

# electriQ

## **EAP400D Multistage Air Purifier**

**True HEPA, VOC filter, UV lamp, TiO<sub>2</sub> photo catalyst (PCO),  
Plasma ioniser and advanced activated carbon filter**



## **USER MANUAL**

**Thank you for choosing this innovative ElectriQ Air Purifier.**

**Please read this user manual before using the product and  
keep it safe for future reference.**

**Visit our page [www.electriQ.co.uk](http://www.electriQ.co.uk) for our entire range of Intelligent Electricals**

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## **SAFETY INSTRUCTIONS**

### **Important!**

- Carefully read the instructions before operating the unit
- This appliance is for indoor use only.
- Rating: This unit must be only connected to a 220-240 V / 50 Hz earthed outlet.
- Installation must be in accordance with regulations of the country where the unit is used.
- If you are in any doubt about the suitability of your electrical supply have it checked and, if necessary, modified by a qualified electrician.
- Only use with the power cable provided by the manufacturer
- This air purifier has been tested and is safe to use. However, as with any electrical appliance - use it with care.
- Disconnect the air purifier from socket when changing the filters or cleaning the unit
- Avoid touching any moving parts of the appliance.
- Never insert fingers, pencils or any other objects though the guard
- This device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities. It is also not intended for use by those with a 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.
- Do not leave children unsupervised with this device.
- Do not clean the unit by spraying it or immersing it in water. Use a damp cloth only
- Do not clean with strong chemical agents or other abrasive materials.
- Never connect the unit to an electrical outlet using an extension cord. If a power outlet is not available, one should be installed by a qualified electrician.
- Never operate this appliance if the power cord is damaged. Ensure the power cord is not stretched or exposed to sharp object/edges.
- A damaged power supply should be replaced by the manufacturer. Never extend or attempt to change the power cord or plug.
- Any service other than regular cleaning or filter replacement should be performed by an authorized service representative. Failure to comply could result in a voided warranty.
- Do not use the appliance for any other purposes than its intended use.
- Avoid removing the power adapter from socket while unit is still in operation. This could cause electrical damage.
- Never use the power supply as a switch to start and turn off the air purifier unit. Use the ON/OFF button located on the control panel.
- Always place the unit on a dry and stable surface.
- The use of accessory attachments that have not been approved by the appliance manufacturer is not recommended, as this may result in fire, cause an electric shock and/or cause personal injury.
- Ensure hands are fully dried before plugging or unplugging the appliance.
- The appliance should not be installed in laundry or wet rooms.

### **Energy Saving and Unit Safety Protection Tips**

- Do not cover or restrict the airflow from the outlet or inlet grills.
- For maximum performance and safety the minimum distance from a wall or objects should be 20cm. Keep away from other electrical appliances.
- Keep the filters clean. Under normal conditions, filters should only need cleaning once every two weeks (approximately). Since the filters remove airborne particles, more frequent cleaning maybe necessary, depending on the air quality. Replace the filters regularly as instructed.

## INTRODUCTION

The **EAP400D** features an easy to use touch control panel, and provides 6 stages air purification using professional air filtration and sterilisation.

- Advanced activated carbon filter - Removes unpleasant odours and absorbs harmful substances such as formaldehydes and benzenes
- True HEPA filter - Removes 99.97 % of airborne particles which are 0.25 micrometres or larger
- VOC filter - Removes toxic volatile organic compounds and unpleasant smells
- Ultra-violet light - UV light treatment to kill airborne bacteria, germs and viruses
- TiO<sub>2</sub> filter - Titanium Dioxide screen to maximise UV effectiveness to kill 99.97% of germs
- Plasma Ioniser - sterilizes the air further by removing mould spores and allergens from the air
- Built in filter replacement indicator, ensuring your purifier is always efficient.

### Applications:

- Personal use in domestic and office space to improve air quality
- Helps smokers to minimise the effects of smoking
- Provides relief for asthma and allergy sufferers
- Great for schools, hospitals, hotels, pubs and other public spaces to enhance clean air standards

**Notes:** This air purifier is not a substitute for proper ventilation, regular vacuum cleaning or for use as a cooker hood while cooking. If the Relative Humidity is over 60% we recommend using a dehumidifier to reduce the humidity.

