

# VK 102 / VK 103

AIR STERILISER  
USER GUIDE AND INSTRUCTIONS



RADIC8



Dear Customer

Thank you for purchasing the VK 102 / VK 103 Air Sterilizer, this is “clean air technology” at its best. This product is packed with power and technology to provide fast and efficient clean air. We hope that you enjoy using your new unit!

The Viruskiller technology was tested against major airborne viruses [Polio Virus, Influenza Virus, Adeno Virus and Coronavirus DF2 (the same family of SARS virus)] by the Institute of Medical Sciences, School of Medicine National Kangwon University. Testing proves 6-log reduction of viruses. The results on airborne pathogens are the same for all of the Viruskiller range.

Radic8's Viruskiller range (Hextio, VK401 and VK103) is not FDA-cleared / FDA-approved.

**READ ALL INSTRUCTIONS BEFORE USING YOUR UNIT**

When using your VK 102 or VK 103, basic safety precautions should be observed, including the following:



**WARNING**

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY

- Use the unit only for its intended use.
- To protect against a risk of electric shock, do not immerse any part of the system in water or in any other liquids.
- This appliance is NOT a toy.
- This appliance is NOT to be used by children or persons with reduced physical, sensory or mental capabilities.
- Children should be supervised at all times.
- Never look directly at a burning ultra-violet light, as this may permanently damage your eyes.
- To reduce the risk of an electric shock or damage to the unit, switch the off and unplug before cleaning or performing any maintenance to the unit.
- Heed all warnings
- There are no UV risks associated with the devices in use. The UV reactor chambers and fans are sealed to ensure there is no risk of harm and UV exposure. Indoor air quality sensors on the devices also highlight when the filters on units need to be cleaned and replaced.

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**Warning** - Indicates important safety instructions that must be followed to avoid injury.



**Caution** - Indicates important information to your attention to avoid the risk of injury or damage to the unit



**Prohibited** - Indicates forbidden action

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**INSTALLATION SAFETY**

Should the unit emit smoke, unusual odors or make any strange noises, immediately switch off the unit unplug it. Contact your distributor.



1

No form of water or liquid should enter the unit. Should this occur, immediately switch off the unit and unplug it. Contact your distributor.



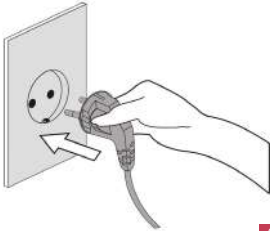
2

Do not place any heavy objects on the power cord as this may cause a fire and/or an electric shock.



3

Make sure the power cord is plugged firmly into the outlet. If the power is not plugged in correctly, this may cause a fire.



4

Do not touch the plug with wet hands, as this may cause serious injuries.



5

Do not block the air inlet of the unit, as this will reduce the airflow and result in poor performance and damage the unit.



6

Do not spray inflammable materials near the unit, as this is a fire hazard.



7

Do not sit, stand or place heavy objects on the unit, as this may result in injury and/or damage to the unit



8

Do not move the product while it is switched on, as this may cause a fire and/or an electric shock.



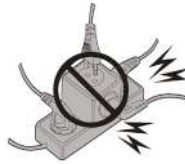
9

Do not alter or modify the plug or cord of this unit as it could cause a fire or an electric shock.



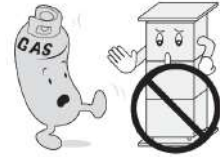
10

Use the proper power cable and outlet, do not over-load the outlets with several cords simultaneously.



11

Keep the product away from inflammable gases, liquids, or other combustible substances, as this could cause an explosion.



12

To protect against a risk of electric shock, do not immerse any part of the system in water or in any other liquids.



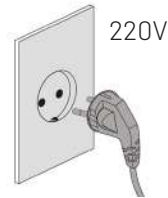
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Do not attempt to repair or replace any part of this equipment unless it is specifically recommended in this manual. All other services should be referred to a qualified technician.



14

Plug the unit into a 220V AC outlet only, if unsupervised, it may cause an electric shock.



15

**Switch the unit OFF, when cleaning a room.**

After cleaning, it is important to ventilate the room properly before switching the unit back ON.



16

**Switch the unit OFF, while cooking.**

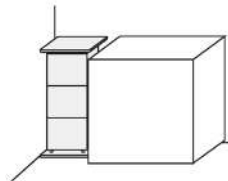
Oils released while cooking may reduce the life span of the sterilizer. After cooking, the room must be ventilated to remove oils. You may now switch the unit ON to remove any smells.



