

# AirClean DE20 Plus

Air Purifier



# AirClean DE20 Plus User Manual

This document includes important tips to prolong the life of your filters and get the most out of your new air purifier.

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# Important safety instructions

Please read these instructions before operating the InovaAir® System and keep for future reference.

# To reduce the risk of fire, electric shock, or injury

- 1. Do not detach motor-outlet module until the system has been switched off.
- 2. Disconnect power, or unplug, before cleaning, performing any maintenance or replacing a filter.
- 3. Use caution when moving the air purifier to avoid injury. We advise removing the filters prior to lifting or transporting the system.
- 4. Do not operate unless all components are fully assembled, securely latched and in the upright position. Failure to do so may result in serious injury.
- 5. Leave a distance of at least 150mm between the appliance and the nearest wall to allow for adequate air circulation.
- 6. Always keep air intake and outlet of the unit unobstructed.
- 7. Do not use near water or moisture or the immediate surroundings of a bath, shower, or swimming pool.
- 8. Do not immerse the air purifier in water or any other liquid.
- 9. Do not let objects, or liquid, enter the product.
- 10. Do not handle any part of the appliance or plug with wet hands.
- 11. Clean only with a dry cloth.
- 12. Do not install near any heat sources.
- 13. Do not operate this appliance if it has a damaged cord or plug, is not working correctly, or has been dropped.
- 14. Do not use this appliance if it has been damaged or submerged in water.

- 15. The appliance is not to be used 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.
- 16. If the supply cord is damaged, it must be replaced with a new cord. Contact our support team for a replacement.
- 17. Keep power cord away from heated surfaces.
- 18. Refer all servicing to qualified InovaAir® service personal. Servicing is required when the product has been damaged in any way. Do not attempt to service this product yourself. Opening or removing covers may expose you to dangerous voltages or other hazards and may void warranty.
- 19. Unplug the air purifier during lightning storms or when unused for long periods.
- 20. Do not use this appliance as sole protection against harmful pollutants.
- 21. Do not use outdoors.
- 22. Keep the appliance away from flammable liquids, vapours, air fresheners and essential oils.
- 23. Do not use in explosive or flammable environments.
- 24. Use only on solid, horizontal, and stable surfaces.

# Introducing your InovaAir® AirClean system

Inside the DE20 Plus boxes, you will find the InovaAir® unit, consisting:

- DE20 System Case/Motor
- Filter Base Plate (detachable)
- Power Cable (located in base of box)
- E20/DE20 Pre-filter (pre-installed)
- DE20 HEPA Filter (pre-installed)
- DE20 6kg Activated Carbon Filter (supplied in a separate box)





The inner Activated Carbon filter will need to be installed prior to use (see page 12)

Please ensure the two latches at the base of the unit are engaged BEFORE moving or lifting system, failure to do so may result in injury.

# How your AirClean system works



- Air is drawn into the system through the sides of the unit.
- B Air passes through the dust pre-filter.
- Air passes through the H13
  HEPA filter which removes
  dust, allergens and submicron fine particle matter.
- Chemicals and odours are removed from the air in the final stage by the Activated Carbon filter.
- The purified air is then returned to the room via the high air-flow diffuser.

# Positioning your AirClean system

There are two main points to consider: where you spend your time and where the main pollutants are.

The longer you keep your InovaAir® in a single room, the cleaner the air in that room will be. As with a heater or air conditioner, the InovaAir® purifier will only be effective if windows are closed during operation.

Your InovaAir® Airclean works best when it has plenty of unrestricted airflow around it.

It is also important to make sure the Air Purifier has easy access to a power outlet as long cords can be a tripping hazard and may result in damage to the unit should it be knocked over.

# The digital controller

Connect the power cord supplied to the power cord inlet on the back of the unit, switch the Main Power On/Off Switch to ON. The system will initiate startup power cycle and all LEDS will illuminate momentarily.



## InovaSmart<sup>™</sup> Digital Controller

Designed for intuitive operation the digital interface on your InovaAir system continuously keeps track of filter life by monitoring system usage based on hours of use and speed of the fan during operation.

