

## New substance generator for medical use

# AK-5000

---

- Convenience in replacing filter
- Realizing the diversity with the high quality filter
- Use of platinum titanium
- Selecting flow meter

Make sure to read this Manual and Warranty Statement to correctly use the product.  
Thereafter, keep them in safe place for future reference.



# PREPARATION FOR SAFETY



## WARNING

- If a break down occurs, do not make a repair by yourself. Contact the place of purchase or A/S center.

### Electric Power Relevance



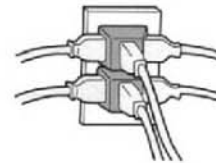
When the main body is dropped in water, pull off the power plug and bring the main body out of the water.

- It may cause the electric shock.



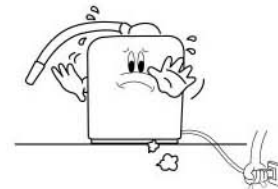
Do not use the product where it exceeds the rating of outlet or electric wiring, or anything other than AC of 220V.

- If the excessive rating occurs with the over use of electricity, it may cause the fire by the overheating.



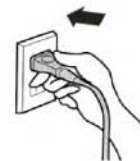
Do not touch the power plug with the wet hands.

- It may cause the electric shock.

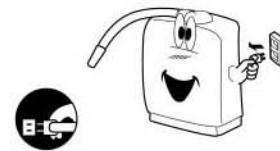


Push the power plus all the way into the outlet.

- If the insertion is not completed it may cause the electric shock or fire by the overheating.
- Do not use the damaged plus or worn out outlet.



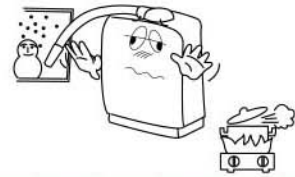
Unplug unit if you plan not to use it for an extended period or turn off the main power switch on the back of the unit. Unit should always be plugged into GFI electrical receptor in order to help protect against electrocution.



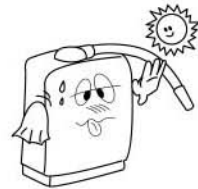
## CAUTION ON UNIT INSTALLATION



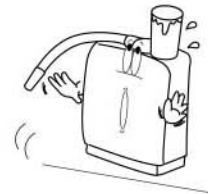
Do not install in the place where water-freezing is possible.



Keep the unit out of the direct sunlight.



Do not put any heavy object on the top of the unit.  
Do not install in on unstable place.



## Caution-(Be cautious when in use)



Do not remodel modify the unit at your option.



Do not use the water that is permitted for consumption such as tap water.

- Since it does not have the sterilization capacity and not able to remove the harmful substances, it may worsen your physical condition.



# PREPARATION FOR SAFETY



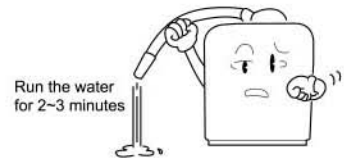
## WARNING

- If a break down occurs, do not make a repair by yourself. Contact the place of purchase or A/S center.

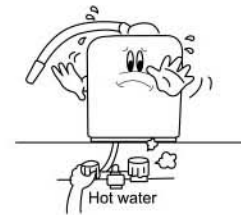
### Caution-(Be cautious when in use)



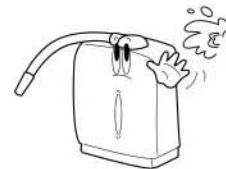
When use the product to assert the machine's own function, release the water accumulated inside.  
(Run the water for 2~3 minutes)



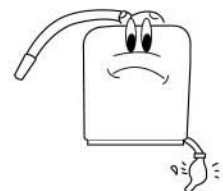
Do not use hot water or inappropriate water to drink.



Do not manage for any water to be infilted into the inside of the unit.  
Do not clean the unit with water.



Do not close, bend, wrench or press the ionized water output ports or hoses.



## The others

---



Do not bring the pH measuring reagent near to the fire.  
- It may cause the fire.  
(No flames)



No fire



As for an alkaline ionized water-keeping container  
(or bottle), please use a container that is corrosion resistant  
such as glass, polyethylene(plastic) or ceramic ware etc.



