## **Specifications**

Model		KI-AB60-W					
Power Supply		220V/50Hz					
Applicable Floor Area (m²)			4	9			
Mode	Clean Air Clean Air & Humidify					idify	
Fan Speed	High	Medium	Low	High	Medium	Low	
Air Flow Volume (m³/h)	410	300	90	410	300	130	
Power Consumption (W)	62	36	7	63	37	10	
Noise Level (dB/A)	62	59	37	62	59	42	
Maximum Humidification Amount (ml/h)			76	30			
Water Tank Capacity (L)	Approx. 4						
Dimensions (mm)	410(W)X684(H)X340(D)						
Weight (kg)		Approx. 13					
Length of Power Cord (m)			2	2			

#### Replacement Filters (for retail)

Filter Category	Filter Model (for retail)
HEPA Filter	FZ-BB60XH-HK
Active Carbon & Silica Gel Deodorizing Filter	FZ-BB60XT-HK
De-formaldehyde Filter	FZ-BB60XV-HK
Humidifying Filter	FZ-BB60XK-HK

#### Caution:

Lifetime of HEPA Filter is about 10 years.

Lifetime of Active Carbon & Silica Gel Deodorizing Filter is about 10 years.

Lifetime of Humidifying Filter is about 5 years.

Lifetime of De-formaldehyde Filter is about 2 years.

Calculation Grounds for Service Life of HEPA Filter/Active Carbon & Silica Gel Deodorizing Filter Suppose the dust collection/deodorization amount is equivalent to five cigarettes per day, when the filter's dust collecting ability/deodorization ability decreases to 50% of its initial stage, it is time to replace the filter. According to The Japan Electrical Manufacturers' Association Standards JEM1467, the replacement cycle is about five years if its dust collection/deodorization amount is equivalent to ten cigarettes per day.

The actual replacement cycle depends on the operation period and the location of the unit.

All filters are comsumable; you have to pay for the replacement filter even if the filter is under warranty.

For details, please contact SHARP Service Center.



TINS-A165SRRZ (1)

## SHARP

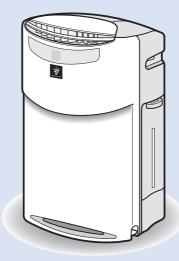
Air Purifier

Humidifying Air Purifier

## OPERATION MANUAL KI-AB60-W



High-Density 25000\*1



\*1"High-Density 25000" is the approximate amount of ions that a Humidifying Air Purifier equipped with a PCI Ion Generating Unit generates per cubic centimeter; and the figure is measured by setting the unit near the wall, detecting in the middle of the room which is restricted in size (e.g. 1.2 meters above the floor), and Fan Speed is set at Medium. This machine is equipped with the PCI Ion Generating Unit.

Thanks for purchasing the SHARP Air Purifier. Please read this manual carefully to get a thorough idea before operation. Please keep the manual properly for future reference.



Plasmacluster and its logo are trademarks of Sharp Corporation.

#### **CONTENTS**

Features	E-2
Frequently Asked Questions	E-3
Precautions	E-4
	E-6
Things to Remember  Location Requirements	E-0
Use Effectively	
· ·	F 7
Parts Names	E-7
Main Unit     Control Band Maniton	F 0
Control Panel and Monitor	E-8
Before Operation	E-10
Filter Installation	- 44
Fill the Water Tank	E-11
Operation	E-12
Clean Air & Humidify Mode	L 12
Clean Air Mode	
Clean Ion Shower Mode	E-13
Function	E-14
Key Lock	L-14
Front Monitor Light: Bright/Dim/Off	
PCI ON/OFF	
<ul> <li>Humidity / 24H Power Consumption</li> </ul>	E-15
Switch	
• Timer	
<ul> <li>Water Supply Alarm</li> </ul>	E-16
<ul> <li>Adjustment of Sensor Detection</li> </ul>	
Sensitivity	
Auto Recovery	E-17
Care and Maintenance	E-40
Care and Maintenance	E-18
<ul> <li>Filter Maintenance Indicator Light:</li> </ul>	E-18
• Filter Maintenance Indicator Light: have it maintained when the light is on	E-18
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> </ul>	E-18
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> </ul>	E-18
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> </ul>	
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> </ul>	E-18 E-20 E-21
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter De-formaldehyde Filter</li> </ul>	
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         <ul> <li>De-formaldehyde Filter</li> <li>Active Carbon &amp; Silica Gel</li> </ul> </li> </ul>	
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         <ul> <li>De-formaldehyde Filter</li> <li>Active Carbon &amp; Silica Gel</li> <li>Deodorizing Filter</li> </ul> </li> </ul>	
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         <ul> <li>De-formaldehyde Filter</li> <li>Active Carbon &amp; Silica Gel</li> <li>Deodorizing Filter</li> </ul> </li> <li>Water Tank</li> </ul>	E-20 E-21
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         <ul> <li>De-formaldehyde Filter</li> <li>Active Carbon &amp; Silica Gel</li> <li>Deodorizing Filter</li> </ul> </li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> </ul>	E-20 E-21 E-22
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         <ul> <li>De-formaldehyde Filter</li> <li>Active Carbon &amp; Silica Gel</li> <li>Deodorizing Filter</li> </ul> </li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> </ul>	E-20 E-21 E-22 E-23
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         <ul> <li>De-formaldehyde Filter</li> <li>Active Carbon &amp; Silica Gel</li> <li>Deodorizing Filter</li> </ul> </li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance</li> </ul>	E-20 E-21 E-22
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         <ul> <li>De-formaldehyde Filter</li> <li>Active Carbon &amp; Silica Gel</li> <li>Deodorizing Filter</li> </ul> </li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance of PCI Ion Generating Unit</li> </ul>	E-20 E-21 E-22 E-23 E-24
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         <ul> <li>De-formaldehyde Filter</li> <li>Active Carbon &amp; Silica Gel</li> <li>Deodorizing Filter</li> </ul> </li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance of PCI Ion Generating Unit</li> <li>Filter Replacement</li> </ul>	E-20 E-21 E-22 E-23
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         <ul> <li>De-formaldehyde Filter</li> <li>Active Carbon &amp; Silica Gel</li> <li>Deodorizing Filter</li> </ul> </li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance of PCI Ion Generating Unit</li> <li>Filter Replacement</li> <li>Humidifying Filter</li> </ul>	E-20 E-21 E-22 E-23 E-24
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         <ul> <li>De-formaldehyde Filter</li> <li>Active Carbon &amp; Silica Gel</li> <li>Deodorizing Filter</li> </ul> </li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance of PCI Ion Generating Unit</li> <li>Filter Replacement</li> <li>Humidifying Filter</li> <li>HEPA Filter</li> </ul>	E-20 E-21 E-22 E-23 E-24
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         De-formaldehyde Filter         Active Carbon &amp; Silica Gel         Deodorizing Filter</li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance         of PCI Ion Generating Unit</li> <li>Filter Replacement</li> <li>Humidifying Filter</li> <li>HEPA Filter</li> <li>Active Carbon &amp; Silica Gel</li> </ul>	E-20 E-21 E-22 E-23 E-24
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         De-formaldehyde Filter         Active Carbon &amp; Silica Gel         Deodorizing Filter</li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance         of PCI Ion Generating Unit</li> <li>Filter Replacement</li> <li>Humidifying Filter</li> <li>HEPA Filter</li> <li>Active Carbon &amp; Silica Gel         Deodorizing Filter</li> </ul>	E-20 E-21 E-22 E-23 E-24
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         De-formaldehyde Filter         Active Carbon &amp; Silica Gel         Deodorizing Filter</li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance         of PCI Ion Generating Unit</li> <li>Filter Replacement</li> <li>Humidifying Filter</li> <li>HEPA Filter</li> <li>Active Carbon &amp; Silica Gel</li> </ul>	E-20 E-21 E-22 E-23 E-24
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         De-formaldehyde Filter         Active Carbon &amp; Silica Gel         Deodorizing Filter</li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance         of PCI Ion Generating Unit</li> <li>Filter Replacement</li> <li>Humidifying Filter</li> <li>HEPA Filter</li> <li>Active Carbon &amp; Silica Gel         Deodorizing Filter</li> </ul>	E-20 E-21 E-22 E-23 E-24
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         De-formaldehyde Filter         Active Carbon &amp; Silica Gel         Deodorizing Filter</li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance         of PCI Ion Generating Unit</li> <li>Filter Replacement</li> <li>Humidifying Filter</li> <li>HEPA Filter</li> <li>Active Carbon &amp; Silica Gel         Deodorizing Filter</li> <li>De-formaldehyde Filter</li> </ul>	E-20 E-21 E-22 E-23 E-24
<ul> <li>Filter Maintenance Indicator Light: have it maintained when the light is on</li> <li>Humidifying Filter</li> <li>Tray &amp; Tray Lid</li> <li>Pre-filter &amp; Back Panel</li> <li>Main Unit</li> <li>HEPA Filter         De-formaldehyde Filter         Active Carbon &amp; Silica Gel         Deodorizing Filter</li> <li>Water Tank</li> <li>When it is too dirty or smelly</li> <li>Filter Function</li> <li>Replacement &amp; Maintenance         of PCI Ion Generating Unit</li> <li>Filter Replacement</li> <li>Humidifying Filter</li> <li>HEPA Filter</li> <li>Active Carbon &amp; Silica Gel         Deodorizing Filter</li> <li>De-formaldehyde Filter</li> </ul>	E-20 E-21 E-22 E-23 E-24