17

**Airflow must NOT be restricted or obstructed,**

by large items such as furniture, electronic items or curtains.



18

**Daily room ventilation for at least 30 minutes.**

The unit is designed to purify and sterilize your indoor air and will do this effectively when used correctly. Good indoor air quality also requires room ventilation. We recommend opening windows and doors, or operating the air conditioning, for a least 30 minutes a day.

19

**Position the unit at least 3 meters away from the bed,**

to avoid excessive cooling caused from sleeping in direct airflow.



20

**Use a dedicated power outlet.**

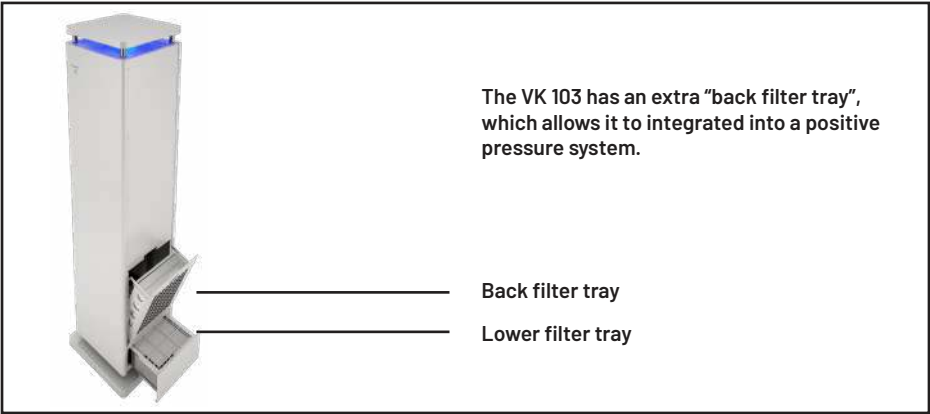
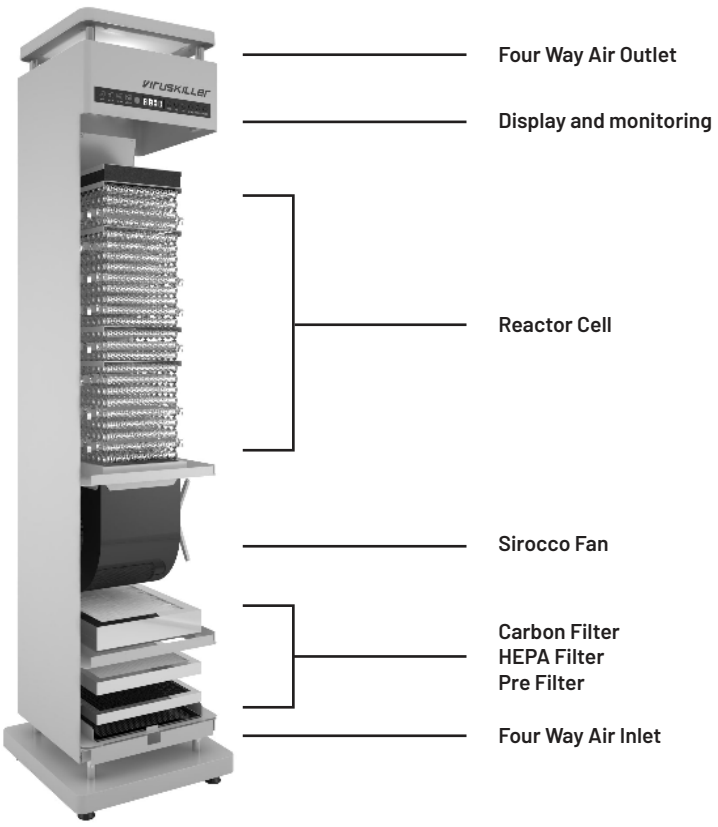
Lightning or static electricity could affect the circuit and may cause a fire or damage the unit. To avoid this, plug the unit into a dedicated, grounded outlet.