3days-shelf (effective) period in case of keeping  
AKW in a closed container in a refrigerator, but  
drinking AKW within 1 day is recommended.



Do not drink, put in the eyes or apply on the body with the pH measuring liquid.  
(Particularly for children)

- If the liquid is consumed by mistake, drink a lot of water to vomit it out, and if it entered into the eyes, wash off sufficiently with water and consult with a doctor immediately.

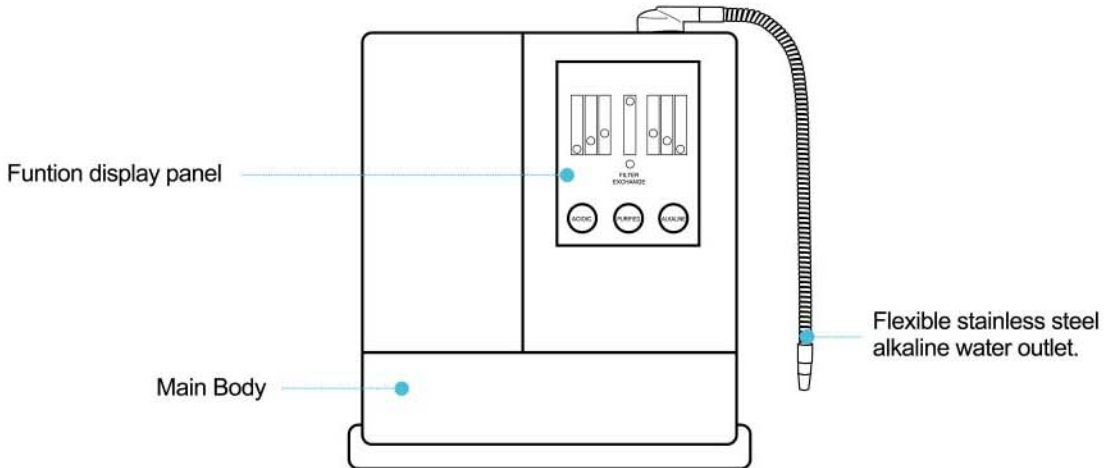
- In the event it is sprayed on the body, wash if off sufficiently.  
Make sure to have the cover and keep it in a place where the children would not be able to reach.



