation exposure limits set forth for a public/uncontrolled environment. This equipment should be installed and/or operated with a minimum distance as below between the unit and your body: 20cm.

This product will be mounted on the ceiling and is for fixed use only. The fixed operation requirement of Section 15.255(a)(2) is satisfied.

## SAFETY PRECAUTIONS

### ISED Warning Statements

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with relevant RF radiation exposure limits set forth for a public/uncontrolled environment. This equipment should be installed and/or operated with a minimum distance as below between the radiator and your body: 20cm.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux radiofréquences pertinentes établies pour un environnement public ou non contrôlé. Cet équipement doit être installé et utilisé à une distance minimale telle que précisée ci-dessous entre le radiateur et votre corps 20cm.

### Group Installations

Any transmitter that is certified under this RSS may be mounted in a group installation for simultaneous operation with one or more certified transmitters, without any additional equipment authorization. However, no transmitter operating under the provisions of this section shall be equipped with external phase-locking inputs that permit beam-forming arrays to be realized.

## SAFETY PRECAUTIONS

### OPERATING ENVIRONMENT CAUTIONS

- DO NOT place in rooms with high heat, damp, or wet places.
- DO NOT use outdoors.
- DO NOT use extension cord with this fan.
- Not for use in kitchens.
- DO NOT remove (or attempt to remove) any part of the unit except for the filters.
- Best operating environment is 50 -104 °F or 10 – 40 °C.
- Ensure the unit is level. Never use when it is tilted.
- Use only a 120-volt outlet with a grounding wire receptacle.
- 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.



### WARNING

– TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- a) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- b) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

## SAFETY PRECAUTIONS

**WARNING— THIS DEVICE SHOULD NOT BE USED IN A CONSTRUCTION ZONE.** Extensive amounts of particulates such as construction dust and debris will clog up the filter and impact the efficiency of the unit. If construction needs to be conducted in an area where Cobalt units are installed, it is recommended that the unit is turned off. After the construction is concluded in the area, units are to be vacuumed and filters replaced.

## UNIT OPERATION CAUTIONS

- This manual's contents must be thoroughly understood by anyone working on or with the product. Operators and personnel must adhere to the contents of this manual.
- Never change the sequence of the operations to be carried out.
- Always keep the manual in the vicinity of the product.
- DO NOT insert fingers or foreign objects into the intake or air outlet.
- Keep hair, loose clothing, fingers, and all parts of your body away from openings and moving parts.
- In the event the machine starts to make excessive vibrations or noise, overheats, or starts to smell, stop using the equipment immediately. Turn off the machine, disconnect the power and contact the manufacturer.
- DO NOT use the air purifier if the power cord or plug is damaged or the connection to the outlet is loose.
- When removing the plug, always hold the plug and never pull by the cord.
- DO NOT use the unit near hot objects, or where it may be exposed to steam or open flame.
- DO NOT obstruct the air inlets or outlets of the unit.
- To avoid the risk of fire, shock, and injury, DO NOT disassemble the unit. Contact a certified technician for service.

## SAFETY PRECAUTIONS

### WARNING

- TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT expose to water or rain.
- RISK OF FIRE OR ELECTRIC SHOCK, DO NOT use this equipment with any solid-state speed control device.
- TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, DO NOT use replacement parts that have not been recommended by the manufacturer.
- TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, AND INJURY TO PERSONS, Cobalt unit must be installed with brackets and screws that are marked in the installation manual to indicate the suitability with this model. Other types of brackets and fasteners cannot be substituted.
- TO REDUCE THE RISK OF PERSONAL INJURY, DO NOT bend the blade brackets when installing the brackets, balancing the blades, or cleaning the fan. DO NOT insert foreign objects in between rotating fan blades.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they DO NOT play with the appliance.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a hazard.



## SAFETY PRECAUTIONS

### CARE AND MAINTENANCE/ SERVICING CAUTIONS



#### WARNING

– RISK OF FIRE. Never operate the air purifier in a space that contains flammable gases. Never use the equipment to extract or filter flammable, blazing or burning particles, chemicals, or liquids. Never use the unit to extract or filter hostile vapors or sharp particles.

– RISK OF ELECTRIC SHOCK. These servicing instructions are for use by qualified personnel only. DO NOT perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

– HIGH VOLTAGE INSIDE. Disconnect power before installation, servicing or replacing filters.

