

React-Air X

Operating Instructions



Reaction Group, Poundbury House, Dorchester, United Kingdom. DT1 2PG
For service and repair, call 0203 885 1334

Please read this manual first!

Dear Customer,

We hope that your product which has been manufactured to the highest standards and passed through a strict quality control procedure will give you the best results. Therefore, we advise you to read through this manual carefully before using your product and keep it for future reference.

This operation manual will...

...help you use your React-Air X efficiently and safely.

Please read the Operation Manual before installing and starting your React-Air X. Particularly follow the instructions related to safety. Keep this Operating Manual within easy reach. You may need it in the future. Please read all the additional documents supplied with this machine.



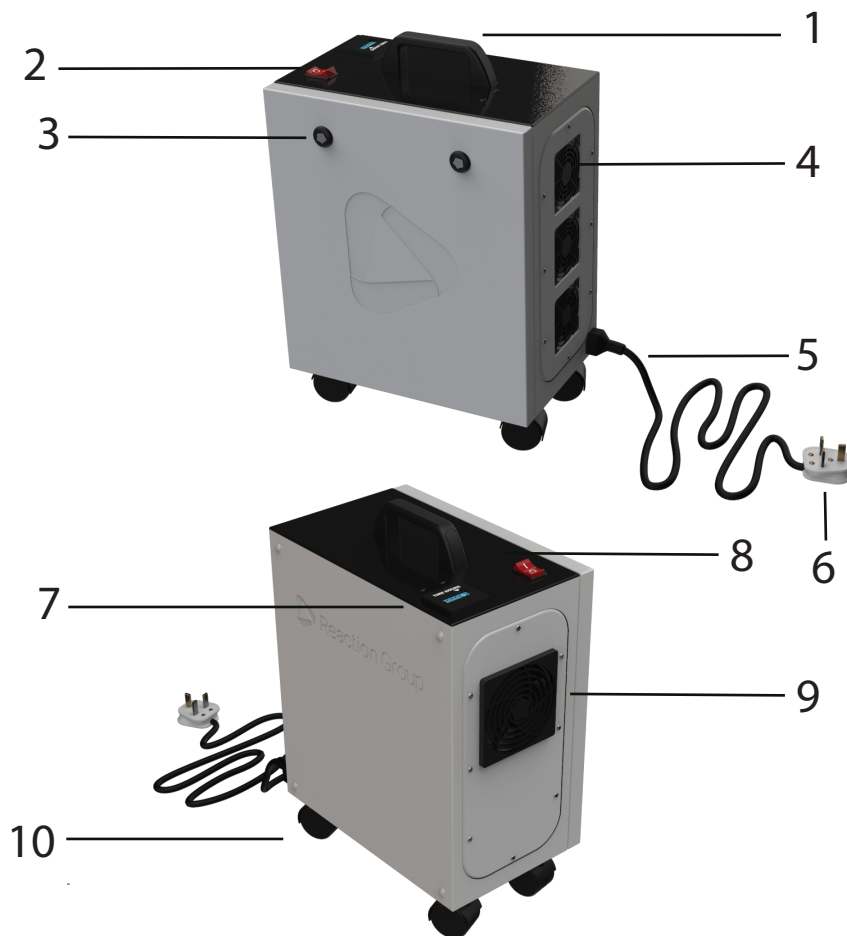
This appliance's packaging material is recyclable. Help recycle it and protect the environment by dropping it off in the municipal receptacles provided for this purpose. Your appliance also contains a great amount of recyclable material. It is marked with this label to indicate the used appliances that should not be mixed with other waste. This way, the appliance recycling organised by your manufacturer will be done under the best possible conditions, in compliance with European Directive 2002/96/EC on Waste Electrical and Electronic Equipment. Contact your town hall or your retailer for the used appliance collection points closest to your home. We thank you for doing your part to protect the environment.

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1 Your React-Air X

Overview



1 - Carry Handle

2 - Power Switch

3 - Inspection Bolts

For safety, the unit must not be opened by unqualified personnel

4 - Inlet Duct

5 - Power Cable

6 - UK (Type G) Plug

7 - Hour Counter

8 - Power Indicator

9 - Output Fan

10 - Castors

Specifications

Dimensions	520 x 510 x 200 mm
Weight	12.2 Kg
Dominant Wavelength	254 nm - ozone free
Total Ultraviolet Output	30W
Airflow	160 m ³ / hour
Power	AC 220 - 240 V, 50 Hz
Power Consumption	193W
Total Current (A)	0.84

Specifications of this appliance may change without notice to improve the quality of the product. Figures in this manual are schematic and may not match your product exactly.

Values stated on the machine labels or in the documentation accompanying it are obtained under test in accordance with the relevant standards. Depending on operational and environmental conditions of the appliance, values may vary.

2 Warnings

Please read the following information. Otherwise, there may be a risk of personal injury or material damage. Moreover, any warranty and reliability commitment will become void.