## INFORMATION ON INDOOR POLLUTANTS

**VOC (Volatile Organic Compound)** – VOC's come from motor vehicle exhausts, gasoline vapour, pollutants such as formaldehyde, ammonia and many other common and chemical solvents such as paints and glues. They can also be a by-product of mould growth. VOC's cause irritation to the eyes and/or nose as well as causing headaches, nausea, and can even lead to damage to the central nervous system. Pressed wood furniture, newly decorated rooms, paint and cleaning solvents are common sources of VOC's.

**MOLD / FUNGUS** – These can affect our respiratory system and cause allergic reactions, like a runny nose, eye and throat irritation, headaches, fatigue and aggravation of asthma. Other indoor pollutants include - bacteria, viruses, dust mites and pollen.

**Emissions from electronic office equipment** – Many studies, including those from EPA and the University of California Berkeley, have reported that emissions from office equipment such as computers and printers include VOC's, ultra-fine particles and ozone. These emissions have been proven to have a negative effect on the health of many people.

### Using HEPA and Carbon Activated filters, Plasma Ionization, VOC Filter, TiO<sub>2</sub> photo catalyst and UV light.

An effective **HEPA** filter is absolutely necessary to remove particles, even at a microscopic level; it ensures that the particles are not spread. A **Plasma Ioniser** will sterilise the air and reduce bacterial growth.

**UV light** dramatically improves Indoor Air Quality by destroying airborne bio-contaminants such as viruses and bacteria which are a leading cause infections and discomfort. Ultraviolet air treatment systems have been used for more than 50 years in hospitals and various other healthcare industries but with the advent of small highly efficient UV Lamps the technology now finds its place in the domestic environment.

**Photocatalytic oxidation** (PCO) is achieved when UV light rays are combined with a **TiO<sub>2</sub>** (titanium oxide) coated filter. Your ElectriQ air purifier features an advanced VOC Filter coated with TiO<sub>2</sub>. This process of photo catalytic oxidation creates hydroxyl radicals and super-oxide ions, which are highly reactive electrons that react with other elements in the air such as bacteria and especially VOCs. Once bound together, a chemical reaction takes place between the super-charged particle and the pollutant, effectively burning ("oxidizing") *the* pollutant. This breaks the pollutant down into harmless carbon dioxide and water molecules, making the air even cleaner.

The **antibacterial activated carbon** is a natural material biosynthesized from walnut shell, the adsorption area of activated carbon is very large. The activated carbon filter will absorb unpleasant odours and will help decomposing VOCs when combined with the TiO<sub>2</sub> filter and UV light.

# OPERATION

## BEFORE FIRST USE



Activated carbon+photo catalyst



Antimicrobial+HEPA

### Installing or replacing the Filters

The EAP400D uses a combination of two filter units, which should be installed in the air purifier before operating it for the first time.

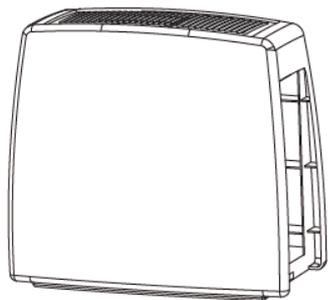
When inserting the filters the “AIR FLOW” Label should be pointing outwards.

## INSTALLING AND REPLACING THE FILTERS

1. Unplug the unit from the socket.
2. Facing the right hand side remove the side cover from top to bottom.
3. Remove both of the filters from inside of the unit.
4. Before installing the new filters, ensure the protective plastic wrap has been removed.
5. Insert both new filters into the unit. The carbon filter should be inserted first, followed by the HEPA filter, both with the “AIRFLOW” labels pointing outwards, as shown in the diagram below
6. Reattach the side cover of the unit and push it back securely it into place.
7. The device should not be turned on until the filter compartment cover is pushed back into place and secured
8. If the fan speed light continues to flash, hold the “Ioniser/UV” button to register that a new filter has been installed