#### 1. FILTER CHECK

Filter Life indicator lights will illuminate separately when the "Filter Check" button is pressed and a number will appear in the LED display showing how many month(s) of life each filter has remaining.

Filter longevity based on 24 hour usage: Pre-filter: 6 months; HEPA Filter: 36 Months; 6kg Activated Carbon Filter: 36 Months.

Please note. The filter replacement intervals are calculated based on the current fan speed. Running the system at higher fan speeds will result in a reduced replacement interval.

### 2. EXPRESS CLEAN

When pressed this allows the user to preselect maximum speed for a period of between 15-90 minutes, using the fan speed control buttons (4), in 15 minute increments. After the set period elapses the system will resume to the previously set speed.

#### 3. NIGHT MODE

Turns off all LED lights to improve sleeping conditions (except night mode LED which is dimmed).

#### 4. FAN SPEED

Allows precise control of fan speed, levels 1 through 20, and increases time increments (express clean).

#### 5. LED DISPLAY

This functions as the main display for the system numerically, showing: speed, filter life and Express Clean status.

#### 6. FAN SPEED INDICATOR

LED bar increases with fan speed as a visual indicator of speed in addition to the numeric display.

# Monitoring filter replacement

FILTER NAME	FACTORY DEFAULT SETTING
Pre-Filter (Wrap-around)	6 months
H13 HEPA Filter	36 months
Inner Activated Carbon Filter	36 months

#### 1. FILTER CHECK



Press "Filter Check" button once and filters PRE-FILTER, HEPA or CARBON illuminate (illustration shows HEPA as example only) in sequence and display the remaining life of each filter. Filter life is displayed in months <u>based on the current fan speed</u>.

#### 2. STANDARD FILTER LIFE RESET

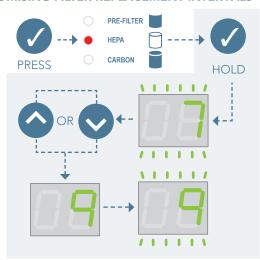






When the filter light illuminates (illustration shows HEPA as example only) for the filter you are wanting to replace, press and continuously hold "Filter Check" for 5 seconds, the display screen will start to flash. When the flashing stops, filter life has been reset to factory default above.

#### 3. CUSTOMISING FILTER REPLACEMENT INTERVALS



NOTE: CONTINUE TO HOLD THROUGHOUT THIS ENTIRE ADJUSTMENT PROCESS

To increase or decrease filter life to a custom setting, press "Filter Check" button once to select the filter life to customise (illustration shows HEPA as example only).

Press and hold "Filter Check" button when the filter to be changed is illuminated (NOTE: CONTINUE TO HOLD THROUGHOUT THIS ENTIRE ADJUSTMENT PROCESS). Once initial flashing has stopped use the "Fan Speed" buttons to decrease the filter life in months. When the desired number of months are displayed, continue to hold down "Filter Check" button, the display will flash again for 5 seconds to indicate the new setting has been saved as your preferred default filter life. (To revert to factory defaults see item 2 procedure above)

Please note: the custom filter life intervals can only be less than the default values above.

#### 4. CUSTOM FAN SPEED FOR NIGHT MODE



Default night mode is set to speed 5, to set a custom fan speed for "Night Mode," use the arrows to adjust the fan to the desired number. Then hold the "Night Mode" button for at least 5 seconds. When released the display will show "I II I" to confirm the new set speed.

# System operation

## **Speed Control**

The system has a variable speed controller and uses an energy efficient European AC fan. Power consumption is relative to the selected speed.

Min	2	4	6	8	10	12	14	16	18	20	Control position
6	8	10	14	20	29	40	48	68	82	84	Power Consumption (Watts)
100	141	182	223	264	305	346	387	428	469	510	Airflow (m³/hour)

The higher the speed, the more times per hour the air in your living space will be cleaned, so it is recommended to run the system at the highest speed you are comfortable with.