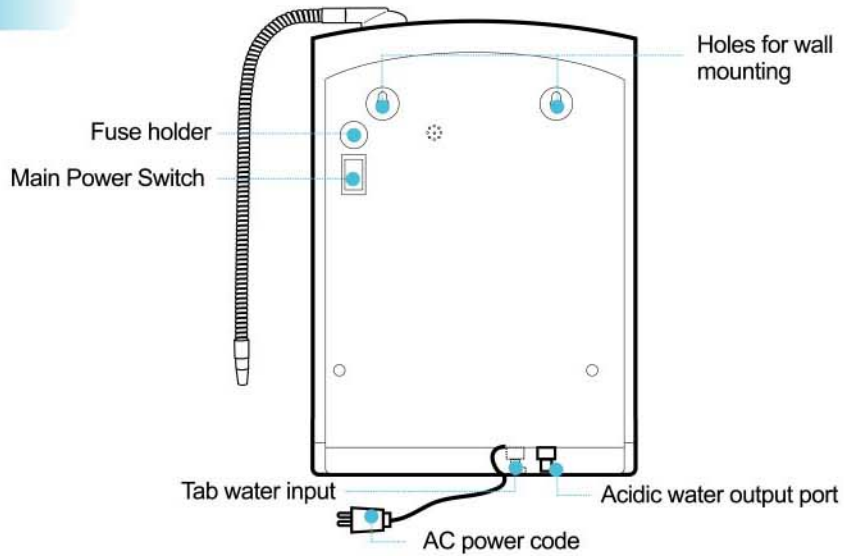


# EXTERNAL FEATURE AND FUNCTION

## Front



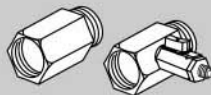
## Back



## Optional Tab Adaptors



Multi Tab daptors



Spare Adaptor 1

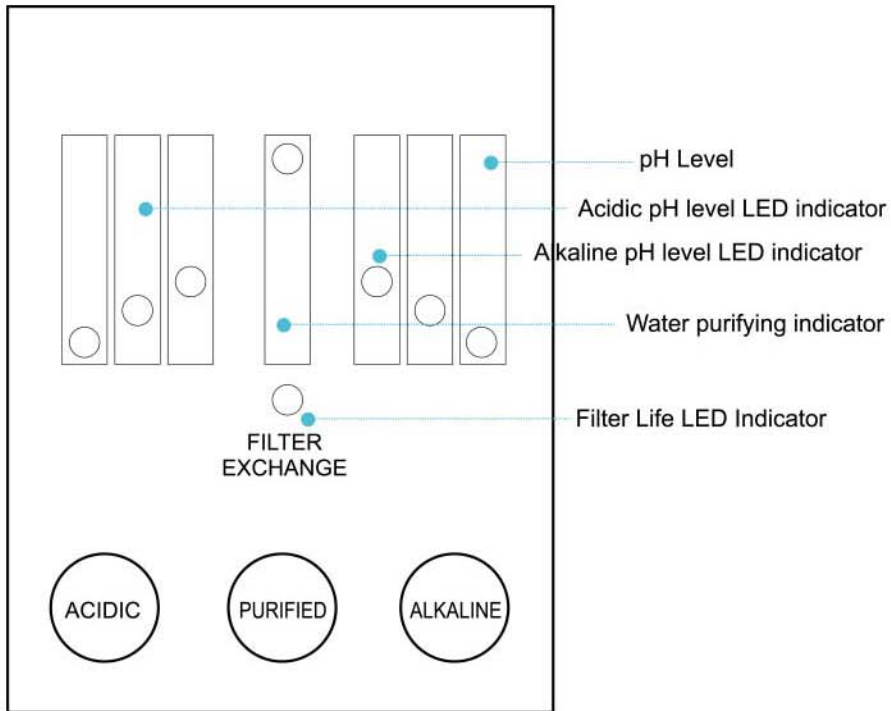


Spare Adaptor 2



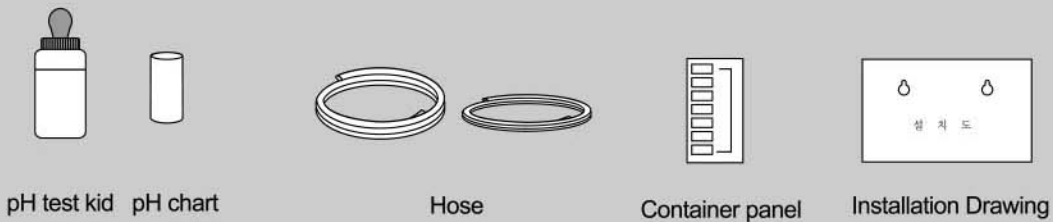
Tab Adaptor

## Contrl Panel



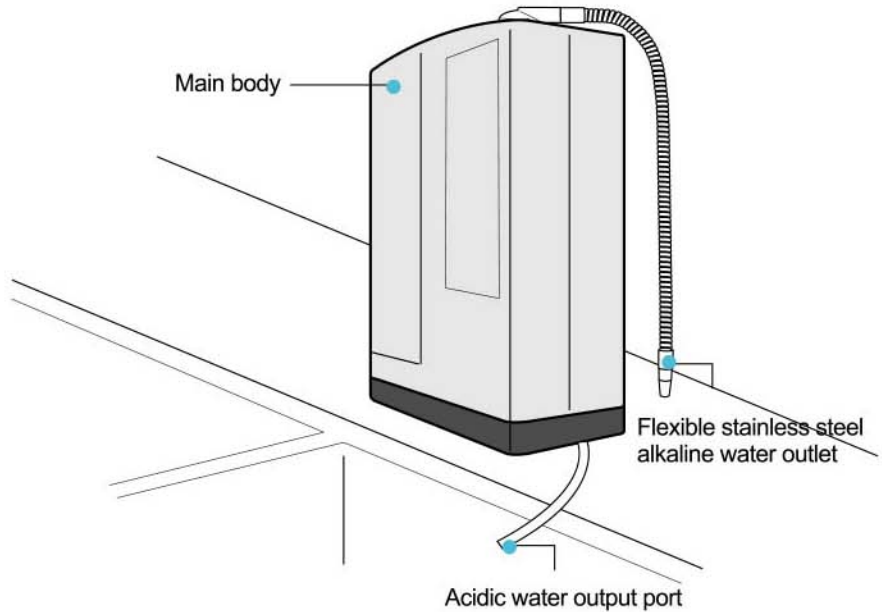
Acidic water button    Water purifying button    Alkaline ionic water button