Specifications

## **Features**



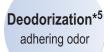
**Dual purifying of filters and High-Density** Plasmacluster Ion 25000 \*1 clean the air in the room effectively.

Same as ions found in Nature

Air purifying ability is explained \*2

Safety is confirmed \*3









- \*1 Please refer to the note on the front cover \*2 Professor Artmann, Aachen University of Applied Sciences, Germany
- (airborne bacteria and viruses) Graduate School of Advanced Sciences of Matter, Hiroshima University Japan (airborne allergens)
- \*3 Mitsubishi Chemical Medience Corporation
- \*4 Dr. Melvin First, Honorary Professor, Harvard School of Public Health USA (airborne bacteria)
- In a 16m<sup>2</sup> (40m<sup>3</sup>) experimental room, 99% of airborne becteria are inactivated after 38 minutes
- \*5 Japan Spinners Inspecting Foundation, Japan After 60 minutes deodorization, the odor of smoke on the cloth is nearly imperceptible
- \*6 Soiken Inc.
- According to the difference of season, ambient temperature (e.g. temperature, humidity and airflow etc.), operating time and method, the effect may differ.
- \*7 It can collect over 99.97% 0.3µm dust and dirt.







\*8 It is experimented in the condition of smoking 5 cigarettes per day and according to the specification of the Japan Electronical Manufacturer's Association JEM 1467.

The deodorization effect may differ in accordance with the different variety and intensity of odor or different service condition

According to liquid absorptive method JIS L1902, the anti-bacteria agent on the Back Panel can prevent 99% of the adhering bacteria \*10 KAKEN TEST CENTER

According to mold resistance experiment JIS Z2911, the anti-bacteria agent on the back panel suppress the breed of the adhering mold.

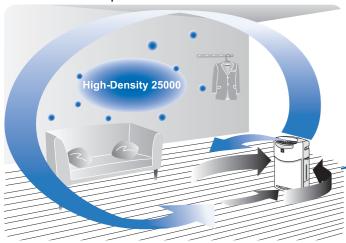
#### Purifying Effect of a PCI Air Purifier

Pasteur Institute of Nhatrang executes the HD-124 performance appraisal experiment of the Japan Electronical Manuafacturer's Association in the 10m² (25m³) experiment room. 99% of a certain kind of airborne virus is suppressed in about 18 minutes The experiment unit is air purifier FU-Z30CX\*; and the operation mode is set as PCI on

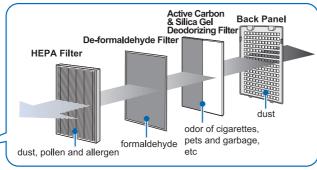
Fan Speed Maximum.

\* In order to ensure the suppressing effect, the experiment unit we used is an air purifier.

- · Plasmacluster Technology can inactivate airborne viruses, decompose allergens such as feces or dead bodies of mites; however, this technology cannot create a completely sterile environment. This unit cannot guarantee the ability of preventing microbial infection.
- The actual ion release amount and the effect of degerming\*4, air purifying and skin beautifying\*6 will vary according to different room condition (e.g. size, shape and ventilation of the room, use of air-conditioner, location of the unit, etc.) and operation method (e.g. blowing direction of ions and operation mode, etc.)
  - · quickly collect dust and pollen, etc
  - inhale contaminants from all sides
  - · unique circulation airflow



#### Through Four Layers of Filters



#### **Back Airflow**



In order to get a stable effect of releasing PCI, this unit requires a regular replacement\* of the PCI Ion Generating Unit.

\* If the operation period is about 17500 hours (24 hours operation every day), the replacement cycle is about two years.

After operating for about 19000 hours (about 2 years and 2 months), the Front Airflow of the unit will stop operation while the Back Airflow will keep on working.

## **Frequently Asked Questions**

#### Why steam or vapour cannot be seen during humidification? Is it over-humidifying?

Since the unit employs the way of vaporization through the Humidifying Filter instead of the way of water-boiling, steam or vapour cannot be seen. There is no heating wire used when humidifying, so it saves the electricity cost. Moreover, it can control the humidifying amount, therefore, the overhumidifying situation cannot happen. And it can be confirmed by checking the Humidifying Indication Light.



#### Why the humidity is not increasing even when the unit is set at CLEAN AIR & HUMIDIFY Mode?

In the condition that the Water Tank is empty and there is scale or dirt adhering to the Humidifying Filter, sometimes the humidity may not be able to reach the proper humidity. Please clean and maintain the Humidifying Filter and Tray. (E-18,E-19,E-22)

Moreover, different room size and condition may cause the above situation as well. In the event that humidity cannot reach the proper humidity, please set Fan Speed at "MEDIUM" or "HIGH".



#### Why the air coming out from the air outlet feels cold?

In order to spread the High-density Plasmacluster Ion to the whole room efficiently, the Front Air Outlet and the Back Air Outlet of this unit blow air out in both directions at the same time. Therefore, it may be cold for one because of the location of the unit.

(When feeling cold, please change the location of the unit or set Fan Speed at "ENERGY SAVING".) In addition, the Humidifying Filter may absorb heat from the air in the room, therefore, the air coming out from the Back Air Outlet may be colder than that in the ambient temperature.

Different room size may cause coldness as well.

(The air from the Back Airflow is about 15℃ when the ambient temprature is 20℃ and the humidity is 30%.)



#### Is it necessary to use tap water?

It is recommended to use tap water as bacteria are hard to breed in chlorinated

If other water (e.g. mineral water, well water and filtrated water etc) is used, mold and bacteria are easy to breed.





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

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 HEPA Filter, Active Carbon & Silica Gel Deodorizing Filter, Humidifying Filter, De-formaldehyde Filter, Tray and Water Tank. (E-18 to E-22)



#### Why there is a sound of "beep"?

It is normal. It is the sound when the PCI Ion Generating Unit generates Plasmacluster Ion. (Sometimes it may change at intervals.)

The degree of the sound may differ according to different operation condition or mode. Sometimes no sound can be heard, however, the air purifying effect is the same.



#### Why the air coming out from outlet become weaker? Why there is a splashing sound?

Is there any dust adhering to Back Panel or Pre-filter?

Please clean and maintain the Back Panel and Pre-fliter. (E-19)



#### Is it necessary to replace the **PCI Ion Generating Unit?**

In order to get a stable effect of releasing PCI, this unit requires a regular replacement of the PCI Ion Generating Unit. (E-24 to E-25)

For more details, please refer to troubleshooting. (E-27 to E-31)

## **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 and Active Carbon & Silica Gel Deodorizing 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

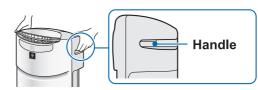
- When operating the unit, please place the unit at least 2 meters away from equipments with electric waves such as televisions, radios or clocks, so that electrical interference can be avoided.
- Do not install the unit in the place where the sensor is exposed to direct wind. Otherwise the unit may 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

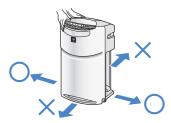
Please follow the instruction in this manual to care and maintain the filters correctly.



