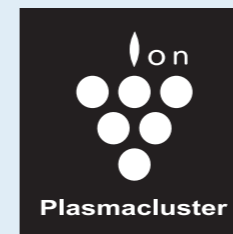


SHARP®

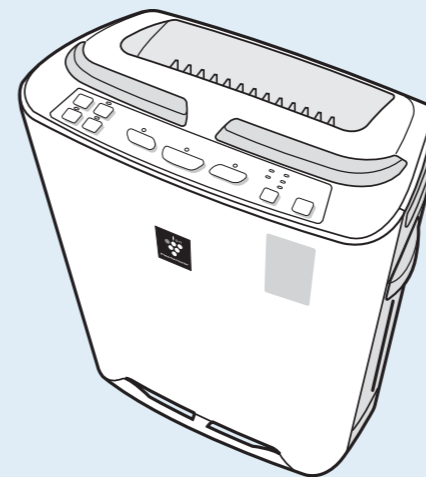
Humidifying Air Purifier

OPERATION MANUAL

Model

KC-AE60**KC-AE30****KC-AE20**

High-Density 7000



Thanks for purchasing the SHARP Air Purifier.
Please read this manual carefully before operation.
Please keep this manual properly for future reference.



Plasmacluster and its logo are
trademarks of Sharp Corporation.

SHARP®
SHARP CORPORATION

TINS-A199SRRZ

CONTENTS

Page

Features	E-2
Frequently Asked Questions	E-3
Precautions	E-4
Parts Names	E-6
Before Operation	E-8
● Filter Installation	E-8
● Location Requirements	E-9
● Fill the Water Tank	E-9
Operation	E-10
● Clean Air & Humidify Mode	E-10
● Clean Air Mode	E-10
● Turbo Mode	E-11
Function	E-12
● Light Control: Bright/Dim/Off	E-12
● Water Supply Alarm	E-12
● PCI ON/OFF	E-12
● ON/OFF Timer	E-13
● Adjustment of Sensor Detection Sensitivity	E-13
Care and Maintenance	E-14
● When Filter Reset Indicator Light is ON	E-14
● Water Tank	E-15
● Humidifying Filter	E-15
● Tray, Tray Lid	E-15
● Back Panel	E-15
● Main Unit	E-16
● Active Carbon Deodorizing Filter, De-formaldehyde Filter, HEPA Filter	E-17
● When it is too dirty or smelly	E-18
Things to Remember	E-19
● Function of Filter	E-19
● Effective Usages	E-19
Filter Replacement	E-20
● Humidifying Filter	E-20
● HEPA Filter, De-formaldehyde Filter, Active Carbon Deodorizing Filter	E-20

Troubleshooting	E-21
------------------------	------

Specifications	E-24
-----------------------	------

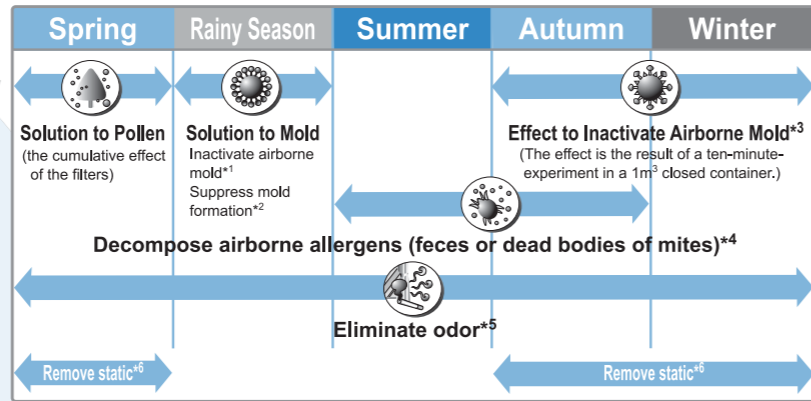
Features

High-Density Plasmacluster Ion purifies the air in the room all around the year.



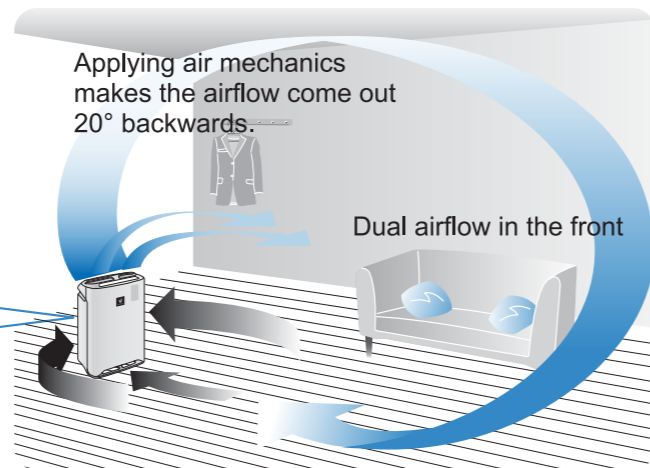
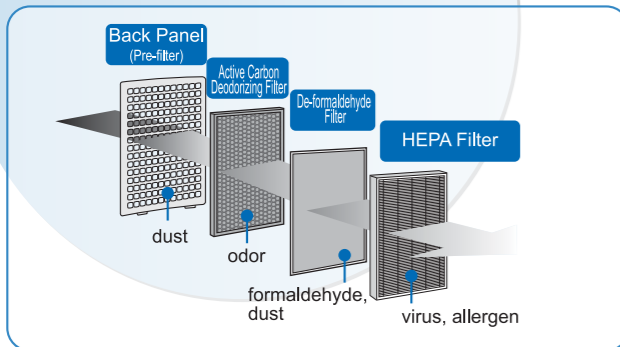
High-Density 7000

- Same as ions found in Nature
- Air purifying ability is explained*1-7
- Safety is confirmed*8



- ※1 Ishikawa Health Service Association, Japan
The elimination rate is 99.0% within 195 minutes in a 13m³ area.
- ※2 Japan Food Research Laboratories, Japan
The breeding of molds on PVC plates gets controlled after five days in a 14 m² lab.
- ※3 Retroscreen Virology Ltd., UK
In a 1m³ box, the elimination rate of a virus is 99.0% within 10 minutes.
- ※4 Graduate School of Advanced Sciences of Matter, Hiroshima University, Japan
Inactivate the potential allergens of aerial mites in a 13m² living area.
- ※5 Japan Spinners Insecting Foundation, Japan
After 80 minutes deodorization, the odor of smoke on the cloth is nearly imperceptible.
- ※6 Sharp Corporation, Japan
In a 1m³ box, the initial potential is weakened from 4.0kV to 1.0kV.
- ※7 Professor Artmann, Aachen University of Applied Sciences, Germany (aerial bacteria and viruses)
Graduate School of Advanced Sciences of Matter, Hiroshima University, Japan (aerial allergens)
- ※8 Mitsubishi Chemical Medience Corporation

Effective airflow collects dust and odor quickly. It inhales contaminants from all sides and purifies by passing through 4 types of filters.



The purifying effect will be more significant if the unit is operated around the clock.

When the air in the room is not fresh, **Turbo mode will be turned on.**

In 60 minutes, the density of Plasmacluster Ion will be 1.5 times* and the indoor air will be purified quickly.

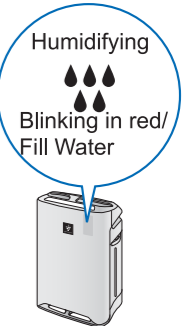
(* 1.5 times: is compared to the density when the unit is set at "Auto" Mode, "High" Fan Speed in the purifying area of Plasmacluster Ion 7000)

- Plasmacluster air purifying technology can inactivate suspended viruses and other contaminants; it cannot create a completely sterile environment. Sharp does not guarantee its ability to prevent microbial infection.
- The effect of eliminating bacteria and purifying air will differ according to different room condition and operation method.

Frequently Asked Questions

Q Why steam or vapour cannot be seen during humidification?

A When the Humidifying Filter is moisturized, humid air will be discharged from air outlet. Humidification is achieved without water-boiling, so steam or vapour cannot be seen.

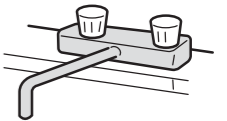


Q Will the moisturized air be very cold when it is discharged from the air outlet?

A The moisturized air may absorb heat from the air when it is discharged, therefore air blowing out from the air outlet may be colder than the ambient temperature. Depending on room size, it is possible that user may feel cold. (For example, when ambient temperature is 20°C, the discharged air may be around 15°C.)