General Safety

- Place your React-Air X device on a solid, flat surface. If the unit falls, this may cause damage, leading to diminished efficiency and possible failure
- If the power cable or mains plug is damaged, do not use. You must call Reaction Group for repair
- The React-Air X uses UV-C light. UV-C is extremely dangerous when exposed to the eyes or skin. Under no circumstances should any untrained person attempt to open the device, even if it is switched off and unplugged. The React-Air X has no user-serviceable parts.
- Servicing should only be conducted by Reaction Group

First Use

- After unboxing your React-Air X you should remove all packaging. There is no further preparation required

Intended Use

- This product has been designed for home and commercial use in internal environments only.

Do not attempt to use the React-Air X outside, or in damp or hazardous environments. The unit may fail to work effectively and / or cause serious injury

Important Safety Instructions

- This appliance must be connected to an earthed outlet protected by a fuse of suitable capacity
- Never attempt to open the unit whilst it is in operation or otherwise.
- UV-C light is extremely hazardous and it is highly likely that injury will occur.
- Unplug the React-Air X when not in use. Never touch the plug with wet hands.
- The appliance can be cleaned with a lightly dampened cloth. Always unplug it and do not use a lot of water or hose
- The React-Air X has been designed to produce the correct dwell-time of air within the UVC chamber to neutralise viruses and bacteria. Do not attempt to replace fans or filters yourself and never try to force more air through the unit by using a different or additional fan.

3 Instructions for Use

Removing Packaging

Carefully remove the unit from its box and remove all packaging

Correct Positioning

There are two options for placement within a room. For a room which is unoccupied, close all windows and doors and place the unit in the center of the room for the desired amount of time (see air exchange information)

For rooms that are occupied, placing the React-Air X in the center of the room may cause a trip-hazard. Whilst the unit can be placed on the floor, for best results, it should be placed on a surface at chest height. However, if it is placed on a raised surface, ensure that the surface is flat and the unit is unable to accidentally fall or be knocked off. Such a fall may injure anyone nearby and will cause damage to the React-Air X

Establishing Power

You may need to use an extension cable to provide power to the unit. If this is the case, ensure that the extension is in good condition, earthed and is not a trip-hazard to others

Turning the unit on

Turn the power switch to the on position. You will immediately hear the fan start and the UVC light array power up. No other noises should be present.

You should also notice a dim, blue hue emanating from the filters. This is normal and indicates that the UV-C array is functioning. Whilst this hue is safe, you should not look directly into the filters or fan.

If in any doubt, immediately switch the unit off, unplug and contact Reaction Group for support.

Indicators

There are two key indicators on the React-Air X. The first is the Power Function indicator. This is a small, green LED on the top of the unit. This will illuminate when the unit is connected to mains power. If it is not lit, the power may not be connected or the fuse in the plug may need to be replaced. If you continue to experience problems, you should immediately switch the unit off, unplug and contact Reaction Group for support.

The hour counter shows how many hours the React-Air X has been operational for since it's last service inspection. The lifetime between services is 6000 hours, or 1 year - whichever comes sooner. Do not attempt to use your React-Air X if outside these criteria. Lamp life is finite and even if it looks to be functioning correctly the lamp and filters may have degraded to a point where the React-Air X fails to perform at the required level. You should have the unit serviced every 6000 hours, or annually, by Reaction Group. You can book a service visit by calling 0203 885 1334

4 Air Exchange Information

What is Air Exchange?

Air exchange is the term used to explain the number of times the air of a room is circulated through your React-Air X. It is not possible to ensure that every last cubic centimeter of air in a room has been exchanged, however, correct placement use as per these instructions and regular servicing will dramatically improve results

How much air can my React-Air X exchange?

The fan in your React-Air X has an average life-span of 60,000 hours and will exchange 187 cubic meters of air per hour. However, in order to neutralise certain types of viruses and bacteria, the fan is restricted to reach the correct dwell-time (the amount of time the air spends inside the UV-C chamber). With this restriction, the React-Air X will exchange 160 cubic meters of air per hour.

Air Exchange Recommendations?

If there is no ongoing source of contamination within a room, then 1-2 air exchanges should be sufficient to neutralise any airborne threats.

If there is an ongoing contamination source - for example, an infected person residing in the room, then you should look to achieve 5 or more air exchanges per hour (approximately every 12 minutes)

However, it's important to realise that cleaning the air within a room does not provide unlimited protection.

Risks still exist from contaminated surfaces, exchanging bodily fluids or being too close to, or not wearing appropriate PPE around sources of infection. Where there is an ongoing contamination source, there is no guarantee that all contamination will have passed through the unit as the contamination continues to be produced. Your React-Air X is therefore designed to be used to augment your existing equipment and procedures, not replace them. The unit will provide a level of protection for the air you breathe but other precautions must be taken.

How do I calculate air exchanges?

You can calculate the number of air exchanges manually, by following the instructions below, but for ease, you can access a calculator on our website at www.reaction-grp.com/xaecalc

Manual Calculation

Cubic meters are based on the Width X Length X Height of your room. Measure these three things and multiply them together to find the cubic meterage (M3) of your room.

The React-Air X will exchange 160 cubic meters of air per hour. Once you've calculated the M3 of a room perform the following calculation

$$160/M3 = \text{number of exchanges per hour}$$

Example: The room has

Width = 4m, Length = 3m, Height = 2.2m
M3 = 26.4 so $160/26.4 =$
Air exchanges per hour: 6