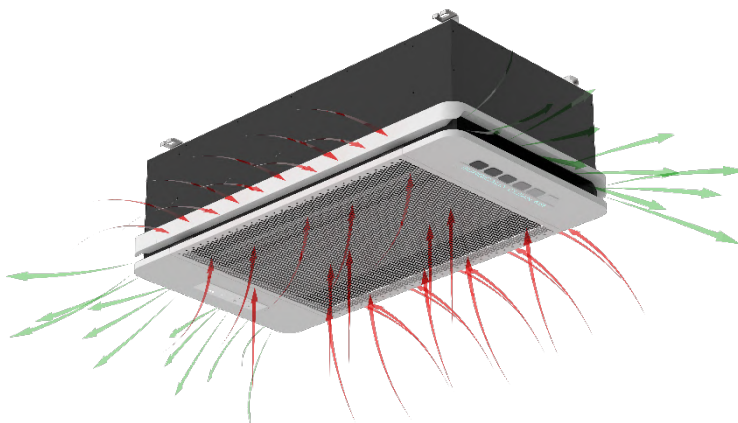
CAUTION – AUTOMATICALLY OPERATED DEVICE –To reduce the risk of injury disconnect from power supply before servicing.

## HOW IT WORKS

When the fan motors are running, the indoor air will be drawn through the front of the unit. The air will then pass through the Filters. The purified air is then released through the outlet on both ends of the unit.

### TWO FILTRATION STAGES

1. PRE-FILTER
2. PARTICULATE FILTERS



## FEATURES AND SPECIFICATIONS

This device features:

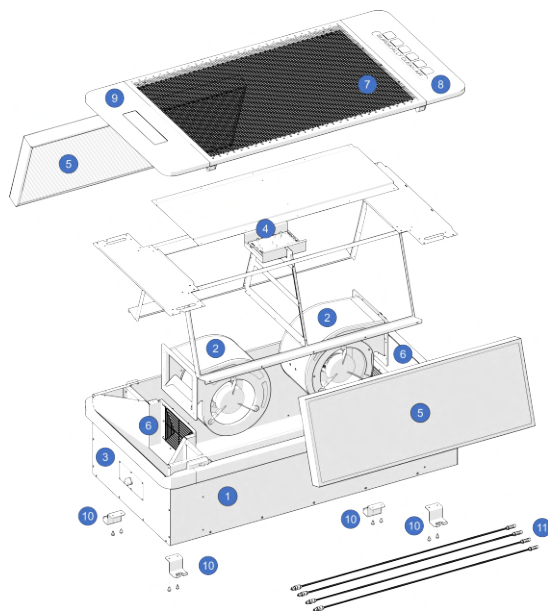
- Automatic Proximity Sensor On/Off
- Automatic Timer
- Remote Control

Model No.	SCA14000–2x4
Power Requirement	120 VAC, 60 Hz
Rated Power	250 W, 2.1 A
Fan Motor	310 VDC, 0.98 A, 113 W
Dimensions	(L) 1245.0 mm x (W) 636.0 mm x (H) 360.0 mm
Weight	45 kg

Model No.	SCA14000–2x2
Power Requirement	120 VAC, 60 Hz
Rated Power	75 W, 1.1 A
Fan Motor	24 VDC, 1.14 A, 27.5 W
Dimensions	(L) 636.0 mm x (W) 636.0 mm x (H) 255.0 mm
Weight	20.5 kg

## PART NAMES

- |                             |  |
|-----------------------------|--|
| 1. Main Body                | 7. Front Access Panel & Inlet Vent         |
| 2. Motor and Fan            | 8. "Surgically Clean Air™" Logo and LED    |
| 3. Electrical Power Box     | 9. User Interface/ Display and Touch Panel |
| 4. PCB Board                | 10. Mount Bracket and Screws               |
| 5. Pre-Filter + HEPA Filter | 11. Mounting Accessories                   |
| 6. Outlet Vents             |  |



## **INSTALLATION REMARKS**

The SCA14000 is designed to be installed as a fixed built-in unit by a qualified installer. In addition to the following instructions the SCA14000 shall be installed:

- In the United States, in accordance with the National Electric Code/State, ANSI/NFPA 70 and Municipal codes and/or local codes.
- In Canada, in accordance with the Canadian Electric Code C22.1 - latest edition/Provincial and Municipal codes and/or local codes.