Q Is it necessary to use tap water?

A It is recommended to use tap water as bacteria are hard to breed in chlorinated tap water. If mineral water, alkaline water, well water, filtrated water are used, mold and bacteria will breed, producing plenty of scale and odor.



Q Why the air coming out from the outlet is smelly?

A If the unit is used in the condition that cigarette smoke or barbecue smell is very strong, or bacteria breed in the tray or water tank, the coming out air might be smelly. Please maintain filters, tray and water tank regularly. (E-14~18)

Q How often shall the unit be maintained?

Filter Name	Maintenance Cycle	Replacement Time	Replacement Filter Model
Humidifying Filter	once a month	every 5 years	FZ-Z380MF-HK
HEPA Filter	when the discharged air is smelly	every 10 years	FZ-WE61GH-HK FZ-CD30BH-HK FZ-CD20BH-HK
De-formaldehyde Filter	when the discharged air is smelly	every 2 years	FZ-C151VFS-HK FZ-C101VFS-HK FZ-C71VFS-HK
Active Carbon Deodorizing Filter	when the discharged air is smelly	every 10 years	FZ-BD60ZD-HK FZ-BD30ZD-HK FZ-BD20ZD-HK

(Instruction of maintenance and filter replacement is shown on (E-14~18) and (E-20). Please contact your dealer or Sharp Authorized Service Center if you want to purchase filters for replacement.

Precautions

When using electrical appliances, basic safety precautions should be followed as below.

Warning—In order to reduce the risk of electric shock, fire or injury:

- Please read all the instructions in the manual before operating the unit.
- Only use a 220 volt outlet with a polarized receptacle.
- Do not operate the unit if the power cord is damaged or the connection to the wall outlet is loosened.
- Remove dust from the power plug regularly.
- **Do not insert fingers or foreign objects into the air intake or air outlet of the unit.**
- **Please hold the plug firmly instead of pulling the power cord when unplugging the unit.** Otherwise, electric shock, fire or short circuit may occur.
- **Do not remove the power plug when your hands are wet.**
- **Do not operate the unit near gas appliances or fireplaces.**
- **Please remove the power plug from the wall outlet before cleaning the unit or when the unit will not be used for a period.**

Otherwise, bad insulation may lead to electric shock, short circuit and/or fire.

- **If the power cord is damaged, it must be replaced by the manufacturer or its agent, Sharp Authorized Service Center or equivalent qualified person so that hazard can be avoided.**
- Do not operate the unit when spraying aerosol pesticides, or there is oil residue, smoke of incense, spark of cigarettes in the room, chemical fumes in the air, or in a highly humidified place such as a bathroom.
- Please take care when cleaning the unit. Strong corrosive cleansers may damage the exterior of the unit.
- This appliance is not intended for use 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 concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- Only Sharp Authorized Service Center can repair the unit. If any problems, adjustments, and/or repairs occur, please contact your nearest Sharp Service Center.

Caution—Radio or TV Interference

Should this unit interfere with radio or television reception, please try at least one of the following measures to amend it:

- Reorient or relocate the receiving antenna.
- Increase the distance between the air purifier and the radio/TV receiver.
- Do not use the same socket to connect this unit and the receiver.
- If you need help, please contact your dealer or professional radio/TV technician.



If the power cord is damaged, it must be replaced by the manufacturer, Sharp Authorized Service Center or equivalent qualified person so that hazard can be avoided.

Cautions Concerning Operation

- Do not block the air intake and air outlet.
- Do not place the unit near or on heating objects, such as stoves or heaters, or anywhere it may contact with steam when operating the unit.
- Please always operate the unit in an upright position.
- **Please hold the handles on both sides of the unit firmly when moving the unit.** Hold the panel when moving the unit may cause the panel to fall off, main unit to drop, and injury.
- **Do not operate the unit without installing the filters, water tank and tray.**
- **Do not wash and/or reuse HEPA Filter and De-formaldehyde Filter.**
- **Clean the exterior of the unit with a soft cloth only.** Otherwise, the unit may be damaged or broken. Moreover, it may lead to breakdown of the sensors.
- **Please clean the unit regularly according to different water quality. The lower the purity of water is, the more often you should clean the unit.**
- **Please keep the unit away from water source.**

Installation Instruction

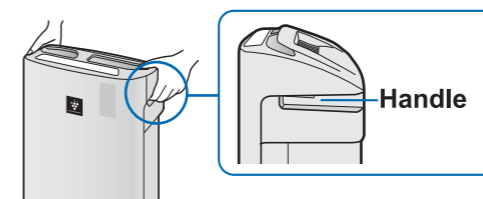
- **When operating the unit, please place the unit at least 2 meters away from equipments with electric waves such as televisions, radios or clocks, so that electrical interference can be avoided.**
- **Do not install the unit in the place where the sensor is exposed to direct wind.** Otherwise the unit may not operate properly.
- **Do not install the unit in the place where objects like curtains are near the air intake or air outlet of the unit.** Otherwise, such objects may become dirty or the unit may break down.
- **Do not install the unit in the place where the unit is exposed to condensation or drastic temperature changes.** Please operate the unit in the room temperature between 0°C and 35°C.
- **Please place the unit on a stable surface with sufficient air circulation.** If the unit is placed on a thick carpet, it may cause the unit to vibrate slightly.
- **Do not install the unit in the place where dark smoke will generate (e.g. kitchen).** Otherwise, it may cause the surface of unit to crack or the sensor to break down.
- **Please place the unit 30cm to 60cm away from the wall.** It may cause the wall behind the air outlet of the unit to become dirty; if the unit is operated in the same location for a long period, please paste a soft rubber pad on the wall in order to prevent the wall becoming dirty. Moreover, please clean the wall regularly.

Filter Instruction

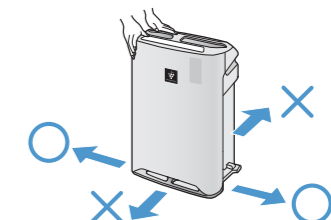
- Please follow the instruction in this manual to care and maintain the filters correctly.



- **When moving the unit, please stop the operation of the unit, remove the water tank and tray, and hold the handles on both sides of the unit.**

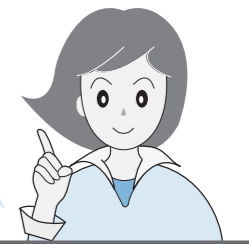


- **Please move the unit in left or right direction slowly.**



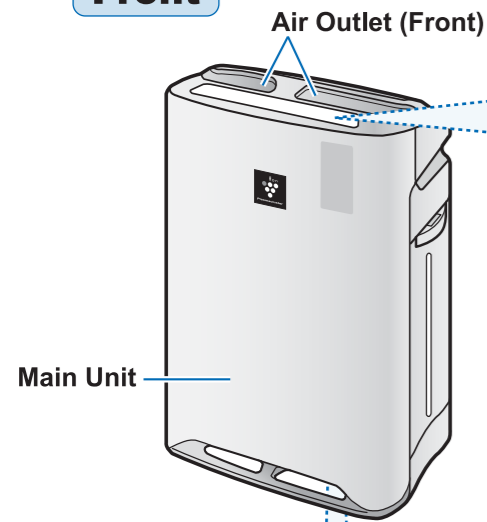
Parts Names

The unit will start to operate if you press the buttons marked with ★.



