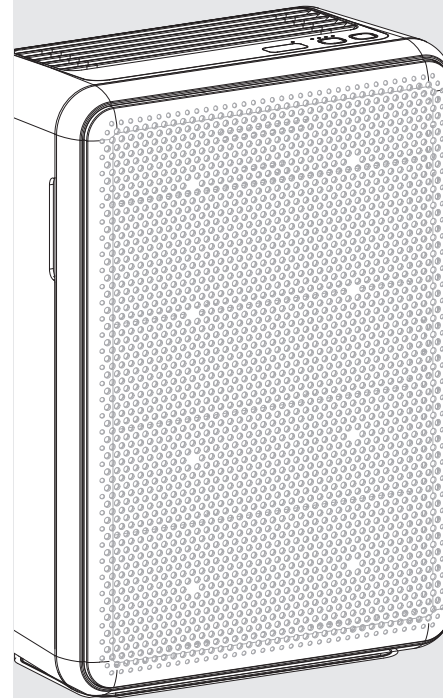


AIR PURIFIER OPERATION MANUAL

WHA-500



◆ FOR YOUR SAFETY

- Precautions 2~8

◆ FOR INFORMATION

- Features 9
- Name of each part 10
- Operation/Indication part 11
- User Instructions 12~13
- Ultra-fine particles 14
- Replacing Filters 15~16
- Cleaning 17
- Troubleshooting 18
- Specifications 19
- Product Warranty Card 20

※ Please read this manual for proper use and safety.
※ Please keep this manual as it contains the product warranty card.

PRECAUTIONS

- Please read all precautions carefully to prevent any potential dangers and/or damages.
- Precautions are divided into three types depending on the degree of potential danger/damage.

- ! Danger** If not observed, serious injury, bodily harm and/or even death may occur.
- ! Warning** If not observed, serious injury, bodily harm and/or property damage may occur.
- ! Caution** If not observed, slight injury, minor bodily harm and/or property damage may occur.
-
- ! This symbol is used to notify the dangers caused by improper use.**

Precautions for power supply

! Danger Always use only the provided adapter with a power output that is suitable for the product.

※ The instructions for class III appliances shall state that it must only be supplied at safety extra low voltage corresponding to the marking on the appliance. This instruction is not necessary for battery-operated appliance if the battery is a primary battery or secondary battery charged outside of the appliance.

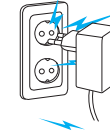
! Danger DO NOT let children to play with the unit.

※ This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

PRECAUTIONS

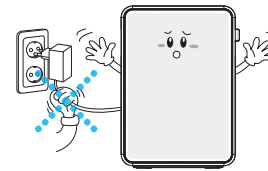
! Danger DO NOT use when the plug is damaged or swinging.

※ Failure to do so can cause a fire and/or an electric shock. When the plug is damaged, contact the customer service center or purchasing place.



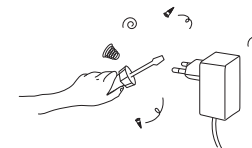
! Danger DO NOT bend, coil or pull the power cord.

※ Failure to do so can cause a fire and/or an electric shock.



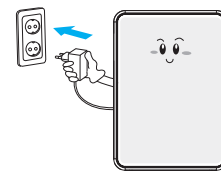
! Danger Please do not disassemble or modify the plug.

※ Failure to do so can cause a fire and/or an electric shock.



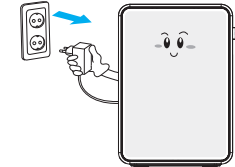
! Danger DO NOT pull the cord instead of the plug when disconnecting from the outlet.

※ Failure to do so can cause a fire and/or an electric shock.



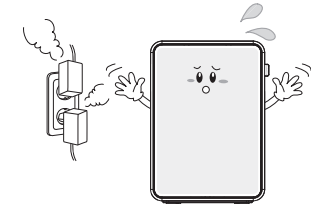
! Danger Before replacing filter, please unplug

※ Failure to do so can cause an electric shock.



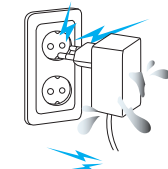
! Danger If you use multi tap, use one outlet for the unit.

※ Failure to do so can cause a fire.



! Danger DO NOT plug in or unplug the power cord with wet hands.