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.



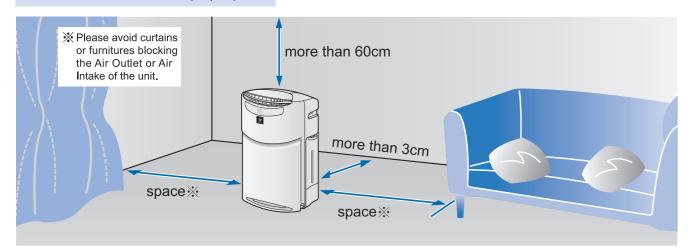
Please move the unit in left or right direction slowly.



## **Things to Remember**

#### **Location Requirements**

#### Please locate the unit in the proper place.



#### Please locate the unit 30cm away from the wall so as to collect dust effectively.

Even if the unit is located 3cm away from the wall, the dust collecting ability will not change; however, it may dirt the wall or the floor.

- •Please operate the unit in the temperature range from 0°C to 35°C.
- Otherwise dew or frost may influence the life time of the filter or break down the unit.
- •Please avoid direct sunlight. Otherwise it may lead to change of shape, quality and/or color of the main unit.
- •Do not locate the unit near the windows and/or the air outlet of an air-conditioner or a heater.
- Otherwise it may lead to change of shape, quality and/or color of the main unit or malfunction of the sensors.
- •Please put the unit in flat and stable places. Otherwise it may damage the ground.
- •Please keep the unit away from the wall if the wall or furniture near the unit gets dirty.
- •When the unit is used at the same place for a long time, please make sure if the ground or the wall near the unit gets dirty.
- Please change the location of the unit frequently and clean the ground.
- •When this unit is interfered with radio or television reception, and cause incorrect time display on the radio-controlled timekeeper, please keep it away from TV sets, radios and radio-controlled timekeeper.

#### **Use Effectively**

• 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 clean and maintain Active Carbon & Silica Gel Deodorizing Filter, HEPA Filter, De-formaldehyde Filter and Humidifying Filter. If it still doesn't work, please replace with the new ones.

- If there is strong smell in the room, please exchange the indoor air regularly.
- Compared to dust removal, deodorization costs more time.



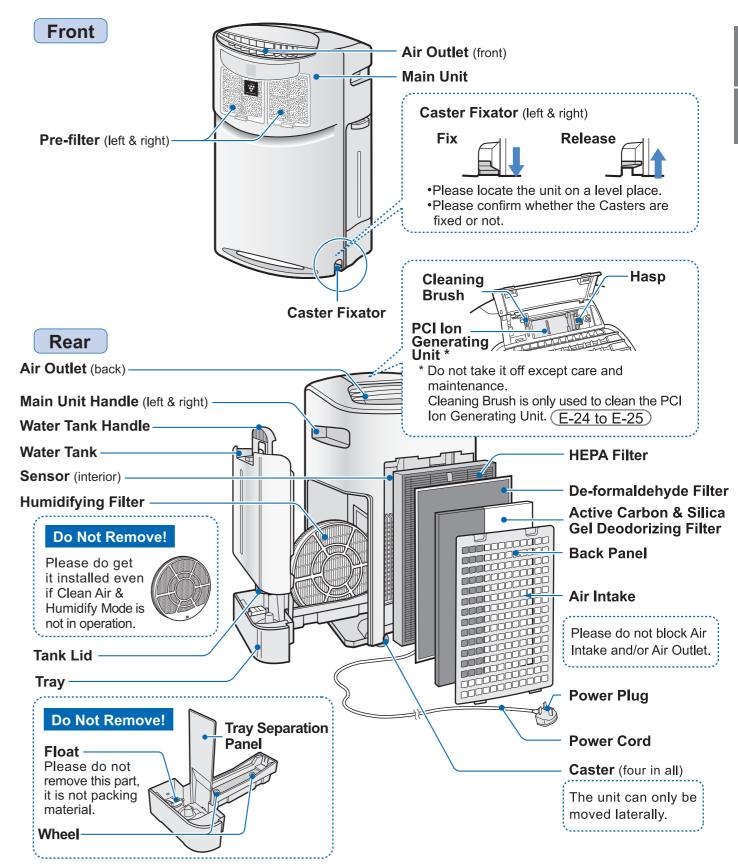
- •Please do not use silicone cosmetics\* near the unit.
- \*Hair products such as Mousse, hair-care solution, cosmetic, antiperspirant, antistatic agent, waterproof spray, brightener, window cleanser, chemical wiper and wax, etc.

If insulative substances like fluoroplast or silicone adhering to the interior of the unit, it will be hard to generate Plasmacluster Ion.

If error information " [[]] " is on display, please maintain the PCI Ion Generating Unit. (E-24.E-25.E-31)

## **Parts Names**

#### **Main Unit**



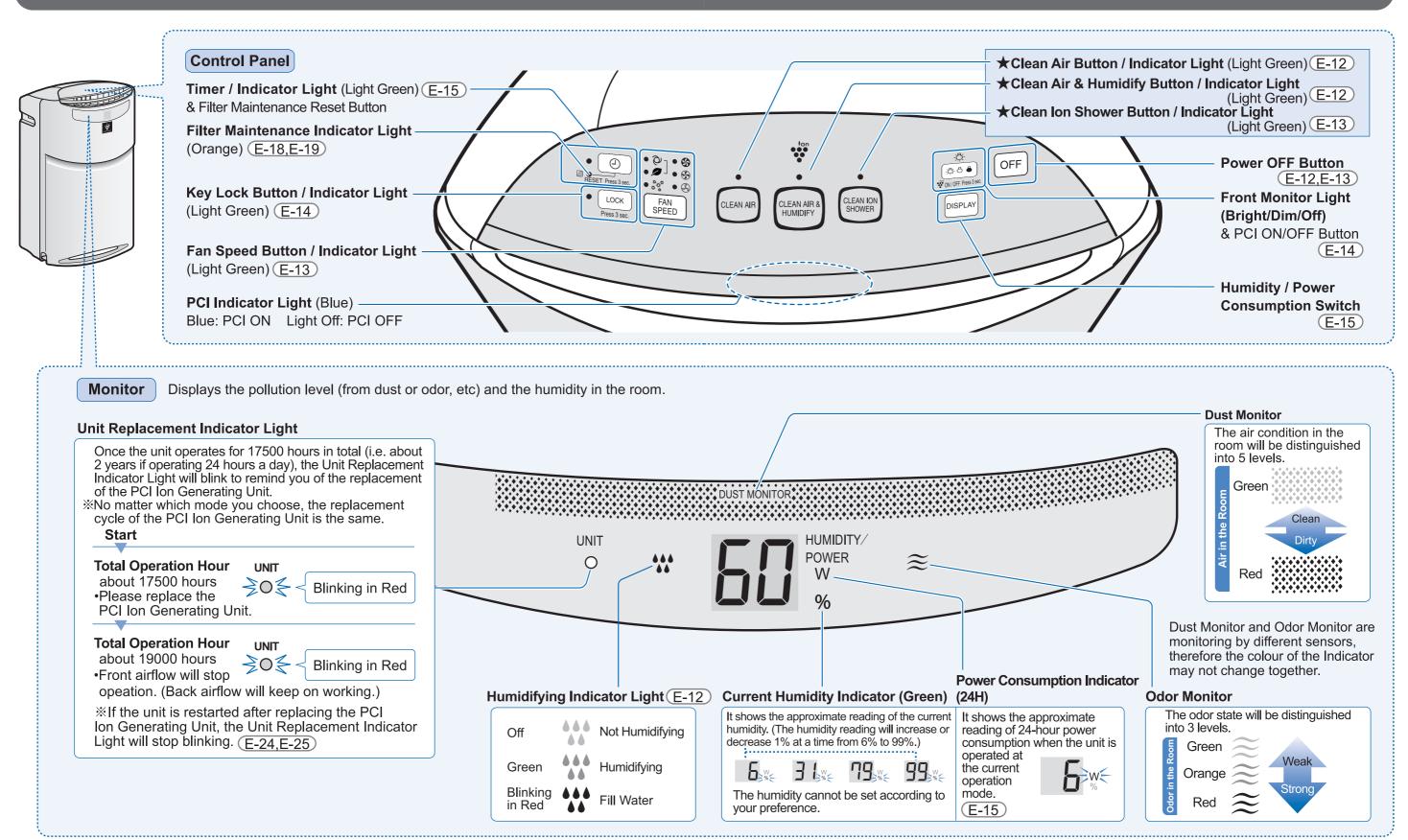
F-6

## Parts Names (continue)

## This unit will start to operate once the buttons marked with ★ are pressed.



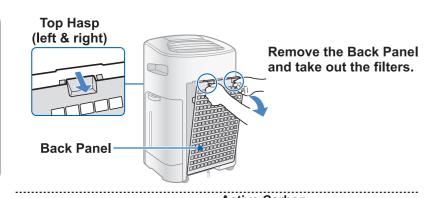
#### **Control Panel and Monitor**



## **Before Operation**

#### **Filter Installation**

#### Please do the following steps before plug into the socket.



 There are three filters in the unit.