Main Unit, Control Panel and Front Monitor

Front



Control Panel

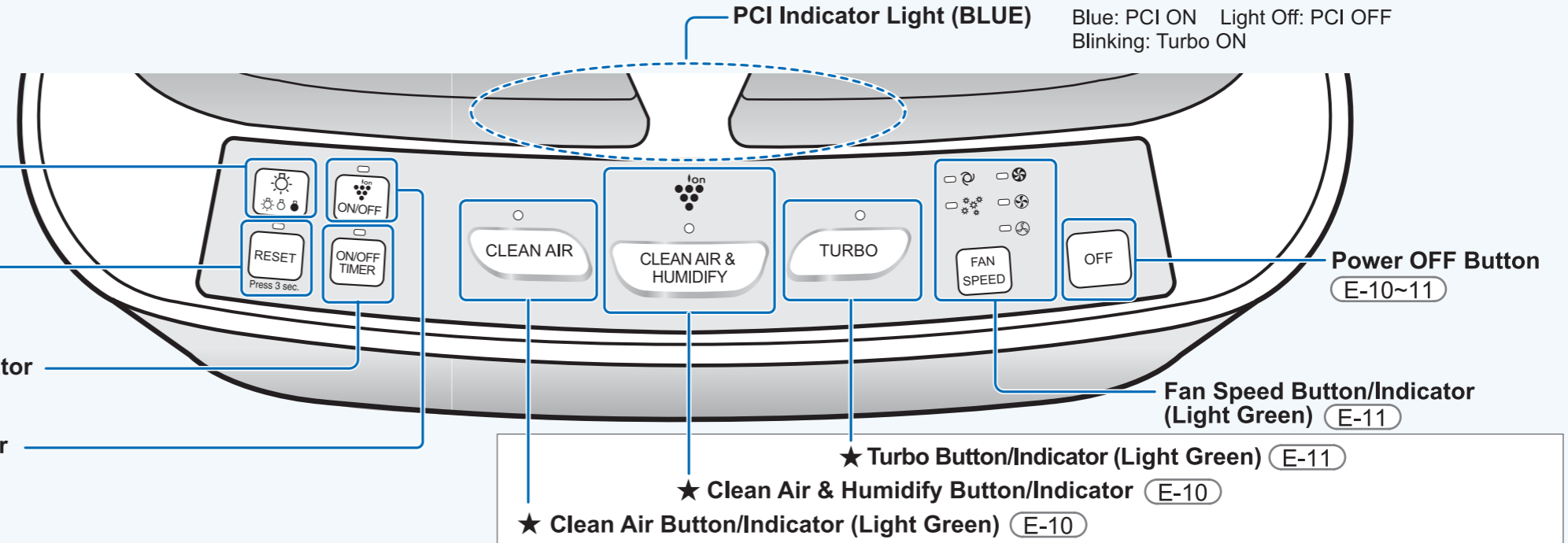
Light Control Button (E-12)

Filter Maintenance Reset Button

Filter Maintenance Indicator (RED) (E-14)

On/Off Timer Button/ Indicator (Light Green) (E-13)

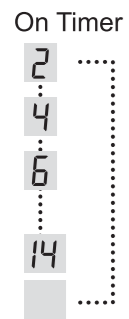
PCI On/Off Button/ Indicator (Light Green) (E-12)



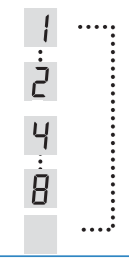
Front Monitor

displays the room air pollution (e.g. dust or odor) level and the approximate humidity

TIMER



Off Timer



Current Humidity Indicator (GREEN)

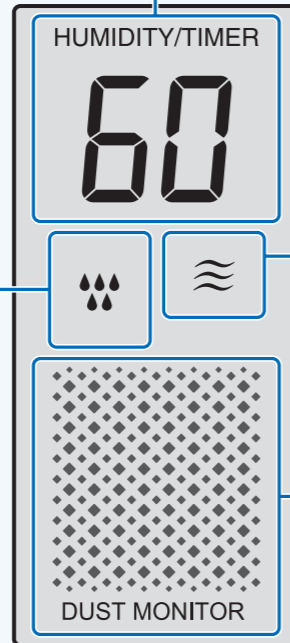
99
79
31
6

displays the approximate reading of the current humidity (The humidity reading will increase or decrease 1% at a time from 6% to 99%.)

The humidity cannot be set according to your preference.

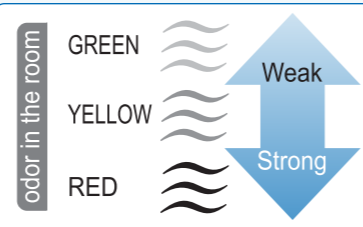
Humidifying Indicator Light (E-10~11)

GREEN Humidifying
Off Not humidifying
Blinking in RED Fill Water



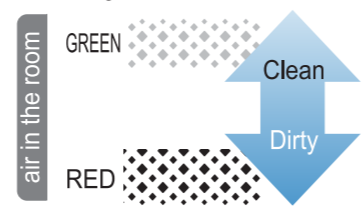
※This picture is for KC-AE60 and KC-AE30 only, KC-AE20 has no Odor Monitor.

Odor Monitor (KC-AE60 and KC-AE30 only)



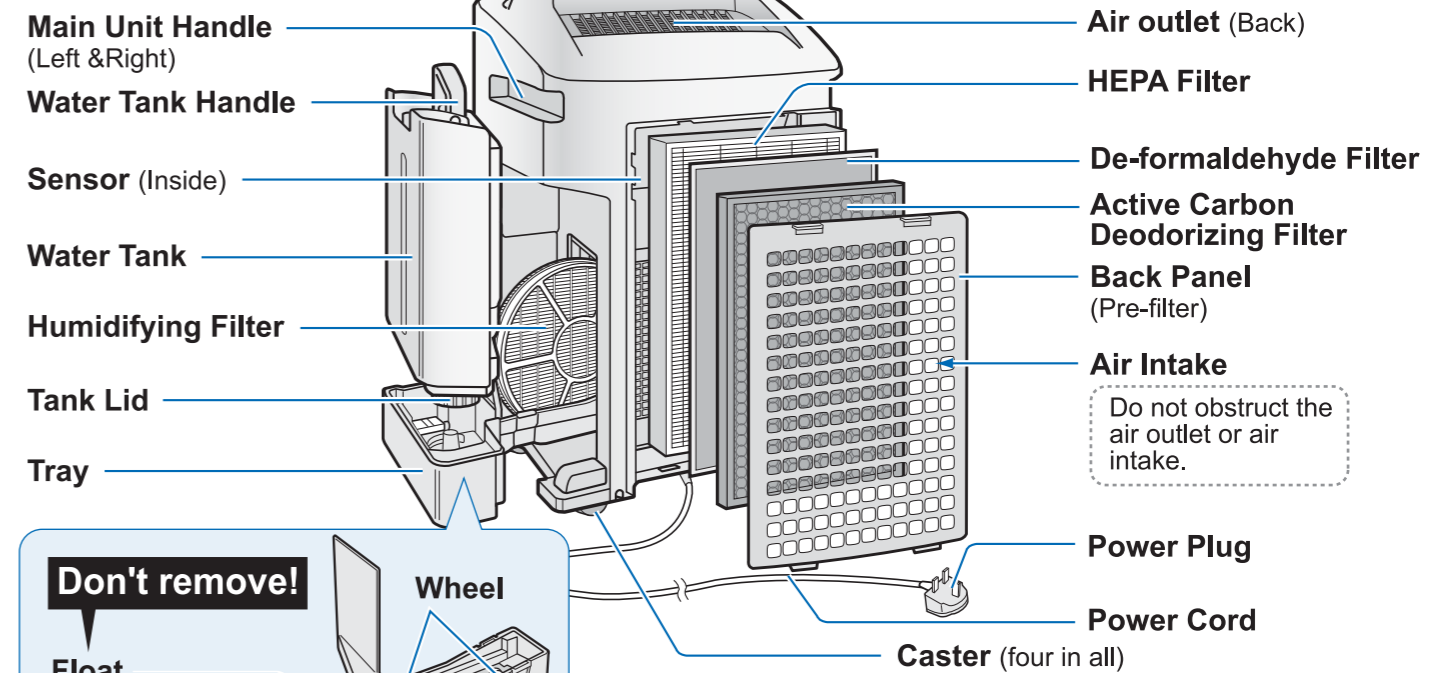
Dust Monitor

The air condition in the room will be distinguished into 5 levels.



Dust Monitor and Odor Monitor are monitoring by different sensors, therefore the color of Indicator may not change together.

REAR



Don't remove!

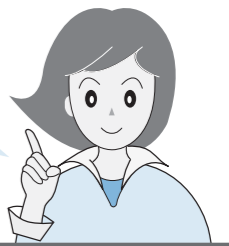
Please do not remove this part, it's not packing material.

Do not obstruct the air outlet or air intake.

Caution ● The unit can only be moved laterally.

Before Operation

Please keep the unit away from the TV set, radio or wave clock, otherwise there will be radio interference and the reading might be wrong.



Filter Installation

Please do the following steps before plugging into the socket.

1

Top Hasp (left & right)

Back Panel

Remove the back panel and take out the filters.

- There are three filters in the unit.

2

HEPA Filter De-formaldehyde Filter Active Carbon Deodorizing Filter

Take out these 3 filters from plastic bags.