※ Failure to do so can cause an electric shock.



! Danger Before use, please wipe dust of other

※ Failure to do so can cause a fire and/or an electric shock.

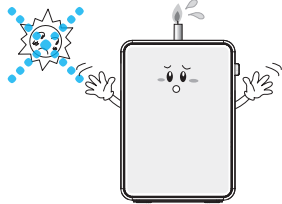


PRECAUTIONS

Precautions for installation

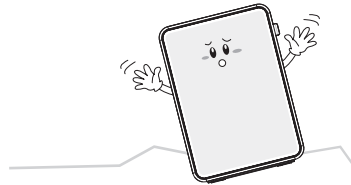
Caution DO NOT install the unit under direct sunlight and avoid high heat areas.

※ Failure to do so can cause a deformation of the product exterior.



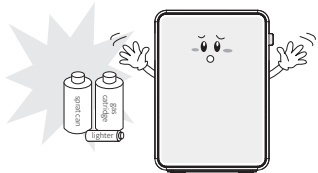
Caution DO NOT place the unit on an unstable surface or a slope.

※ Failure to do so can cause a malfunction.



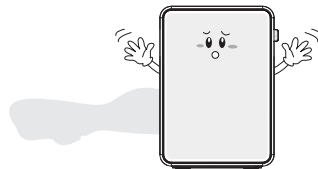
Danger DO NOT place the unit near the inflammables.

※ Failure to do so can cause an explosion and/or a fire.



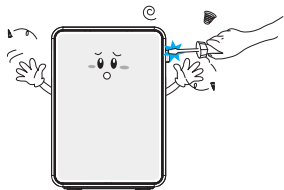
Danger DO NOT use the unit in wet surroundings such as a bathroom, shower room or swimming pool.

※ Failure to do so can cause a fire and/or an electric shock.



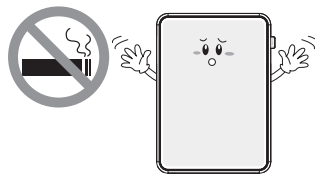
Danger DO NOT disassemble, repair or modify the unit by yourself.

※ Failure to do so can cause a fire and/or an electric shock.



Danger Keep distance from flammable materials. At least, 40 inches away is recommended.

※ Failure to do so can cause a fire.

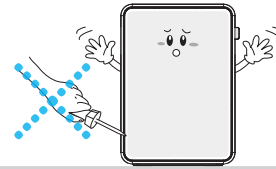


PRECAUTIONS

Precautions for installation

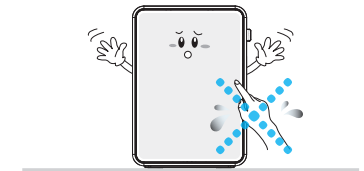
Danger DO NOT insert a sharp wires and/or screwdrivers into the unit inside.

※ Failure to do so can cause a malfunction and/or an electric shock.



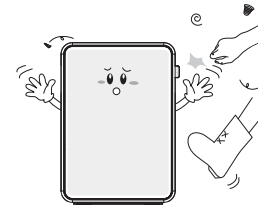
Warning DO NOT touch inside of the unit with wet hands.

※ Failure to do so can cause an electric shock.



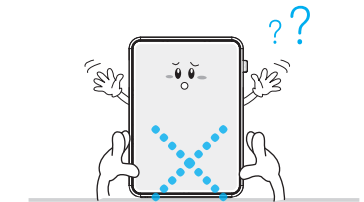
Danger DO NOT apply severe impacts to the unit.

※ Failure to do so can cause a malfunction, damage and/or an electronic shock.



Caution DO NOT move the unit when it is in use.

※ Failure to do so can cause a malfunction.



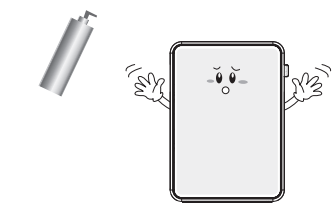
Caution DO NOT put heavy stuffs on the unit.

※ Failure to do so can damage the product.



Danger DO NOT spray a pesticide or flammable liquid.

※ Failure to do so can cause a malfunction.



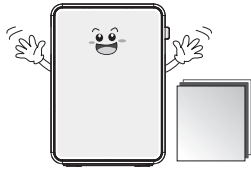
PRECAUTIONS

Precautions for use



DO NOT operate the unit without filters.