- De-formaldehyde & Silica Gel Deodorizing Filter\*
  - Please take out these 3 filters from plastic bags.

    \*The real filter may

    \*HEPA Filter, De-formaldehyde Filter and Active Carbon & Silica Gel Deodorizing Filter
  - should not be washed.
    Otherwise the filters will lose efficacy.

    There might be a slight of smell when taking out the filters from
    - not the problem of the filters.

       When installing the HEPA

Filter, please put the black side

the plastic bags, however, it is

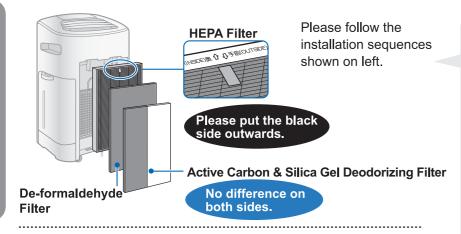
outwards.

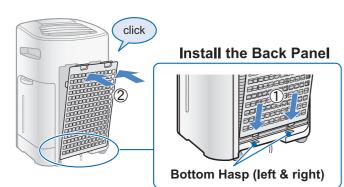
It will be easier to take the filters out if you pull the top label of the HEPA Filter to the front side of the Active Carbon & Silica Gel Deodorizing Filter.

## HEPA Filter

Label

-abei
Active Carbon & Silica
Gel Deodorizing Filter





#### **Fill the Water Tank**

#### Please fill water in the Water Tank before operating Clean Air & Humidify Mode.

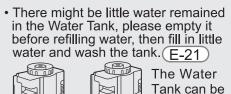


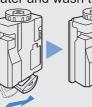
To remove the Water
Tank, please push
down the handle and
pull outwards.

• Be careful, do not let water spill over.



Remove the Tank
Lid, fill in little water
to wash the inside,
and then fill in tap
water.





Tank can be placed in upright position.



- 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.)



Tighten the Tank Lid.

 Please tighten the Tank Lid and make sure there is no leak of water.



- Please wipe off the water near the Water Tank.
- Be careful. Avoid any accident.
- When installing, do not move the unit and make sure the Water Tank is installed firmly.

click 2

E-10 E-11

#### Plug into the socket.



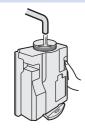
## **Operation**

#### **Clean Air & Humidify Mode**

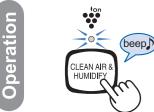
In general, the following operation is recommended. (The humidity cannot be adjusted according to your preference.)







Add tap water into the Water Tank. (E-11)



Choose your favourite Fan Speed. (E-13)



 Plug into the socket to start operation, the initial settings are Fan Speed at AUTO, PCI at ON.

• From the 2nd time, the operation mode will stay the same as the former one.

#### **Humidifying Indicator Light**

Off

Not Humidifying\*

Green

Humidifying

**♦♦♦** Blinking in Red

Fill Water

\* When Fan Speed is set at AUTO, ENERGY SAVING, or POLLEN, once it reaches the proper humidity, the unit will stop humidifying and the Humidifying Indicator Light will be off.



- Once the Water Tank is empty, the Humidifying Indicator Light will blinking in RED and the Humidifying Mode will be OFF while other modes will still operate as usual.
- If Fan Speed is set at AUTO, ENERGY SAVING or POLLEN, 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.

Room Temp.	Humidity
~18°C	65%
18°C ~ 24°C	60%
24°C ~	55%

#### **Clean Air Mode**

Please use this mode in high humidity or rainy days. (Even if the Water Tank is empty, the unit can still be working.)

Operation



Choose your favourite Fan Speed. (E-13)

- AUTO, PCI at ON. • From the 2nd time, the operation mode will stay the same as the former one.

 Plug into the socket to start operation, the initial settings are Fan Speed at

**Humidifying Indicator Light** 



**Not Humidifying** 

#### **Clean Ion Shower Mode**

#### The air in the room suddenly turns dirty.

The unit will operate in this mode together with CLEAN AIR & HUMIDIFY Mode and HIGH Fan Speed Mode within 60 minutes. After 60 minutes, it will return to the former operation mode.



If the unit is directly set at CLEAN ION SHOWER Mode when it gets started, it will return to the last operation mode when it gets stopped after operating **CLEAN ION SHOWER Mode for 60** 





- · Solution to pollen inside the room
- When or after operating the vacuum cleaner
- Laundry are taken in
- · Quickly get rid of odor
- Solution to the cooking odor or laundry odor

#### **Humidifying Indicator Light**



- \* Once it reaches the proper humidity, the unit will stop humidifying and the Humidifying Indicator Light will be off.
  - If the Water Tank is empty, the Humidifying Indicator Light will stay OFF when CLEAN ION SHOWER Mode is in operation.



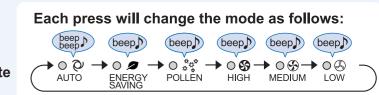
- · Once the Water Tank is empty, the Humidifying Indicator Light will blink in RED and the operation wil continue without humidifying.
- · When PCI is set at OFF, there will be no Plasmacluster Ion coming out; however, dust and odor can still be removed from the air.

#### Fan Speed

When the unit is set at CLEAN AIR & HUMIDIFY Mode or CLEAN AIR Mode, Fan Speed can be adjusted.

- \*\*\* 🔊

Choose your favourite Fan Speed. SPEED

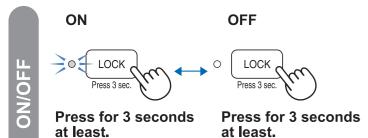


O QUAUTO	Fill the room with High-density Plasmacluster Ion; monitor the room situation through Dust Monitor, Odor Monitor and Humidity Monitor; switch to different Fan Speed automatically.
O ENERGY SAVING	Monitor the room situation through Dust Monitor, Odor Monitor and Humidity Monitor; switch to different Fan Speed automatically; control power consumption effectively and operate the unit quietly.
O 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 in order to remove pollen effectively.
○ 🚱 нідн	Operating at HIGH Fan Speed. (Operation sound will increase.)
○ <b>③</b> MEDIUM	Operating at MEDIUM Fan Speed.
○ ⊗ LOW	Operating at LOW Fan Speed.

## **Function**

#### **Key Lock**

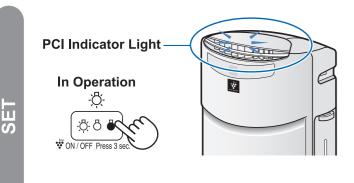
To avoid children touching or playing with the buttons.

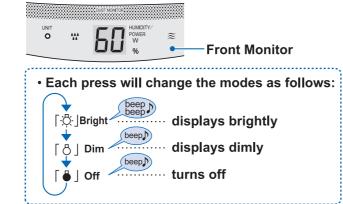


If the unit is locked, you can do nothing before unlocking the unit.
 Once the plug is taken out, the Lock will be released.
 (If Auto Recovery Mode is set on, the Lock will not be released even the plug is taken out from the socket.)

#### Front Monitor Light: Bright/Dim/Off

To avoid the dazzling feeling from Front Monitor Light or PCI Indicator Light.



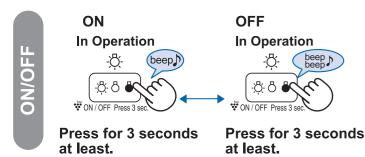




- Even the Front Monitor Light is set at OFF, the Humidifying Indicator Light and the Unit Replacement Indicator Light will blink if it is time to blink.
- Even the Front Monitor Light is set at OFF, the Front Monitor Light will operate at Dim if the unit is restarted.