Left cover



Body



Activated carbon+photo catalyst

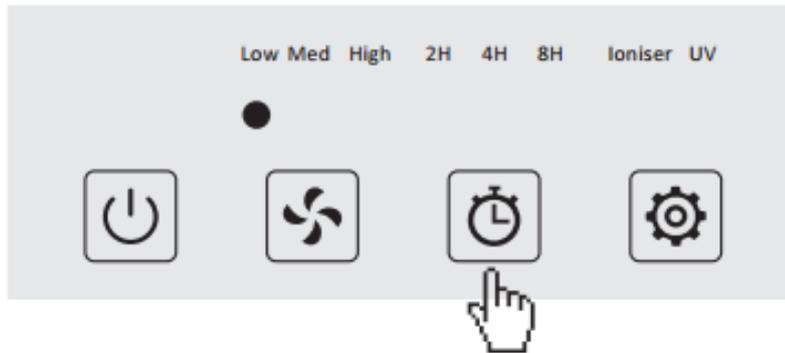


Antimicrobial+HEPA



Right filter cover

## FILTER REPLACEMENT REMINDER INDICATOR



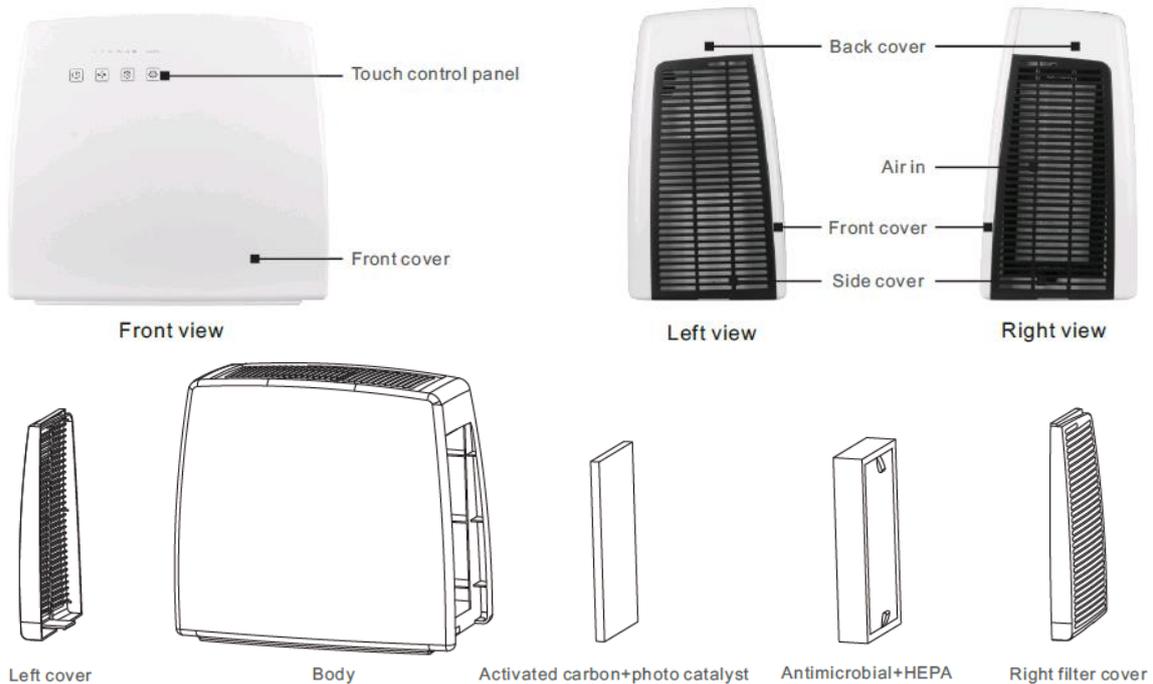
When the “Speed” indicator is flashing, this indicates that the installed filters are coming to the end of their useful life and should be replaced.

Once the filters have been replaced following the steps in “Installing and replacing the filters”, hold down the “Timer” button for five seconds, until the unit beeps to register the new filters.

### **CLEAN OR REPLACE THE FILTER CARTRIDGE**

1. If necessary wipe the inside of the filter holder with a dry cloth.
2. After maintaining or replacing the filters reverse the above disassembly procedure and return the unit to original operation mode.
3. Do not connect the unit to a socket before is fully assembled and never operate it without a filter inside.

