

PHOTO~CATALYTIC PURE AIR PURIFIER

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**Portable Indoor Air Purifier
For The Home & Office**



User's Guide

IMPORTANT SAFETY INSTRUCTIONS

Read And Save These Instructions.

When using electrical appliances, basic precautions should always be followed to reduce breakage, risk of fire, electric shock and injury to persons including the following:

- Always unplug the air purifier when it is not in operation, while the filters or ultraviolet light are being changed, 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 air purifier will not turn on. This is a built-in safety feature.
- Before using the air purifier, 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 air purifier while it is in operation. Always unplug prior to moving.
- Do not immerse the air purifier in water, as permanent damage will occur. Refer to the "Performing Maintenance" section in this user's guide.

Warning: To reduce the risk of fire or overheating of the electrical cord, do not run power cord under carpets, and do not cover with throw rugs. Arrange cord such that it will not be tripped over.

- Do not allow foreign objects to enter ventilation or exhaust opening as this may cause electric shock or damage to the air cleaner. Do not block air outlets or intakes.

SPECIFICATIONS - THE PHOTO~CATALYTIC PURE AIR PURIFIER

Dimensions (inches)	21.5" wide x 18.0" high x 8.0" deep
Weight	23 lbs.
Maximum Air Volume	400 CFM free flow
.....	265 CFM loaded
UV Lamp	254 nanometers (germicidal)
Line Voltage.....	115V-60Hz/230V-50Hz
Maximum Watts.....	110 watts
Maximum Amperes.....	0.93 amperes
Blower.....	Backward-curved motorized impeller

2 YEAR LIMITED WARRANTY

This product has been engineered and crafted with great care for your satisfaction. Be sure to fill out and return the enclosed warranty card within 14 days of purchase. Each Photo~Catalytic Pure Air Purifier comes with a limited two year warranty, excluding expendable parts such as filters and UV lamp.

This exceptional warranty provides for repair or replacement of parts or components found to be defective for two years from the date of purchase at no charge for labor or materials. This warranty does not cover the expendable ultraviolet lamp, which must be replaced on an annual basis (1-year) or the expendable filter cartridge media, which must be replaced on an annual basis (1-year) or sooner depending on environmental conditions.

All warranty repair work must be performed either at the factory or by a factory certified service center. Shipping costs to and from the factory or service center is the responsibility of the owner of the Pure Air Purifier. This warranty is provided to the original purchaser of the Pure Air Purifier and may not be transferred, sold or bartered.