### **UNPACKING**

While unpacking the product please follow the instructions and markings on the packaging.

### **INSPECTION**

After unpacking the air purifier and prior to installation, thoroughly inspect the unit for freight or cosmetic damage. Report any damage immediately.

## INSTALLATION REMARKS

- The Cobalt unit can be hoisted from the concrete ceiling or the I-beam. Please refer to the Installation Guide for detailed instructions.
- Ensure the unit is being installed level in both directions.
- A lubricant should not be used on any mounting screw.
- Follow ceiling tile system manufacturer instructions for integration compatibility.
- Install the filters after the building is completely clean of construction debris and dust.
- **Be sure to remove any plastic wrapping from the HEPA filters prior to installing them in the unit and operating the equipment.**



## ELECTRICAL SUPPLY

- The customer has the responsibility to ensure that the unit installation is in compliance with all national and local electrical and building codes and ordinances including but not limited to ANSI/NFPA 70. The unit shall be installed by a qualified electrician and properly grounded. The electrical supply which the unit is designed for is 120VAC, 60 Hz.
- The receptacle shall be accessible and connected to an external electrical circuit with a fuse or breaker rated for 15.0 Amps. Receptacles shall be located to avoid physical damage to the power cord.
- No other appliances should be connected to the air purifier supply circuit.

## INSTALLATION REMARKS


### CHOOSING THE LOCATION


- Choose a location with the following conditions:
  - A. Indoor Space
  - B. Operating Temperature: 50 -104 °F (10 – 40 °C), Relative Humidity: <75%
- Built-in fixed units must be enclosed at the posterior and unobstructed from the front and all sides.
- For new installation, the work must be performed by a qualified installer.
- It is recommended that Cobalt unit is positioned centrally within a room. It is important that the intake side of the unit is away from the supply of the HVAC system. To improve air quality in the room, the unit should circulate and filter the existing air in the room, not the fresh air supplied by the HVAC system. Likewise, the position of the output side of the unit should be away from the return ducts of the HVAC system. This is to ensure that the clean air coming from the unit is not immediately taken out of the room by the HVAC system.

### WARNING

- SUPPORT DIRECTLY FROM THE BUILDING STRUCTURE IF INSTALLED IN THE CEILING.
- TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS OBSERVE THE FOLLOWING:
  - a) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
  - b) When cutting or drilling into a wall or ceiling, DO NOT damage electrical wiring and other hidden utilities.
- MAKE SURE THE POWER IS OFF BEFORE ATTEMPTING INSTALLATION.

## UNIT OPERATION


The power button light and “Surgically Clean Air™” LED will turn on when power button  is pressed.


Use the  button to adjust the fan speed.


When the unit is first turned on the fan speed is by default on Low. The display indicator will show the unit speed.


**(Press  button after the unit is first turned on)** the proximity sensor will be activated.


On Proximity Mode the unit will operate on a set speed and will turn itself on/off depending on movements and motions in the vicinity of the unit.


**(Press  to turn on the unit)** Fan speed is on 'Low'


**(Press  one time)** Fan speed is on 'Low'


**(Press  second time)** Fan speed is on 'Medium'

**(Press  third time)** Fan speed is on 'High'

**(Press  fourth time)** Fan speed is on 'Turbo'


Pressing and holding the  button for 5 seconds will lock the control panel at the selected settings.


Pressing and holding the  button for 5 seconds will change the default fan speed to current setting.

Pressing and holding the  button for 10 seconds will reset the filter timer and flashing “Surgically Clean Air™” LED.




## UNIT OPERATION


Pressing the  will turn the control panel and “Surgically Clean Air™” LED on/off.

Pressing the  will activate the timer, the unit will shut off after set time is passed, set time is shown on the control panel. The timer can cycle between 2, 6, 12, and 24 hours.