3

Please follow the installation sequences shown on the left.

Active Carbon Deodorizing Filter – no difference on both sides

De-formaldehyde Filter

HEPA Filter – please put the labeling side outwards

4

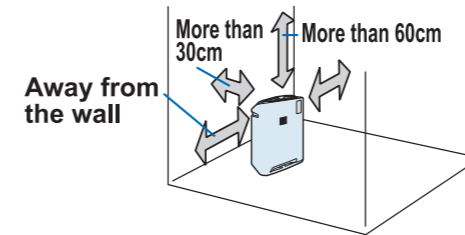
click

Install the back panel.

Bottom Hasp (left & right)

Location Requirements

Please locate the unit at the properest place.



In order to remove dust in an effective way, please keep the unit 30cm away from the wall.

- Please operate the unit at room temperature from 0°C to 35°C. Otherwise dew or frost may influence the life time of the filter or break the unit down.
- Please avoid direct sunlight. Otherwise, it may lead to change of shape, quality and/or color of the main unit.
- Please do not place the unit around the air outlet of an air-conditioner, heater or window. Otherwise it may lead to change of shape, quality, and/or color and mishandling of sensor.
- Please put the unit in flat and stable places. Otherwise the unit may fall and thus lead to injury.
- Keep the unit away from curtains, walls and furnitures, etc.
- Keep the floor or wall near the unit clean. Otherwise damage or stain may occur to the wall or nearby area.

Fill the Water Tank

Please fill water in the water tank before humidifying and purifying.

1

Tank Handle

Water Tank

To remove the water tank, please push down the handle and pull outwards.

- Be careful, do not let the water spill over.
- There might be little water remained in the water tank, please empty it before refilling water, then fill in little water and wash the tank.

2

Tank Lid

Fill Water

Water Tank

Remove the tank lid and fill in tap water.

The water tank can be placed in upright position.

3

Tighten the tank lid.

- Please tighten the tank lid and make sure there is no leak of water.

4

click

Reinstall the water tank in the unit.

- Please wipe off the water near the water tank.
- Be careful. Avoid any accidents.
- Do not move the unit and make sure that the tank lid is installed firmly.

- Caution**
- Please use tap water only. (Otherwise it may cause breed of bacteria.)
 - Please do not use hot water (≥40°C), sesame oil, chemicals, sewage, abstergent or aromatic etc. (Otherwise, it may cause crack or leakage.)

Operation

Plug into the socket.



Clean Air & Humidify Mode

In general, the following operation is recommended.
(The humidity cannot be adjusted according to your preference.)

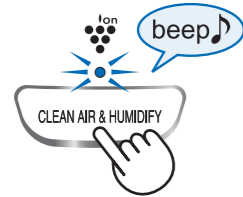
Fill Water



Add tap water into the water tank.
(E-9)

Water Tank

Operation



Choose "Clean Air & Humidify" mode and your favorite fan speed. (E-11)

Stop



- Plug the socket to start operation with fan speed at AUTO, PCI at ON (default setting).
- From the 2nd time, the operation mode will be the same as the former one.

Humidifying Indicator Light

	Green	Humidifying
	Off	Not humidifying※
	Blinking in Red	Fill Water

Caution

- If water tank is empty, the Humidifying Indicator Light will blink in red. Operation continues with no humidifying.
- If Fan Speed is set at AUTO, the unit will automatically adjust the humidification amount to the best humidifying status; however, according to different room size and condition, the humidification effect may not be that perfect or the humidification amount may be excessive. If it cannot reach the proper humidity..... please set Fan Speed at "High" or "Medium". If the humidity is excessive.....please set at "Clean Air" mode.
- ※When Fan Speed is set at AUTO or POLLEN, once the humidity is suitable for the room, the unit will stop humidifying and the "Humidifying" Indicator Light will be off.

Room Temperature	Humidity
~18°C	65%
18°C~24°C	60%
24°C~	55%

Clean Air Mode

Please use this mode in rainy days.
(Even there is no water supply in the water tank, the unit can still operate.)

Operation



Choose "Clean Air" mode and your favorite fan speed. (E-11)

Stop



- Plug the socket to start operation with fan speed at AUTO, PCI at ON (default setting).
- From the 2nd time, the operation mode will be the same as the former one.

Humidifying Indicator Light

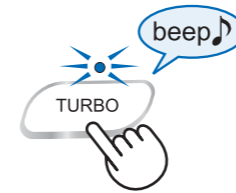
	Off	Not humidifying
--	-----	-----------------

Turbo Mode

When the indoor air suddenly turns dirty

In 60 minutes, Turbo Mode will be on and Fan Speed will be set at "High". After 60 minutes, it will return to the former operation mode.

Operation



Stop



- Solution to virus and/or pollen when you go back to home
- When or after operating the vacuum cleaner
- Laundry are taken in
- Remove odor as soon as possible
- Solution to the odor after cooking or cleaning

Humidifying Indicator Light

	Green	Humidifying
	Off	Not humidifying※
	Blinking in Red	Fill Water

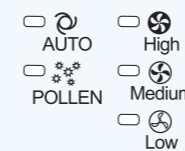
Caution

- If water tank is empty, the Humidifying Indicator Light will blink in red. Operation continues with no humidifying.
- When PCI mode is set at OFF, there will be no plasmacluster ion coming out; however, dust and odor can still be removed from the air.
- ※The humidifying mode will stop and the Humidifying Indicator Light will be OFF when it gets to the appropriate humidity. If the water tank is empty, the Humidifying Indicator Light will stay OFF when operating Turbo mode.

Fan Speed

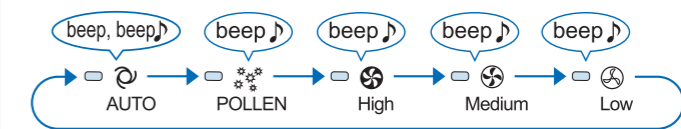
When the unit is set at Clean Air & Humidify Mode or Clean Air Mode, the fan speed can be adjusted.

When Turbo mode is set on, the fan speed cannot be changed.



Choose your favorite fan speed.

Each press will change the mode as follows:



	AUTO	According to different room condition and the sensors of DUST, ODOR※ or HUMIDITY, the unit will adjust the fan speed automatically.
	POLLEN	After operating at High Fan Speed for ten minutes, the unit will operate between Low Fan Speed and High Fan Speed in twenty minutes alternately in order to remove pollen effectively.
	High	Operating at High Fan Speed. (Operation sound will increase.)
	Medium	Operating at Medium Fan Speed.
	Low	Operating at Low Fan Speed.

※Only suitable for KC-AE60 and KC-AE30

Function

Light Control: Bright/Dim/Off

When you feel the Front Monitor Light or PCI Indicator Light are dazzling

SET

Unit is ON

- Each press will change the mode as follows:
 - Lights on front monitor are bright
 - Lights on front monitor are dim
 - Lights on front monitor turn off

for KC-AE60 and KC-AE30 only

- Caution**
- Even the Monitor Light is set at OFF, the Humidifying Indicator Light will blink in red once the water tank is empty.
 - Even the Monitor Light is set at OFF, the Monitor Light will operate at Dim if the unit is restarted.

Water Supply Alarm

Set / Cancel

Set (Unit is OFF) → **Cancel (Unit is OFF)**

Press for 3 seconds at least

- If the Water Supply Alarm is on, you will hear "Beep, beep" for about 10 seconds, meanwhile the Humidifying Indicator Light will blink.
- If the Alarm is cancelled, you will hear nothing but the Humidifying Indicator Light will blink.
- Once the power supply runs off, this setting will be cancelled and therefore you will not hear the alarm.

PCI ON/OFF

When you want to turn on/off PCI

ON/OFF

ON → **OFF**

ON/OFF TIMER

Once set, the unit will automatically operate or stop as scheduled.

ON

Choose your favourite time.

Each press will change the modes as follows:
2 → 4 → 6 → 8 → 10 → 12 → 14 → OFF

OFF

Choose your favourite time.