## Accessories





# INSTALLATION PROCEDURE



## Wall mounting location

- 1 Vertically attach the provided installation guide paper on the wall after wetting the guide paper.



- 2 Nail down the studs on wall stud position as shown in the guide paper (1cm length of the studs should be remained).



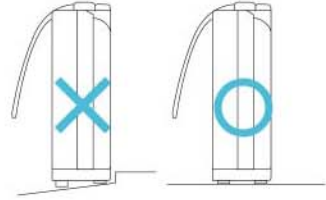
- 3 Mount the ionizer unit on the wall by using the wall-mount holes on the back side of the ionizer unit.





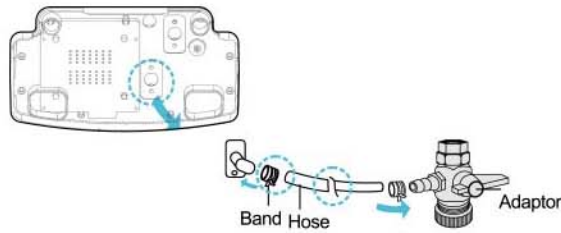
## Installation Method

- 1 Please ensure that the machine is properly rested on a flat surface before operation.

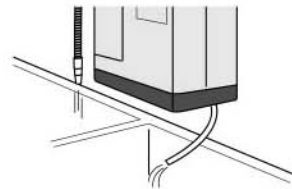


- 2 Connect one side of the hose to the tap water input and the other side diverter and then hose with fitting bands/rings.

Connect to the tap water input and the other side diverter



- 3 Insert the hose on acid water exit and release onto the sink opening or connect it to the acid water container.



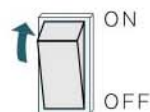
If the acid water outlet hose is locked in inside the container, the ion-generating outlet volume may differ that you should use it as short of a length as possible. The acid water hose shall not be installed higher or farther out than the ion water machine. (The drainage function may not be operated during the period of not in use.)



# OPERATING PROCEDURE

## Self cleaning

- 1 Switch on the main power switch behind the machine.



- 2 The water supply valve is turned toward the original water direction to have the water flowing in gradually.  
Original water / plane water



- 3 Along with the melody, the early washing is made for approximately 15 seconds. (For automatic washing, the alkali water comes from the acid water exit and the acid water comes from the alkali exit.)

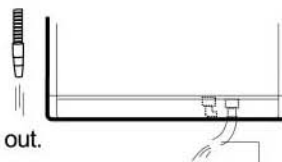
\* Depending on the functions the initial washing may not be released.

## How to generate alkaline ionic water

- 1 Allow water to flow into the machine.  
Press the alkaline water button.



- 2 The 3-phase indicator LED of the previously used in edge water (for example, 3-phase) is turned on and the alkali water comes off from the alkali exit and the acid water comes off from the acid exit.



Alkaline water comes out.

Acidic water comes out.

3

When the edge water is changed, press the pH selection button.  
(The pH value may be changed depending on the water quality and water pressure.)

3rd phase-----Around 9.5

2 phase-----Around 9.0

1 phase-----Around 8.5

## Generating ionized Acidic water

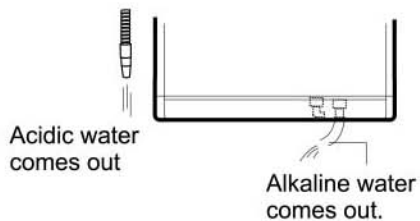
1

Allow water to flow into the machine and press the Acidic water button.