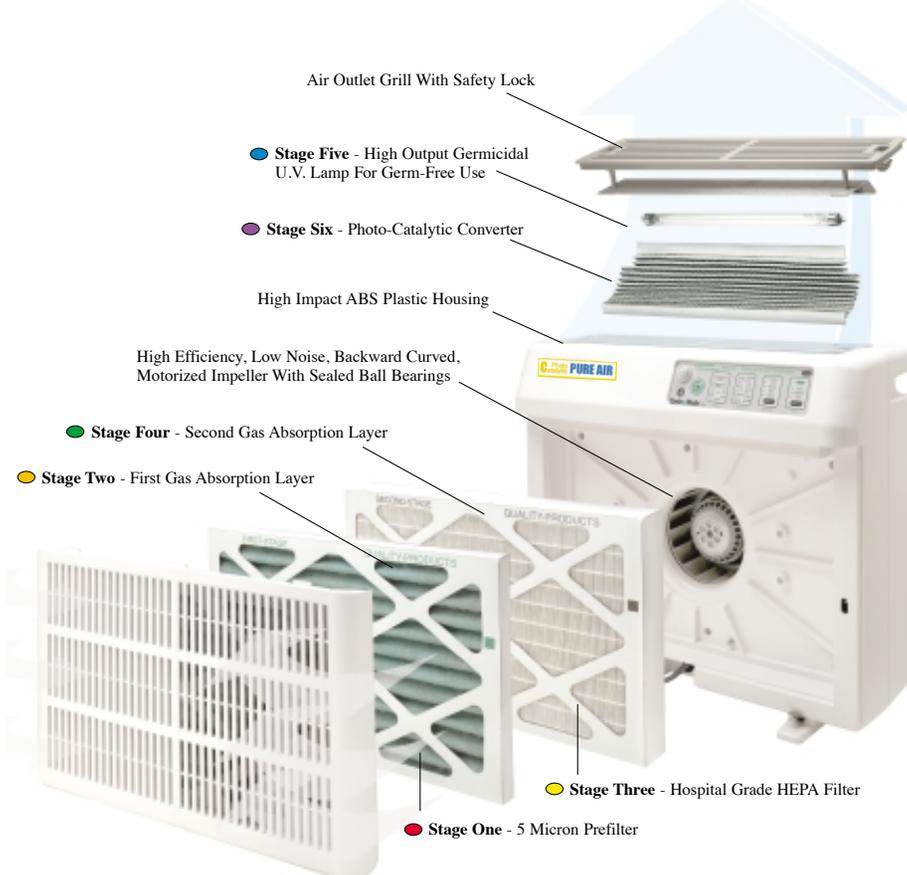
This product is not warranted against freight damage, unreasonable use, failure resulting from misuse, connection to incorrect voltage, or acts of God such as fires, earthquakes, or floods. This warranty gives you specific legal rights which vary from region to region. This warranty applies only to the original Purchaser of this product.

7. Install the new pre-filter squarely on top of the HEPA filter the white (or green) pleated layer facing upwards and the dark layer on the downward side. When correctly in place the words "FIRST-STAGE" and "FRONT SIDE" printed on the replacement filter are clearly visible.
8. Replace grill. Slide its upper end into grill slot and snap the bottom into place until it locks.
9. Reset the FILTER timer by placing the end of a paper clip or toothpick into the rest hole and Gently press in the switch to return the indicator light to Green OK. The FILTER will again be counted to zero over 6 month period.

This completes filter replacement procedures.

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.
3. Press the black POWER button to activate the unit into service.



PHOTO~CATALYTIC PURE AIR PURIFIER

Thank you for purchasing a great American made health care product. The Pure Air Purifier is the most advanced Home and Office air purification system in the world. The Pure Air Purifier embodies unique air-purification technologies not found in any other air purifier including utilizing Photo-Catalytic process to clean the home and office down to the last molecule.

Photo~Catalytic Pure Air Purifier Features:

Only the Pure Air Purifier hybrid system has all these features:

- A quiet, energy-efficient backward-curved impeller that moves 265 cubic feet of air per minute.
- An advanced electronic control system that monitors air quality, room occupancy, air flow and volume, filter and ultraviolet lamp replacement time.
- A six-stage filtration system with gas-absorption media that absorbs toxic gas, organic hydrocarbons, exhaust fumes, formaldehyde, cleaning chemicals, low level ozone, unpleasant odors, and paint solvents.
- A hospital-grade three-stage HEPA 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.)
- A photo-oxidation chamber with **Germicidal Ultraviolet Light** destroys Bio-aerosols and reduces the spread of airborne disease in the home and office environment. Ultraviolet light 10,000 times the intensity of sun light kills on contact viruses and bacteria too small to be filtered out by a HEPA filter. Ultraviolet technology combined with photo-catalytic oxidation is the most important feature in air purification since germs are easily spread from one person to another by central heating and air-conditioning systems.
- **Photo-Catalytic Oxidation** Eliminates Pollutants From Home and Office Environments. Only Photo Catalytic Oxidation provides an absolute detoxification of the air stream, rather than changing the phase or collecting and concentrating the contaminants like other air "cleaners". The Photo Catalytic Oxidation reactor grid absorbs indoor air pollutants including bacteria, viruses, and fungus on the grid surface which are reduced to carbon dioxide and water vapor when illuminated by the Ultraviolet light.