※ Failure to do so can cause an electric shock and be shorten the life cycle of the unit.



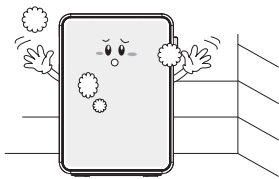
Cover the unit when it is not in use for a long time.

※ Failure to do so can cause a malfunction.



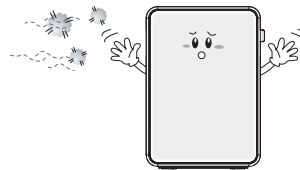
DO NOT use the unit in greasy or dusty surroundings such as restaurants, kitchens or construction site.

※ Failure to do so can contaminate the dust sensor and be shorten the life cycle of the filter.



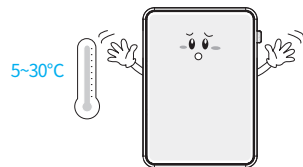
DO NOT use the product in surroundings with a toxic gas.

※ Failure to do so can cause a malfunction.



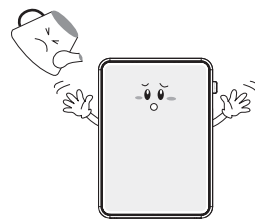
DO NOT use the unit in surroundings with too high or low ambient temperatures.

※ Recommended temperature for use is from 5°C to 30°C. Failure to do so can cause a deformation and discoloration the unit and/or be shorten the filter life cycle.



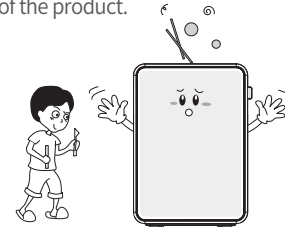
DO NOT let water or any other liquid enter the unit.

※ Failure to do so can cause an electric shock or a malfunction.



DO NOT insert any objects like cards, coins, or forks into the air outlet or inlet.

※ Especially it requires attention for children to prevent physical injury or malfunctioning of the product.



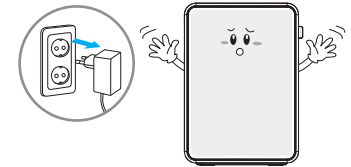
DO NOT block the air inlet and outlet by placing items on the air outlet or in front of the air inlet.

※ Failure to do so can cause a malfunction.



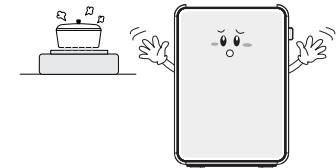
Stop using the product if it makes any irregular noise, smoke and/or smells.

※ Unplug the power cord and contact the customer service center.



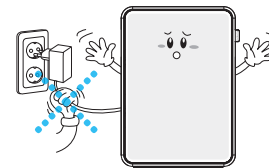
DO NOT use the unit for any other purpose

※ If the unit is used in the kitchen for ventilator, the filter replacement cycle will be shorten.



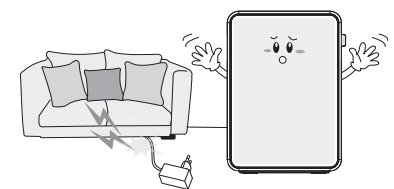
DO NOT unplug or move the unit while the product is operating.

※ Failure to do so can cause a physical injury or malfunctioning of the product.



DO NOT forcibly bend the power cord or place heavy objects on the power cord.

※ Failure to do so can cause a fire and/or damage the unit.



SAFE PLACE FOR INSTALLATION

Indoors away from direct sun light

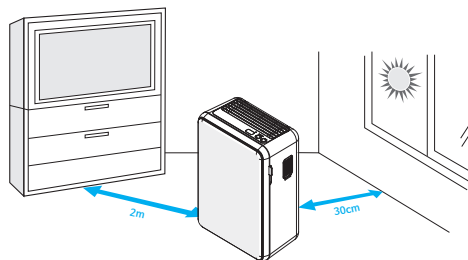
- ▶ Direct sunlight may cause a malfunction of the product.

Dry and well-ventilated place

- ▶ Avoid humid and windtight place.

