# Safeair<sup>\*</sup> sutta



**User Manual** 

# Safeair

Breathe with Confidence

# **Product Introduction**

Welcome to the SafeAir Family! We're excited to get you started on your journey with your new SafeAir Ultra Purifier and help you pursue a healthy living environment. If you're looking to oxidize odors, purify the air you breathe and disinfect the surfaces you touch - then we know that you're going to love your SafeAir Purifier!

SafeAir Ultra brings the most advanced air purification technology into the comfort of your living or workspace by incorporating 4 technologies into one easy to use, powerful and safe device to rapidly oxidize organic materials, mold, odors and even infectious viruses.

Inspired by the way nature unleashes activated oxygen to defend our Earth against pollution, SafeAir's active purification technology unleashes the power of activated oxygen to kill germs and other pollutants that linger in the indoor air we breathe and on the surfaces we touch.



# "You're Going to Love Your Air... I Guarantee It!"

Julius Toth,
Air Purifcation Expert and
SafeAir Inventor



# **Specifications and Safety**

#### **Unit Specifications -**

Unit Size - 12" x 9" x 10 3/4 "

Unit Weight - 10.2 lbs

Coverage - Up to 3000 ft<sup>2</sup> (actual coverage depends on variables such as the severity and frequency of pollutants, flow of air, humidity and temperature.)

Input - 100-240 VAC; 50-60 Hz; 2.5 A

#### PCO Cell -

Normal Mode Ozone Output - <0.02 ppm (ambient room concentration)

#### **Purification Plate -**

High Mode Ozone Output - 25-360 mg ozone per hour.

#### Ionization -

Ion Generation Pulsator - 24-30 khz

Ion Needle Generator - 6 kv

#### Safety Information -

- Never operate the unit near heat source, open flame or flammable/combustible fluids.
- Do not operate unit unless all parts (PCO Cell, Purification Plate, Rear Filter Assembly and Rear Cover) are properly installed.
- Directly viewing the lamp inside the unit for an extended period of time (longer than 20 minutes) may result in eye damage.
- Never adjust setting to exceed square footage of space being treated.
- Do not use away mode in occupied spaces.
- Unit should be powered OFF and power cord should be disconnected when cleaning, disassembling, reassembling, or servicing.

# 4 Technologies



#### **Electrostatic Filtration**

SafeAir Ultra includes an advanced electrostatic filter to help keep the purifier clean while filtering out particles. Unlike HEPA filters, the electrostatic filter is washable and can be used over and over again.



#### **Needlepoint Ionization**

SafeAir Ultra generates a continuous stream of millions of negative ions that circulate throughout your space. These ions charge particles such as dust, dander and bacteria causing them to attract other particles and clump together. As more particles come together, they become heavier, making them easier to pull into the homes HVAC air filter or simply fall to the floor to be vacuumed up. Unlike HEPA filters that can only filter out particles of .5 microns or larger, the SafeAir can reduce ultra-fine, even nano-sized particles, that are much more dangerous.



#### **Scalable Purification**

SafeAir can easily be adjusted to the preferred purification setting for your living or workspace. Using these settings provides optimum performance and comfort. In high mode, the purification plate generates actived oxygen to assist in breaking down pollutants and odors. For faster sanitization, the unit can be set to away mode which is equipped with an auto shut-off timer and can be used for maximum output when the room or space is unoccupied.

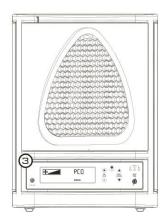


#### **Advanced Photo Catalytic Oxidation (PCO)**

SafeAir's final technology works in sync with it's scalable purification technology to destroy biological contaminates as well as odors, mold, bacteria and viruses. Photo Catalytic Oxidation has been proven to reduce dangerous pathogens by more than 99% in less than 24 hours through a process called molecular disassociation to break down harmful molecules, rather than just covering them up.