Higher fan speeds will generate higher sound levels. Generally for sleeping, an ideal setting is position 1-2.



# Tips for getting the most out of your Air Purifier

### Always operate the system with windows closed.

Air purifiers are not designed to filter the great outdoors, like an air conditioner or heater leaving a window open will render the system ineffective. Use of evaporative coolers will also reduce effectiveness.

### Operate the system 24/7.

As dust, allergens, and chemicals are always present in the air, for maximum effectiveness you should operate the system continuously. By switching the system off you are only allowing these contaminants to build up in the interim until it is switched back on. InovaAir systems are designed for optimal energy efficiency – so don't be concerned about power consumption as this will barely be noticeable on an electricity bill.

### Decide where you need clean air the most.

Typically for allergy and asthma sufferers, use while sleeping will be an important part of how you use your air purifier. If you have a high capacity system with adequate coverage, it can be moved between living areas during the day and the bedroom at night. Operation for 15-30mins on high speed will dramatically reduce the bulk of airborne particulates when moving into a new room.

### Enclose the area where you are operating the system.

If you close a bedroom door the system will be much more effective as it will only be filtering air in the one room. If you move to larger areas, if possible, close off surrounding areas to maintain clean air in that space. E7 and E8 models are designed primarily for bedroom use, while the high capacity E20 series are designed to cover large living areas and be moved to bedrooms for night-time use.

### Operate at the highest speed you are comfortable with.

All InovaAir systems include variable speed controls and the speed should be varied depending on the room size, the level of air pollutants present, and the sensitivity of the individual. The higher the operating speed the more effective the system will be, as the purifier will be filtering the air more times every hour resulting in lower levels of particles and certain chemicals. When operating smaller systems in larger areas, increase the operating speed to enable the system to filter the air more effectively.

#### Activated carbon filters.

While they are highly efficient at removing chemicals and odours, if you have high levels of any chemicals or odours they will absorb these from the air quickly and the filter life will be reduced. If you want to prolong the life of the activated carbon filter, you should turn the system off while cooking or if there are any heavy transient odours.

### Check your pre-filters regularly for dust build-up.

We recommend that you check your pre-filter after every three months of operation to visually inspect the level of dust buildup. Pre-filters typically last between 4 to 6 months based on average dust levels in a home environment. If the levels of dust in your home are high due to external factors such as living near a main road, you may need to change your filters more regularly. Change of filter colour alone from white to grey does not indicate the filter needs changing, rather a thick dust layer does. Do not vacuum or wash pre-filters, they are made from very high efficiency material which is not designed for vacuuming or washing. These actions will damage the pre-filter and reduce the life of the HEPA filter by allowing dirt to pass through.

### Know when to change your main filters.

The HEPA filter will require replacement when the outside, the side immediately visible underneath the pre-filter, changes colour from white to dark grey – this typically takes some years to occur as long as you have maintained and changed your pre-filter on a regular basis. Activated carbon filters, when saturated with chemicals or odours, will leave the air tainted with an odour. If the air coming out of your purifier develops any sort of noticeable odour, the carbon filter may require replacement.

### When changing pre-filters.

It is best to remove the HEPA filter with the pre-filter intact and take outside so no dust is released in your environment when changing. If not practical to do so you can simply place a large garbage bag over the entire HEPA filter/pre-filter and remove the pre-filter inside the bag.

# Accessing the filters



## Recommended filter replacement intervals

APPROXIMATE REPLACEMENT INTERVAL*					
3-6 months					
3-5 years					
Maximum 3 years					

<sup>\*</sup> Based on 60% daily usage in environments with average particulate/chemical levels.

Operating conditions will vary based on levels of dust, chemicals & odours present, and system proximity to major pollution sources each of which may lower any of the filter lifespans. InovaAir does not warranty consumable filter life.

# When to replace the filters



### Stage 1: Pre-filter

The pre-filter is the initial stage of filtration, filtering large dust particles right down to ultra fine sub-micron particles. It is made from a patented material used in respirators and face masks.