#### **PCI ON/OFF**

#### To turn on or turn off PCI.

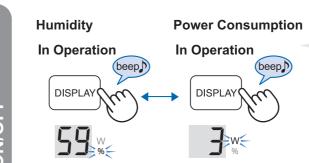


 If PCI is turned off, Plasmacluster Ion will not be emitted, front airflow will stop working as well. (PCI Indicator Light will be OFF.)



#### **Humidity / 24H Power Consumption Switch**

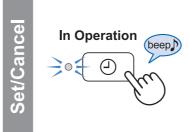
To show the 24-hour power consumption in the current operation mode.



- Displays the approximate power consumption.
- 24H Power Comsuption: the approximate 24 hours power consumption in the current operation mode.
- When it is set at AUTO, ENERGY SAVING, POLLEN, Fan Speed switches automatically. therefore, it only shows the approximate power consumption when it operates continuously for 24 hours at the current Fan Speed.
- Since it will return to the former operation mode after operating at CLEAN ION SHOWER Mode for 60 minutes, it only displays the approximate power consumption when it operates continuously for 24 hours at CLEAN ION SHOWER Mode.
- Even if the Timer is in operation, it only displays the approximate power consumption when it operates continuously for 24 hours at the current operation mode.
- · W is short for watt.

#### Timer

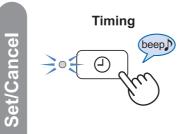
The unit will stop operating when it comes to the set time.



Choose your favourite time within 3 seconds.

- Each press will change the modes as follows:

  | beep | b
- If there is no operation within 3 seconds, it will be regarded as finished. (The Timer Indicator Light will be on.)
- Please set at "release" if you want to cancel the timer. (The Timer Indicator Light will be off.)
- After releasing the setting, it will return to display Humidity/Power Consumption 3 seconds later.



Displays the remaining time. (3 seconds)
 (The reading will be 1 hour if it is less than 1 hour.)



(the remaining time: more than 3 hours but less than 4 hours)  $\,$ 

 Though the remaining time is on display, if you keep on pressing the Timer button, the set time can be changed or the setting can be cancelled.

## Function (continue)

**CANCEL** 

at least.

#### **Water Supply Alarm**

Set/Cancel

### **Not In Operation**

**SET** 

at least.

**Not In Operation** 



- · Once the Water Supply Alarm is set on, you will hear "beep, beep" for about 10 seconds, meanwhile the Humidifying Indicator Light will blink.
- Once the Water Supply Alarm is cancelled. you will hear nothing but the Humidifying Indicator Light will blink.
- Once the plug is taken out, the setting will be cancelled and therefore you will not hear the Alarm.

#### **Dust Monitor or Odor Monitor**

If the Indicator remains in RED or turns to RED frequently, please turn sensitivity to LOW. If the Indicator remains in GREEN, please turn sensitivity to HIGH.



#### **Adjustment of Sensor Detection Sensitivity**

Done



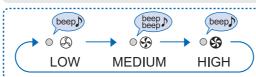
Press for 3 seconds at least.



Choose your favourite Sensor Detection Sensitivity within 8 seconds.



- 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 the plug is taken out, the setting of the Sensor Detection Sensitivity will remain the same.

#### **Detectable Substances**

- room dust (dust, mite, corpose, spore of mold and pollen), smoke of cigarette, etc.
- · cigarettes, smell of incense, cosmetics, alcohol and sprayer, etc.

#### **Auto Recovery**

If Auto Recovery is set on, it will return to the former setting automatically when the unit recovers from a power failure.



Press for 3 seconds at least.



Once the Indicator Light of HIGH, MEDIUM and LOW is set on, the setting is done. (The lights will be on for 10 seconds.)

- If Auto Recovery is set on, it will return to the former setting automatically even if the plug is taken out or a power failure is happened.
- · Auto Recovery is not the default

**Not In Operation** 



Press for 3 seconds at least.

## **Warning**

Stop operating and unplug the unit when maintaining the unit.

Otherwise electric shock or injury may result.

#### Please maintain the unit regularly to keep it clean and tidy. Please maintain the unit carefully so that High-density Plasmacluster Ion can be emitted stably.



#### Filter Maintenance Indicator Light

**Care and Maintenance** 

The Inidicator Light will display in ORANGE a month later (720 hours) if the unit operates 24 hours a day.

Once a month

Please

refer to

П

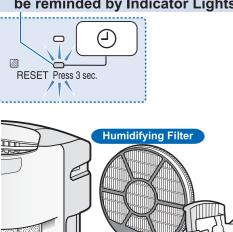
-22

≓ ≓

S.

too

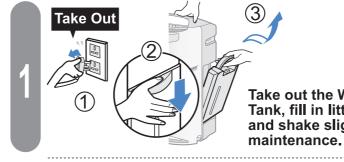
Maintenance cycle of Water Tank, Humidifying Filter, Tray, Tray Lid, Back Panel and Pre-filter will be reminded by Indicator Lights.



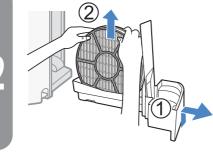
Rear

of Tray Lid

Remove



Take out the Water Tank, fill in little water and shake slightly for



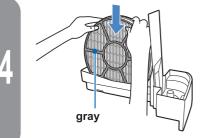
Pull up the Tray a little bit to take out the **Humidifying Filter for** maintenance.

Do not spill out water from the Water Tank.



Remove the Tank Lid and maintain the Tray and Tray Lid.





Please reinstall the above items back into the unit according to the above procedures.

- Please install the Tray Lid
- The two sides of the Humidifying Filter are different, please install properly.

Take out the Pre-filter for maintenance. Maintain the Back Panel when it is installed in the unit.



When maintenance is finished, insert the plug into the socket, press the Timer button for at least 3 seconds until the Filter **Maintenance Indicator Light** 

• After maintenance, even if the Filter Maintenance Indicator Light is off, please press the Timer button for at least 3 seconds. (The maintenance cycle is one month if the unit is operated 24 hours a day, and the Indicator Light will be on again.)

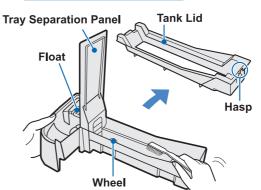
#### **Humidifying Filter**



Flush with water.

Please do not remove the filter frame when washing the Humidifying Filter.

#### Tray & Tray Lid



#### Remove the Tray Lid and wash with water.

Installation method of Tray Separation Panel, Float and Wheel, please refer to (E-31).



- The Tray Separtion Panel is designed to be loose. It is not a flaw.
- · Do not split Tray Separation Panel, Float and Wheel.
- Please pour out the water in the Tray regularly, otherwise it may cause stink or the breeding of mold and bacteria.

#### **Pre-filter & Back Panel**

#### Pre-filter (left & right)

- · Slightly pull the filter outwards and then pull it out downwards.
- The left Pre-filter and the right Pre-filter are different. Please pay attention to the marks on the Pre-filters.
- · Insert the Pre-filter into the unit
- The filters may get damaged if they are pulled in or out by force.

#### **Back Panel**

Please maintain the Back Panel when it is installed in the unit.



maintaining the Pre-filter.

Please cover the ground with

Please use a vacuum cleaner for inhalation and cleaning.



The filters may get damaged if you force too hard.

# Install

• Installation and Removal Method

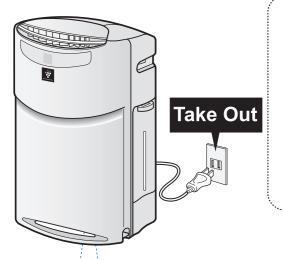
dirty newspapers when 0 smelly

## Care and Maintenance(continue) Otherwise electric shock or injury may result.



#### **Main Unit**

when the unit becomes dirty



Please do not use the following substances. Otherwise, the scratch on the surface or the leakage inside may lead to breakdown.



gasoline

alcohol





detergent detergent bleach (for furniture)

alkaline synthetic atomizing abluent mental brush

#### Surface

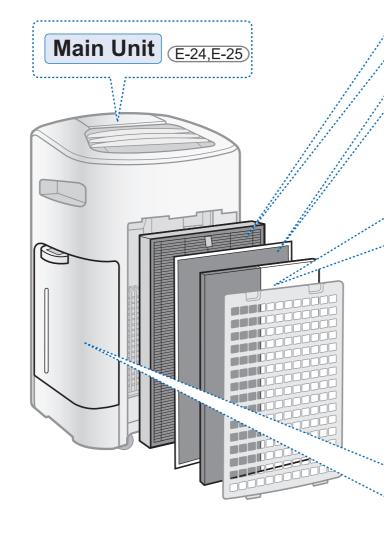


Do not rinse the surface with water.

