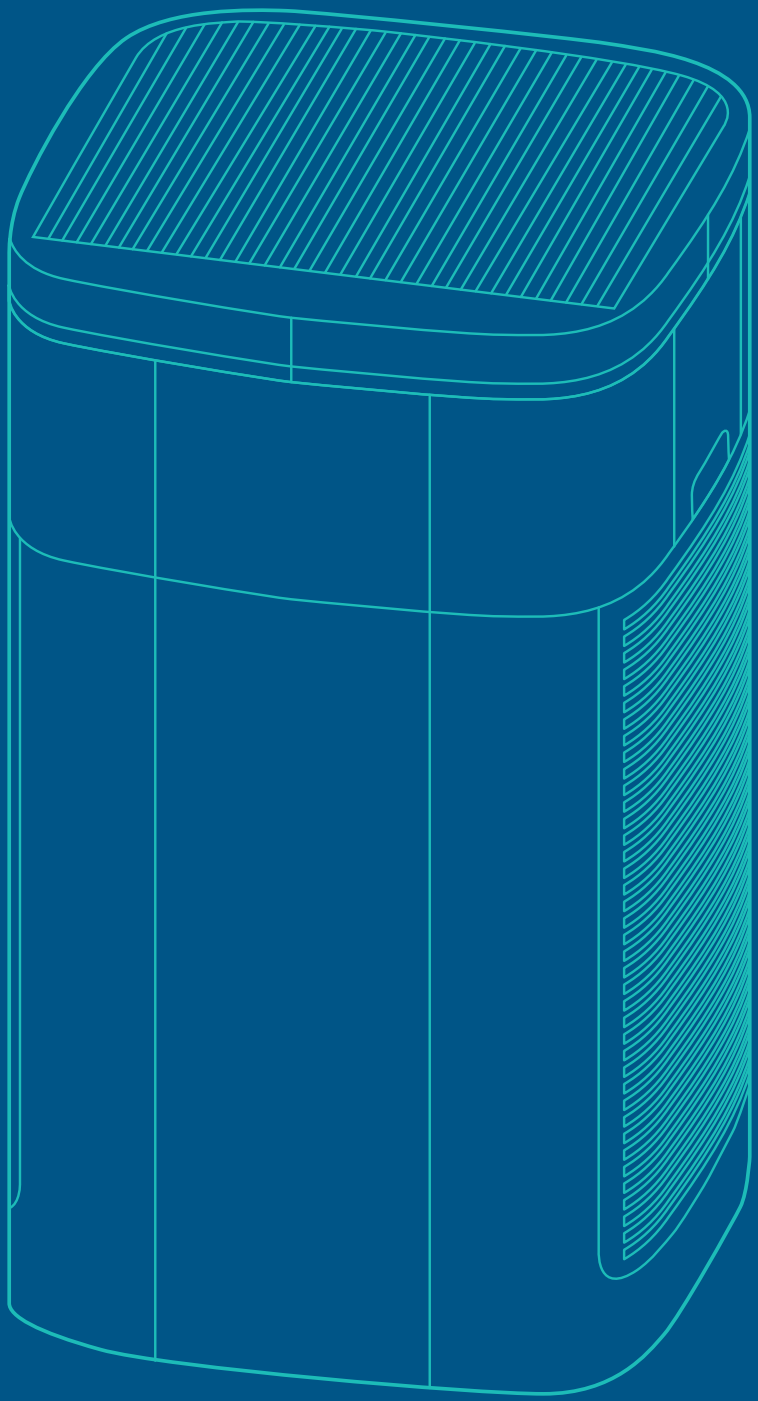
PRODUCT MANUAL

How to operate.
Installation & maintenance

RAIR-01 Version 2. Approved 20/12/2021



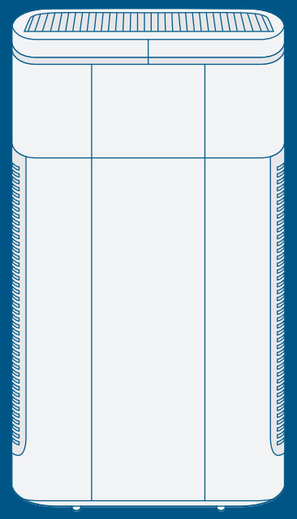
from the makers of clinell®

rediair™

PRODUCT CONTENTS

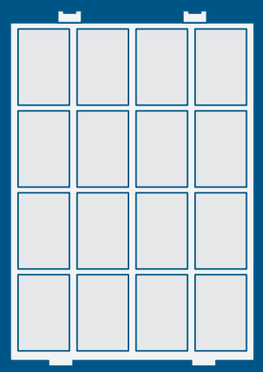
Rediair decontamination device, pre-filter, main combination filter (HEPA 14), remote control, instruction manual

Rediair decontamination device

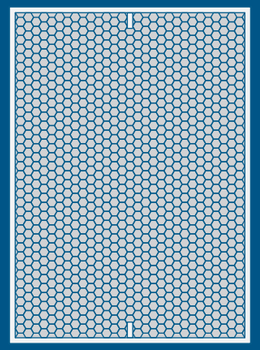


Remote control

Pre-filter



Main combination filter (HEPA 14)



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INTRODUCTION

WARNING

Always read before commissioning. Please carefully follow the instructions in the operating manual. Non-observance will invalidate the warranty. GAMA Healthcare accepts no liability for any damage or consequential damage arising from this.

Product description

- Rediair is a mobile air decontamination device that removes numerous microorganisms, particulates and gaseous pollutants from the air. This group includes mould spores, bacteria, airborne pathogens, animal hair and above all, house dust allergens (mite faeces, excrements), but also heavy metals, soot and mineral fibres. (Figure 1-Product image)
- Rediair comes with 2 HEPA 14 carbon filters & 2 pre-filters, and a 2-metre power cord, designed to operate with a shockproof 230V/50hz plug socket. The HEPA 14 filters and pre-filters are removable for cleaning and replacement.
- Rediair is designed to be stationary when in operation (out of standby mode). The user can select its three operating modes: automatic, turbo and night mode at will. Additional functions such as night mode, a timer setting and child lock help Rediair adapt to various situations and environments.
- An internal particle sensor combined with an LED air quality indicator strip monitors a room's air quality and changes depending on the current air quality. Rediair will change its internal fan speeds to account for the CADR required to decontaminate the surrounding air when in automatic mode.