INSTALLING THE PURE AIR PURIFIER

Unpacking the Purifier

NOTE: Before unpacking the product, inspect the shipping container for visible damage. If you feel that you may have received the product in a damage 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 it!

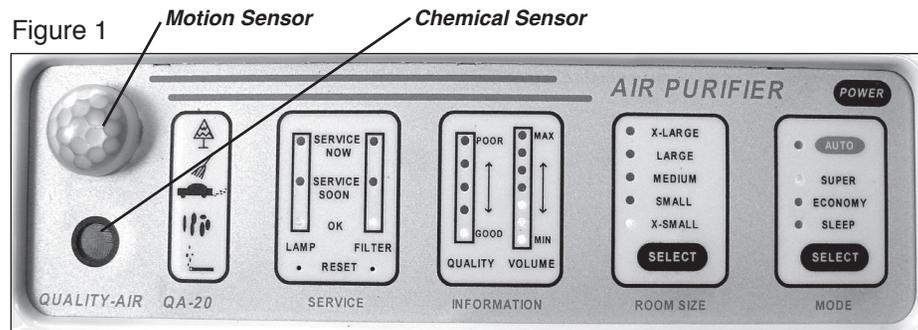
Installing the Purifier

CAUTION
This product is for indoor use only.

Place the purifier in a location that will NOT restrict the inlet air flow towards the front or sides of the unit front grill or the outlet air flow from the top grill. The outlet air flow pathway which allows the unit to be most beneficial includes an unobstructed flow towards the room ceiling. Once the unit has been positioned, plug-in the electrical cord at the nearest electrical wall outlet.

Installing the Purifier

1. Press-in Power ON/OFF button to turn-on the Purifier. Lights on the control panel (figure 1) will turn on and the ultraviolet lamp will be "On".



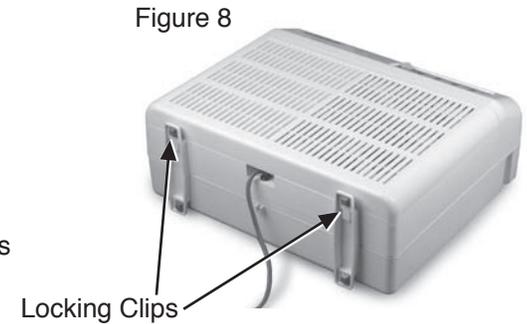
2. Look into the air outlet at the top of the Pure Air Purifier and confirm that the ultraviolet lamp is operating. You will see a faint blue glow when the lamp is on. If the lamp appears to be "Off", refer to "Maintaining the Pure Air Purifier".

When the lamp is "On", the product is ready for operation.

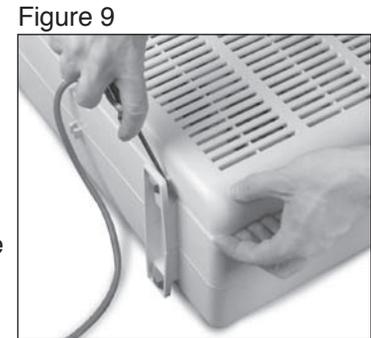
Replacing Filters

When the Yellow Filter indicator lights, filter should be replaced within 30 days. Here's the step-by-step procedure:

1. Unplug the Purifier's power cord from the electrical outlet.
2. Rest the Purifier on its back (figure 8) to access the bottom of the unit.
3. Press-in locking clip at each end of the front grill.



4. Lift the bottom of the front grill away from the locking clips, approximately 1", (figure 9) and slide the top of the front grill towards the unit's feet to free the front grill tabs that are inserted into the unit housing under the control panel. Set the front grill to the side and vacuum any collected dirt and debris attached to the inner grill areas before reinstalling



5. Pull out the two filters, individually, and discard them.
6. Install the new HEPA filter in the lower slot with the white pleated layer facing upwards and the sealing gasket on the downward side. When correctly in place the words "SECOND-STAGE" and "FRONT SIDE" printed on the replacement filter are clearly visible.

