

HEALTHY HOME AIR PURIFICATION SYSTEM

MODELS:
TRIO-1000P & TRIO-1000P2



INSTALLATION AND OPERATION



by **FIELD** CONTROLS

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TABLE OF CONTENTS

Installation & Maintenance Instructions

Trio-1000P/Trio-1000P2 Air Purification System

Important Safety Instructions	2
Specifications	3
Features	3
Installation	4
Monitoring Operation	5
Maintenance	5
Performing Maintenance	6
Replacing the Germicidal Ultraviolet Lamps	6
Replacing the Filters	7
Replacement Parts	8
Warranty	8

IMPORTANT SAFETY INSTRUCTIONS

Before installing the Trio-1000P/1000P2 Healthy Home Air Purification System, inspect for any signs of damage.



WARNING - Always unplug the power cord from the Trio-1000P/1000P2 Portable Air Purification System when changing the filter or UVC germicidal lamps, and when cleaning. After servicing this equipment both the front and top grill assemblies must be reinstalled in exactly the same manner as prior to removal. If either grill is not reinstalled properly the Trio-1000P/1000P2 Portable Air Purification System will not turn on. This is a built in safety feature.

Before using the Trio-1000P/Trio-1000P2 Portable Air Purification System extend the power cord and inspect for any signs of damage. Do not use the product if the power cord has been damaged.

Warning – This appliance is designed to be used on a flat level surface, and may not work properly on an uneven surface. To reduce the risk of electric shock and injury, do not place in a window. Always place the air purifier at least 12 inches (30.48 centimeters) away from heat sources such as stoves, radiators, or heaters.

Do not move the Trio-1000P/1000P 2 Portable Air Purification System while it is in operation. Always unplug prior to moving.

Do not immerse the Portable Air Purification System in water, as permanent damage will occur. Refer to the “Performing Maintenance” section in this owner operation and maintenance manual.

Do not operate this device with a damaged cord or plug. Discard device or return to an authorized service facility for elimination and/or repair.

Do not run cord under carpeting. Do not cover cord with throw rugs, runners or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.

SPECIFICATIONS

Model Trio-1000P:

Dimensions: 21.5" W x 18" H x 8" D
Weight: 23 LBS
Maximum Airflow: 265 cfm
Power Consumption: 106 watts, 0.89 amps
Voltage: 115V/1ph/60 Hz
Blower: Backward-curved motorized
impeller-sealed bearing
UVC Germicidal Lamp: 8 watts
Microwatts at surface per cm²: 16,000
Microwatts at surface per cm² @ 1ft: 540
UVC Germicidal Wavelength: 254 nanometers
Stage 1 Pre-Filter: 5 micron
Stage 2 High Efficiency Filter: 0.30 micron
hospital grade
Stage 1 Gas Absorption Layer: Activated Charcoal
Stage 2 Gas Absorption Layer: Activated Charcoal
Application Range: 1000 sq feet (auto mode)
Service Interval: 1 year lamp and filter replacement
Catalyst: TiO₂ Anatase
Filter Efficiency %: 99%
Sound Level dBA: 48 to 68
Agency compliance: ETL, CSA
Warranty: 2 year Limited Warranty, excluding
lamps and filters

Model Trio-1000P2:

Dimensions: 21.5" W x 18" H x 8" D
Weight: 23 LBS
Maximum Airflow: 265 cfm
Power consumption: 84 watts, 0.38 amps
Voltage: 220V/1ph/50 Hz
Blower: Backward-curved motorized
impeller-sealed bearing
UVC Germicidal Lamp: 8 watts
Microwatts at surface per cm²: 16,000
Microwatts at surface per cm² @ 1ft: 540
UVC Germicidal Wavelength: 254 nanometers
Stage 1 Pre-Filter: 5 micron
Stage 2 High Efficiency Filter: 0.30 micron
hospital grade
Stage 1 Gas Absorption Layer: Activated Charcoal
Stage 2 Gas Absorption Layer: Activated Charcoal
Application Range: 1000 sq feet (auto mode)
Service Interval: 1 year lamp and filter replacement
Catalyst: TiO₂ Anatase
Filter Efficiency %: 99%
Sound Level dBA: 48 to 68
Agency compliance: ETL, CSA
Warranty: 2 year Limited Warranty, excluding
lamps and filters

FEATURES

Thank you for purchasing a Trio-1000P/Trio-100P2 Portable Air Purification System by Field Controls. The Portable Air Purification System embodies unique air-purification technologies not found in any other air purifier. The PRO-Cell™ patented catalytic technology significantly reduces the presence of irritable and toxic airborne gaseous contaminants produced by common household cleaners and materials.