2

The 3-phase indicator LED for the previously used edge water (i.e., 3-phase) is turned on, the alkaline exit releases the acidic ionic water, and the acidic exit releases the alkaline water out.





# OPERATING PROCEDURE

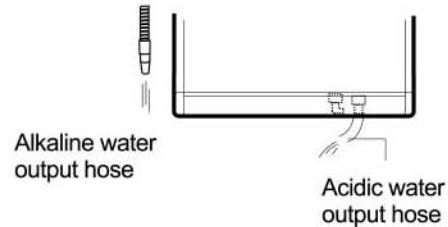
## Generating purified water

This is the function to collect a massive volume of acid ion water to use as the water for washing face or bathing.

- 1 Allow water to flow into the machine and press the purified water button.



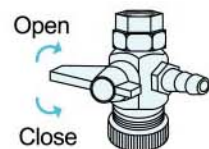
- 2 Press Purified water button for purified water only.



Use it when used for the water cleaning function and consumed for medical product. This is a function to use the water purifier without the ion separation. When using the water purifying function, the water supply valve may be used without the turning on of the power button, however, the filter outlet volume can not be calculated that make sure the power is turned on to use. Depending on the pH value of original water, the value may exceed pH8.

## How to suspend (stop)

- 1) Turn off the water supply.
- 2) The machine will buzz "Pphhikk" and the machine will stop its operation automatically. The filter life indicator and pH level LEDs will remain lighted.

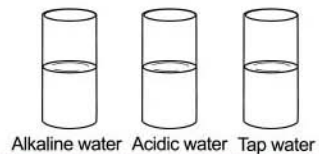




# Testing of pH value

## Testing of pH value

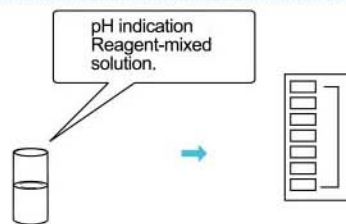
- 1** Fill up 2/3 each test tube with tap water alkaline water and acidic water.



- 2** Drop 2 to 3 of the testing solution into each tube and shake it well.



- 3** Compare the color to the color chart provided.



- The water with pH measuring reagent shall absolutely not be consumed.
- The pH measuring reagent and the pH value measuring chart are taken into the vinyl container and keep it in dark and cool area where the sunshine does not reach.
- Avoid the area for children to reach or the place with fire
- In the event that the pH measuring reagent touches eye and mouth, wash it off sufficiently with water.





## Utilization of various kind of water from the ionizer unit.

### Particula usage of ionized water

1~2 cups AKW on empty stomach every morning and 1~2 cups before daily bedtime will bring great efficacy. Drink 2~4 cups of pH 8.0~9.0 AKW everyday and increase the driking quantity with higher pH strenth as your body gets assimilated with it.



Strong alkaline water

10.0

For cooking preparation.  
Good for extorting a bitter taste of vegetables.  
shorten cooking time.  
Use for washing vegetables and for boiling foods,  
and the color of vegetables and foods get more  
lucid and clearer



Alkaline water

9.5

Optimal for making barley tea and oolong tea.  
Can make tea softer and time it takes  
conventional water to make tea.



Alkaline water

9.0

To cook rice  
To make teas.



Alkaline water

8.0

Suitable for a beginner to AKW.



Purified water

7.0

For taking medications.



Acidic water

6.0~3.0

For skin care.  
After face washing, bathing and shaving.  
For cleaning of electrolytic cell.





[Anacidity: Anacidity is a symptom to have the functions of liver and gall to have shortage in secretion of bile or stomach acid and others, causing the indigestion of food]

## General information



The persons who consume this for the first time should have a little volume for approximately two weeks by making pH close to neutral. Begin with weak alkali, raise the level gradually to the strong alkali and consume it.



Do not consume the medical product as the alkali water. Consume the medical product by generating in purified water.



The following persons should consult with a doctor or pharmacist prior to consuming it.

1. Person with chronic disease
2. Person who has ailment in liver and intestine
3. Person who is under a care of a physician



The following persons should consult with a doctor or pharmacist prior to consuming the acid water.