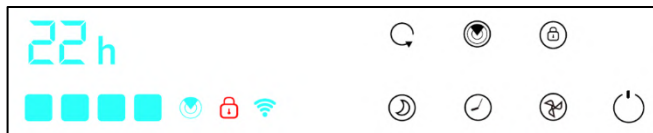
**(Press  one time to set the timer)** Timer is to '2 hours'

**(Press  second time)** Timer is set to '6 hours'

**(Press  third time)** Timer is set to '12 hours'

**(Press  fourth time)** Timer is set to '24 hours'

## UNIT OPERATION











ICON	ACTION	RESPONSE
	Press	ON/OFF
	Press and hold for 10 seconds	Reset Filter Timer After Replacement
	Press	Turn Control Panel and "Surgically Clean Air™" LED ON/OFF
	Press	Proximity Sensor is ON
	Press and hold for 5 seconds	Default Fan Speed is Changed to Current Setting
	Press	Activate and Cycle Through Timer
	Press	Activate and Cycle Through Fan Speed
	Press and hold for 5 seconds	Lock Control Panel at the Selected Settings

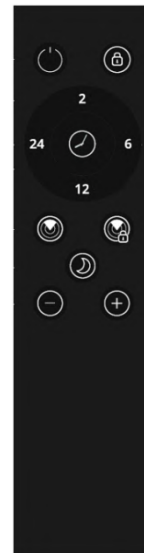
ICON	INDICATORS	STATUS
	Solid Light	Proximity Sensor Detected Movement/ Motion
	Solid Light	Control Panel is Locked

## UNIT OPERATION

### REMOTE CONTROL

The unit is supplied with a Remote Control that operates similar to the unit's control panel.

ICON	ACTION	RESPONSE
	Press	ON/OFF
2   6   12   24	Press	Activate Timer for 2, 6, 12, 24 hours
	Press	Turn Control Panel and "Surgically Clean Air™" LED ON/OFF
	Press	Proximity Sensor is ON
	Press	Set Default Fan Speed to Current Setting
	Press	Set Timer ON/OFF
	Press	Reduce Fan Speed
	Press	Increase Fan Speed
	Press and hold for 5 seconds	Lock Control Panel at the Selected Settings



## CARE AND MAINTENANCE

To maintain optimum performance of this air purifier, the filters need to be replaced when “Surgically Clean Air™” LED flashes (Breathing Flash). If the device is operating in an atmosphere with heavy dust, particulate, or pet dander, you may need to periodically vacuum the pre-filters for optimal performance.

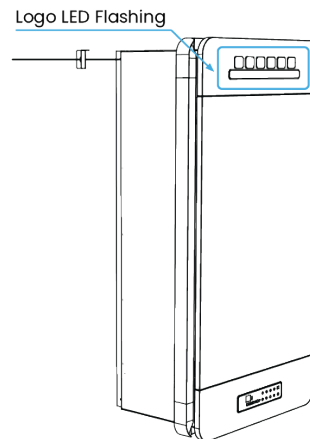
### CAUTION

- DO NOT clean the filters and any other parts with liquid, especially alcohol, gasoline, paint thinner, etc. It may cause a risk of fire!
- Make sure all the filters are installed properly before operating the unit.
- When conducting maintenance on the unit, be sure the unit is turned off and the plug is disconnected from the outlet.
- Never handle the plug with wet hands. If so, electrical shock and bodily injury may occur as a result.