- A quiet, energy-efficient backward-curved impeller that moves approximately 265 cubic feet of air per minute.
- An advanced electronic control system that monitors air quality, air flow and volume, filter and UVC germicidal lamp replacement time.
- A five-stage filtration system with gas-absorption media absorbs toxic gas, organic hydrocarbons, exhaust fumes, formaldehyde, cleaning chemicals, low level ozone, unpleasant odors, and paint solvents.
- A hospital-grade three-stage high efficiency filter removes allergens such as pollen, mold fungal spores, tobacco smoke, insecticide dust, dust mites, and particles down to 0.3 microns (0.00003 inch).
- The PRO-Cell™ photo-catalytic oxidation chamber reduces the spread of airborne disease in the home environment. The powerful UVC germicidal light has 150 times the ultraviolet intensity of bright sunlight, which kills viruses and bacteria on contact.
- Oxygen and humidity in the air, combined with photo-catalytic technology and UVC germicidal ultraviolet light, oxidizes airborne impurities too small to be filtered-out.
- The PRO-Cell™ photo-catalytic oxidation technology, which has received six patents from the USPTO, will keep the air clean and fresh in exactly the same way sunlight and oxygen clean the air we breathe in the outdoor environment.

INSTALLATION

CAUTION: This product is for indoor use only.

Before unpacking the product, inspect the shipping container for visible damage. If you feel that you may have received the product in a damaged condition, notify the shipper or supplier before opening the container. Remove the product from the box and inspect it for damage.

Handle it carefully. Do not drop!

Place the Purifier in a location that will not restrict air flow through either the air inlet or the air outlet, then plug-in the electrical cord at the nearest electrical wall outlet.

NOTE: The Trio-1000P/Trio-1000P2 Portable Air Purification System will perform a self diagnostic test of indicator lights and functions when plugged in to the wall outlet. This will only happen once unless the system is unplugged from the wall and reinstalled.

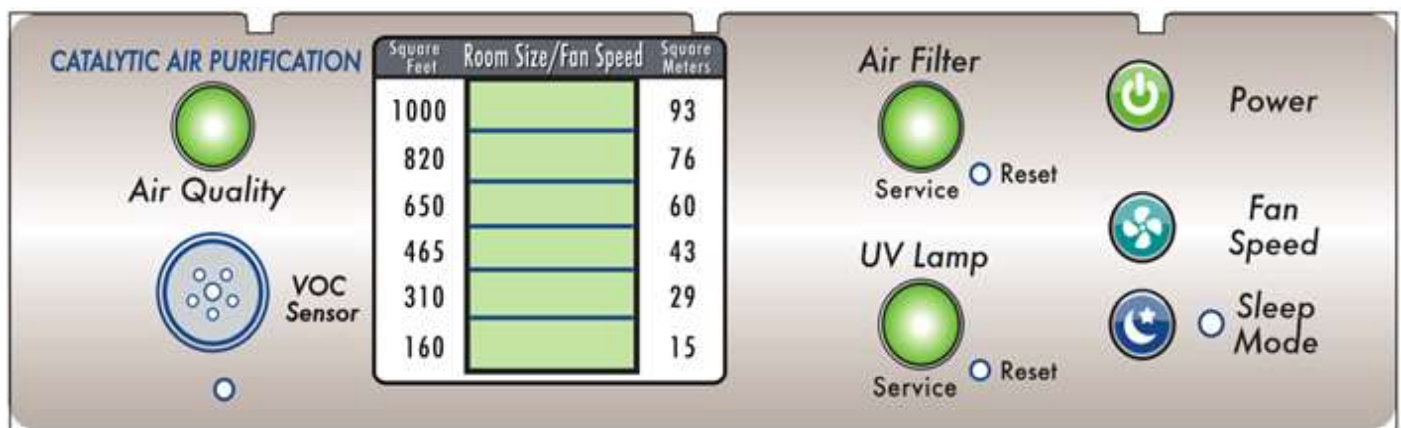


FIG 1

1. **Press-in Power (ON/OFF) button** to turn-on the Purifier. Lights on the control panel (figure 1) will turn-on. The UVC germicidal ultraviolet lamp will turn on and the fan motor will turn on.
2. Look into the air outlet at the top of the **Trio-1000P/Trio-1000P2** Air Purification System and confirm that the UVC germicidal ultraviolet lamp is on. You will see a faint blue glow when the lamp is on. When the UVC germicidal ultraviolet lamp is on, the product is ready for operation.