On stable, hard, and horizontal surface

- ▶ If the product is placed on the inclined or weak surface, it may result in noise and vibration. Leave at least 30 cm free space behind and both sides of the unit.



Information

Tighten the filter before using and replace it if there is an abnormal odor from the product.

- ▶ The best quality of air-cleaning could not be expected if the filter is not connected to the product.
- ▶ The quality of cleaning air could be less if the filter is dirty. If the filter gets dirty or makes an abnormal odor and a weak air-flow, it must be replaced.

Reduce the use of the air purifier when cooking food that occurs much odor such as fish.

- ▶ If you use the product while cooking food with bad odor, the life of the deodorant filter could be shortened. In severe cases, the product could make an odor when you use it after ventilating with a filter permeated with odor.
- ▶ If the product makes an odor from the permeated ultrafine particle free filter and deodorant filter, replace the filter with new one.

Close the door and window while using the product.

- ▶ The quality of air-cleaning could be less if window or door is opened.
- ▶ Unremovable poisonous gas : carbon monoxide (CO)

◆ Small Air Purifier

Small air purifier for easy use and easy movement in the room.

◆ Simple design

It is white, simple and minimalistic design to fit everywhere.

◆ 4 Stage of Filter

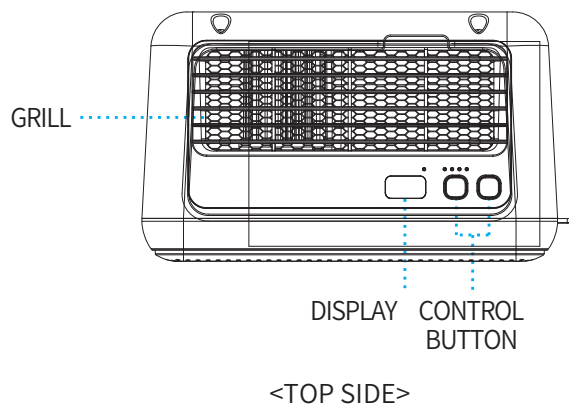
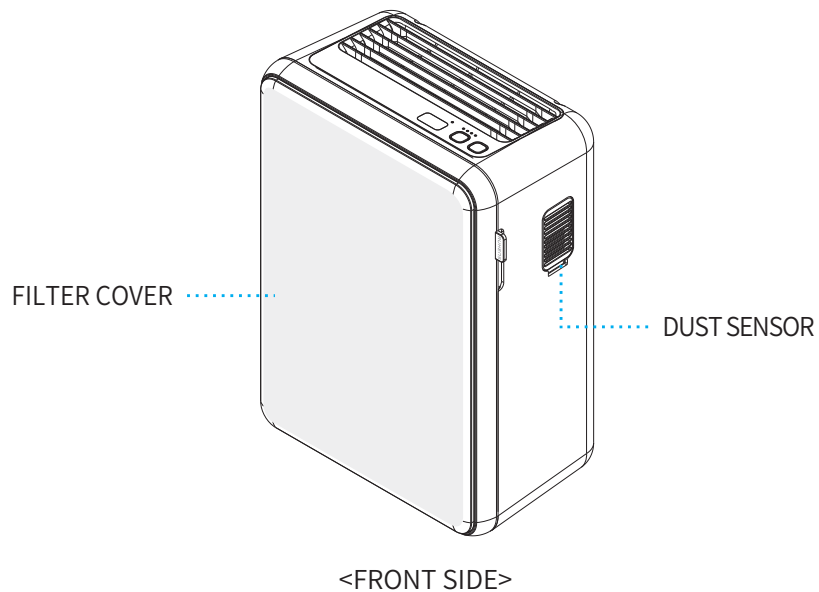
- **Pre-filter** : It traps large particle dust like hair, fur, pollen, and so on.
- **Anti-allergy filter** : It removes the allergy ingredient by deactivating bonding of Sulfur atom in the protein. It removes invisible dust and bacteria, resulting in helping you avert allergy problems associated with such allergens.
- **Deodorization-filter** : It filters formaldehyde, acetaldehyde which cause sick building syndrome and smell of cigarette, pet and food and etc.
- **Ultrafine particle free filter** : The H13 grade filter captures 99.95% of all particles 0.3 micron such as bacteria, tobacco smoke, mold, and etc.

◆ Dust sensor

The product displays the density of PM2.5 Ultrafine particle by the dust sensor inside.