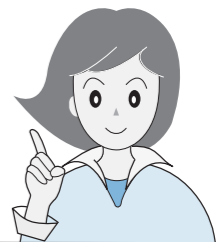
Each press will change the modes as follows:
1 → 2 → 4 → 8 → OFF

- Press **ON/OFF TIMER** button when the unit is not in operation to activate ON Timer mode.
- The initial operation of ON TIMER mode is Fan Speed set at "AUTO", PCI at "ON". From the 2nd time, the operation mode will stay the same as the former one.
- When ON TIMER mode is set on, the LED light of ON/OFF TIMER button will be lighted on, and the reading on the Front Monitor displays the remaining hours before the unit starts operation. It decreases on a basis of 1 hour (i.e. 14 → 13 → 12 ...).
- Press **ON/OFF TIMER** button when the unit is in operation to activate OFF Timer mode.
- Choose your favourite time within 3 seconds. A beep sound can be heard after finishing the setting.
- When OFF TIMER mode is set on, the LED light of ON/OFF TIMER button will be lighted on.
- Press **ON/OFF TIMER** button to display the remaining hours before the unit stops operation. It decreases on a basis of 1 hour (i.e. 8 → 7 → 6...).
- Press **OFF** button to release the timing mode.

Caution

- ON Timer and OFF Timer cannot be reserved together.
- Once there is a power failure, the operation and setting of ON Timer and OFF Timer mode will be cancelled. Please reset the Timer after power resumption.

Dust Monitor or Odor Monitor
The Indicator remains in RED..... Please turn to LOW.
The Indicator remains in GREEN..... Please turn to HIGH.



Adjustment of Sensor Detection Sensitivity

1 Unit is OFF

FAN SPEED Press for 3 seconds at least.

2

FAN SPEED Choose your favorite sensor detection sensitivity within 8 seconds.

Low → Medium → High

Finished

OFF

- Fan Speed Indicator Light shows the current sensor detection sensitivity. (The default setting is MEDIUM.)
- Each press of the button will change the modes as follows:
- If there is no operation within 8 seconds, it will be regarded as finished.
- Even if power supply is interrupted, the setting of the sensor detection sensitivity will remain the same.

Detectable Substances

- Room dust (dust, mite feces, corpse, spore of mold and pollen), smoke of cigarettes, etc.
- Cigarettes, smell of incense, cosmetics, alcohol and sprayer, etc. (for KC-Z380A and KC-Z280A only)

Care and Maintenance

Warning
 Stop operating and unplug the unit when maintaining the unit.
 Otherwise electric shock or injury may result.

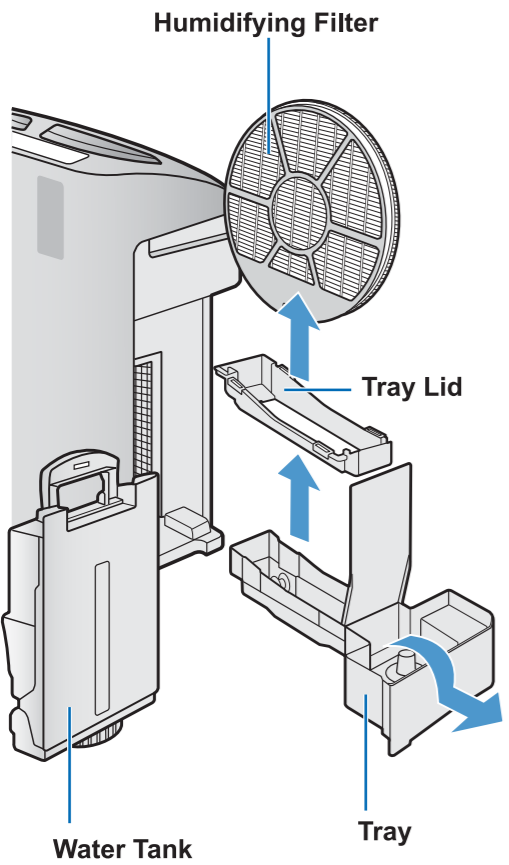


When Filter Reset Indicator Light is ON Once a month

it's time to maintain Humidifying Filter, Tray, Water Tank and Back Panel .

RESET
Press 3 sec

- The indicator light will turn on after operation for 1 month (at working 24 hours a day).



- 1** **unplug**

Take out Water Tank for maintenance.
- 2**

After removing the water tank, pull out the tray before taking out the Humidifying filter.

Start cleaning the filter.

 - Do not spill out water from the water tank.
- 3**

Remove the Tank Lid and maintain the Tray and Tray Lid.
- 4**

Reinstall the above items back into the unit.

 - Please pay attention that each side of the humidifying filter is different from the other.
- 5**

Maintain the Back Panel.
- 6**

When maintenance is finished, insert the plug into the socket and press the Filter Reset button for at least 3 seconds until the Indicator Light goes off.

beep

 - After maintenance, even if the Filter Reset Indicator Light is off, please press the Filter Reset button for at least 3 seconds to reset the operation time.

Water Tank

Before adding water into the water tank, fill little water and shake the water tank to wash the tank inside.

Tank Lid

Caution Please hold the tank body instead of the tank handle when shaking the water tank.

Humidifying Filter

Flush with water.

- Please do not remove the filter frame when you wash the filter.

Tray, Tray Lid

Remove the tray lid and wash with water.

Tray Lid

Please hold the ○ part when removing the tank lid.

Tray Float

Wheel

- Do not remove the float and wheel from the tray when maintaining the unit.

If the float or wheel falls off, please refer to E-23 .

Back Panel

Please use a vacuum cleaner for inhalation and cleaning.

Back Panel

Caution If you force too hard, the filter may get damaged.

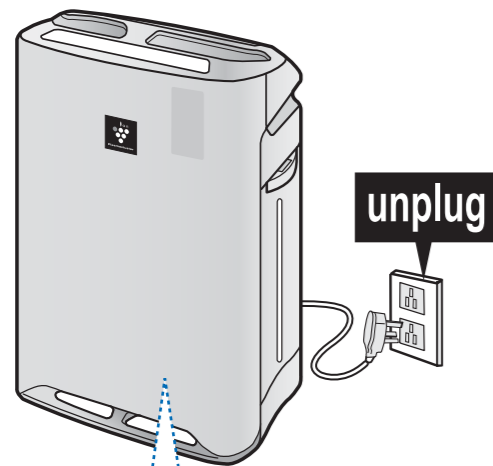
- Please maintain the back panel when it is installed in the unit.

Please refer to E-18 if it is too dirty or smelly.





Care and Maintenance (continue)





Warning
 **Stop operating and unplug the unit when maintaining the unit.**
 Otherwise electric shock or injury may result.

Main Unit




Please do not use the following.

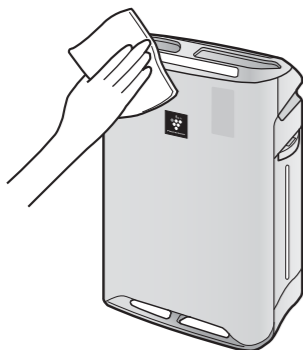
			
diluent	volatile oil	gasoline	alcohol

			
oven cleanser	bleach	alkaline synthetic detergent (for furniture)	atomizing abluent

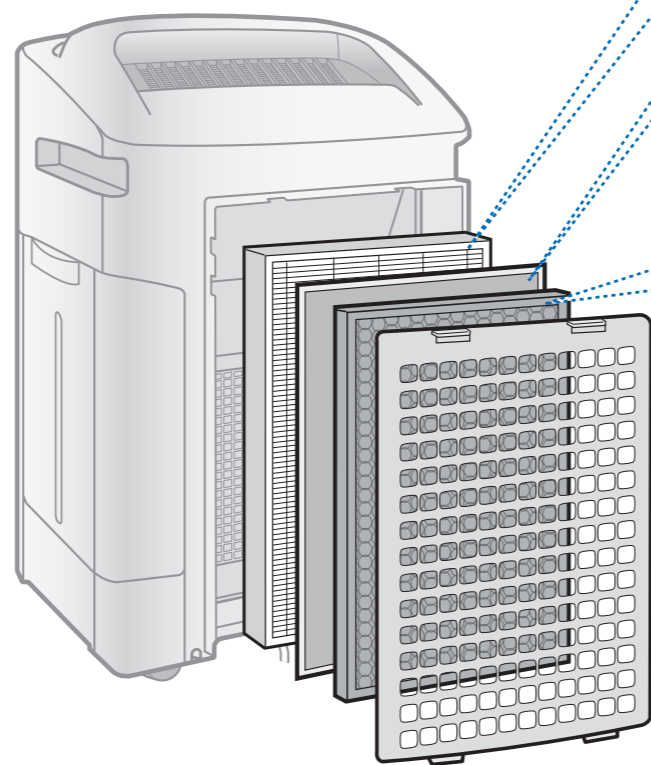
Main Unit

 Do not rinse with water.