1. Person with vulnerable skin
2. Person with allergy



Use the appropriate water for the standard of drinking water as the original water. It may influence on the product and human body.



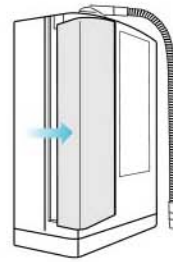
Persons of anacidity shall not consume the ionic water.



# HOW TO REPLACE NEW FILTER

Turn off the water supply

- 1** Push right-middle point of filter cover and pull the filter cover.



- 2** Gently open filter access door and lift off from the main housing.



- 3** Depress top of filter and pull towards opening.

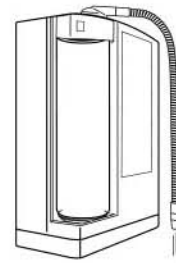


Accurately insert the o-ring not to be broken off. Open the water supply valve to supply the water in order to confirm whether the leakage phenomenon occurs



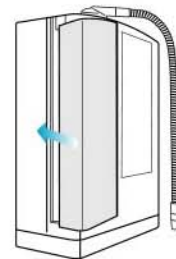
4

When the new filter is installed, please allow water to run through for about 2 to 3 minutes with power supply off. You might observed an outflow out initially and when the water is clear, you can start to operate your machine.



5

When the new filter is fitted, please allow water to run through for about 2 to 3 minutes with power supply off. You might observed an outflow of dark-colored water flowing out initially and when the water is clear, you can start to operate your machine.



**[Even if the filter replacement LED is not turned on completely, please replace the filter when any one of the following phenomenon occurs.**

- When the severely polluted water is used to clog up the filter to allow much less water to run
- When excessively polluted water in flow in to have odor in the water
- When re-use it with not using it for a significant time.