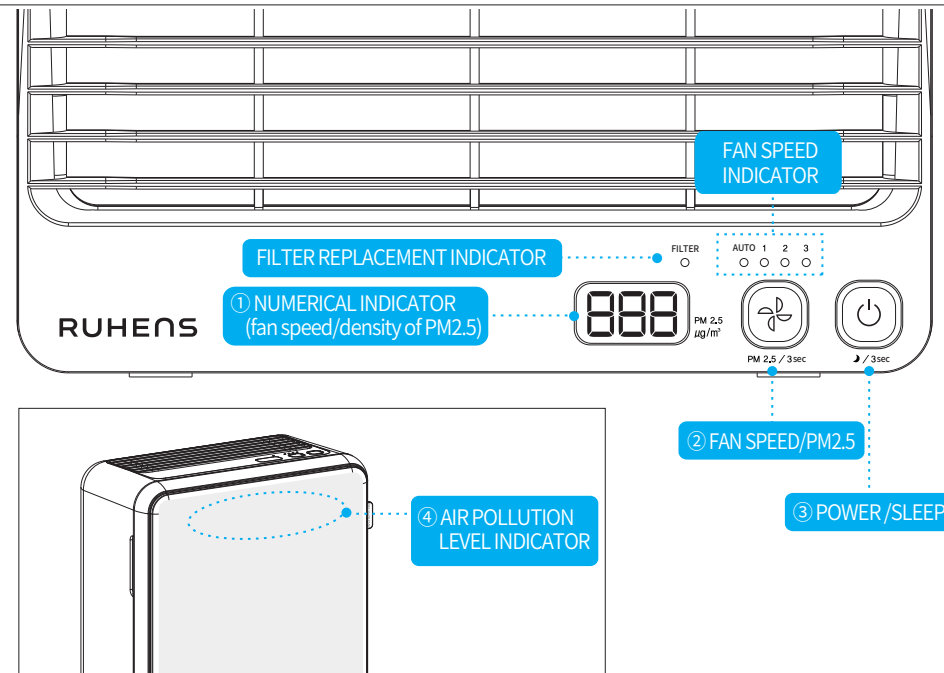
NAME OF EACH PART

Model No. WHA-500



OPERATION/INDICATION PART

Model No. WHA-500



① NUMERICAL INDICATOR
Fan speed
 Indicating the fan speed level by the speed of revolution on the indication.

PM 2.5
 Numerically Indicating the density of PM2.5

② FAN SPEED/PM2.5
Fan speed
 Fan speed control

PM2.5
 To see the density of PM2.5, press and hold the button for 3 seconds.

③ POWER/SLEEP
POWER
 POWER ON / OFF

SLEEP
 For sleep mode, press and hold the button for 3 seconds.

④ AIR POLLUTION LEVEL INDICATOR
 LED changes its color by the dust sensor.
 After measuring PM2.5 Ultrafine particle, the product automatically selects the color of the air quality out of blue, green, yellow and red.

※ For your safety and proper use of the product, please read and understand the following before use.

1. POWER BUTTON

Press the power button to turn the air purifier on or off.

※ The fan speed operates under the step 1 by default.

※ After measuring the air quality for 30 seconds, the dust sensor will automatically select the color according to the ambient air quality. For 30 seconds, the air quality light lights up all colors in sequence.

2. FAN SPEED

① Touch the fan speed button repeatedly to select the fan speed you need.
You can choose the auto mode, speed 1, 2 or 3 in sequence.

② The LED light of the current fan speed is on.



3. PM2.5

① Press and hold the fan speed button for 10 seconds to see the density of PM2.5 Ultrafine particle.
Then, the numerical indicator will show the density of PM2.5 for 10 seconds.

② After 10 seconds, the indicator will show the previous setting.

4. SLEEP MODE

① Press and hold the power button for 3 seconds to select the sleep mode.

② In sleep mode, the lights of indicators are dimmed. The light of the air pollution level indicator and the button sound are off.

③ For the previous setting, press and hold the power button for 3 seconds.

5. Auto mode of the fan speed

① Press the fan speed button to select the auto mode of the fan speed.
The product will automatically select the fan speed after measuring the air quality.

② There are 3 stages of the fan speed.