Performing Maintenance

Maintenance procedures are:

- Replacing the ultraviolet (UV) lamp.
- Replacing the filters.

Replacing The UV Lamp

When the Yellow UV Lamp indicator lights, the ultraviolet lamp should be replaced within 30 days.

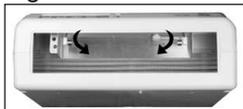
Here's the step-by-step procedure.

1. Unplug the Purifier's power cord from the electrical outlet.
2. Using index fingers, squeeze the locking tabs (figure 6) inwards towards the center of the grill on top of the Purifier. Lift the grill up and remove.
3. Rotate the UV lamp one-quarter turn, Top-to-Back (figure 7), and remove the lamp in similar manner of a florescent bulb with 2 pins per end.
4. Insert the new UV Lamp in place and install by rotating one-quarter turn (top-to-front). Handle the new lamp by the metal ends (figure 7a) avoiding contact with the quartz tube. Finger prints and smudges can be removed from the quartz sleeve with rubbing alcohol.
5. Replace grill removed in previous step 2. by pressing it into position until it locks. The aluminum reflector must be positioned over the lamp, nearest the front of the unit. (figure 7a).
6. Reset the UV LAMP timer by placing the end of a paper clip or toothpick into the rest hole and Gently press in the switch to return the indicator light to Green OK. The UV Lamp will again be counted to zero over 12 month period.

Figure 7a



Figure 7



Backside

Figure 6



This completes lamp replacement procedures.

Set Purifier For Room Size

1. Measure the room the Purifier is to serve, multiplying length by width to obtain a measurement in square feet (or square meters.)
2. Review the charts below to find the room and identify the respiratory condition the unit is to serve.
3. Use the "Heavy Duty" chart if you seriously suffer allergic reactions from particulate matter (pollen, dust, dust mites, animal dander, etc.) or airborne chemicals (pesticides, herbicides, cleaning solutions, etc.). Use the "Light Duty" chart if the area you live in is unhealthy from time to time, or you suffer mild allergies occasionally.

Heavy Duty		
People with Severe Respiratory Problems		
SUPER MODE	SQ. FT.	SQ. Meters
Extra Large	660	61
AUTO MODE	SQ.FT.	SQ. Meters
Extra Large	565	53
Large	485	45
Medium	400	37
Small	350	33
X Small	300	28

Light Duty		
Average Home		
SUPER MODE	SQ. FT.	SQ. Meters
Extra Large	1980	183
AUTO MODE	SQ.FT.	SQ. Meters
Extra Large	1695	159
Large	1455	135
Medium	1200	111
Small	1050	99
X Small	900	84

Select Operating Mode

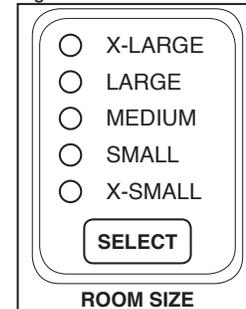
To make your MODE selection, press the black SELECT button (figure 3) repeatedly until the appropriate light is "On" next to the desired operating mode.

AUTO MODE - This is the mode, most commonly used. In this mode the electronic sensors combines the real time chemical sensor with the blower speed.

If the chemical sensor detects an unhealthful amount of chemicals present in the air (indicated by the red light on the quality scale) the electronic controls will automatically speed the blower up to the next setting.

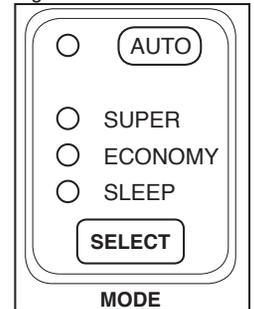
SUPER MODE - This mode may be selected during periods of high

Figure 2



ROOM SIZE

Figure 3



MODE

air pollution. For example: high winds which increase airborne dust and pollen. Heavy room loading, such as parties and heavy smoking. Super-Mode operation will increase blower speed approximately 25 percent above auto mode setting.