Figure 1 – Rediair decontamination device

Intended use

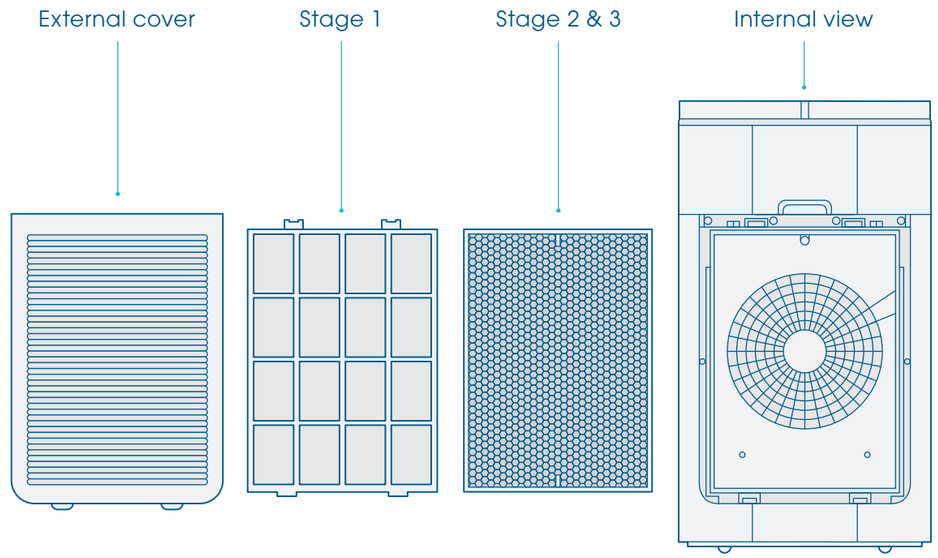
Rediair is a mobile air decontamination unit that draws air in from the environment, passing through a four-stage filtration system. The filter stages consist of pre-filter, a 2-in-1 combination-filters for gases and particles, and a plasma generator.

Limitations of use

Rediair is designed to be used in private apartments, offices, conference and training rooms, schools and public authorities, surgeries and fitness centres, and other areas where people are present.

A local risk assessment should be conducted before Rediair is commissioned for use.

REDIAIR'S 3 STAGES OF DECONTAMINATION ARE:



Rediair's 3 stages of decontamination are:

Stage 1 – Pre-filter

A washable plastic pre-filter filters coarse dust particles of more than 5 micrometres, such as house dust, scales, pollen. The filter can be washed out with water and reused several times. GAMA Healthcare recommends replacing the pre-filter annually.

Stage 2 – Effective formaldehyde filter

A formaldehyde filter with activated carbon cleans the air of unwanted odours, gases and substances. It also cleans the air of harmful formaldehyde in a relatively quick time. The activated carbon absorbs the substances, and when the filter is saturated, the filter must be replaced. GAMA Healthcare recommends replacement every six months. In case of strong odour pollution, a more frequent change is advisable.

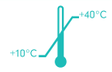
Stage 3 – Highly efficient HEPA filter (suspended matter filter)

The HEPA 14 filter filters airborne microorganisms, smoke, and dust particles down to 1µm in size at a rate of 99% or more. In combination with stage 2, the HEPA-14 filter can catch microscopic particles with a minimum diameter of 20 nanometres, like bacterial mould, dust, allergens, and airborne viruses. According to the World Health Organisation, COVID-19 (SARS-CoV-2), avian flu virus, influenza virus, and legionella bacteria are larger than 20 nanometres.

INTRODUCTION

Universal labels, symbols and icons

SYMBOL	DESCRIPTION
	Distributor
	Caution Consult accompanying documents **Warning** Indicates a hazardous situation, which if not avoided, could result in injury to the operator
	Consult instructions for use
	AU Regulatory Compliance Mark
	CE marked product (European Conformity mark)
	UK Conformity Assessed
	Do not dispose of in general waste. Waste Electrical and Electronic Equipment (WEEE Directive; (2012/19/EU; Article 11(2))
	Serial number
	Quantity
	Catalogue number
	Date of manufacture
	Maximum mass = 20.5kg
	Electrical ratings

	Maximum altitude
	Double insulated device
	Handle with care
	Keep dry
	Temperature limitation
	Atmospheric pressure limitation
	Humidity limitation

INTRODUCTION

Warnings and safety precautions

If Rediair is used in a way other than specified in this manual, safety of the operator and others may be compromised. All warnings and precautions must be followed to avoid personal injury or damage to the device:

- Read the product manual thoroughly before using this product.
- For indoor use only.
- Carefully select area for deployment – conduct a local risk assessment prior to deployment.
- Only plug the product into an approved electrical socket.
- Do not cover the top of the unit during operation.
- Do not position the device so that the air intakes or outlets are blocked while in use.
- Do not use the product if it is damaged.
- Do not store or operate the product in areas where it could get wet or be exposed to any harsh environmental conditions, such as extreme temperature or humidity, direct sunlight, dust etc.
- If the device accidentally becomes wet, discontinue use until dry and then test the device for proper operation before reuse.
- To avoid electrical or fire hazards, do not attempt to remove or replace the power cord. The power cord and plug must be intact and undamaged; check the cables integrity before each use.
- In case of damage of any kind, do not use and do not attempt to repair the cable.
- It is necessary to use the mains supply cord/plug to disconnect the equipment electrically – take care not to position the product so that it is difficult to disconnect the mains supply/cord.
- Do not attempt to move or reposition the unit with the mains supply cord/plug still connected.
- Do not use the product if any moving parts (i.e. impeller fan) are exposed.
- Always change the filter as soon as the relevant indicator appears on the unit (see page 13).
- Do not use a non-compatible filter that is not designed/approved for use with this product. (Only use Filter (RAIR-S01) supplied by GAMA Healthcare Ltd.)