On average the pre-filter is designed to last up to 6 months of continuous use. Dust levels in the ambient air will affect how long the pre-filter will last.

Pre-filters are white in colour and will turn grey fairly quickly within 1-2 weeks of use, this is nothing to be concerned about and simply means the filter is doing its job.

We recommend checking the dust buildup on the pre-filter every 3 months of use. When the dust layer is approximately 2 mm thick the pre-filter should be replaced.



The H13 HEPA filter is designed to last 3 to 5 years under normal use. As with other filters, the environment in which it is used will determine the filter life.

The outside of the HEPA filter will change colour and turn dark grey when it needs changing. Generally for the first two years of use the filter will remain white and then gradually get darker in the final months of its life. Please note, the inside of the HEPA filter will always remain white so it is important to check the outside of the filter which is visible when the Pre-filter is being changed.



The DE20 6kg activated carbon filter adsorbs chemicals, gases and odours from the air and, depending on the environment, will last up to 3 years.

Carbon filters should be changed when they are saturated, this means the filter has entirely filled up with what it has filtered from the air during use. You can tell when a carbon filter needs changing because the air coming out of the air purifier will either be tainted with an odour of what it has adsorbed during use, or the air will simply stop smelling clean or smell stale.

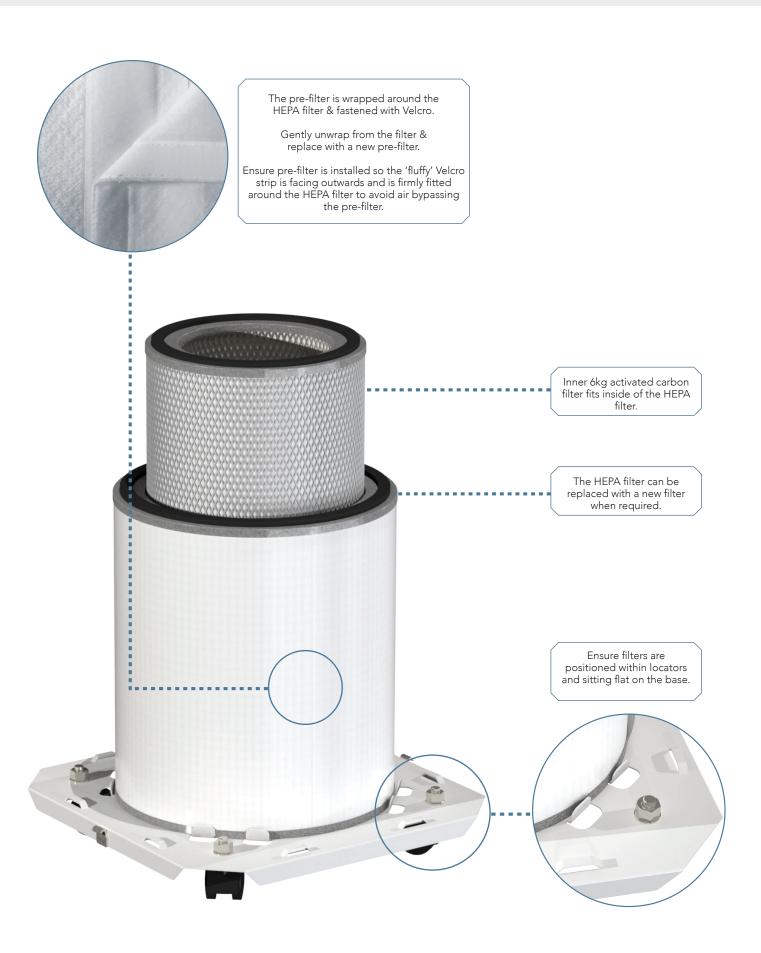
## When changing pre-filters

It is best to remove the HEPA filter with the pre-filter intact and take outside so no dust is released into the environment when changing. If not practical to do so, you can simply place a large garbage bag over the entire HEPA filter/pre-filter and remove the pre-filter inside the bag.