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 & Silica Gel Deodorizing Filter**

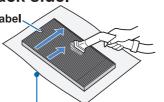
Please maintain HEPA Filter, De-formaldehyde Filter and Active Carbon & Silica Gel **Deodorizing Filter together.** 

will be damaged.

#### **HEPA Filter**



Gently inhale from the black side.



Please cover the ground with newspapers when maintaining the filter.

#### **De-formaldehyde Filter**



Please use a vacuum cleaner to clean the filter carefully and do not damage the filter.

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

Do not wash with water, otherwise the filter

· Remove the odor and dust on the filter.

• Please only clean the marked side. Avoid cleaning the other side, otherwise, the filter will be damaged.

• Do not overexert since the filter can get damaged

#### **Active Carbon & Silica Gel Deodorizing Filter**



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 doing the cleaning. Remove the odor and dust on the filter.



Please cover the ground with newspapers when maintaining the filter.

Do not explose the filter under the sunshine, otherwise the filter will get damaged.

#### **Water Tank**

Gently inhale.

To Fill Water

#### **Water Tank**



#### Add little water and shake the Water Tank.

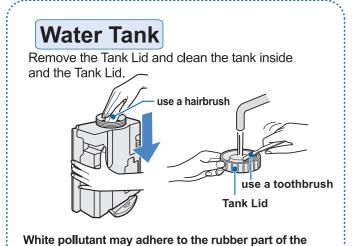


Please hold the tank body instead of the tank handle when shaking the Water Tank.

## Care and Maintenance(continue) Otherwise electric shock or injury may result.



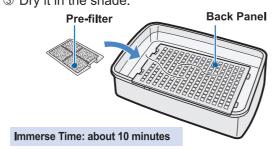
#### When it is too dirty or smelly



Tank Lid, please clean and maintain it with a toothbrush.

#### **Back Panel & Pre-filter**

- 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
- 3 Dry it in the shade.



#### **Humidifying Filter, Tray & Tank Lid**

Smudginess Status	Scale and Odor	White Substance
Items for Maintenance	Humidifying Filter, Tray and Tray Lid	Humidifying Filter
	Synthetic Detergent Power (for kitchen) or Bicarb	Citric Acid
Preparation	Do not use the detergent if it is foamy, smelly, alkaline or acidic. (Usage of Bicarb is shown below.)	It is available at drug stores.
Agent	Appropriate Amount of Water or Warm Water (≤40°C)	Appropriate Amount of Water or Warm Water (≤40°C)
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 deterger it may cause odor, deformation or change of colour.	nt or citric acid is remained; otherwise,



- Do not use the detergent if it is foamy, smelly, alkaline or acdic, otherwise, it may cause deformation, change of colour or leakage.
- If the filter has not been cleaned thoroughly, it may cause odor, deformation or change of colour.
- If the unit is operated in the smudginess status, it may cause leakage.

#### Usage of Bicarb (It is hard to remove the odor from the 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.

#### **Filter Function**

#### This unit is equipped with 6 types of filters.

Filter	Function	Approximate Maintainance Cycle	Approximate Replacement Cycle
Humidifying Filter Filter Frame (white)  (gray)	Absorb water from the Tray and after vaporization, the air is humidified.	Once a Month	Every 5 Years  E-26  Please use the original Filter Frame when replacing the filter.
HEPA Filter*1	Catch pollen, allergen (i.e. feces or dead bodies of mites), mold, dust, dirt, smoke of cigarette, pet hair, etc.	When feeling smelly or dirty  Avoid washing with water.	Every 10 Years E-26
De-formaldehyde Filter	Absorb formaldehyde.	When feeling smelly or dirty  Avoid washing with water.	Every 2 Years E-26
Active Carbon & Silica Gel Deodorizing Filter**2	Absorb and remove the odor of cigarette, the odor in washroom, the odor of garbage and the odor of pet, etc.	When feeling smelly or dirty  Avoid washing with water.	Every 10 Years  (E-26)
Back Panel	Catch big dust.	Once a Month	No Replacement
Pre-filter(left & right)	Catch big dust.	Once a Month	No Replacement

- %1 In order to avoid odor transferring from HEPA Filter, the filter is processed by active carbon (black part).
- \*2 The 2 different colours on the filter mean that the left part and the right part of the filter aim to remove different odor. It is alright to change to the other side when installing the Filter.



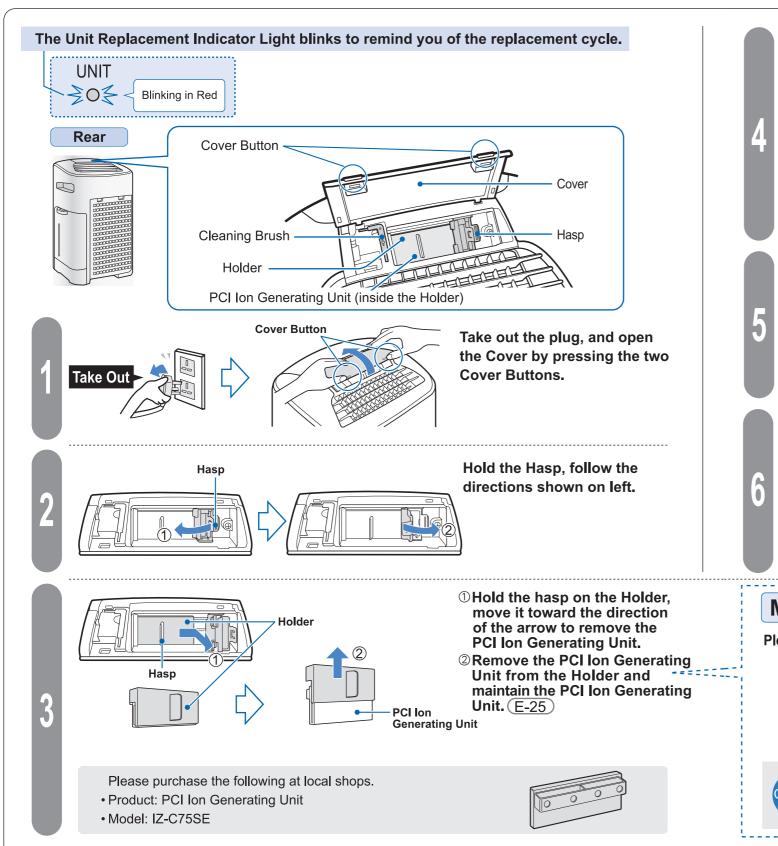
Harmeful gas (e.g. CO from lit cigarettes) or continuous odor (e.g. odor of building materials or pets) cannot be removed totally.

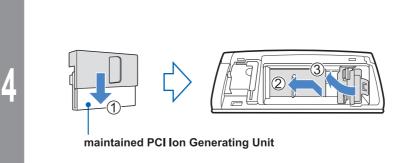
Stop operating and unplug the unit when maintaining the unit.

**Warning** 

## Care and Maintenance(continue) Otherwise electric shock or injury may result.

#### Replacement & Maintenance of PCI Ion Generating Unit

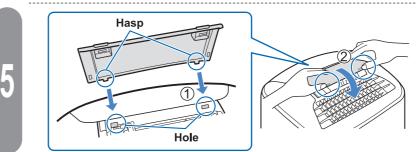




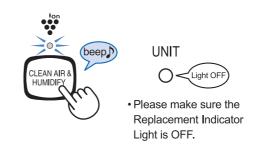
- ①Put the PCI Ion Generating Unit back to the Holder after maintenance.
- 2 Install the PCI Ion Generating Unit on the Main Unit.
- 3 Get it hasped.