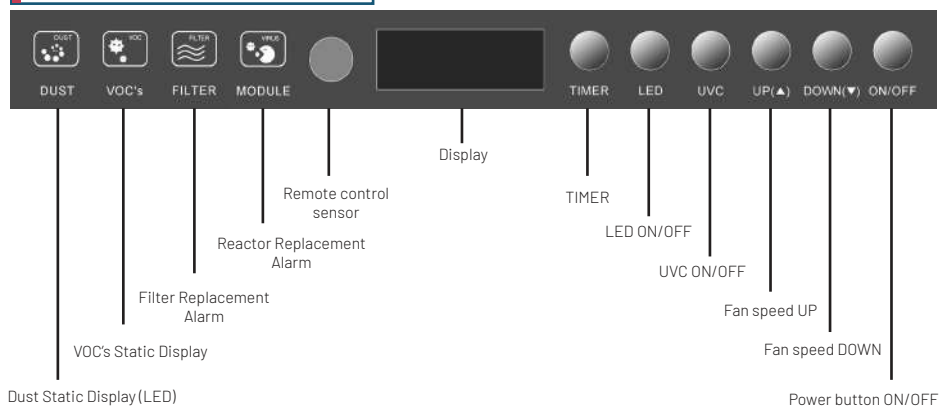
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**KEY PARTS AND COMPONENTS**

**THE UNIT**



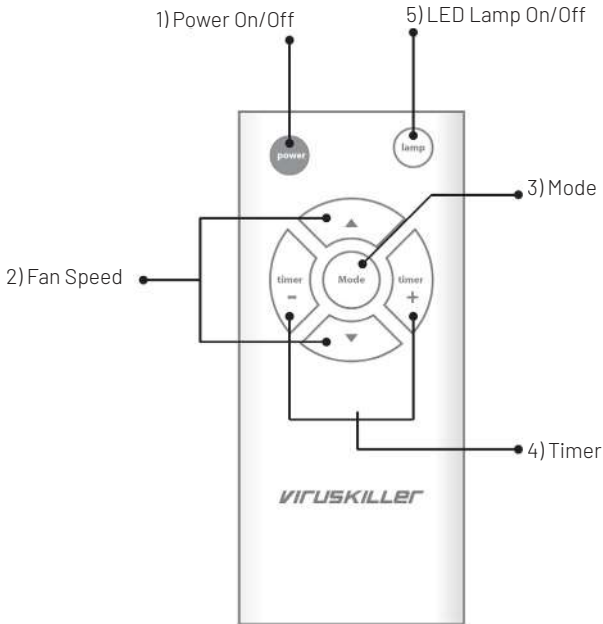
## DISPLAY AND MONITORING



Name	Function
Display and Monitoring	Changes the information displayed on the LED in the following order: UV Lamp Time, Current Temp, Fan Speed.
Remote Control Sensor	Point your remote control at the sensor in order to use your remote operate the unit.
Reactor Replacement Alarm	When this LED turns from blue to red, it is time to replace the reactor cell.
Filter Replacement Alarm	When this LED turns from blue to red, it is time to replace the filters.
VOC's Static Display	Color indicates air quality: blue – good, yellow – normal, red – poor
Dust Static Display	Color indicates air quality: blue – good, yellow – normal, red – poor
Timer	Sets a working time for the unit. The unit will stop after the specified time has passed.
LED ON/OFF	Hold the “lamp” button down for a few seconds in order to switch the LED lights ON/OFF.
UVC ON/OFF	Turns the UVC lamps ON or OFF. (Keep this on for air sterilization, keep it off for simple air purification through the mechanical filters)
Fan Speed	Press the “Up” button to increase the fan speed. Press the “down” button to decrease the speed. Fan speeds: FAN 1 (Quiet), FAN 2 (Normal), FAN 3 (High Speed).
Power button ON/OFF	To switch the unit ON/Off. You will hear a beep sound.



## REMOTE CONTROL



No	Name	Function
1)	Power ON/OFF	To switch the unit ON/Off. You will hear a beep sound.
2)	Fan Speed	Increase the fan speed. Fan speeds: FAN 1(Quiet), FAN 2(Normal), FAN 3(High Speed). Decrease fan speed.
3)	Mode	Changes the information displayed on the LED in the following order: UV Lamp Time, Current Temp, Fan Speed
4)	Timer	Sets a working time for the unit. The unit will stop after the specified time has passed.
5)	LED Lamp ON/OFF	Used to switch the blue LED Lamp ON/OFF on the unit.