- Stage 1 : Good (blue)
- Stage 2 : Normal (green) and bad (yellow)
- Stage 3 : Very bad (red)

6. Filter replacement

① The unit automatically calculates the filter life cycle and indicates it.
When the filter is almost expired, the LED light of the filter will flicker.

② After replacing the filter, press and hold the power button and fan speed button simultaneously for more than 5 seconds to enter the filter force reset mode.

③ If you replaced the filter before the LED light of the filter flickers, press and hold the power button and fan speed button simultaneously for more than 5 seconds to enter the filter force reset mode.

※ Note

- The filter can be used from 6 months to 1 year when you use the product 24 hours every day. The lifetime of the filter can be shorten according to the air pollution level.
- If the filter produces an unpleasant smell after absorbing odors from the ambient air, replace the filter and enter the filter force reset mode.

Ultra-fine particles

What's PM 2.5?

The term of PM 2.5 refers to ultra-fine particles less than 2.5 μm in diameter. According to the study that found smaller particles are more harmful than the larger particles, the advanced countries have introduced the standard of the ultra-fine particles since the late 1990s.

- The density of PM2.5 is shown in number from 5 to 500.
- The indoor density of PM2.5 could be different from outdoors.
- The density of PM2.5 shown on the indicator may differ from the data of another appliance.
- The product changes the density of PM2.5 according to the ambient air circulation.

Precautions on using filters

1. Precautions for using filters

- Only use the original filters specially intended for this product.
- Contact the authorized service center to purchase the filter.
- Refer to the page 16 of this manual for replacing filters.

2. Precautions for replacing filters.

- Always unplug the product before changing filters.
- Before changing filters, remove all packaging materials of the filter. Failure to do so can cause a noise and/or fire because of the overheated motor.
- If you unpack the package of the filter, you cannot request a refund anymore.

Features of filters

1. Pre-filter

It filters large particle dust like hair, fur, pollen, and so on.

2. Anti-allergy filter

It filters the allergy ingredient by deactivating bounding of Sulfur atom in the protein. It filters invisible dust and bacteria, resulting in helping you avert allergy problems associated with such allergens.

3. Deodorization-filter

It filters formaldehyde, acetaldehyde which causes a sick building syndrome. Also, it absorbs daily odors like pet and food smells to keep pleasant environment.

4. Ultra-fine particle free filter

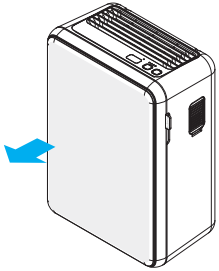
The H13 grade filter captures 99.95% of all particles 0.3 micron such as bacteria, tobacco smoke, mold, and etc.

Filters lifespan

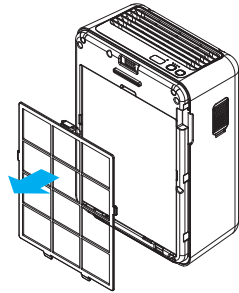
	stage 1	stage 2	stage 3	stage 4
Filter	Pre-filter	Anti-allergy filter	Deodorization-filter	Ultra-fine particle free filter
Replacement cycle	semi-permanent	About a year	About a year	About a year
Cleaning method	Wash the filter with water once a month.	Not washable. Replace the filter.	Not washable. Replace the filter.	Not washable. Replace the filter.

REPLACING FILTERS

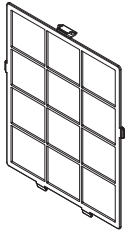
1. After unplug the product, take out the front cover of the filter.



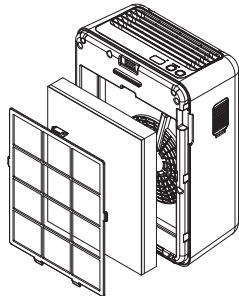
2. Take out the expired filter.
You can easily remove the filter by holding the filter handle and pulling it off.



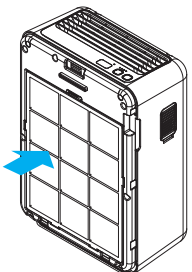
3. Wash the Pre-filter under the running water.
Before reuse the Pre-filter, make sure that the filter is completely dry under the shade.



4. Put filters back into the unit in sequence.
※ From inside of the unit, reattach Ultra-fine particle free filter, Deodorization-filter, Anti-allergy filter, and Pre-filter in sequence.