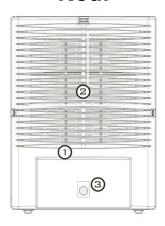
# Diagram (Unit)

#### **Front**



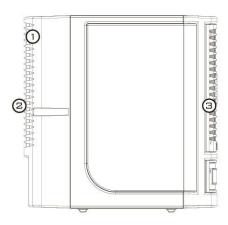
- 1 Ionization Needlepoint 2 - Front Grille
  - 3 Control Panel

#### Rear



- 1 -Rear Cover Screw
- 2 Rear Cover Clasps
- 3 Power Adapter Inlet

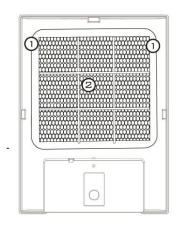
#### Side



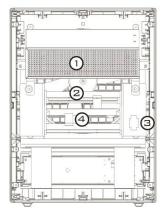
- 1 Rear Cover
- 2 Unit Rear
- 3 Unit Front

# Rear (Cover Removed)

# Rear (Filter Assembly Removed)

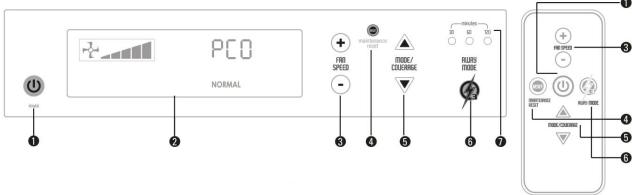


1 - Brass Thumbscrews 2 - Filter Assembly

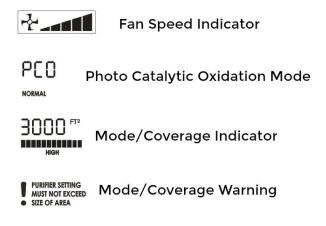


1 - PCO Cell 2 - PCO Cell Nuts 3 - PCO Cell Connector 4 - Purification Plate

# **Control Settings Guide**



- 1 Power Control
- 2 LCD Screen
- 3 Fan Speed Setting
- 4 Maintenance Reset
- 5 Mode/Coverage Setting
- 6 Away Mode
- 7 Away Mode Timer





# Setup

#### Ideal Placement

There are several important factors to consider when selecting a location for your SafeAir unit:

- 1 Make sure the location you choose is in an area where air is optimally circulated.
- 2 Place the unit on top of a sturdy surface like a bookcase, shelf or mounting bracket; ideally 12-24 inches from the ceiling.
- 3 To ensure that the unit works properly, there should be as much space as possible in front of the unit so that it can efficiently process the air in the area.
- 4 Never place an operating unit on the floor.

#### **Initial Setting**

Before using the unit, you will need to find the area or square footage of the space. To do this accurately, take into account all connected rooms with open doorways. Your SafeAir unit can purify up to 3,000 square feet of space but does not flow readily through closed doors.

For example: Suppose you have a 2,500 square foot house. The living room is attached to the kitchen, three bedrooms, the den and a laundry room. The kitchen and three bedrooms doors remain open the majority of the time but the laundry room and den doors usually remain closed from the rest of the house. Together, the laundry room and den have a combined area of 500 square feet. The area of the space you would want to set your unit to purify would be 2,000 square feet.

#### Once you have determined the idea location and space size -

- 1 Connect the power cord into the unit
- 2 Insert the power plug into a wall outlet
- 3 Turn the unit on and set it to NORMAL mode (See Controls Page)
- 4 After 10-12 hours, set the unit to HIGH mode and set the square footage to 250 square feet.
- 5 Gradually increase the square footage setting every 24 hours until you reach the accurate square footage of your area.

Note - Using SafeAir at a setting less than the square footage of the area is acceptable and may be desireable in an area relatively free of pollutants.

## Operating the Unit

#### Turning the Unit Off/On -

Press the power button on the control panel or remote control to turn the unit on. The unit will initially be set to normal mode. Press the power button once more to turn the power off.

#### Using Normal Mode -

Press Mode/Coverage button until "Normal" is shown in the lower right of the display.

- Square Footage is not available in "Normal"
- To control the fan speed, use fan up/down buttons

#### Using High Mode -

Press the Mode/Coverage button and verify that "High" is shown in the lower right of the display.

- To set the square footage, use the Mode/Coverage buttons.
- To control the fan speed, use fan up/down buttons

#### Using Away Mode -

Press the Away Mode button and verify that "Away" is shwon in the lower right of the display.

• To set the Away Mode timer, press Away Mode button. Each press of the button increases the running time of the Away Mode.

#### **LCD Reminders**

#### Replace Plate -

When "Replace Plate" appears, the Purification Plate has reached the end of its useful life and must be replaced. To order a replacement, please contact your distributor. Once a replacement has been obtained, follow the instructions for "Disassembly/Assembly" to replace.