If you suffer from dust allergies, we recommend moving the system outside before removing the pre-filter to avoid the possibility of dust being released in your environment. Alternatively wear a dust mask if performing this operation inside.

**Important:** Do not attempt to vacuum the HEPA or Pre-filter as this will damage the fine filter fibers and reduce efficiency. Air intake vents on the sides of the system can be vacuumed including the base plate which sits under the filters.

# Replacing filters



# Ordering new filters

Replacement filters can be ordered from the Inova $Air^{TM}$  website using the URL or QR code below.

www.inovaairpurifiers.com.au/replacement-filters





### Committed to clean air.

InovaAir® is an Australian-owned company that, for more than a decade, has engineered and manufactured air purifiers for home, commercial and industrial use. InovaAir® purifiers are built in a modern factory on the pristine NSW Central Coast, one hour north of Sydney.

InovaAir® has an uncompromising approach to building the world's best air purifiers with airtight seals that are guaranteed 100% leak-free. The company is committed to using Australian-made components wherever possible. If components must be sourced from overseas, they are always the best available.

Over the years, InovaAir® has developed an enviable reputation for the quality and performance of its unique range of air purifiers. InovaAir® purifiers are built to operate for decades, to be easy to service, to have filters that are easy to replace, to work quietly, effectively and efficiently and to dramatically improve the lives of those who use them.

InovaAir® purifiers contain no harmful chemicals and are essential for people with allergies and asthma, and for anyone who wants to remove harmful pollutants from the air they breathe.

InovaAir® has a strong commitment to research and development, and continuous improvement is the hallmark of its products. InovaAir's scientifically proven air cleaning technologies work and their performance can be certified with a laser particle counter.

The company's success is based on customer satisfaction. The InovaAir® philosophy is to make products that exceed customer expectations, offering high-efficiency air purification solutions that are perfectly tailored to the needs of customers.

Peace of mind is included with every InovaAir® purifier at no extra cost.



# System warranty

#### **Definitions**

In this warranty:

"ACL" refers to the Australian Consumer Law . "Back to Base" means where delivery to and collection of your product from the Service Agent is your responsibility. "Consumable" includes (without limitation) filters and pre-filters. "InovaAir® Australia" means InovaAir® Australia Pty Ltd ACN 103 549 435. "Factory Second" means a Production of the Act o

means InovaAir® Australia Pty Ltd ACN 103 549 435. "Factory Second" means a Product sold by InovaAir® Australia or any other authorised person as a 'second' meaning a product with a small imperfection that does not impede functioning. "Genuine" means manufactured by or on behalf of InovaAir® Australia. "Product" means a Genuine Product supplied new by InovaAir® Australia. "Purchase Date" means the date of first purchase from InovaAir® Australia or any other authorised person seller or distributor. "Any other authorised person" means a dealer, reseller or retailer of the Product.

"Service Agent" means an authorized InovaAir® Australia service agent. "You" means the End User and "your" has a corresponding meaning.

#### Introduction

Subject to these conditions, InovaAir® Australia Pty Ltd offers this Warranty on a Product to which it's Back to Base service applies.

- (1) This Warranty applies in addition to the conditions and warranties implied by the Act in relation to a Product.
- (2) Any other authorized person who has sold a Product to you has acted as principal and has no authority to give any additional warranty or guarantee in relation to the Product on behalf of InovaAir® Australia.
- (3) InovaAir® Australia will not be liable for any consequential loss, indirect or special damage arising from your use of the Product. In particular (but without limitation) InovaAir® Australia excludes any liability for actual or expected revenue loss or other loss.
- NB. This exclusion is subject to any relevant Commonwealth or state law, which is intended to override such exclusions.
- (4) In no event shall InovaAir® Australia, its agents, employees, or distributors be liable for special, incidental, consequential, or indirect damages.
- (5) The provisions of this warranty supersede and are in lieu of any other warranty, whether express or implied, written or oral, including any warranty of merchantability or fitness for a particular purpose.
- NB. This exclusion is subject to any relevant Commonwealth or state law, which is intended to override such exclusions.
- (6) Maximum liability shall not exceed the actual purchase price paid for this product.
- (7) This warranty is non-transferable.
- (8) Should any of the conditions of the warranty be deemed unenforceable then same shall be severable from the balance of warranty conditions, which shall remain legally binding.