5. Put the Pre-filter back into the unit.



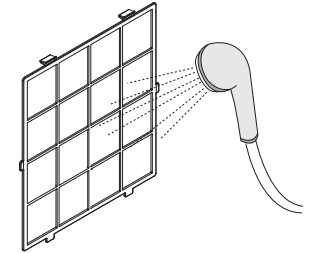
6. Reattach the front cover.



CLEAING

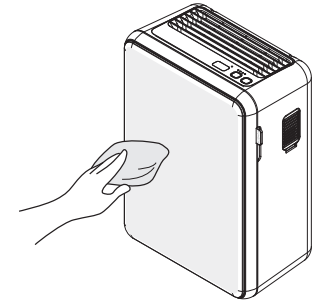
How to clean Pre-filter

- Every once a month, carefully wash the Pre-filter carefully under a running water.
- Never use a benzene, alcohol, flammable, hot water over 40°C and/or flammable cleaning agents to clean the filter. Failure to do so can cause a damage or discoloration.



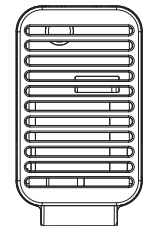
How to clean exterior

- Wipe the surface of the unit with a soft dry cloth.
- Clean the back and front cover of the filter with a dust cleaner or vacuum cleaner.
- Never use a benzene, alcohol, flammable, hot water over 40°C and/or flammable cleaning agents to clean the filter. Failure to do so can cause a damage or discoloration.
- Never use water or any flammable detergent to clean the unit.



How to clean dust sensor

- Unplug the product before cleaning.
- Carefully wipe away dust on the lens of dust sensor with a cotton swab after taking out the cover of the dust sensor.
- The number of PM2.5 for ambient air shown on the indicator could be wrong if there is dust on the lens.
- Clean the dust sensor every 6 months for optimal functioning of the unit.
- Clean the dust sensor more frequently if you use the unit in a dusty environment.



dust sensor

TROUBLESHOOTING

※ Please refer to the common troubleshooting solutions before contacting customer service center.

Problem	Likely causes	Actions
The air purifier does not work at all.	Does it connect to the electrical power supply well?	Check if the outlet has power going to the unit, and ensure the plug is secured.
	Is there a power outage?	Check if other lights and electrical equipment are working and try again.
Auto Mode does not work.	Does it connect to the electrical power supply well?	Reconnect the power cord to the product and press the button for Auto mode.
	Has Auto mode been selected?	Press the Fan Speed button for Auto Mode.
The air pollution level indicator shows the red color continuously.	Haven't you clean the dust sensor quite a while?	Clean the dust sensor.
	Do you use it in a smelly environment?	Move the purifier in a clean environment and check if the sensor keeps showing the red. If it keeps showing the red, please contact the customer service center.
The product vibrates and makes a lot of noise.	Is it running on a slanted or uneven surface?	Move the unit to a hard, flat, even area of the floor.
The power plug and outlet feel hot.	Is the plug securely plugged in?	Check if the plug is properly plugged into the outlet.
The product produces a strange smell.	Is it being used in a place with a lot of smoke, dust, or odors?	Clean the Pre-filter and/or replace expired filters.
The airflow that comes out of the air outlet is significantly weaker than before. Even though the product has been operating for a long time, the unit is not purifying the air.	Have you cleaned or replaced the filter? Have you put the stuff on the air outlet?	Clean the Pre-filter or replace the filter. Remove the stuff on the air outlet.

SPECIFICATIONS

Model	WHA-500
Power rating	DC 24 V / 0.75A
Size	300(W)*180(D)*427(H) mm
Weight	4 kg
power consumption	18 W

PRODUCT WARRANTY

Product	Model	<input type="checkbox"/> WHA-500	
	Date of Manufacture		
Date of Purchase	Year	Month	Day
Customer's Name			
Dealer's Name			

WARRANTY GUIDE

1. The warranty period is 12 months from date of purchase.
 2. In following case, the product will be repaired at cost.
 - a) After expiry of free warranty period.
 - b) Malfunction of caused by careless or abnormal use.
 - c) Malfunction of caused by natural disaster.
 - d) In case this manual has been lost.
-

MEMO



MEMO