Please wipe the unit with a soft cloth.



- If the unit is too dirty, please wipe the unit with a cloth damped with water or warm water (≤40°C).
- Please keep the casters tidy and clean as well.

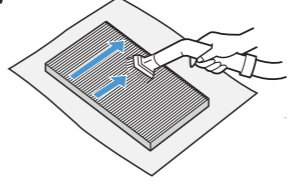



HEPA Filter, De-formaldehyde Filter, & Active Carbon Deodorizing Filter when the air from the air outlet is smelly; when the odor is hard to remove

※Please maintain Active Carbon Deodorizing Filter, De-formaldehyde Filter and HEPA Filter together.

HEPA Filter

Please clean the labeling side of the filter carefully.




 Do not wash with water, otherwise the filter will be damaged.

- Please only clean the labeling side. Avoid cleaning the other side which is without the blue stick, otherwise, the filter will be damaged.
- Remove the odor and dust on the filter.
- Since the filter can get damaged easily, please do not exert strong force when cleaning the filter.

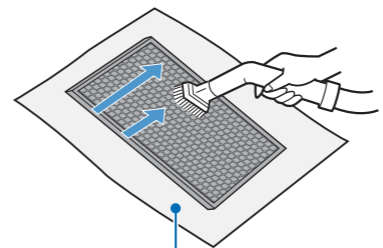
De-formaldehyde Filter


Use a vacuum cleaner to clean the filter carefully. Do not damage the filter.

 Do not wash with water, otherwise the filter will be damaged.

Active Carbon Deodorizing Filter

Gently inhale.




 Do not wash with water, otherwise the filter will be damaged.

- Both sides can be cleaned and maintained. Overexert will cause breakage to the filter, therefore please pay special attention when cleaning the filter.
- Remove the odor and dust on the filter.

Please cover the ground with newspapers when maintaining the filter.

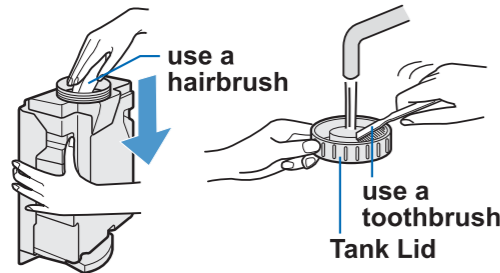
Care and Maintenance (continue)

Warning
 **Stop operating and unplug the unit when maintaining the unit.**
 Otherwise electric shock or injury may result.

When it is too dirty or smelly

Water Tank

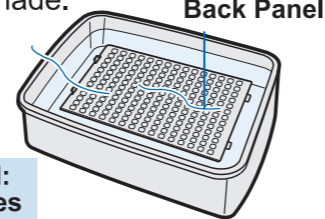
Remove the tank lid and clean the tank inside and the tank lid.



White pollutant may adhere to the rubber part of the tank lid, please clean and maintain it with a toothbrush. Please dry the Water Tank if the unit is not in operation for a long period.

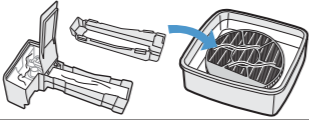
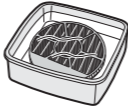
Back Panel

- ① Immerse the back panel into the water where synthetic detergent (for kitchen) is dissolved.
- ② Please rinse it thoroughly and make sure that there is no detergent remained on the back panel.
- ③ Dry it in the shade.



immerse period:
about 10 minutes

Humidifying Filter, Tray, Tray Lid

Smudginess status	Scale and odor	White substance
Items to be cleaned	Humidifying Filter, Tray, Tray Lid	Humidifying Filter
Preparation	Synthetic detergent powder (for kitchen) Please do not use the detergent if it is foamy, smelly, alkaline or acidic.	Citric acid available at drug store
Agent	Adequate water or warm water ($\leq 40^{\circ}\text{C}$)	Adequate water or warm water ($\leq 40^{\circ}\text{C}$)
Cleaning method	Immerse and wash. 	Immerse and wash. 
Immerse period	About 30 to 60 minutes	About 2 hours
After immersing	Please clean the filter thoroughly and make sure no detergent or citric acid is remained; otherwise, it may cause odor, deformation or change of color.	

Caution

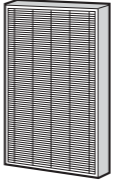
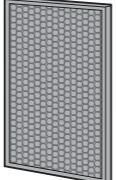

- Please do not use the detergent if it is foamy, smelly, alkaline or acidic, otherwise it may cause deformation, change of color or leakage.
- If the filter has not been cleaned thoroughly, it may cause odor, deformation or change of color.

When it is hard to remove the odor from the Humidifying Filter

- ① Please dissolve bicarb into the water and immerse the filter into the solution for about 30 minutes.
- ② After immersing, please rinse with water thoroughly. Please add 60g bicarb into 1000ml water.

Things to Remember


Function of Filter

	HEPA Filter	Active Carbon Deodorizing Filter	De-formaldehyde Filter
Removable Substance	 <ul style="list-style-type: none"> • Pollen or allergen (feces or dead bodies of mites) • Virus • Mold • Dust or dirt • Smoke of cigarettes • Pet hair 	 <ul style="list-style-type: none"> • Smell of cigarettes (odor) • Odor in washroom • Odor of garbage • Odor of pet 	 <ul style="list-style-type: none"> • Formaldehyde • Smell of cigarettes (odor) • Odor in washroom • Odor of garbage • Odor of pet
Irremovable Substance	<ul style="list-style-type: none"> • Harmful gas (eg.CO from cigarettes) • Continuous odor (eg.Odor of building materials or pets) 		

Effective Usages

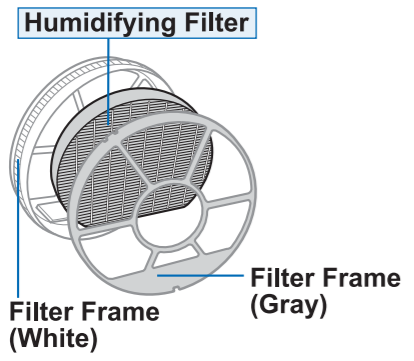
- Since the air purifier is the machine which collects indoor dust and odor, odor will stick on the filter surface if there is strong smell of aromatic, sesame oil, cigarettes or barbecue in the room; therefore, odor may occur in several weeks or months. If the above situation occurs, please care and maintain Active Carbon Deodorizing Filter, HEPA Filter, Deformaldehyde Filter and Humidifying Filter. If it still doesn't work, please replace with new ones.
- If there is strong smell in the room, please exchange the indoor air regularly.
- Compared to dust removal, deodorization costs more time.
- **Please do not use silicone cosmetics near the unit.** If silicone adheres to the unit, the unit may not generate Plasmacluster Ion.
 * Hair Products such as Mousse, hair-care liquid, make-up, antiperspirant, anti-water spray, brightener, window cleanser, chemical wiper and wax, etc.

Filter Replacement

Warning
 **Stop operating and unplug the unit when maintaining the unit.**
 Otherwise electric shock or injury may result.

Humidifying Filter about every 5 years※

Model: FZ-Z380MF-HK **Please use the original filter frame when replacing the filter.**



Different water quality may lead to different service life of Humidifying Filter. Please replace the filter if the following situation occurs within 5 years:

- The scale or odor cannot be removed even if the filter has been maintained.
- The color of the filter has changed to black or yellow, or the filter is polluted seriously.
- White substance covers the Humidifying Filter thoroughly.
- The filter is damaged or seriously deformed.

(Please follow the instruction of Care and Maintenance in the manual when replacing the Humidifying Filter.) (E-14)

Caution

- Please discard the used Humidifying Filter according to the garbage classification method in your area.

Humidifying Filter material.....Rayon, PET

- Humidifying Filter is consumable; you have to pay for the replacement filter even if the filter is under warranty.

※If the unit is operated at Clean Air & Humidify mode for 12 hours a day, different water quality or operation condition will lead to different replacement cycle of filters.