### 5 Year warranty

InovaAir® Australia warrants that your Product will be free from defects in materials or workmanship for five (5) year/s from your Purchase Date. One (1) year in commercial applications).

At its discretion, InovaAir® Australia will repair or replace your Product, if it is found be defective. InovaAir® Australia will, if it deems the unit defective, either repair or replace the unit at its sole option (and, based on availability, may elect to replace the unit with an air purifier of similar function or value).

To make a Warranty claim, you must:

- First call InovaAir® Australia's Contact Centre on 1 300 137 244;
- Return the Product (if warranty service is required) in its original packaging (or suitable alternative) to a Service Agent, as discussed with the Contact Centre; and
- Provide a copy of your purchase receipt, to show that this Warranty applies to your Product at the date of your claim.

You are responsible for the cost of and risk in delivery of your Product to and its collection from the Service Agent.

### Warranty application

This Warranty applies only:

- a. To a Product that is supplied new to You by InovaAir® Australia or by any other authorized person:
- b. If you use the Product for your own private or business purposes; and
- c. You have not bought the Product for resale.

### Warranty exclusions

This Warranty will not apply if during the warranty period:

- a. A Product's serial number or any rating label is removed or changed in any way;
   This warranty shall immediately become void if the unit's serial number label is removed, altered, or is no longer clearly legible;
- b. A Product is repaired other than by a Service Agent;
- c. You use a Product contrary to any technical or operating environment or safety guidelines recommended in its user guide or manual;
- d. No fault found service calls where the perceived problem is explained within the Operating Manual or the trouble shooting section of the operating manual.
- e. This Warranty does not cover costs associated with delivery, handling, freighting or damage to product in transit.
- f. This Warranty does not apply to a Product's malfunction or failure resulting from:
  - i. Deliberate or accidental damage:
  - ii. Rust or damage to paintwork, varnishes or seals caused by a corrosive atmosphere;
  - iii. Vermin infestation;
  - iv. Any modification by the purchaser which affects the reliability or performance of the unit, not attributable to faulty manufacture, parts and labour:
  - v. Where a unit is installed incorrectly by the purchaser or its servants agents employees or by unqualified persons;
  - vi. Failure is due to improper installation or faulty installation;
  - vii. Failure is due to improper maintenance by customer (refer to maintenance section of Operating Instructions);
  - viii. Misuse, abuse or neglect;
  - ix. Incorrect voltage or a power surge; or
  - x. Your use of any non-genuine Consumables parts accessories or interfacing;
  - xi. Failure to remove or replace out of date or non-functioning filter.
- g. This warranty covers only manufacturing defects, and not normal wear and tear, including filters which are considered consumables.
- h. InovaAir® does not warrant the Product as a health safety device. The product is not a Medical Device or Therapeutic Device as defined by the Therapeutic Goods
- i. All exclusions as determined by InovaAir® Australia at its sole discretion.
- j. Filter life: InovaAir® does not warrant the useful life of filter consumables. The filter consumables working life will depend entirely on the environments in which it is used. In dusty environments filter life will be reduced. The Products and their filters are not intended to be used for dust extraction in industrial or commercial applications.

#### Non-genuine items

InovaAir® Australia advises that if you use non-Genuine Consumables, replacement parts or accessories, you may damage your Product and may void your warranty.

#### **Australian Consumer Law**

In addition to your rights under the InovaAir® guarantee, we also provide the following statement as required by the Australian Consumer Law: In Australia, your InovaAir® appliance comes with statutory guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have your InovaAir® appliance repaired or replaced if it fails to be of acceptable quality and the failure does not amount to a major failure.





InovaAir Australia Pty Ltd Unit 8, 1 Reliance Drive, Tuggerah, NSW 2259 Australia

TEL: 1300 137 244

www.airclean.com.au