## DIAGRAM OF THE AIR PURIFIER



**ACTIVATED CARBON:** Absorb formaldehyde, benzene and other noxious gases.

**PHOTO CATALYST:** When photo catalyst titanium dioxide ( $\text{TiO}_2$ ) absorbs Ultraviolet (UV) radiation, it will produce a chemical reaction that help oxidise and remove VOCs, odours, and kill germs.

**Note:** for maximum efficiency the UV lamp cover is coated with  $\text{TiO}_2$

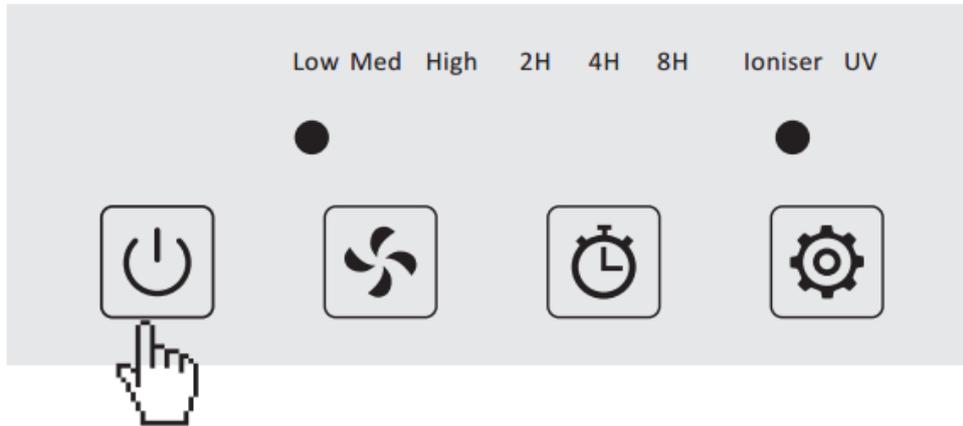
**VOC / ANTIMICROBIAL:** Captures Pollutants and mould spores

**HEPA:** Captures dust, smoke, pollen and other allergens.

**UV LIGHT:** Destroys micro-organisms such as germs, viruses, bacteria and fungi (such as mould).

**Ion:** Negative ion improves the air quality by combining with dust or reacting with odour molecules attached on the wall. Plenty of negative ions exist in natural surroundings such as waterfalls or forests. In this mode, negative ions bring the room air close to this natural environment.

## CONTROL AND SETTINGS



### “POWER” BUTTON:

Press this button to turn on or switch off the unit.

**Child Lock:** Hold the “Power” button for 5 seconds until the unit beeps once. This will lock the controls and prevent them from been adjusted. The lock can be removed by holding the button for another 5 seconds



### “SPEED” BUTTON:

Pressing the fan control key you can cycle between maximum air purification on high speed to lower air flow but quieter operation mode with lower fan speed. The fan speed of the unit can be adjusted when the unit is in operation (Low, Med, High ). Each time that you press on the (SPEED) button, the speed is adjusted from low to medium to high.

**Sleep Mode:** Hold the “Speed” button for 5 seconds until the unit beeps once. This will put the unit into sleep mode, the unit will operate in low fan speed, with no lights illuminated. To resume normal operation, press the “Power” button.



### “TIMER” BUTTON:

By pressing this button, the purifier can be timed to operate for intervals of 2 hours, 4 hours and 8 hours, stopping automatically when the selected operating time has elapsed.

- 1) Press this button (Timer) to select the required operating time. A led light automatically indicates the remaining operating time.
- 2) To select the continuous operating mode, cycle through until there are no more indicator lights lit up.

**Replace Filters:** Hold this button for 5 seconds following replacing the filters to reset the flashing “speed” indicator LED



### “IONISER / UV” BUTTON:

Pressing this button allows you to cycle between running the Ioniser, UV light, both or neither. The indicator lights above the button will indicate which of the features are currently activated

## CARE AND MAINTENANCE

Always shut off the unit and unplug from the mains before cleaning or performing any maintenance. When it is not in use for long periods it is advisable to remove the plug from the power socket. Do not use chemical solvents (such as benzene, alcohol or gasoline) as they may cause irreversible damage to the unit.