NOTE: The "Air Quality" LED light may turn **red** on startup until the surrounding air quality improves. When the air quality LED is **red**, the air flow is automatically increased by (2) power levels. The lowest fan speed cannot be reached until the air quality light turns **orange** in color and then **green** as air quality reaches a good level.

3. Setting the fan speed and air volume for to the correct room size.

Press the **"Fan Speed Button"** (FIG 1) until the **green LED bar light** underneath "Room size / Fan Speed" reaches the corresponding size of your room. Calculations in both "square feet" and "square meters" (length x width) measurements are conveniently listed at either side of the **green LED bar lights**. Correctly setting this indicator will keep the air volume at an optimum level.

4. Press the "Sleep Mode Button" (figure 1) at night if you desire to reduce fan noise.

A **green** LED light will illuminate to the right side of the button. This will maintain constant airflow through the purifier and reduce fan speed to a minimum. Since there is no movement in the room, purification requirements are greatly reduced.

Press the Sleep Mode Button again to return to the normal air flow mode.

MONITORING OPERATION

You can always monitor the air quality of the room.

Air quality is sensed in real time by the chemical-detection sensor (see figure 1) which continually evaluates air quality. Air quality is expressed by one of (3) colors on the air quality LED light.

1. Green indicates good air quality.
2. Orange indicates poor air quality.
3. Red indicates bad air quality.

Air volume is automatically increased by (2) fan speed levels when the air quality indicator turns red, and will reset to a preset fan speed when the air quality indicator turns orange and then green.

NOTE: It is normal for the air quality indicator to temporarily be red during periods of house cleaning, painting or cooking meals.

MAINTENANCE

You should also keep an eye on the Service Panel which tells you when maintenance will soon be required.

What the Service Panel Indicator Lights Mean ("Air Filter" and "UV Lamp"):

Indicator lights on the Service Panel tell you if either the air filters or the germicidal ultraviolet lamp will soon need to be cleaned or replaced.

Air Filter Indicator Light:

The filters have a useful life of one year in a typical residential environment.

- Green LED light is On – The filters have been in service for 0 to 5 months.
- Orange LED light is On – The filters have been in service for 5 to 6 months.
- Red LED light is On – The filter has been in service for more than 6 months. It is time to vacuum off the top pre-filter to maintain maximum air flow. The filter does not need to be removed at this time.

Reset the filter timer button by lightly pressing the small hole to the right of the filter light with a small pin or similar object. This will reset the filter timer for another (6) months. **When both the "Air Filter" and "UV Lamp" LED service lights turn red at the same time**, filters and UV Lamp have been in service for one year and need to be replaced.



Ultraviolet Lamp Indicator Light:

The UVC Germicidal Ultraviolet Lamp has a useful life of one year (9,000 hours) with a one-month grace period.

- Green LED light is On – The lamp has been in service for 0 to 11 months.
- Orange LED light is On – The lamp has been in service for 11 to 12 months. It's time to order a new UVC Germicidal Ultraviolet Lamp and replacement filter.
- Red LED light is On – The lamp has been in service for more than 12 months. The UVC Germicidal Ultraviolet Lamp may not be effective and must be replaced.

PERFORMING MAINTENANCE

Maintenance includes the following procedures:

- Replacing the ultraviolet UVC Germicidal Ultraviolet Lamp
- Replacing the filters

REPLACING THE GERMICIDAL ULTRAVIOLET LAMP

1. Unplug the Purifier's power cord from the electrical outlet.
2. Using index fingers, squeeze the locking tabs (FIG 2) inwards towards the center of the grill. Lift the grill up and remove.
3. Rotate the Ultraviolet Lamp one-quarter turn, top to rear, (FIG 3) and remove lamp.
4. Insert the new Ultraviolet Lamp in place and install by rotating one-quarter turn (top-to-front).
5. Replace the top grill removed in previous step 2 by pressing it into position until it locks. The aluminum reflector must be positioned over the UVC Germicidal Ultraviolet Lamp, nearest the front of the unit (FIG 4).
6. Reset Ultraviolet Lamp timer by lightly pressing the related RESET button on the Service Panel (located directly beside the "UV Lamp" LED indicator) with a pin or similar object. The "UV Lamp" LED service light will turn green, and the 6 month timer will reset. This completes UVC Germicidal Ultraviolet Lamp replacement procedures.