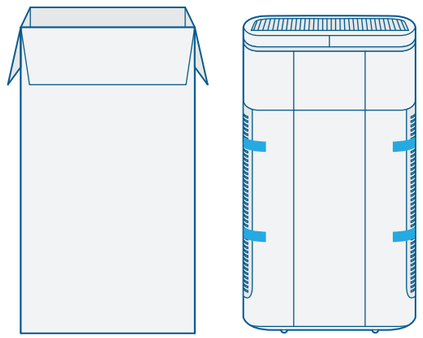
NOTE

Please speak to your local Rediair customer service representative for more information about the warnings and precautions.

HOW TO USE SETUP

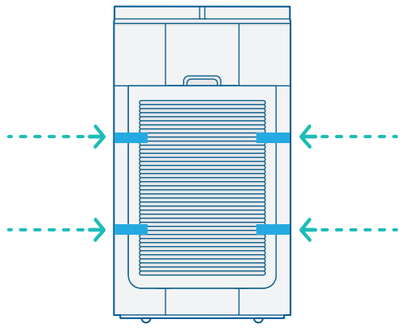
Before getting started and switching on the Rediair, please remove all packaging.
The Rediair filters must be removed from their protective packaging.

1



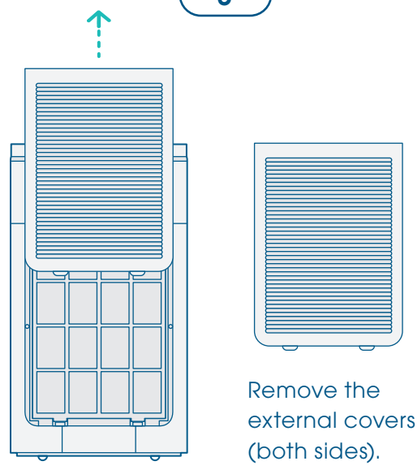
Unbox the Rediair and remove all outer packaging.

2



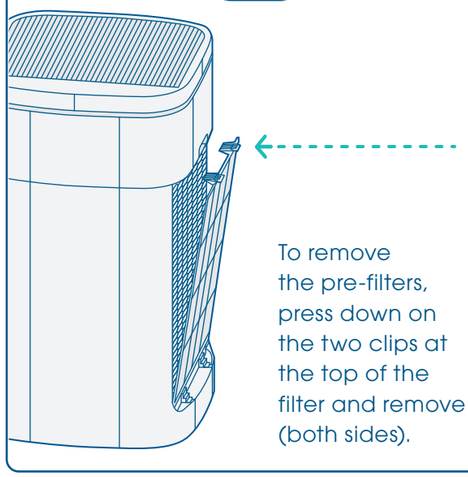
Remove the blue tape on the external covers of the device.

3



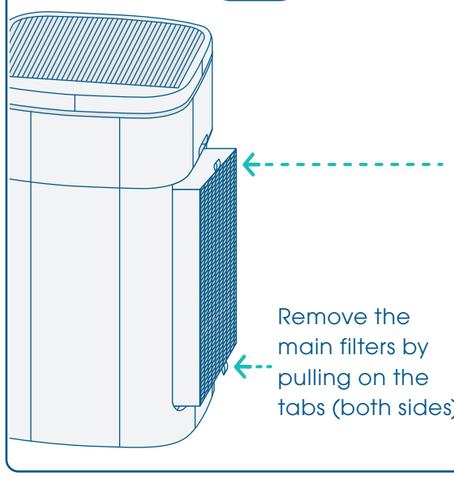
Remove the external covers (both sides).

4



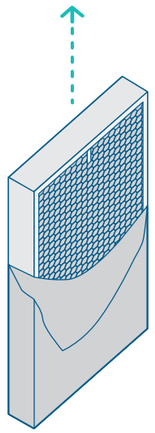
To remove the pre-filters, press down on the two clips at the top of the filter and remove (both sides).

5



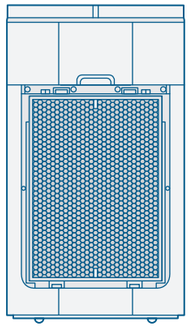
Remove the main filters by pulling on the tabs (both sides).

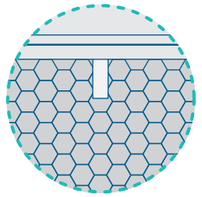
6



Remove the plastic wrap from the filters.

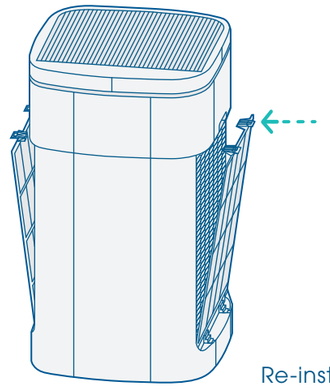
7





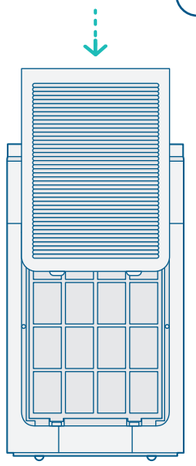
Re-install the main filters (both sides), making sure that the tabs are facing outwards.

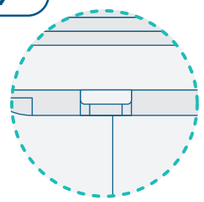
8



Re-install the pre-filters (both sides).