HEPA Filter, De-formaldehyde Filter, Active Carbon Deodorizing Filter

HEPA Filter: about every 10 years※
Active Carbon Deodorizing Filter: about every 10 years
De-formaldehyde Filter: about every 2 years

	Model
HEPA Filter	FZ-WE61GH-HK FZ-CD30BH-HK FZ-CD20BH-HK
De-formaldehyde Filter	FZ-C151VFS-HK FZ-C101VFS-HK FZ-C71VFS-HK
Active Carbon Deodorizing Filter※	FZ-BD60ZD-HK FZ-BD30ZD-HK FZ-BD20ZD-HK

These are not washable, please replace regularly. (Please replace the filter according to the Filter Installation Instruction in the manual.) (E-8)

Caution

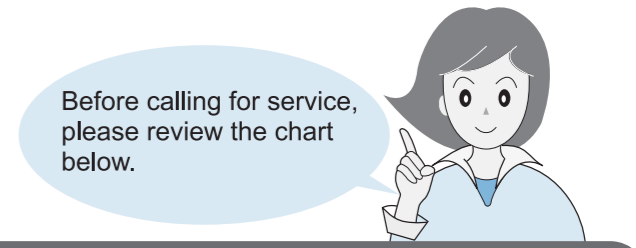
- Please put paper under the filter when replacing the unit, otherwise the surrounding may be polluted.
- Please discard the used filters according to the garbage classification method in your area.

HEPA Filter material.....polypropylene, polyethylene
De-formaldehyde Filter material.....mesh, polypropylene, polyester

- The filter may be smelly within several weeks or months according to different operation condition; when the above situation occurs, please replace the filter.
- Filter is consumable; you have to pay for the replacement filter even if the filter is under warranty.

※The estimate filter replacement cycle: when the filter's dust collecting ability decreases to 50% of its initial stage (suppose the dust collection amount of the HEPA Filter is equivalent to five cigarettes a day). According to The Japan Electrical Manufacturers' Association Standards JEM1467, the replacement cycle is about five years if its dust collection amount is equivalent to ten cigarettes a day.

Troubleshooting



	Problems	Please check	Please refer to																								
Humidification	Water level in the tank does not decrease or decreases slowly.	<ul style="list-style-type: none"> • Is the unit set at "AUTO", "POLLEN" or "TURBO" mode? → The unit will stop humidifying when the room humidity reaches at the appropriate level. • Is the water tank, tray or humidifying filter installed correctly? • Is there scale or dust on the humidifying filter? → Please care and maintain the above. • The humidity may change according to different humidity and temperature in the room. e.g. When it is wet (like in rainy days) or cold, the humidifying amount will decrease and the water level in the tank will decrease slowly. When it is dry or hot, the humidifying amount will increase and the water level in the tank will decrease quickly. 	10~11 14 14~15,18 —																								
	The humidity does not rise up.	<ul style="list-style-type: none"> • Is the room too big? → Please operate the unit within the recommended area. • Is there any water remain in the water tank? • Is there any scale or dirt on the humidifying filter? → Please care and maintain the unit. 	9 14~15,18																								
Odor	It's hard to remove odor and/ or smoke.	<ul style="list-style-type: none"> • Is the filter packed in the plastic bags? → Please take out the filter from the plastic bags. • Does the air from the air outlet become weaker? → Please clean the dust at the following locations which is marked with ★. <table border="1" style="margin: 10px auto;"> <thead> <tr> <th colspan="8">Maintenance</th> </tr> <tr> <th>Main Unit</th> <th>Back Panel</th> <th>Water Tank</th> <th>Tray</th> <th>Humidifying Filter</th> <th>Active Carbon Deodorizing Filter</th> <th>De-formaldehyde Filter</th> <th>HEPA Filter</th> </tr> </thead> <tbody> <tr> <td></td> <td>★</td> <td></td> <td></td> <td>★</td> <td>★</td> <td>★</td> <td>★</td> </tr> </tbody> </table>	Maintenance								Main Unit	Back Panel	Water Tank	Tray	Humidifying Filter	Active Carbon Deodorizing Filter	De-formaldehyde Filter	HEPA Filter		★			★	★	★	★	8 14~18
	Maintenance																										
Main Unit	Back Panel	Water Tank	Tray	Humidifying Filter	Active Carbon Deodorizing Filter	De-formaldehyde Filter	HEPA Filter																				
	★			★	★	★	★																				
	The discharged air is smelly.	<ul style="list-style-type: none"> • Is the unit operated in a room with strong smell. e.g. If there is a strong smell of cigarette or barbecue in the room, the filter might be smelly within several weeks or months; at this time, please replace the filter. → We advice you to ventilate the room regularly when the unit is on. • Please check the ★ part as below and maintain the places where odor occurs. <table border="1" style="margin: 10px auto;"> <thead> <tr> <th colspan="8">Maintenance</th> </tr> <tr> <th>Main Unit</th> <th>Back Panel</th> <th>Water Tank</th> <th>Tray</th> <th>Humidifying Filter</th> <th>Active Carbon Deodorizing Filter</th> <th>De-formaldehyde Filter</th> <th>HEPA Filter</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>★</td> <td>★</td> <td>★</td> <td>★</td> <td>★</td> <td>★</td> </tr> </tbody> </table>	Maintenance								Main Unit	Back Panel	Water Tank	Tray	Humidifying Filter	Active Carbon Deodorizing Filter	De-formaldehyde Filter	HEPA Filter			★	★	★	★	★	★	— 14~18
Maintenance																											
Main Unit	Back Panel	Water Tank	Tray	Humidifying Filter	Active Carbon Deodorizing Filter	De-formaldehyde Filter	HEPA Filter																				
		★	★	★	★	★	★																				
Sound	A sound of "pip, pip" comes out from the unit.	<ul style="list-style-type: none"> • It is the sound of bubbles when they come from the water tank to the tray. According to different humidification amount, the frequency of the sound will be different. It is not a breakdown. 	—																								
	A clicking or ticking sound comes out from the unit.	<ul style="list-style-type: none"> • It is the sound from the generation of Plasmacluster Ions instead of a breakdown. According to different operation condition and operation mode, the sound volume may be different but the effect will stay the same. 	—																								

Troubleshooting (continue)

Problems	Please check	Please refer to																								
Front Monitor	<p>The reading on the Dust Monitor or Odor Monitor does not change.</p> <ul style="list-style-type: none"> The sensitivity of the sensors may be unstable and the light color may not change in a period. After operating for several minutes, the sensitivity of the sensors will turn to be stable. <ul style="list-style-type: none"> However, if the sensitivity stays unstable after operating for several minutes, please adjust it. If the light stays green, the air in the room is fresh. Sometime it will be hard to monitor the odor since the odor is far away from the sensors. If the color of the Dust Monitor Indicator changes when blowing smoke to the unit or pat towel near the unit, it is not a breakdown. If the indoor odor is very strong, sometimes the sensitivity of the odor monitor may come down. <ul style="list-style-type: none"> Please set the fan speed at "Medium" for several hours or a single day. Sometimes the sensitivity of the sensors may not conform to the room situation. <ul style="list-style-type: none"> Please stop the operation and adjust the sensitivity. 	13																								
	<p>Dust Monitor or Odor Monitor does not turn green.</p> <ul style="list-style-type: none"> Due to the room's door and windows are always open, the dirty air comes from outside. It takes longer time to clean the air. 	—																								
	<p>Dust Monitor or Odor Monitor Light changes quickly.</p> <ul style="list-style-type: none"> This may be influenced by the wind or huge change in temperature through opening or shutting the door. 	—																								
	<p>The Front Monitor is dazzling.</p> <ul style="list-style-type: none"> The brightness of the Front Monitor can be adjusted or even turned off. Please press the Front Monitor Light Control Button to select your preferred brightness: Bright/ Dim/ Off. 	12																								
Indicator Light	<p>Filter Reset Indicator light is on.</p> <ul style="list-style-type: none"> Please clean and maintain the ★ part. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="8">Maintenance</th> </tr> <tr> <th>Main Unit</th> <th>Back Panel</th> <th>Water Tank</th> <th>Tray</th> <th>Humidifying Filter</th> <th>Active Carbon Deodorizing Filter</th> <th>De-formaldehyde Filter</th> <th>HEPA Filter</th> </tr> </thead> <tbody> <tr> <td></td> <td>★</td> <td>★</td> <td>★</td> <td>★</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Maintenance								Main Unit	Back Panel	Water Tank	Tray	Humidifying Filter	Active Carbon Deodorizing Filter	De-formaldehyde Filter	HEPA Filter		★	★	★	★				14~15
	Maintenance																									
	Main Unit	Back Panel	Water Tank	Tray	Humidifying Filter	Active Carbon Deodorizing Filter	De-formaldehyde Filter	HEPA Filter																		
		★	★	★	★																					
	<p>Filter Reset Indicator does not die out.</p> <ul style="list-style-type: none"> Do you press the Filter Reset button? <ul style="list-style-type: none"> After maintenance, please press the Filter Reset button for 3 seconds at least. 	14~15																								
<p>There is water in the water tank, but the Humidifying Indicator Light does not light on or blink in red.</p> <ul style="list-style-type: none"> Does the float get stuck at any places? <ul style="list-style-type: none"> Please maintain the tray, clean the float and reinstall it back firmly. Are the water tank and the tray installed firmly? <ul style="list-style-type: none"> Please install the water tank and the tray to the unit firmly. The float may be influenced by any magnetic substances (eg. a horn or a microwave oven). Therefore, it may not provide correct water supply information. If the unit is set at "AUTO", "POLLEN" or "TURBO" mode, the unit will stop humidifying and the indicator light will turn off once it reaches the appropriate humidity. 	14,23 7 — 10~11																									
<p>The readings of "Current Humidity" is different from other hygrometers.</p> <ul style="list-style-type: none"> Even in the same room, the humidity and temperature may be different because of different locations. The humidity sensor is different from other hygrometers, therefore their precision and reaction speed to humidity are different. (The reading of humidity is for your reference only.) 	—																									