FIG 2

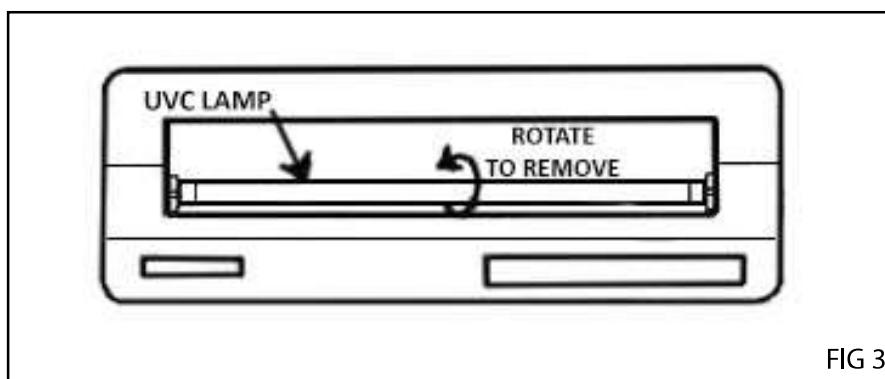


FIG 3

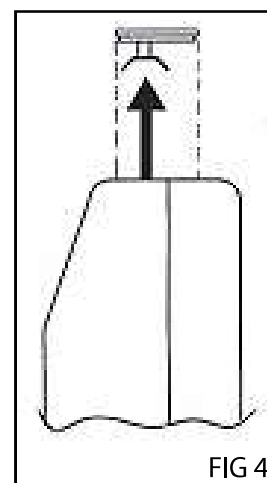


FIG 4

REPLACING THE FILTERS

When both the "Air Filter" and "UV Lamp" LED Indicator lights turn red, both filters and UV lamp have been in service for one year and should be replaced within 30 days.

1. Unplug the Purifier's power cord from the electrical outlet.
2. Rest the Purifier on its back (FIG 5) to access the bottom of the unit.
3. Press-up on locking clips at the bottom of the front grill.
4. Lift bottom of grill upwards and slide the grill out from the top of the unit (FIG 6 and 7).
5. Pull out the two filters, individually, and discard them.
6. Install new white high efficiency media/carbon filter (labeled second stage) in first with its white lay facing upwards. (FIG 8).
7. Install the new pre-filter (labeled first stage) in the remaining slot with its white side facing upwards.
8. Replace grill. Slide upper end into grill slot and snap the bottom into place until it locks.

The Trio-1000P/Trio-1000P2 Portable Air Purification System can be equipped with permanganate filter, carbon filter and prefilter configuration for special organic conditions or applications. (See FIG 9)