## CLEANING AND MAINTENANCE

### CLEANING THE PRE-FILTER

#### VK 102

The plastic pre-filter is reusable. To clean it, follow this procedure:

1. Pull out the filter case ①.
2. Remove pre-filter ② from filter case ① and separate from carbon filter ③ and HEPA filter ④.
3. Clean the pre-filter with a vacuum cleaner.
4. Place the filter back into the filter case.



#### VK 103

The plastic pre-filter is reusable. To clean it, follow this procedure:

1. Pull out the bottom filter case ①.
2. Remove pre-filter ② from filter case ① and separate from carbon filter ③ and HEPA filter ④.
3. Clean the pre-filter with a vacuum cleaner.
4. Place the filter back into the filter case.
5. Repeat the process for the top filter case ⑤.



### Replacing the HEPA filter



When the Filter LED light changes to RED, it is time to replace the HEPA and Carbon filters. The HEPA and Carbon filters are not reusable and should be replaced. Please contact your distributor to purchase replacement HEPA and Carbon filters. Depending on the levels of pollution, the lifetime of the HEPA filter may be longer or shorter than the recommended use times below:

HEPA filters (hrs)	6000	Carbon filters (hrs)	6000
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1. Pull out the bottom filter case ①.
2. Separate the carbon filter ③ and HEPA filter ④ from the pre filter ②.
3. Replace them with new filters.
4. Place them back into the filter case.
5. For the VK 103: Repeat the process for the top filter case ⑤.
6. Press the UP button on the Display for at least 5 seconds, to reset the Filter timer to zero.



## Replacing the Reactor Cell



In order for the VK 102 and VK 103 to remain functional, the reactor chamber must be replaced every 8000 hours. Your unit will indicate that a change is required by displaying a “-0001” code on the LED Display .

1. From the top PCB board ①, disconnect the 2 cables connecting the reactor cell to the back of the unit ②.

2. On the side, you will see 2 long cables connecting the reactor cell to the bottom right of the unit. One cable is red and yellow, while the other one is black and white. Disconnect these cables and bring them the front of the unit.

3. Remove the 2 screws on the ③ top and 3 screws on the bottom, which attach the reactor cell to the unit.

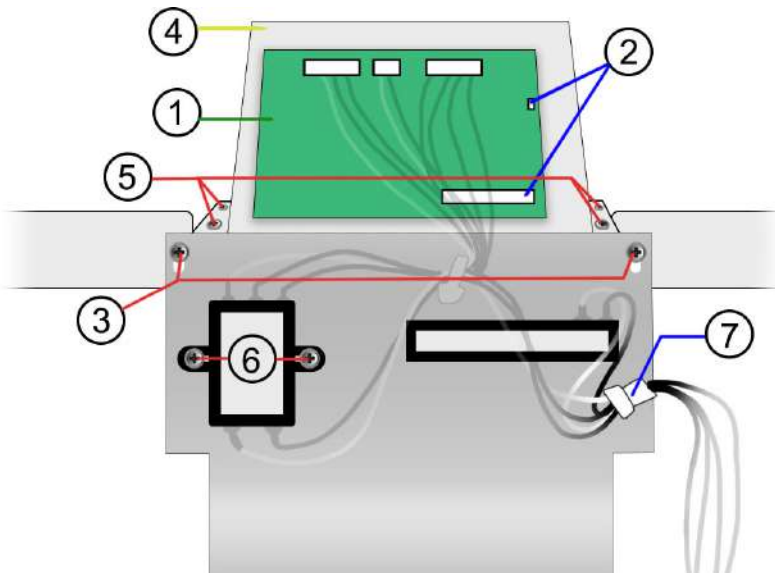
4. You can now remove the old reactor cell, making sure no wires are still connected to the main unit

5. You must now separate the top white part ④, holding the PCB board, from the old reactor cell and move it to the new reactor cell. First, unscrew the top 4 screws ⑤, that attach the white, metal box to the old reactor cell.

6. Unscrew the 2 screws holding the component marked with ⑥, and disconnect the wires ⑦.

7. Now carefully lift the top part, holding the PCB, and mount it on the new reactor cell in reverse order. Then place the new reactor cell inside the unit and assemble in reverse order.

8. Now switch your VK 102 or VK 103 back on, press and hold the down button for 14 seconds, to reset the warning timer. Your VK 102 or VK 103 is ready for the next 8000 hours.