ECONOMY MODE - This mode saves energy cost during hours when the room is unoccupied. When people are moving in the room, operation is the same as that in the Auto Mode. When no motion has been detected in the room for 30 seconds, blower speed is reduced by 35 percent to save electricity costs. The blower returns to normal speed when motion is again detected in the room.

SLEEP MODE - This mode reduces the sound level by reducing blower speed by 30 percent, while still purifying room air at 70 percent of normal while the occupant sleeps.

Monitoring Operation

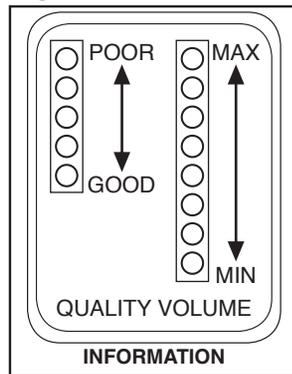
You can always monitor the quality of room air, and make sure that the Purifier is set to move a volume of air appropriate for present conditions. Note that measurements are relative to the selected room size. Make sure that the “Room Size” panel is always set for the room in which the unit operates. “Quality” and “Volume” are shown on the Information display.

Air quality is sensed by the chemical-detection sensor (see figure 1) which continually evaluates air quality. Air quality is expressed by one of five lights expressing a range from GOOD to POOR.

Air volume is shown by one of seven lights (figure 4) representing a range from greater than normal air flow, to reduced air flow (energy-saving Sleep Economy Mode). The light shows that air volume is just right for the selected room size.

You should also keep an eye on the Service Panel which tells you if maintenance will soon be required, or if maintenance is required for further operation. The Service Panel is described in Maintaining the Pure Air Purifier.

Figure 4



MAINTAINING THE PHOTO-CATALYTIC PURE AIR PURIFIER

What The Service Panel Indicator Lights Mean

Indicator lights on the Service Panel tell you if either the ultraviolet lamp, or the air filters, will soon need to be replaced, or if they must be replaced before using the Purifier again.

UV Lamp Indicator Lights

The Ultraviolet lamp has a useful life of one year (approximately 9,000 active hours) with a one month grace period.

Green light is On - the lamp has been in service for less than 12 months.

Yellow SERVICE SOON light is On - the lamp has been in service for more than 12 months. It's time to order a new lamp.

Red SERVICE NOW light is On - the lamp has been in service for more than 13 months. The lamp may not be effective and must be replaced.

Filter Indicator Lights

The filters have a useful life of one year in a typical residential environment. The filter service life span can vary greatly depending upon the individual location and application where the unit is placed.

It is recommended that when the FILTER service light turns red and the LAMP light is green, the front grill should be removed and the top pre-filter ONLY can be cleaned with a vacuum hose attachment to remove the collected dirt and debris. NOTE: Be careful not to scrap or puncture the filter media when cleaning.

It is recommended that BOTH the UV lamp and filter set be replaced at the end of 12 month operation when both service indicator lights turn red. This will assure maximum air flow and air quality.

The FILTER lights on the Service Panel designate the following:

- FILTER Green “OK” light is On – The filters have been in service for less than 5 months from reset date
- FILTER Yellow “SERVICE SOON” light is On – The filters have been in service for less than 6 months
- FILTER and LAMP Yellow “SERVICE SOON” light is On – The filters have been in service for less than 12 months. It is time to order a new filter package.
- FILTER Red “SERVICE NOW” light is On – The filters have been in service for 6 months and only the top Green filter should be cleaned.
- FILTER and LAMP “SERVICE NOW” Red light is On – The filters have been in service for 12 months and should be changed with the lamp.

Figure 5