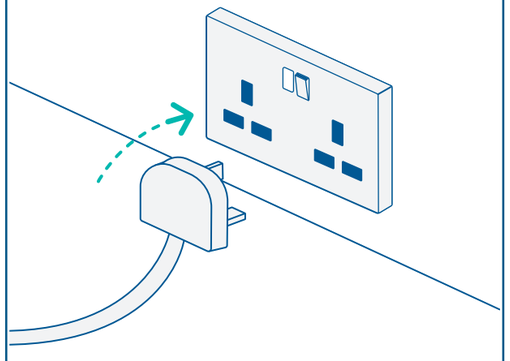
9





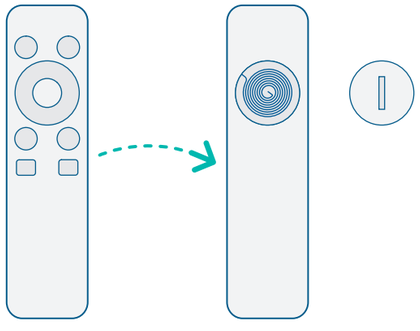
Re-install the external covers (both sides).
Note: Ensure external covers are fitted correctly or the Rediair will not power-on.

10



Connect the power supply.

11



Unpack the remote control and remove plastic battery protector film.

HOW TO USE LCD TOUCH CONTROL PANEL

1.1 - Power on/off

To switch Rediair on/off, press the power button. Rediair will start in automatic mode. In automatic mode, the motor speed will be controlled by a sensor, which is automatically regulated in 3 stages, depending on the air quality. Pressing the power button again will put the Rediair unit back into standby mode.

1.2 - Speed setting

The speed button changes the fans speed. Repeatedly pressing this button, you can select any of the three air output levels.

1.3 - Mode selection

The Mode button lets you select three programmes:

- **1.3.1 Automatic mode** - While in automatic mode, Rediair will select the appropriate speed, depending on the current air quality. The ionisation function is in operation. At night, Rediair automatically reduces the fan speed.
- **1.3.2 Turbo mode** - Made for heavy air pollution, turbo mode allows the Rediair fan to operate at its highest speeds.
- **1.3.3 Sleep mode** - Selecting the sleep mode will allow Rediair to operate at its quietest level. Unlike the automatic mode, all lights and displays are turned off, and the fan runs at its slowest speed. In sleep mode, Rediair will not respond to the built-in air sensor.

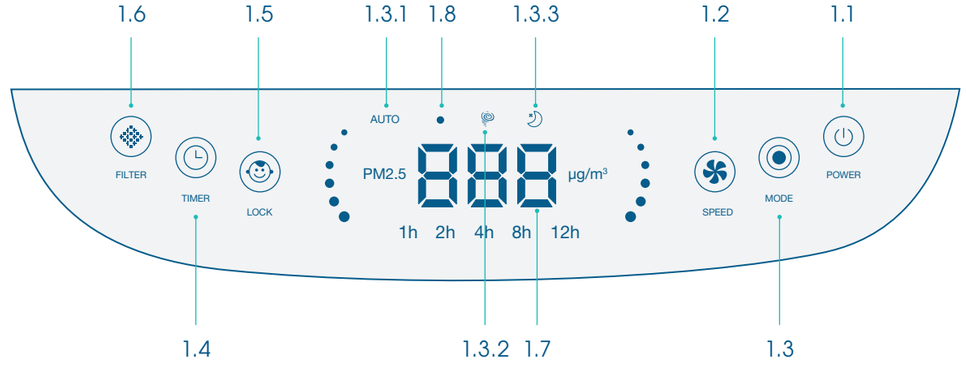
1.4 - Timer setting

The 'Timer' setting lets Rediair operate automatically for a select period, ranging from 1 hour to 12 hours. Press the button until your desired time appears on the display. 10 seconds after the last press, the display switches back to the air quality display. To switch off the timer setting, press the 'Timer' button until no hour signals are lit up on the display.

1.5 - Child lock

To active the child lock safety feature, press the 'Child Lock' button on the display. To unlock, press and hold the button for 10 seconds.

REDIAIR LCD TOUCH CONTROL PANEL



HOW TO USE

LED AIR QUALITY INDICATOR DISPLAYS (1.7)				
PM2.5 VALUE	1 - 35	36 - 75	76 - 150	151 - 500
AIR QUALITY	Very good	Good	Not good	Bad
DISPLAY COLOUR	Blue	Green	Orange	Red

1.6 - Filter indicator

The Rediair filter indicator displays the status of the main filters. After 3000 hours of operation, this indicator will light up continuously red, prompting you to replace the main filters. If the filter indicator flashes red intermittently, it is time to clean the pre-filters. To reset the display after changing the filters, press and hold the filter indicator for 3 seconds, after which the indicator will reset.

1.7 - Air quality indicator

The air quality is displayed by the LED ring as outlined above, and shown numerically in the display in µg/m3.