### Clean the external case

Only use tepid water and a mild detergent on soft cloth. Do not use bleach or abrasives. Do not splash water directly onto the main unit. Avoid wetting the power connection port. Doing so may cause an electrical shock and can lead to the insulation to deteriorate, or cause the unit to rust.

### Clean the filter and the filter holding area

Hoover the filters with a gentle brush every 2-3 weeks or more often if used in a dustier environment. Please make sure the filter is not damaged during the process and replace in such occurrence. Wipe with a dry cloth the filter holding area if necessary.



**Front (VOC and HEPA)**



**Back (Carbon and Photo catalyst)**

**NOTE:** The filters are not washable, and should be replaced if damaged or clogged.

**Clean the filter cover and clean air outlet** Use water and a mild detergent. Do not use bleach or abrasives. Do not spray water inside the unit. If the clean air outlet grilles get soiled easily, use a vacuum attachment or soft brush to clean. If the filter cover is dirty Hoover it, if it is heavily soiled wash it with warm soapy water and dry thoroughly before reinserting it in the unit.

**Note:** Do not assemble the unit and power it before all the parts are completely dry. Any other maintenance than what is described in this user manual must be only performed by the service centre.

## TECHNICAL DATA

Model	<b>EAP400D</b>		
Fan Speed	Low	Medium	High
Airflow (m <sup>3</sup> /hr)	70	100	150
Noise level (db)	25	32	40
Power rating	36 Watts / 220-240 V, 50 hz		
Ions	5x10 <sup>6</sup> ions/cm <sup>3</sup>		
Power cord length	≥ 1.4 meters		
Net Size (wxdxh)	329x170x300 mm		
Net Weight	3.2 kgs		
	<b>VOC and HEPA Filter</b>		
Size (wxdxh)	Efficiency	Particle Size	Life Time
20.9×10.2×4cm	99.9%	≤0.0003 mm	about 6 months
	<b>Carbon Activated and Photo catalyst Filter</b>		
Size (wxdxh)	Material	Active Filter Absorption Surface	Life Time
20.3×9.7×1.5cm	Walnut Shell	300,000 m <sup>2</sup>	about 6 months

## TROUBLESHOOTING

The Air purifier does not seem to work	Is the power plug disconnected from the wall socket? Is the socket switched on? The filter cover panel may not be properly installed, please re-install.
No clean air is delivered or performance is poor	Please ensure filters are cleaned and the packing was removed before installing the filter cartridge Ensure unit is only operating with a filter cartridge Set the unit to high fan speed Investigate if the air purifier is used in a room matching its size and enough operation time is allowed for larger rooms
Abnormal noise during operation	Check if the filter cartridge packaging was removed during the filter change Unit may not be on a hard / flat surface. Correct and retry Air inlet or outlets may be blocked. Remove obstruction and try again.
Speed light Flashing	Indicates that the filters require replacing, replace filters, and hold the "Ioniser / UV" Button for 5 seconds to resume normal operation.
Control panel not responding	Check that child lock has not been activated, by holding power button for around 5 seconds, or unplug the unit for 5 minutes.



**Disposal:** Do not dispose of this product as unsorted waste. Collection of such waste must be handled separately as special treatment is necessary.

Recycling facilities are now available for all customers at which you can deposit your old electrical products. Customers will be able to take any old electrical equipment to participating civic amenity sites run by their local councils. Please remember that this equipment will be further handled during the recycling process, so please be considerate when depositing your equipment. Please contact the local council for details of your local household waste recycling centres.

## **UK PRODUCT SUPPORT**

**[www.electriQ.co.uk](http://www.electriQ.co.uk)**

**Please, for your own convenience, make these simple checks before calling the service line.**

**If the unit still fails to operate call: 0871 620 1057 or complete the online form**

1. Is the unit plugged into the mains?
2. Is the power supply working?
3. Have you followed the troubleshooting suggestions?
4. Have you cleaned or changed the filters if the unit lost efficiency?
5. Switch the unit off and wait three minutes to see if the issue is resolved. Restart the unit.

**Office hours: 9AM - 5PM Monday to Friday**

**[www.electriQ.co.uk](http://www.electriQ.co.uk)**

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