## CARE AND MAINTENANCE

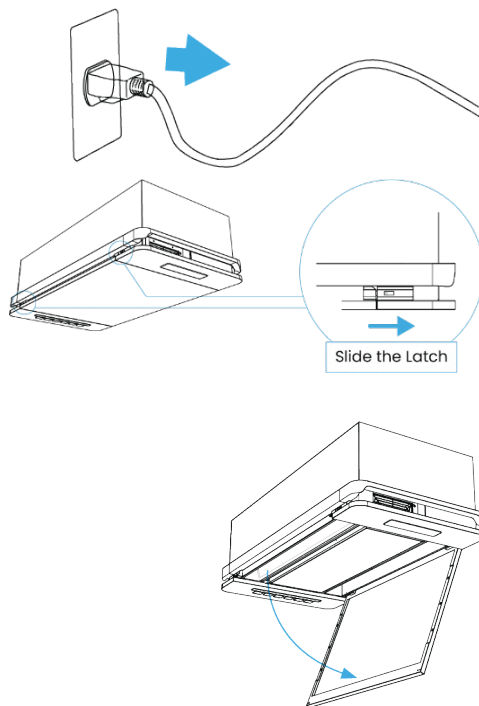
### REPLACING THE FILTERS

1. When the “Surgically Clean Air™” LED starts flashing (Breathing Flash), the filters need to be replaced.

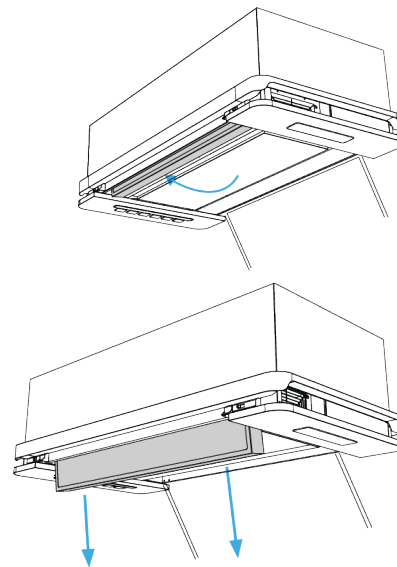


2. Turn the unit off and disconnect the plug from the outlet.

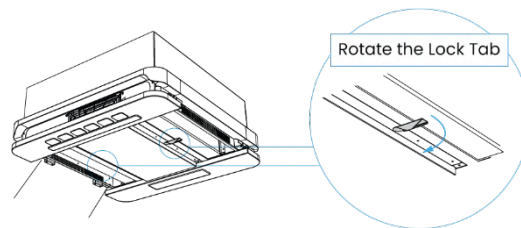
3. Open the front panel by sliding the latches open on both sides.



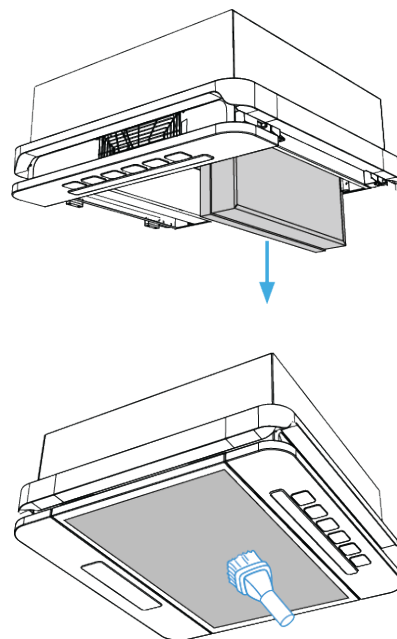
4a. 2×4 Model: Use tabs on the filter to slide both filters out of the housing and remove the filters from the unit.



4b. 2×2 Model: Rotate the lock tab 90 degrees and remove the filters from the unit.

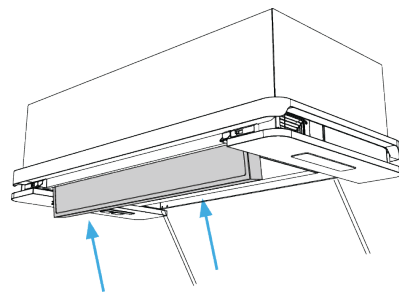


5. Clean the interior compartment of the unit by vacuuming and removing any debris that has accumulated.

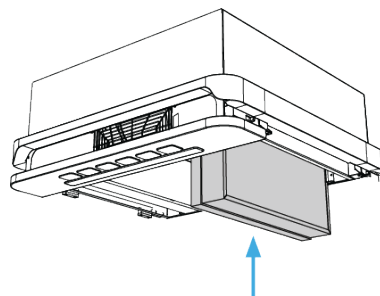





5a. 2×4 Model: Place new filters in the housing and make note of the air-flow direction. Slide the filter in place; the pre-filter mesh should point outwards. The filters should be pressed against the grill panel. Close the front panel.



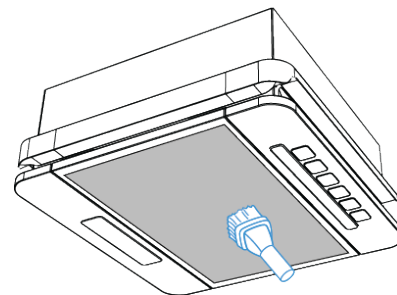
5b. 2×2 Model: Place new filters in the housing and make note of the air-flow direction. Slide the filter in place; the pre-filter mesh should point outwards. Rotate the lock tab 90 degrees to lock position. Close the front panel.