1.8 - Light sensor

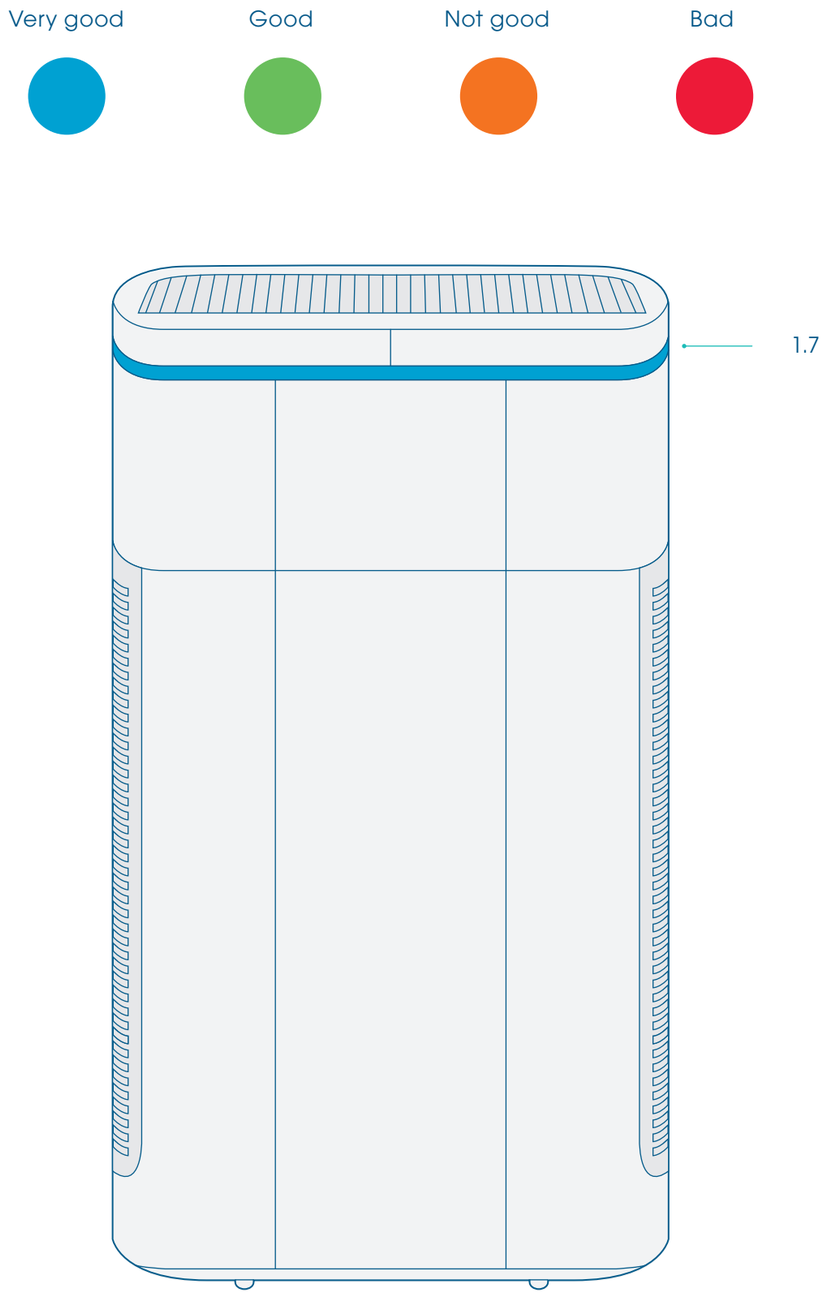
In automatic mode, Rediair is put into sleep mode when the ambient light falls below the value of <5x and exits sleep mode light levels exceed <5x for more than 3 minutes. This level of light then puts Rediair back into automatic mode.

1.9 - Rediair remote control

Rediair comes with a remote control powered by 3V lithium dry cells. When not in use for an extended period, please remove the dry cells. The remote-control display is extremely similar to the digital display on Rediair; all operating modes are identical to the digital display.

1.9 – Rediair remote control

LED AIR QUALITY INDICATOR



DISPOSAL, CLEANING AND MAINTENANCE

External surface cleaning

Before performing any filter change, clean/decontaminate the external surface of the Rediair device. When cleaning the exterior, remember to:

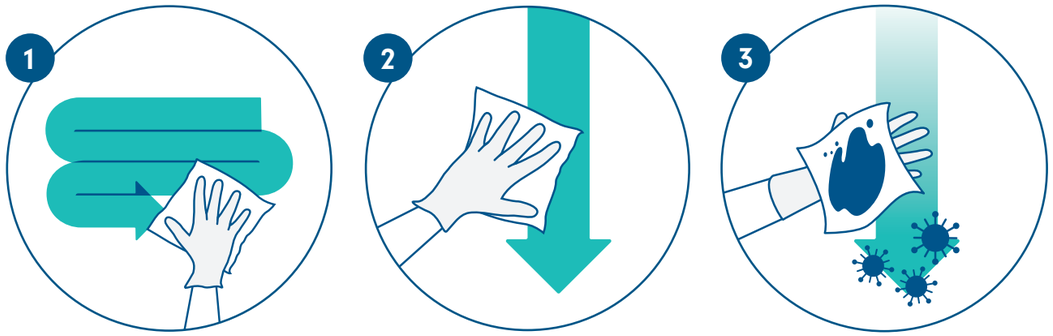
- Clean from top to bottom and from clean to dirty areas.
- Wipe in an `S' shape to avoid recontamination of areas you've already cleaned.
- If using a disinfectant, ensure that recommended contact times are reached.

Filter changing and cleaning

Changing the main Rediair filter is displayed by the filter indicator button located on the digital display.

Pre-filters should be cleaned regularly, at least once a month.

When the filter indicator flashes red after 3000 hours (approximately twice a year), you should replace the main Rediair filter. After replacing the Rediair main filter, reset the filter.



WIPE IN AN 'S' SHAPED PATTERN

WORK FROM TOP TO BOTTOM

WIPE FROM CLEAN TO DIRTY

ENSURE CORRECT CONTACT TIME

ONE WIPE, ONE SURFACE

NOTE

Clinell Universal combined cleaning & disinfecting wipes are compatible with Rediair. Additionally, for a full list of compatible agents, please refer to the appendix.

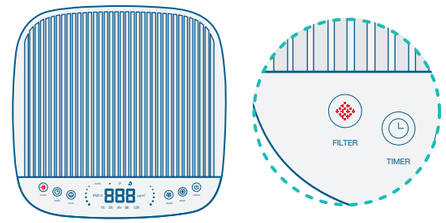
Cleaning a pre-filter

- The surface of the pre-filter can be vacuumed with a HEPA filter if available.
- The pre-filter can also be rinsed with clean water but must be completely dry before being used again as any remaining moisture could potentially cause damage to the HEPA 14 filter.