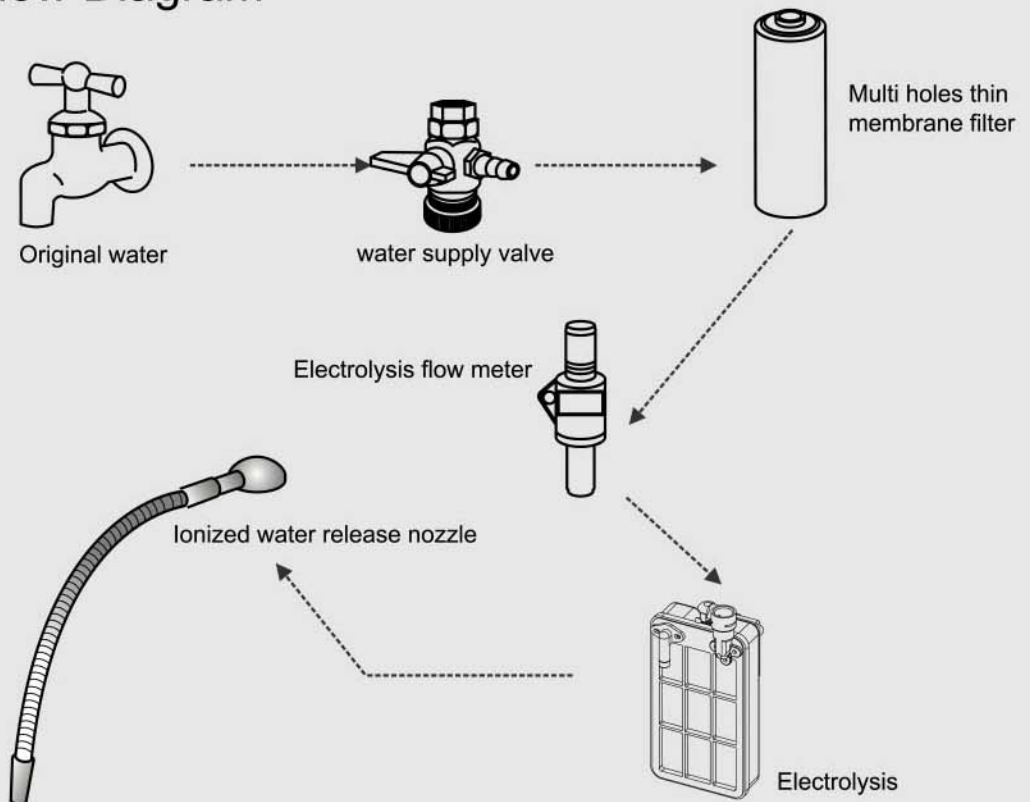


# INTERNAL FEATURE AND FUNCTION

## 1. Function

- **Realizing the complete automation with the built-in automation system**
  - artificial intelligent Mycom circuit
- **Alarm message function**
  - for low flow volume and hot water flow in, the automatic ion generation is suspended for the alarm message function
- **Cycle cycle calculation function for water purifier filter**
  - Calculate the life of accurate purified water filter by selecting the water meter
- **Early washing function**
  - when water is flowing in, it has the function of early washing

## 2. Flow Diagram



## 4. Composition of filter

### 5. Calcium

It removes the bad taste and bad odor in water, and it is particularly effective in removing the chloride.

### 4. Tourmaline ceramics

The molecule group of water is converted in small size of good taste water to be effective in removing the odor of germ effect

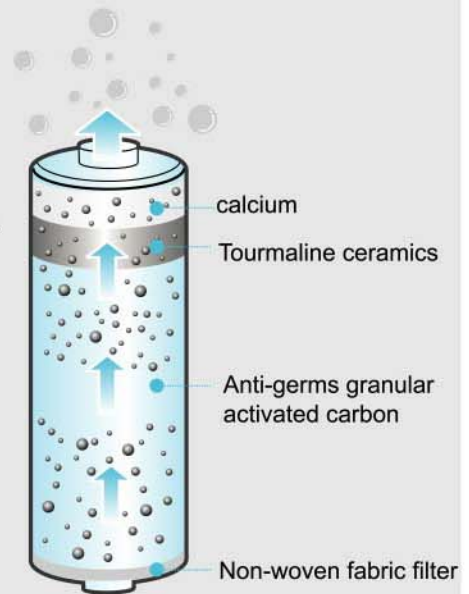
### 3. Non-woven fabric filter

### 2. Anti-germs granular activated carbon

It removes odor, taste, disinfectant, agricultural chemicals, phenol, trihalomethane and other chemical substance. Silver is coated on the surface of the granular activated carbon to control the breeding of germs.

### 1. Non-woven fabric filter

It filters the rust, wastes and floating substances with relatively large particles.





# UNIT EXAMINATION & EMERGENCY TREATMENT

Abnormal condition	Cause	Treatment
Main power lamp dose not function.	A power plug is not put into the socket.	Put al plug exactly in socket.
	The fuse is blown. the fuse is not inserted propety	Replace the fuse (2A fuse against 220V)
Ionization lamp dose not come on even after turning the tap on.	Abnormality of PCB	Immediately unplug out of a socket and then bring the unit to the selling agent.
On pH test with a reagent acidic water color gets yellow, but alkaline water color indicates pH neutrality	Alkaline is in inverse proportion to acidity. therefore, showing an acidic reaction means that inversely alkaline water is generated from the unit. No alkalinity color appearance result from a chemical reaction that carbonic acid in water evaporates some test reagent elements.	Test pH value with level 3 water.
Power supply is suddenly cut off while operating the unit	Too much salt in the water which cause overheating. TDS is much generated from subterranean water due to long time operation at high pH level.	It is a mechanism to protect the unit from possible excessive electric current. The unit will automatically operate after some time interval.
Low output of ionized water from the unit.	Filter is clogged. Clugging of filter may be cause by sudden inflow of serious polluted source water.	Filter replacement is needed.
	Low inflow pressure.	Take a hose away from the divert adaptor connected to the water tab and make a divert adaptor hole larger
	The use hose is bend.	Straighten the bent hose.