6. After replacing the filters, hold the  button for 10 seconds to reset the flashing “Surgically Clean Air™” LED.



7. It is recommended to clean the air inlet with a vacuum cleaner after the filters are replaced.

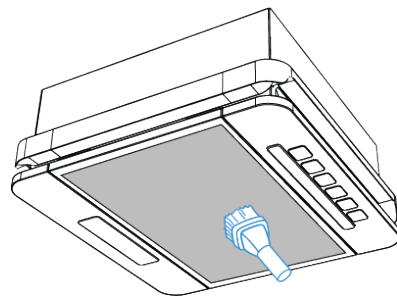
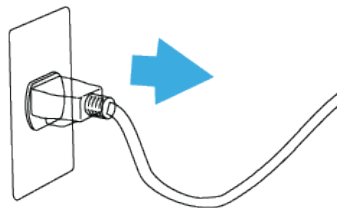


## CARE AND MAINTENANCE

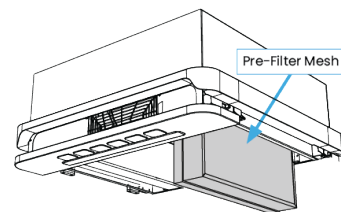
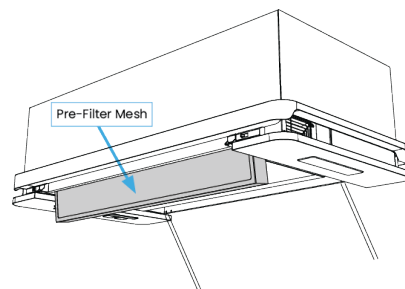
### CLEANING THE UNIT

1. Turn the unit off and disconnect the plug from the outlet.

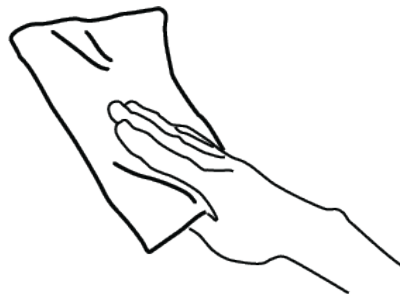
2. It is recommended to vacuum the pre-filters and air inlets every 6 months for optimal performance.



NOTE: Pre-filter mesh should be facing outwards as shown.



3. Wipe the exterior of the unit with a soft, clean and lint free cloth.



- DO NOT use volatile fluids, gasoline, chemical solvents, benzene, paint thinner or corrosive/ abrasive materials and 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.
- DO NOT insert foreign objects into the inlet or outlet of the unit. It could lead to injury.

## TROUBLESHOOTING

Most service problems that appear to be major can often be resolved easily. You can be your own troubleshooter by reviewing the following guide. All other major servicing should be done by the manufacturer.

NO.	FAILURE	POSSIBLE CAUSE	SOLUTION
1	Unit is inoperable	Main circuit breaker in not ON	Turn main circuit breaker to ON position
		Blown main circuit breaker fuse	Replace the main circuit breaker fuse
		Unit not hardwired correctly	Refer to "Electrical Wiring Instructions" and confirm proper hardwiring
		Wires disconnected from mains or soft set	Refer to "Electrical Wiring Instructions" and confirm proper hardwiring
		Damaged power cord	Replace damaged power cord
2	Fan works but the air cleaner functions poorly or not at all (reduced airflow or poor filtration)	Plastic wrapping not removed from one or both filters	Remove plastic wrapping from filters
		Air outlets blocked	Inspect and remove any blockage from air outlets at both ends of the unit
		One or both pre-filters are fully loaded	Vacuum the pre-filters

		One or both HEPA filters are fully loaded	Replace HEPA filter(s)
3	"Surgically Clean Air™" LED flashing	Filter change cycle timer expired	Replace HEPA filters and reset the timer
4	Remote Control is inoperable	Battery nearly exhausted	Replace batteries
		Unit's display panel is covered	Confirm and remove any obstruction in front of the display panel



**SURGICALLY CLEAN AIR™**

1A - 6300 Viscount Road

Mississauga, Ontario

Canada, L4V 1H3

Tel: 1-877-440-7770

[www.surgicallycleanair.com](http://www.surgicallycleanair.com)

[info@surgicallycleanair.com](mailto:info@surgicallycleanair.com)