Cleaning and changing times

- Pre-filters are to be cleaned twice a month and replaced twice year.
- Main filters are to be replaced twice a year.
- The ioniser is located within the device and can't be replaced.
- The particle sensor should be cleaned every 2 months.

1



When filter indicator (1.6 on control panel) **flashes red intermittently**, it is time to clean the pre-filters.

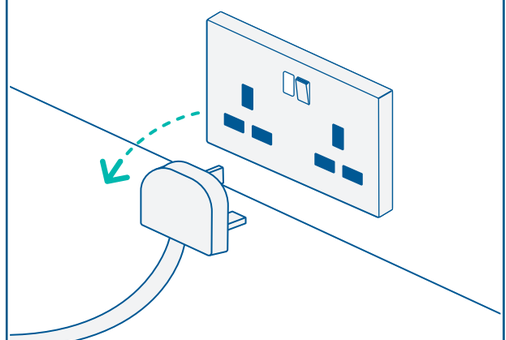
WARNING

Before dismantling Rediair to perform filter maintenance/replacement, a local risk assessment should consider the appropriate PPE.

WARNING

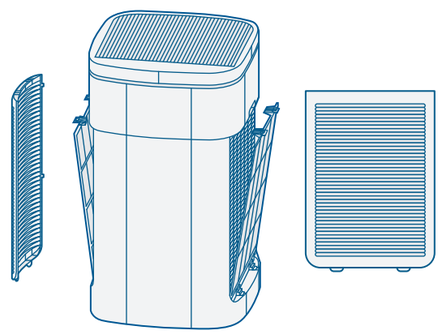
Always unplug the Rediair before dismantling device to perform filter maintenance/replacement,

2



Switch off device and disconnect the power supply.

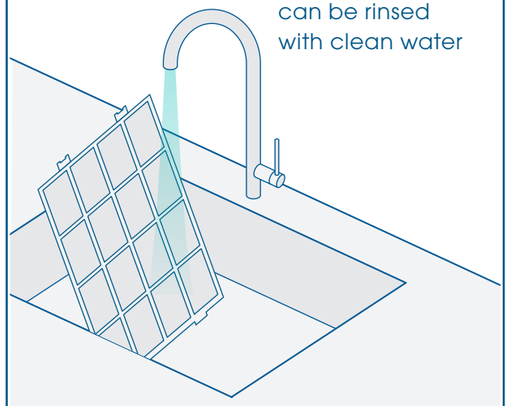
3



Remove the external covers and the pre-filters (both sides).

4

The pre-filters can be rinsed with clean water



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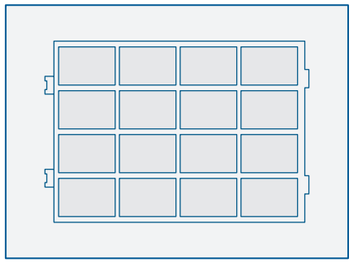
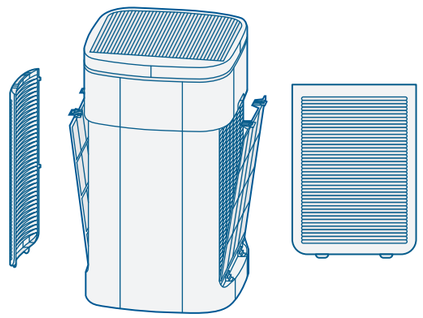


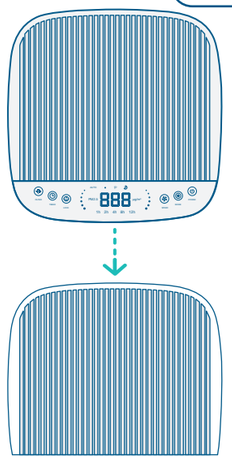
The pre-filters must be completely dry before being used again as any remaining moisture could potentially cause damage to the HEPA 14 filter.

6



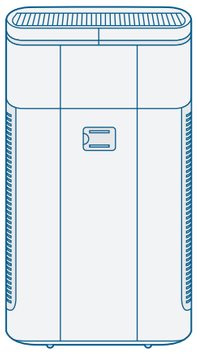
Re-install the external covers and the pre-filters (both sides). **Note:** Ensure external covers are fitted correctly or the Rediair will not power-on.

7



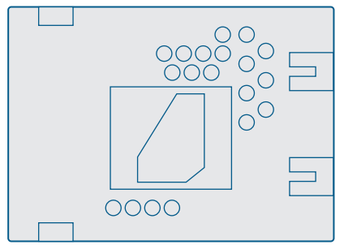
To clean Rediair's air outlet, lift the grill from the side with the arrow symbol and clean the area with a dust cloth.

8



On the back of Rediair is a small flap which houses the particle sensor.

9



To clean the sensor, lift the flap and carefully clean it with a cotton swab. This should be done every 2 months or if the LED air indicator consistently shows poor air quality.