## Cleaning the Air Quality Sensor (IAQ Sensor)

### Cleaning the Indoor Air Quality (IAQ) Sensor

The IAQ sensor is a very delicate instrument that uses light scattering to detect pollution. It therefore needs a clean lens to work effectively. Regular maintenance (every 6 months) should be carried out to keep the lens clean.

**Important - Only use pure water and allow to dry completely before replacing. To avoid damage to the plastic lens do not use chemicals such as benzene or alcohol etc.**

Procedure to maintain and clean the IAQ Sensor:

Locate the IAQ sensor on the side of the unit

Clean lens with a clean cotton swab dampened with pure water as shown in the image on the right.

Allow lens to dry completely.



## ERROR MESSAGES

### Reactor Cell change



The lifespan of the Reactor Cell is 8000 hours of use. When this time has passed, the timer on the unit will display with a minus (-). When you see this warning message, it is time to replace the Reactor Cell.

1

### UV Lamp malfunction



This is an error message that refers to a malfunction of the UV lamps. Turn the unit off and contact customer service.

2

### Circuit overhear error



This is an error message that refers to a malfunction of the UV lamps. Turn the unit off and contact customer service.

3

### Fan error



This error indicates that the fan is not working properly. Turn the unit off and contact customer service.

4

## TROUBLESHOOTING

Before you call for service, review this list. It may save you time and expense. This list includes common occurrences that are not the result of defect in workmanship or materials.

Problem	Possible cause	Solution
The product will not turn on	The plug is not properly inserted in the grounded outlet.	Plug the device into a working grounded outlet.
	The remote control is out of battery power	Replace the batteries according to the polarity.
	The voltage of the AC outlet is too low	Make sure you plug the unit into its dedicated, grounded 220 AC outlet.
Weak airflow and noise from the product.	The pre-filter has accumulated too much dust.	Clean the pre-filter to avoid this problem Also change the HEPA filter when due.
The timer preset does not work.	The timer function has not been activated.	Set the timer, according to the instructions in this manual.
The air purifying function does not work properly.	The indoor air is heavily contaminated	The room requires ventilation.
	The pre filter is blocked	Clean the pre filter.
	The HEPA filter is blocked	Replace the HEPA filter.
	The room is too large for the unit	Select the right Viruskiller according to the room size.
	The airflow is restricted	Make sure there is enough clearance around the product and that the air inlet and outlet of the unit are unobstructed.
Strange smell is emitted from the device.	New product odour	The antimicrobial coating of the reactor cell might release a small amount of harmless odor. It should disappear in one to two weeks.
	Moist filters	When cleaning the pre-filter with water, make sure it is completely dry before reinstalling.
	The product has been used in environments with a high concentration of food odours.	Food odors are oily and can penetrate into the filter or the sterilizing module. Use proper ventilation.
	The product has been used in environments with a high concentration of smoke.	In areas emitting too much smoke, the performance of the sterilizing module may be affected. Use proper ventilation.

## CUSTOMER SERVICES

In this manual, you will find a card containing details of your limited warranty. Please contact your distributor if you encounter issues with your unit or to procure replacement filters or reactor chamber when these reach their end of life.

Damage or malfunction caused by negligence, abuse, unauthorized repairs or use not in accordance with the User Guide will not be covered. All warranties are rendered void and the cost of repair will be payable by the user in the case of damages caused by:

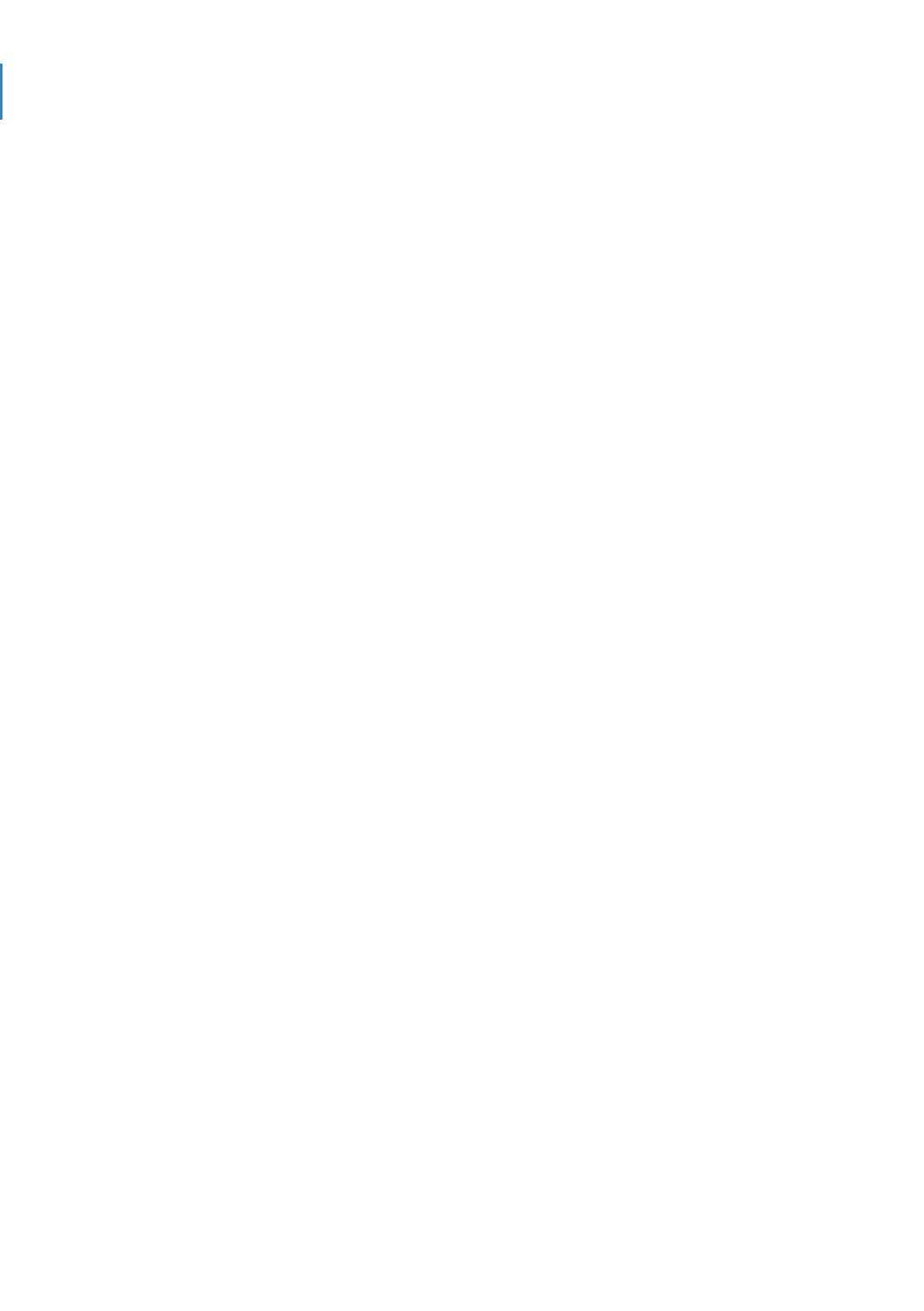
- putting in foreign objects (such as water, liquids, fragrance oils, toys etc.) in or out of the unit;
- transportation or handling;
- use of products such as benzene or thinners;
- incorrect power supply or output voltage;
- breakdown or loss of part caused by unauthorized disassembling or modifications;
- repair or replacement undertaken by unauthorized persons
- non-adherence to the instructions provided in this user guide, and as given by the local customer service center;
- careless or improper use; and
- caused by operating the product in a corrosive or moist environment.

## SPECIFICATIONS

The company reserves the right to make changes to the design and specifications of the product without prior notice.

Description	Air Sterilizer
Brand	VIRUSKILLER
Model No	VK 102
Max. Elec. Consumption	320 watt
Net Weight	40 Kg
Dimensions (mm)	1570 x 320 x 320
Noise (dB)	40 – 49
Airflow (CFM)	200 – 388
UVC Lamps	16
TiO <sub>2</sub> Hexagon Filters	~140
Power cord length	1.2 m

Description	Air Sterilizer
Brand	VIRUSKILLER
Model No	VK 103
Max. Elec. Consumption	210 watt
Net Weight	42 Kg
Dimensions (mm)	1570 x 320 x 320
Noise (dB)	40 – 49
Airflow (CFM)	200 – 358
UVC Lamps	8
TiO <sub>2</sub> Hexagon Filters	~70
Power cord length	1.2 m





**World Leading Air Sterilization Equipment**  
***VIRUSKILLER***



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