#### Replace PCO Cell -

When "Replace PCO Cell" appears, the PCO Cell has reached the end of its useful life and must be replaced. To order a replacement, please contact your distributor. Once a replacement has been obtained, follow the instructions for "Disassembly/Assembly" to replace.

#### Perform Cleaning -

"Perform Cleaning" will display once the 30 day operation cycle between cleanings has passed and the unit requires a complete cleaning. Follow instructions for "Cleaning" then see "Resetting Reminders" instructions.

#### **Resetting Reminders -**

After replacing the Purification Plate or the PCO Cell, the corresponding reminders will reset themselves. After performing a cleaning of the unit, you should reset the reminders manually by holding down the Reminder Reset button on the control panel of the unit.

# **Disassembly**

\* #2 Phillips Screwdriver Required

#### **Workspace Recommendations -**

A countertop or flat surface is ideal for disassembling/assembling your SafeAir unit. You will need 2-3 ft of clean, accessible workspace. It is recommended to use a small bowl or cup to hold any screws so they are not lost during the process.

#### **Disassembly Instructions -**

- 1 Turn off the unit.
- 2 Remove Powercord from the wall and from the rear of the unit.
- 3 Clean exterior of the unit if necessary.

#### Removing the Rear Cover -

- 1 Using your screwdriver, remove the Rear Cover Screw from the Rear Cover (above the power cord port). Place the Rear Cover Screw where you will find it easily during reassembly.
- 2 Squeeze the tabs on both sides of the Rear Cover (where the grooves are) until they release and tilt the Rear Cover upwards until the tab releases. Clean with compressed air or a damp cloth. Set the Rear Cover aside.

#### Removing the Filter Assembly -

- 1 Remove Brass Thumbscrews from the top corners of the Filter Assembly. Place Brass Thumbscrews where you will find them easily during reassembly.
- 2 Grasp the top of the Filter Assembly and tilt away from the unit. Clean if necessary and set the Filter Assembly aside.

#### Removing the Purification Plate -

Grasp the Purification Plate on the ceramic and gently pull it out of the grooves on the sides. Clean and set the Purification Plate aside.

#### Removing the PCO Cell -

- 1 Locate the PCO Cell Power Connector on the right of the rear of the unit (beside the Purification Plate slot). Squeeze the tabs on the top and bottom of the PCO Cell Power Connector and pull gently until free from the PCO cell Power Connector Outlet
- 2 Rmove the Thumb Nuts from the Screw Posts on the right and left below the PCO Cell. Place the Thumb Nuts where you will find them easily during reassembly.
- 3 Gently side the PCO cell out of the unit. Clean and set the PCO Cell aside. Clean the interior of the unit.

\* #2 Phillips Screwdriver Required

#### Installing the PCO Cell -

- 1 Position the PCO Cell inside of the unit so that the two tabs are on the bottom (interior side) of the PCO Cell. Ensure that the holes in the two tabs fit over the two Screw Posts. Screw the Thumb Nuts onto the Screw Posts until they are snug.
- 2 Align the PCO Cell Power Connector to the PCO Cell Power Connector Outlet and insert gently until the tabs at the top and bottom of the PCO Cell Power Connector snap into place, holding it in the PCO Cell Power Connector Outlet.

#### Installing the Purification Plate -

Holding the Purification Plate by the ceramic, slowly insert it into the Purification Plate slot, ensuring that the Purification Plate is sliding into the grooves on either side.

Note - About halfway in, the Purification Plate Connectors are parted. Continue sliding the Purification Plate into the slot until there is approximately one inch of the Purification Plate remaining outside of the slot and significant resistance is met. Be careful not to force the Purification Plate further into the slot as this could damage your unit.

#### Installing the Filter Assembly -

- 1 Hold the Filter Assembly with the larger flat side facing the interior of the unit. A sticker reading, "Caution: Reinstall filter after cleaning," is located on the opposite side of the Filter Assembly. This sticker should be visible when you install the Filter Assembly.
- 2 Insert the bottom of the Filter Assembly into the tabs on the rear of the unit and then seat the Filter Assembly on the rear of the unit. (Note If the user fails to insert the Filter Assembly into the tabs appropriately, disassembling the unuit in the future could be extremely difficult.)
- 3 Screw the two Brass Thumbscrews into their holes at the top corners of the Filter Assembly.