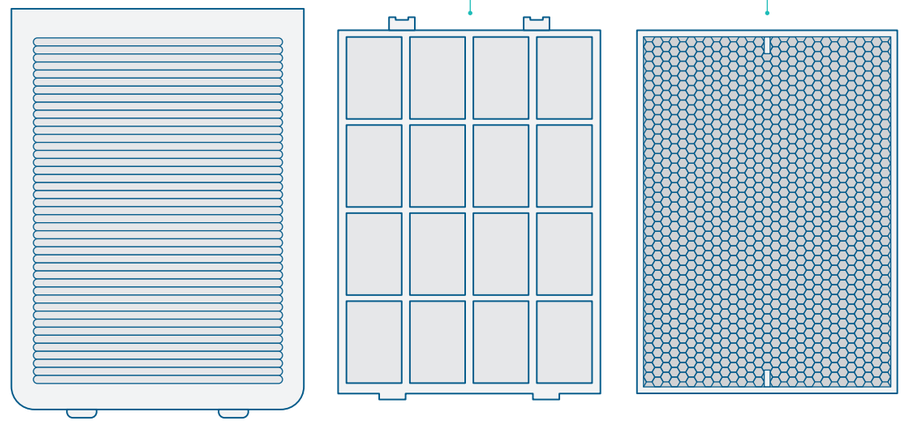
DISPOSAL, CLEANING AND MAINTENANCE

CLEANING AND CHANGING TIMES

External cover
Clean all external surfaces frequently

Pre-filter
Cleaned twice a month and replaced twice a year

Main filter
Replaced twice a year



Disposal

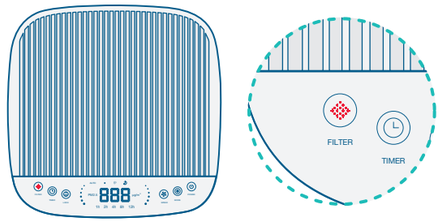
Used Rediair filters can be disposed of following local waste guidance policies. Also, if the device has been used in polluted air situations, the filter must be packed into an airtight bag and disposed of per local waste guidance policies.

In the case of contamination with viruses, please consult local guidance for the appropriate PPE. Respiratory protection is recommended at a minimum of FFP2.

Decommissioning

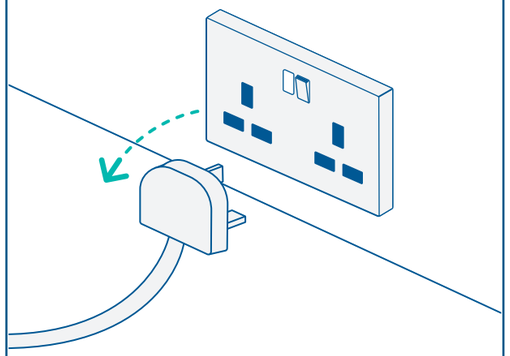
Rediair has been designed to operate for many years. However, please ensure you follow your local waste guidance policies beforehand if the device must be disposed of.

1



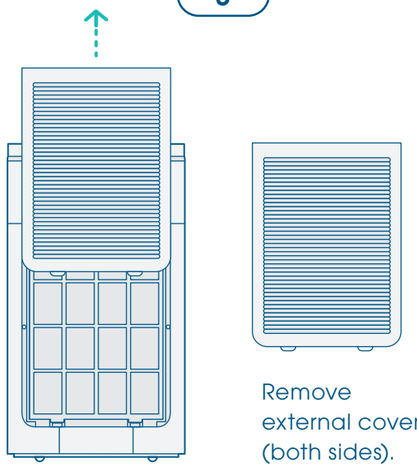
When filter indicator (1.6 on control panel) **lights up continuously red**, it is time to change the pre-filters and main filters.

2



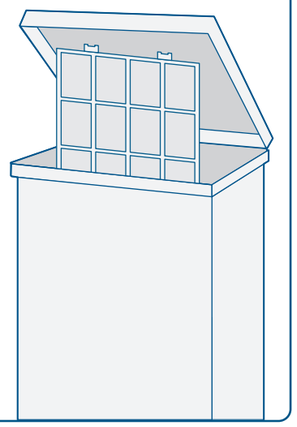
Switch off device and disconnect the power supply.

3



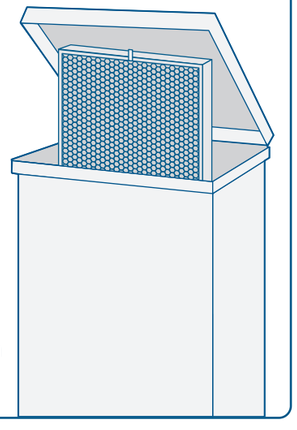
Remove external covers (both sides).

4



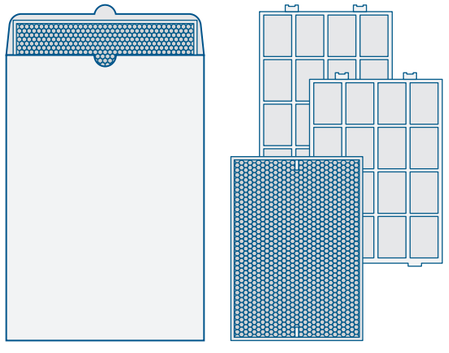
Remove pre-filters and dispose of them (both sides).

5



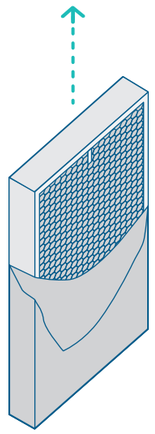
Remove main filters and dispose of them (both sides).

6



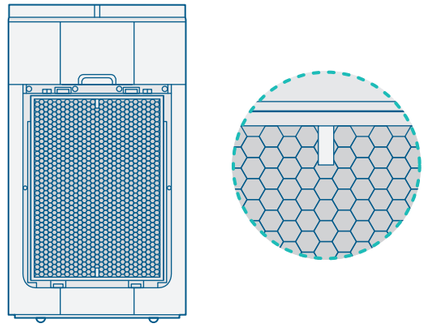
Remove new main filters and pre-filters from box.

7



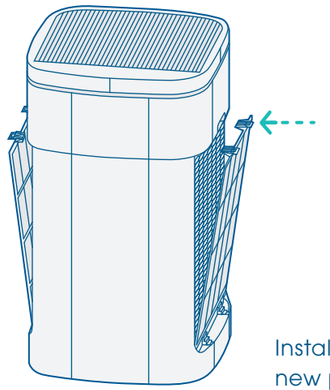
Remove the plastic wrap from the filters.

8



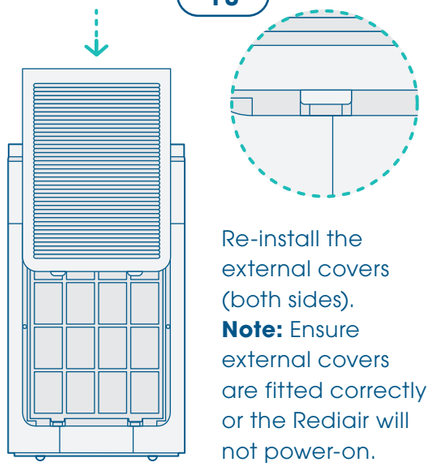
Install the new main filters (both sides), making sure that the tabs are facing outwards.