Problems	Please check	Please refer to	
Float and Wheel	<p>The float and/or the wheel drop(s).</p> <ul style="list-style-type: none"> Please install the float and the wheel according to the following steps. <div style="display: flex; justify-content: space-around;"> <div style="border: 1px dashed gray; padding: 5px;"> <p>float do not disassemble</p> </div> <div style="border: 1px dashed gray; padding: 5px;"> <p>wheel</p> <p>Please hook the wheel crosswise on the ledge of the tray as shown below.</p> </div> </div>	—	
	<p>You want to have the unit restart automatically when power supply recovers from the power cut.</p>	<p>Electric Switch Linkage</p> <ul style="list-style-type: none"> If the plug is taken out when the unit is on operation or power cut suddenly occurs, you can have the unit recover to the operation mode before power cut through the following instruction. <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Setting</div> <div> <p>Unit is OFF</p> <p>Press together for 3 seconds at least</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> High Medium Low </div> <div> <p>Once the (High/Medium/Low) Indicator Light is on for 10 seconds, the setting is finished.</p> </div> </div> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Cancel</div> <div> <p>Unit is OFF</p> <p>Press together for 3 seconds at least</p> </div> </div>	—
Error	<p>The Front Monitor displays E2</p>	<ul style="list-style-type: none"> Please confirm whether the Humidifying Filter, Tray, Tray Lid and the Wheel are firmly installed. Then restart the unit. 	14,23
	<p>The Front Monitor displays </p>	<ul style="list-style-type: none"> Unplug the unit, wait for a minute before inserting the plug again; then restart the unit. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>If the ERROR information shows up again, please contact your dealer or SHARP Service Center.</p> </div>	—

Specifications

Model	KC-AE60					
Power Supply	220V / 50Hz					
Applicable Floor Area (m ²)	46					
Mode	Clean Air			Clean Air & Humidify		
Fan Speed	High	Medium	Low	High	Medium	Low
Air Flow Volume (m ³ /h)	380	270	160	360	270	160
Power Consumption (W)	53	17	4.7	40	18	6.2
Noise Level (dB/A)	61	50	35	60	50	35
Maximum Humidification Amount (ml/h)	760					
Continuous Humidifying Period (h)	Approx. 5.3					
Water Tank Capacity (L)	Approx. 4.0					
Dimensions (mm)	413(W)X646(H)X288(D)					
Weight (kg)	Approx. 11					
Length of Power Cord (m)	2					

Replacement Filters

Filter Category	Filter Model
HEPA Filter	FZ-WE61GH-HK
De-formaldehyde Filter	FZ-C151VFS-HK
Active Carbon Deodorizing Filter	FZ-BD60ZD-HK
Humidifying Filter	FZ-Z380MF-HK

Caution: Lifetime of HEPA Filter is about 10 years※;
 Lifetime of Active Carbon Deodorizing Filter is about 10 years.
 Lifetime of Humidifying Filter is about 5 years;
 Lifetime of De-formaldehyde Filter is about 2 years.

※ Determination for lifetime of HEPA Filter

Filter life and replacement period are based on the condition of smoking 5 cigarettes per day, reducing the dust collection/ deodorization ability to half compared with that of new filters, according to specification of The Japan Electrical Manufacturer's Association JEM 1467, the replacement period is 10 years.

The replacement period differs depending on the operation hours and location of installation.

The filters are consumables; therefore, you have to pay for the new one even it is still in warranty period.

For details, please contact SHARP Service Center.

Model	KC-AE30					
Power Supply	220V / 50Hz					
Applicable Floor Area (m ²)	34					
Mode	Clean Air			Clean Air & Humidify		
Fan Speed	High	Medium	Low	High	Medium	Low
Air Flow Volume (m ³ /h)	280	160	80	250	160	80
Power Consumption (W)	31	10	4.1	26	12	6
Noise Level (dB/A)	58	45	33	57	45	33
Maximum Humidification Amount (ml/h)	600					
Continuous Humidifying Period (h)	Approx. 6.0					
Water Tank Capacity (L)	Approx. 3.6					
Dimensions (mm)	393(W)X603(H)X265(D)					
Weight (kg)	Approx. 9.2					
Length of Power Cord (m)	2					

Replacement Filters

Filter Category	Filter Model
HEPA Filter	FZ-CD30BH-HK
De-formaldehyde Filter	FZ-C101VFS-HK
Active Carbon Deodorizing Filter	FZ-BD30ZD-HK
Humidifying Filter	FZ-Z380MF-HK

Caution: Lifetime of HEPA Filter is about 10 years※;
 Lifetime of Active Carbon Deodorizing Filter is about 10 years.
 Lifetime of Humidifying Filter is about 5 years;
 Lifetime of De-formaldehyde Filter is about 2 years.

※ Determination for lifetime of HEPA Filter

Filter life and replacement period are based on the condition of smoking 5 cigarettes per day, reducing the dust collection/ deodorization ability to half compared with that of new filters, according to specification of The Japan Electrical Manufacturer's Association JEM 1467, the replacement period is 10 years.

The replacement period differs depending on the operation hours and location of installation.

The filters are consumables; therefore, you have to pay for the new one even it is still in warranty period.

For details, please contact SHARP Service Center.

Specifications

Model	KC-AE20					
Power Supply	220V / 50Hz					
Applicable Floor Area (m ²)	24					
Mode	Clean Air			Clean Air & Humidify		
Fan Speed	High	Medium	Low	High	Medium	Low
Air Flow Volume (m ³ /h)	200	130	80	190	130	80
Power Consumption (W)	20	10	4.4	21	11	6
Noise Level (dB/A)	55	45	34	55	45	34
Maximum Humidification Amount (ml/h)	450					
Continuous Humidifying Period (h)	Approx. 6.7					
Water Tank Capacity (L)	Approx. 3.0					
Dimensions (mm)	375(W)X570(H)X234(D)					
Weight (kg)	Approx. 8.1					
Length of Power Cord (m)	2					

Replacement Filters

Filter Category	Filter Model
HEPA Filter	FZ-CD20BH-HK
De-formaldehyde Filter	FZ-C71VFS-HK
Active Carbon Deodorizing Filter	FZ-BD20ZD-HK
Humidifying Filter	FZ-Z380MF-HK

Caution: Lifetime of HEPA Filter is about 10 years※;
 Lifetime of Active Carbon Deodorizing Filter is about 10 years.
 Lifetime of Humidifying Filter is about 5 years;
 Lifetime of De-formaldehyde Filter is about 2 years.

※ Determination for lifetime of HEPA Filter

Filter life and replacement period are based on the condition of smoking 5 cigarettes per day, reducing the dust collection/ deodorization ability to half compared with that of new filters, according to specification of The Japan Electrical Manufacturer's Association JEM 1467, the replacement period is 10 years.

The replacement period differs depending on the operation hours and location of installation.

The filters are consumables; therefore, you have to pay for the new one even it is still in warranty period.

For details, please contact SHARP Service Center.