#### Installing the Rear Cover -

- 1 Place the tab at the top of the Rear Cover into the hole at the top of the Filter Assembly then lay the Rear Cover flat against the rear of the unit until the tabs on the sides of the Rear Cover click into place on the unit
- 2 Carefully insert the Rear Cover Screw into its hole on the Rear Cover (above the Power Cord Port) and tighten into place.

#### Installing the Power Cord -

- 1 Insert the Power Adapter Plug into the rear of the unit
- 2 Ensure the Power Cord is properly connected to the Power Adapter
- 3 Insert the Power Plug into a wall outlet

# Cleaning

Your unit should be cleaning monthly to be kept running at peak performance, but depending upon the pollution or odor levels present during initial setup, it is advisable to clean the unit more frequently until the environment has been treated.

#### Cleaning the Unit (Exterior) -

Wipe down the exterior with a damp cloth or use compressed air or a vacuum cleaner to remove surface dust, use an alcohol-based cleaning product to clean the surfaces of the unit if needed.

#### Cleaning the Filter Assembly -

You may use clean water or compressed air to clean your Filter Assembly once it has been disassembled (See Instructions)

#### Cleaning the Ionization Needle -

Use compressed air to blow off any dust that may accumulate near the ionization needle.

#### Cleaning the PCO Cell -

Using compressed air or a vacuum cleaner, blow and/or vacuum the dust out of the PCO Cell. Do not use any liquid to clean the PCO Cell.

#### Cleaning the Purification Plate -

Using a 50/50 mix of warm water and clear ammonia or white vinegar, soak the Purification Plate for 8-10 hours, but no not exceed 12 hours. Using a soft bristle brush, scrub the wire mesh to remove debris lodged inside the mesh. Rinse thoroughly. Allow the purification plate to dry completely before reinstalling. After reinstalling, use a soft cloth and rubbing alcohol to clean the contacts on the interior of the unit that touch the Purification Plate.

#### Cleaning the Unit (Interior) -

Using a damp cloth, clear alcohol based cleaner, compressed air or a vacuum cleaner, carefully clean the walls and components of the inside of the unit only after full disassembling.

# **Troubleshooting**

#### If the Unit Fails to Turn On -

- 1 Verify that the Power Plug is plugged into an operational wall outlet.
- 2 Ensure that the Power Adapter Plug is fully seated in the receptacle on the back of the unit.
- 3 Verify that the Power Button has been activated on the Control Panel
- 4 If the Power Button on the Control Panel Fails, try using the Power Button on the Remote Control.

#### If the Unit is Operating in High Mode or Away Mode, but No Noticeable Purification is Being Produced -

- 1 Ensure that the Purification Plate is clean
- 2 The Purification Plate may not be working because it needs to be replaced. Try installing a new Purification Plate.
- 3 Check the electrical contact arms which touch the plate to ensure that they are making proper contact with the metal weave on the Purification Plate.
- 4 Ensure that the electrical contact arms which touch the plate are clean. Clean them with a soft cloth and rubbing alcohol.
- 5 Turn the lights off in the room and look through the Front Grille at the Purification Plate. If it is not operating properly, it will produce a dim purple glow.

#### The Purification Plate Generates an Electrical Arc, Arc Noise or Burning Odor -

This means that the Purification Plate is damaged and must be replaced. The unit may or may not display the Replace Plate LCD reminder. To order a replacement, contact your distributor.

#### The PCO Cell is Not Lighting Up -

- 1 Ensure the PCO Cell Power Connector is properly seated in the PCO Cell Power Connector Outlet.
- 2 If the PCO still fails to operate, it needs to be replaced. Contact your distributor.

#### The Ionization Needle Creates an Electrical Arc -

This indicates that the lonization Needle needs to be cleaned. Be sure to complete all of the cleaning procedures every 30 days of operation.

#### The Fan Does Not Operate Properly -

Try adjusting the fan speed using the control panel or remote control.

#### The Unit Makes a Rattling Noise When Taken Out of Packaging -

Remove the back panel of the unit. Check to ensure the two Brass Thumbscrews holding the Filter Assembly are in their proper place. If they are properly installed, remove the Thumbscrews and Filter Assembly and check the PCO Cell to ensure the two Brass Thumbscrews securing the PCO Cell are installed properly.

# **Customer Service**

### Questions or Concerns? We're Here for You!

All SafeAir models are backed by a 30 day money-back guarantee and a 1 year factory warranty. Warranty is valid on any model purchased through an accredited SafeAir retailer or distributor. Proof of Purchase required for refund, return or warranty claims.

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