9



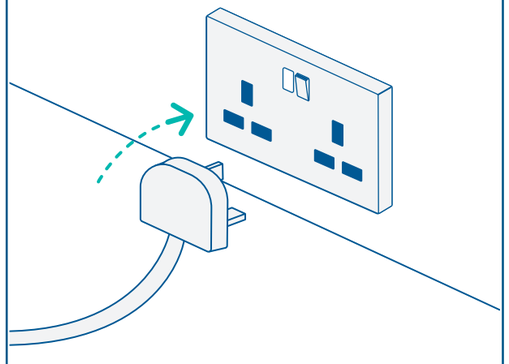
Install the new pre-filters (both sides).

10



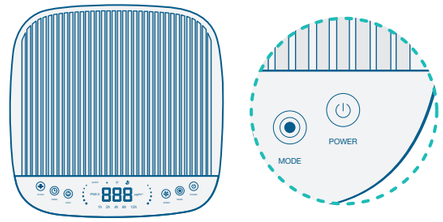
Re-install the external covers (both sides).
Note: Ensure external covers are fitted correctly or the Rediair will not power-on.

11



Connect the power supply.

12



Switch on the Rediair via the LCD touch control panel.

APPENDIX

TECHNICAL SPECIFICATIONS	
AIR FLOW RATE MAX. (M^3/H)	600
CADR (CLEAN AIR DELIVERY RATE) (M^3/H)	Range: 200 – 600
AIR FLOW RATE WITH H14 FILTER MAX. (M^3/H)	600
CONTAINS IONISATION FUNCTION	Yes
AIR QUALITY DISPLAY	Very good (blue), good (green), bad (orange), very bad (red)
FILTER TYPE / CLEANING METHOD	Pre-filter, activated carbon + HEPA filter, ionization
FILTER CLASS	HEPA
ROOM SIZE* HEPA 14 (AT 5X AND 3X AIR EXCHANGE RATE) (M^2)	60 / 100
ELECTRICAL CONNECTION (V/HZ)	230 / 50
CAPACITY (W)	90
NOISE LEVEL MIN (DB(A) / 3 M)	22
NOISE LEVEL MAX (DB(A) / 3 M)	66
CABLE LENGTH (M)	2
IP CLASS	20
LENGTH/WIDTH/HEIGHT (MM)	400 / 400 / 669
WEIGHT (KG)	14

* Room sizes calculated at a room height of 2.40m

WARNING

The technical data can be changed in the course of further development without prior notice. Some values are approximate values.

Cleaning/Disinfecting

The Rediair device should be cleaned after each use (or more frequently, as needed). The following cleaning agents may be used on external surfaces only:

CHEMICAL/FLUID	CONCENTRATION
CLINELL UNIVERSAL WIPES	N/A
CHLORINE	1000ppm
HYDROGEN PEROXIDE WIPES	7.5%

NOTE

Use only the cleaning agents recommended.

Damage occurring through decontamination of the device using agents other than those cited above will void the warranty.

Declaration of Conformity

NAME OF COMPANY	ADDRESS
DISTRIBUTOR	
GAMA Healthcare Ltd.	The Maylands Building, Maylands Avenue, Hemel Hempstead Industrial Estate, Hemel Hempstead, HP2 7TG, United Kingdom
EUROPEAN REPRESENTATIVE	
GAMA Healthcare Ireland Ltd.	13 Upper Baggot Street, 2nd Floor, Dublin 4, D04 W7K5
AUSTRALIAN SPONSOR	
GAMA Healthcare Australia Pty.	Suite 1, 33-37 Duerdin Street, Notting Hill, VIC 3168, Australia

PRODUCT IDENTIFICATION	
PRODUCT NAME	Rediair
CODE/CATALOGUE NUMBER	RAIR-UK RAIR-EU RAIR-AUS
DESCRIPTION	HEPA-14 air purifier

GAMA Healthcare Ltd. declares that, if fitted, used and maintained in accordance with the product manual, the above-mentioned product(s) conform to the following EU legislation:

- Low Voltage Directive (2014/35/EU)
- Electromagnetic Compatibility (EMC) Directive (2014/53/EU)
- Restriction of Hazardous Substances (RoHS) Directive ((EU) 2015/863 amending 2011/55/EU)

Following the provisions of standards:

- EN IEC 60335-1
- EN IEC 60335-2-65
- EN 62233
- IEC 62321
- EN 55014-1
- EN 55014-2
- EN IEC 61000-3-2
- EN 61000-3-3

CE

The declaration loses its validity in case of unauthorized changes to the machines.

Nat Bates
Company Representative
Regulatory Affairs Manager
Hemel Hempstead, Hertfordshire, United Kingdom.
22nd November 2021

CONTACT AND SUPPORT

Contact your local distributor for technical support.

gama healthcare

About GAMA Healthcare

GAMA Healthcare is at the forefront of infection prevention technology. Founded in 2004 by two NHS doctors, we develop infection prevention products to help save and improve lives.

Today, our Clinell, Carell and Contiplan product ranges protect people in healthcare, businesses and homes across more than 60 countries. Our Clinell Universal Wipes are the NHS' number 1 most used disinfectant wipe, trusted by 9 out of 10 NHS hospitals to help safeguard patients and healthcare workers from the risk of infection.

Rediair is part of the Redi family of products. Redi products equip you to respond instantly to outbreaks, infections and emergencies, giving you the tools to protect your patients and staff. They are united by clever design, removing the obstacles presented by traditional solutions.

www.gamahealthcare.com

@gamahealthcare

Scan QR code for translations of this product manual.

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