Insert the PCI Ion Generating Unit to the end thoroughly.
If it is not inserted thoroughly, error information [5] may appear when the unit is in operation.



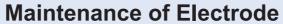
- ①Insert the (left and right) Hasps into the Holes on the Main Unit.
- ② Press the Cover Button and close the Cover.



Insert the plug into the socket, press any button to start the unit.

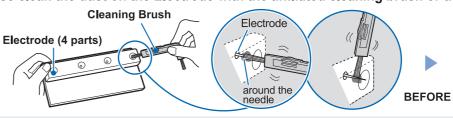
- Please dispose the junked PCI Ion Generating Unit as incombustible waste.
- Please obey the local regulations if the local government has regulatory category for wastes.

**AFTER** 



every 6 months (if operated 24 hours per day)

Please clean the dust on the Electrode with the affiliated cleaning brush or the on-sale swab.



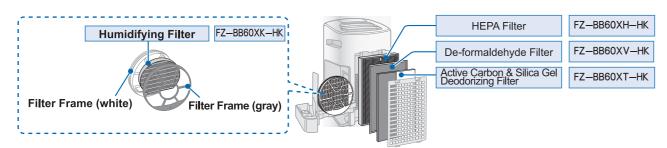
- Do not touch the Electrode, otherwise it may lead to injury.
- Do not deform the Electrode, otherwise it may lead to breakdown. Do not touch the connector, otherwise it may lead to breakdown.

If it is hard to clean the Electrode, please use a swab damped with little water.

## Filter Replacement



Replacement Cycle of HEPA Filter, Active Carbon & Silica Gel Deodorizing Filter, Humidifying Filter



**Humidifying Filter** 

Model:FZ-BB60XK-HK

about every 5 years\*

Do not discard the Filter Frame. It is not a replacement part.

Please follow the instruction on the operation manual 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 even within 5 years.

- The colour 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 deformed seriously.

Estimated Filter Replacement Cycle: suppose the unit is operated 12 hours per day, when the filter's humidifying ability decreases to 50% of its initial stage, it is time to replace the filter.

Because of the different opeartion condition, the filter's service life may get shortened; therefore, regular maintenance of the filter is necessary.

**HEPA Filter** 

Model:FZ-BB60XH-HK

(about every 10 years\*

#### Please follow the instruction on the operation manual when replacing the filter.

The filter may be smelly within several weeks or months according to different operation condition; when the above situation occurs, please replace the filter.

Estimated Filter Replacement Cycle: suppose the dust collection amount of HEPA Filter is equivalent to five cigarettes per day, when the filter's dust collecting ability decreases to 50% of its initial stage, it is time to replace the filter. 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 per day.

Deodorizing Filter

Model:FZ-BB60XT-HK

about every 10 years\*

#### Please follow the instruction on the operation manual when replacing the filter.

The filter may be smelly within several weeks or months according to different operation condition; when the above situation occurs, please replace the filter.

Estimated Filter Replacement Cycle: suppose the deodorization amount of Active Carbon & Silica Gel Deodorizing Filter is equivalent to five cigarettes per day, when the filter's deodorization ability decreases to 50% of its initial stage, it is time to replace the filter. According to The Japan Elelctrical Manufacturers' Association Standards JEM1467, the replacement cycle is about five years if its dust collection amount is equivalent to ten cigarettes per day.

De-formaldehyde Filter

Model:FZ-BB60XV-HK

about every 2 years\*

#### Please follow the instruction on the operation manual when replacing the filter.

The filter may be smelly within several weeks or months according to different operation condition; when the above situation occurs, please replace the filter.

Caution

- Please cover the ground with newspapers when replacing the filters.
- Please discard the used filters according to the garbage classification method in your area.

Humidifying Filter material ...... Rayon, PET
HEPA Filter material ...... Polypropylene, Polyethylene
Active Carbon & Silica Gel Deodorizing Filter material ...... Paper
De-formaldehyde Filter material ...... Mesh, Polypropylene, Polyester

 All filters are comsumable; you have to pay for the replacement filter even it is under warranty period.

## **Troubleshooting**

Before calling for service, please check the following.



	Problems	Please check	Please refer to					
Humidification	Water level in the Water Tank does not drop down or the speed is very slow.	<ul> <li>Is the unit set at "AUTO", "ENERGY SAVING", "POLLEN" or "CLEAN ION SHOWER" mode?</li> <li>⇒ The unit will stop humidifying when the room humidity reaches at an appropriate level.</li> <li>Is the Water Tank, Tray and/or Humidifying Filter installed firmly?</li> <li>Is there any scale or dust on the Humidifying Filter?</li> <li>⇒ Please clean and maintain the above.</li> <li>The humidification amout may change according to different humdity and temperature in the room.</li> <li>e.g. When it is wet (like in rainy days) or cold, the humidification amount will decrease and the water level in the Water Tank will drop down slowly.</li> <li>When it is dry or hot, the humidification amount will increase and the water level in the Water Tank will drop down quickly.</li> </ul>						
Humid	The humidity does not rise up.	<ul> <li>Is there any water remain in the Water Tank?</li> <li>Is the room too big?</li> <li>⇒ Please operate the unit within the recommended area.</li> <li>Is the unit located near the air outlet of an air-conditioner or a heater?</li> <li>⇒ If so, it may lead to malfunction of the Humidity Sensor. Please relocate the unit.</li> <li>Is there any scale or dirt on the Humidifying Filter?</li> <li>⇒ Please clean and maintain the filter.</li> <li>Is Power Consumption on display?</li> <li>⇒ Please press Humidity/ Power Consumption Switch and turn to Humidity Display.</li> </ul>						
	It is hard to remove odor and/or smoke.  Is the filter packed in the plastic bags?  It is hard to remove odor and/or smoke.  Is the filter packed in the plastic bags?  It is hard to remove odor and/or smoke.  Is the filter packed in the plastic bags?  It is hard to remove odor and/or smoke.  Is the filter packed in the plastic bags?  It is hard to remove odor and/or smoke.  It is hard to remove odor an							
Odor	The discharged air is smelly.	<ul> <li>Is the unit operated in a room with a strong smell? 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.</li> <li>⇒ We advice you to ventilate the room regularly when the unit is on.</li> <li>Please check the ★ part as below and maintain the places when odor occurs.</li> <li>Maintainance</li></ul>						

F-26

# Troubleshooting

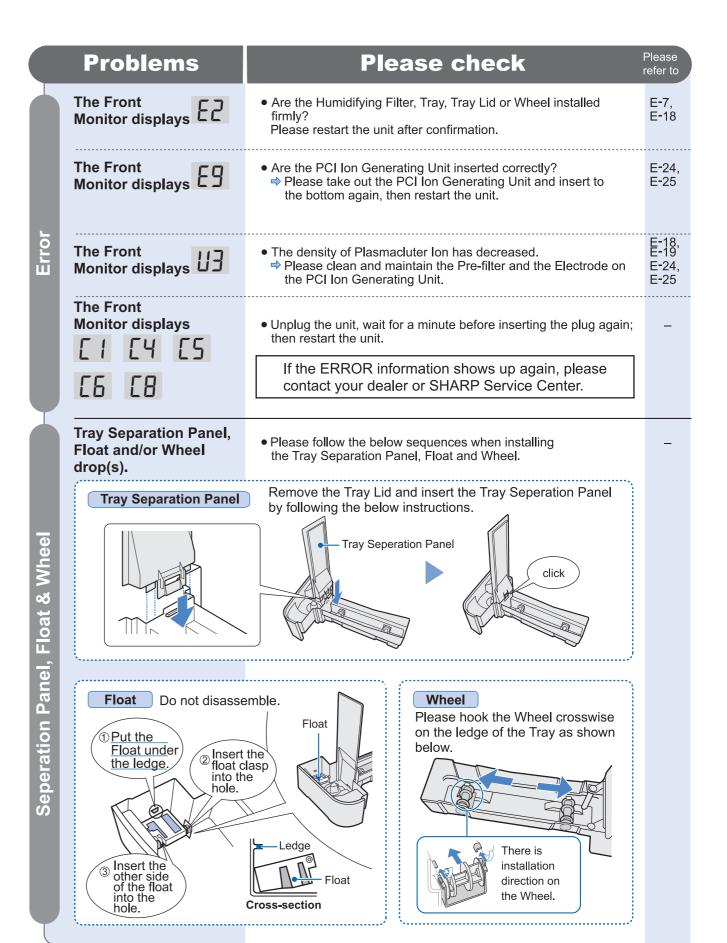
## Troubleshooting(continue)