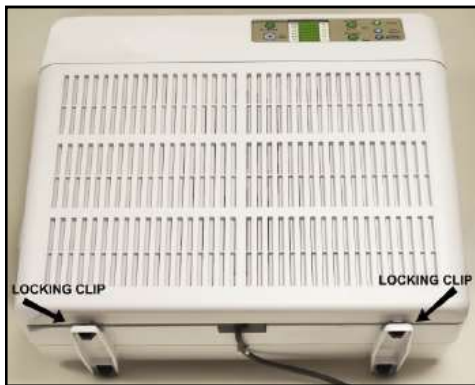


FIG 5



FIG 6

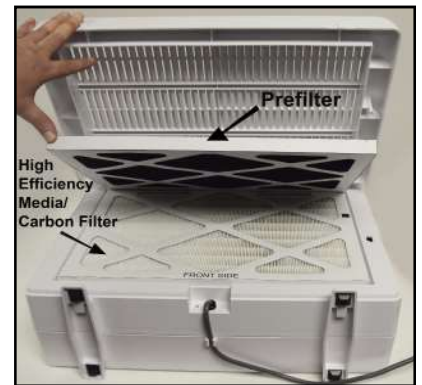


FIG 7

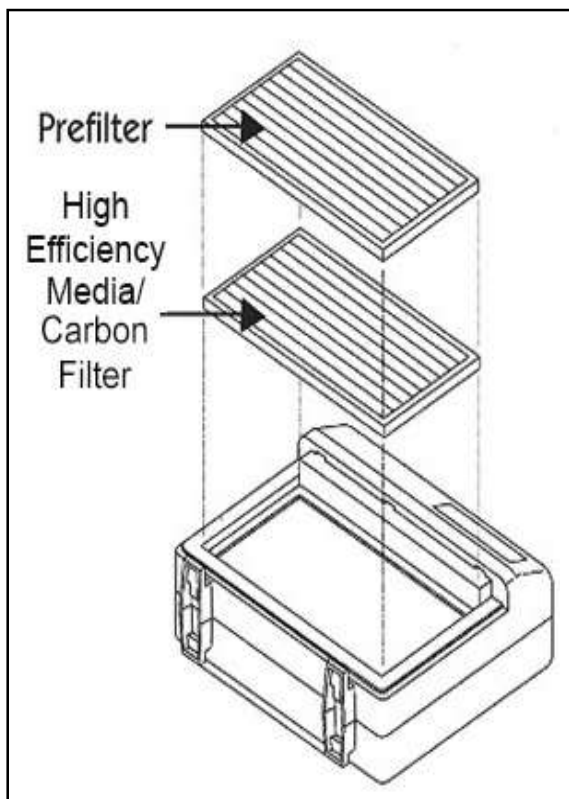


FIG 8 - STANDARD FILTER CONFIGURATION

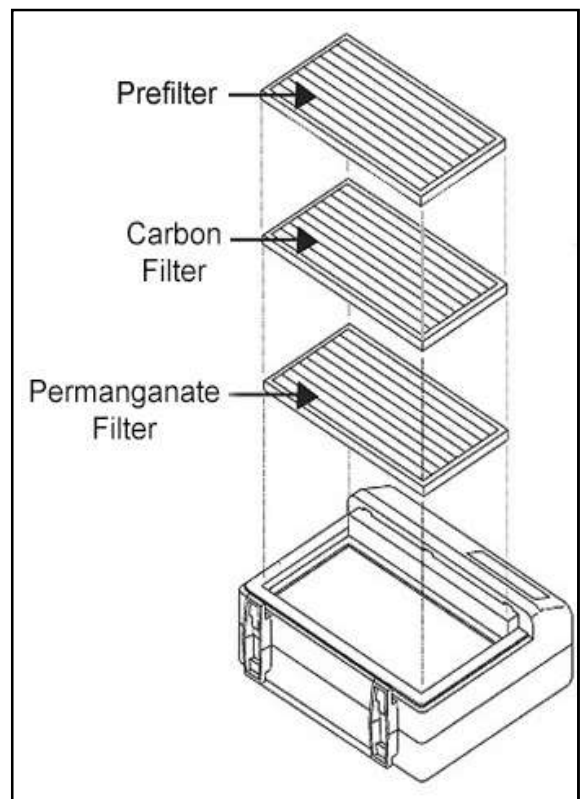


FIG 9 - OPTIONAL PERMANGANATE FILTER PACK CONFIGURATION

Reset the Filter Replacement timer by lightly pressing the RESET button on the Service Panel (located directly beside the “Air Filter” LED indicator) with a pin or similar object. The “Air Filter” LED light will turn green and the timer will be reset. This completes filter replacement procedure.



Restore the Purifier to normal operation as follows:

1. Set the unit in its normal operating position.
2. Plug the power cord into the wall outlet. Press the “Power” (ON/OFF) switch to operate.

REPLACEMENT PARTS

TRIO 1000P (120VAC)		TRIO-1000P2 (220VAC)	
Part Number	Description	Part Number	Description
46649600	RPLC FILTER SET PRE FLTR & HIGH EFFICIENCY	46649600	RPLC FILTER SET PRE FLTR & HIGH EFFICIENCY
46649700	REPLACEMENT UVC LAMP 8 WATT	46649700	REPLACEMENT UVC LAMP 8 WATT
46649800	1ST STAGE FILTER (PRE-FILTER)	46649800	1ST STAGE FILTER (PRE-FILTER)
46650100	RPLCMNT KIT (1) UVC LAMP (1) FILTER SET	46650100	RPLCMNT KIT (1) UVC LAMP (1) FILTER SET
46649900	2ND STAGE FILTER (HIGH EFFICIENCY FILTER)	46649900	2ND STAGE FILTER (HIGH EFFICIENCY FILTER)
EL043	5v1a POWER ADAPTER	EL043	5v1a POWER ADAPTER
46680000	ASSY MOTOR AIR PORTABLE 120V	46680100	ASSY MOTOR AIR PORTABLE 220V
EL021	7.5mf 370 vac 50/60 hz CAP. 120V	EL025	2.0mf 370 vac 50/60 hz CAP. 220V
BL016	ELEC BALLAST FOR TRIO1000 120V	BL017	ELEC BALLAST FOR TRIO1000 220V
46681400	DISPLAY BOARD	46681400	DISPLAY BOARD
46700700	PERMANGANATE FILTER PACK (PREFILTER, CARBON FILTER AND PERMANGANATE FILTER)	46700700	PERMANGANATE FILTER PACK (PREFILTER, CARBON FILTER AND PERMANGANATE FILTER)

This manual may be downloaded and printed from the Field Controls website (www.fieldcontrols.com)

WARRANTY

For warranty information about this or any Field Controls product, visit:
www.fieldcontrols.com



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