	Problems	Please check	Please refer to
	A sound of "pip, pip" comes out from the unit.	<ul> <li>It is the sound of bubbles when they come from the Water Tank to the Tray.</li> <li>According to different humidification amount, the frequency of the sound will be different. It is not a breakdown.</li> </ul>	_
Sound	A clicking or ticking sound comes out from the unit.	<ul> <li>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.</li> </ul>	-
	A sprinkling sound comes out from the front Air Outlet.	<ul> <li>Is there dust adhering to Pre-filter?</li> <li>⇒ Please clean the Pre-filter.</li> </ul>	E-19
	The reading on the Dust Monitor or Odor Monitor does not change.	<ul> <li>The sensitivity of the sensor may be unstable and the light colour may not change in a period when the operation is just started. After operating for several minutes, the sensitivity of the sensors will turn to be stable.</li> <li>⇒ However, if the sensitivity stays unstable after operating for several minutes, please have it adjusted.</li> <li>If the light stays green, the air in the room is fresh. Sometimes it will be hard to monitor the odor since the odor is far away from the sensors. If the colour of Dust Monitor Indicator changes when blowing smoke to the unit or pat towel near the unit, it is not a</li> </ul>	E-16
Front Monitor		<ul> <li>breakdown.</li> <li>If the unit is operated in a room with a strong smell, sometimes the sensitivity of the Odor Monitor may come down.</li> <li>⇒ Please set Fan Speed at "MEDIUM" for several hours or all day long.</li> <li>• Sometimes the sensitivity of the sensors may not conform to the room situation.</li> <li>⇒ Please stop the operation and adjust the sensitivity. Please set sensitivity at "HIGH" or "MEDIUM".</li> </ul>	E-12 E-16
Fro	Dust Monitor or Odor Monitor does not turn green.	<ul> <li>Since the doors and windows are open frequently, the dirty air comes from outside. It takes longer time to clean the air.</li> </ul>	_
ı	Dust Monitor or Odor Monitor changes frequently.	<ul> <li>This may be influenced by the wind or huge change in temperature through opening or shutting the door.</li> <li>Please adjust the sensitivity.</li> <li>⇒ Stop the operation and set sensitivity at "LOW" or "MEDIUM".</li> </ul>	– E-16
	The Front Monitor is dazzling.	<ul> <li>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 birghtness: Bright/Dim/Off.</li> </ul>	E-14
PCI Indicator Light	PCI Indicator Light does not light on.	<ul> <li>Is the PCI set at OFF?</li> <li>⇒ Please press the Front Monitor Light Control Button for 3 seconds at least to set PCI ON.</li> <li>Is the Front Monitor set at OFF?</li> <li>⇒ Please press the Front Monitor Light Control Button to set the brightness at Bright or Dim.</li> </ul>	E-14

	Problems			Ple	ase	che	eck			Please refer to
	Filter Maintenance Indicator Light is on.	● Please		and main	tain the	items w	nich are	marked	with	E-18 to E-22
			l	I -	Mainta Humidifying	inance Deodorizing	De-formaldehyde			
		Back Panel	Water Tank	Tray	Filter	Filter	Filter	HEPA Filter	Pre-filter ★	
Indicator Light Display	Filter Reset Indicator Light does not die out.	⇒ Afte 3 se	Have you pressed the Filter Reset Button?     After maintenance, please press the Filter Reset Button for 3 seconds at least, then the Filter Reset Indicator Light will die out.							
	There is water in the Water Tank, but the Humidifying Indicator Light does not light on or blink in RED.	<ul> <li>⇒ Plea</li> <li>◆ Are th</li> <li>⇒ Plea</li> <li>• The flothern of water</li> <li>• If the uniform of the uniform o</li></ul>	<ul> <li>Does the float get stuck at any places?</li> <li>⇒ Please maintain the tray, clean the float and reinstall it back firmly.</li> <li>Are the Water Tank and the Tray installed firmly?</li> <li>⇒ Please install the Water Tank and the Tray to the unit firmly.</li> <li>The float may be influenced by any magnetic substances (e.g. a horn or a microwave oven). Therefore, it may not provide correct water supply information.</li> <li>If the unit is set at "AUTO", "ENERGY SAVING", "POLLEN" or "CLEAN ION SHOWER", the unit will stop humidifying and the Indicator Light will turn off once it reaches the appropriate humidity.</li> </ul>							
	PCI Ion Generating Unit Replacement Indicator Light is blinking.	● It's time to replace the PCI Ion Generating Unit.							E-24, E-25	
Humidity Display	The readings of "Current Humidity" is different from other hygrometers.	<ul> <li>Even in the same room, the humidity and temperature may be different because of different locations.</li> <li>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.)</li> <li>Is the Power Consumption on display?</li> <li>⇒ Please press the Humidity/Power Consumption Switch to make sure Humidity is on display.</li> </ul>					_ E-15			
Consumption Display	What does 24H Power Consumption display?	<ul> <li>It displays the approximate 24-hour power consumption after the unit operates in the current mode all day long.</li> <li>When the unit is set at "AUTO" or "ENERGY SAVING", it will adjust Fan Speed according to the room condition. Therefore, the displayed reading is the approximate power consumption after operating 24 hours in current Fan Speed.</li> <li>When the unit is set at "CLEAN ION SHOWER", it will return to the former operation mode after operating 60 minutes. Therefore, the displayed reading is the approximate power consumption after operating 24 hours in "CLEAN ION SHOWER".</li> </ul>						E-15		
	The reading of Power Consumption does not change.	<ul> <li>It displays the approximate 24-hour power consumption after the unit operates in the current mode all day long.</li> <li>When Fan Speed changes, please confirm whether the reading of Power Consumption gets changed or not.</li> <li>Is the unit displayed on Humidity?</li> <li>Please press the Humidity/Power Consumption Switch to make sure Power Consumption is on display.</li> </ul>							– E-15	

## Troubleshooting (continue)

	Problems		Please refer to					
Tray & Tray Lid	Tray cannot be taken out. Tray Lid cannot be open.	Tray  • Pull up the Tray a little bit and then take it out.  Pull Upwards Slightly  Tray Lid  Tray Lid  Tray Lid	E-18					
Fall Over	The unit falls over when it is humidifying or there is water in the Water Tank.	<ul> <li>If the unit falls over when it is humidifying or there is water in the Water Tank, please turn it off immediately, take out the plug and contact your dealer or SHARP Service Center for help.</li> </ul>						
	There is no air coming out of the Front Air Outlet.	<ul> <li>Is PCI off?</li> <li>⇒ Press Front Monitor Light Button continuously to set PCI ON.</li> <li>Is PCI Ion Generating Unit Replacement Indicator Light blinking quickly?</li> <li>⇒ It is time for replacement. After operating for 19000 hours in total, the Front Airflow will stop operation while the Back Airflow will keep on working until the PCI Ion Generating Unit is replaced.</li> </ul>						
	The operation is unavailable.	<ul> <li>Does the buttons get locked?</li> <li>⇒ Please press the button for 3 seconds at least to release the KEY LOCK button.</li> </ul>	E-14					
ers	The unit is expected to be fixed in a certain place.	Press down the Caster Fixators on both side of the unit to make sure the Casters are fixed. Please make sure to use the two fixators together.  Caster Fixator	E-7					
Others	When the unit is restarted or after Clean Air Shower operation, it is not able to operate even it is set at the same mode as the former.	Is the power plug taken out from the socket?  If the plug is taken out, the unit will return to the default setting.	-					
	The air coming out of the Front Air Outlet is chilling.	<ul> <li>If coming-out air is chilling, please set Fan Speed at ENERGY SAVING or LOW.</li> </ul>	E-13					
	Power cannot be switched on.	<ul> <li>Is the Cover correctly installed after the PCI Ion Generating Unit is replaced or maintained?</li> <li>⇒ If the Cover have not be installed correctly, it is not able to be switched on.</li> <li>Please have it installed correctly.</li> </ul>	E-24, E-25					



E-30 E-31