Abnormal condition	Cause	Treatment
Strange smell from output water	Filter life is over. filter life can be extremely shortened in case the unit is exposed to bad quality water.	Filter replacement is needed.
	Due to sudden change of source water quality and too much chlorine contained in the source water in summer season. Infinitesimal chlorine may remain in output water as electrolyzed ion water has a activity (but such a tiny chlorine contents falls within a water quality standards) and this chlorine may cause a strange smell.	select pH level 1~2 lower pH strength. If still serious, filter replacement is needed.
Milk-water materials precipitate on the bottom of a ionized water receptacle (alkaline and acidic water)	It is extracted $\text{CaCO}_3$ after $\text{CO}_2$ in water is bonded with Ca in case much $\text{CO}_3$ exists in water	It is totally harmless to our body. It gives a merely discomfort feeling to an user due to its appearance, but please feel easy. In this instance, select pH level 1~2 pH strength lower.
At first no smell, but smell from the output water in about 1 hour after collecting ionized water	The water-keeping bottle or receptacle is foul. Contamination is added into the bottle when collecting output water from the unit. Filter is seriously polluted.	Check cleanliness of the water-keeping bottle considering ionized water's molecule clustersize is much smaller. If serious, it is replace a filter and select pH level 1~2 pH strength lower.
Water leakage from a filter room	Abnormal with a filter packing. A filter is not placed firmly at the base.	Remove filter, check the filter room and fit filter firmly there to.
No output flow of generated water from the acidic output port.	Check whether the output hose is bent.	Increase the quantity of source water inflow. Straighten the bent hose.



# PRODUCT SPECIFICATIONS

Product Specifications		
Product Manufacture Permission Number	No.610 by The Ministry of Health & Welfare	
Feature	Ion water generator	
Model	AK-5000	
Input voltage	AC220V 60Hz	
Input Electricity(Power consumption)	0.5A(80W)	
Weight	Approx 5.5kg	
Overall Dimention	245 x 130 x 330(mm)	
Applicable Water Inflow Pressure	0.7~5kgg/cm <sup>2</sup>	
Applicable Water Temperature	5~30 °C	
Unit Operation Type	One Touch - Automatical ionization Start	
Unit Operation Means	Tap - water - open and - close	
Electolysis Device	Electrolysis Method	Continuous electrolysis
	Electrolysis Strength	1-2-3 level
	Ionized Water Output Rate	Max 3 Liters/minute(alkaline+acidic water)
	Cleaning Device	Automatic & manual cleaning
	Electrode Materials	Platium and Titanium
Water Purifying Device	Filter Replacement	Easy replaceable cartridge
	Filter Life	Activated Carbon filter:approx 5~6 months basic 20 Liter/day
	Filter Life Indicator	LED Indication
	Filter Composition	Silver impregnated Carbon
Water Purifying Device	Temperature sensor / Auto Shut off	
Water Supply	Direct connection to a top	

## CERTIFICATE OF WARRANTY CARD

(Customer's Portion)

**Name of Owner :** \_\_\_\_\_

**Address :** \_\_\_\_\_

**Product :** \_\_\_\_\_

**Serial Number :** \_\_\_\_\_

**Date Purchased :** \_\_\_\_\_

**Invoice Number :** \_\_\_\_\_

(Note : The warranty is not transferrable. This portion to be retained by the customer and must be produced when service is required)

**Sole Distributor :**

---

## CERTIFICATE OF WARRANTY CARD

(Sole distributor's Portion)

**Name of Owner :** \_\_\_\_\_

**Address :** \_\_\_\_\_

**Product :** \_\_\_\_\_

**Serial Number :** \_\_\_\_\_

**Date Purchased :** \_\_\_\_\_

**Invoice Number :** \_\_\_\_\_

**Sole Distributor :**

We provide a full year warranty effective from date of purchase against manufacturing Defects provided that machine is being used according to the operating instructions.

### **CONDITIONS : -**

- 1) Under normal usage, if the machine breakdown, it shall be repaired free of charge during the warranty period.
- 2) This one year warranty does not cover the followings:-
  - a) Cleaning and replacement of filter.
  - b) Wrong usage of machine.
  - c) Damage caused by tampering and alterations or repairs made by unauthorized persons.
  - d) Damage cause by defective house wiring or by operating the machine on incorrect voltage or cycles or fluctuations or interruptions in the electric power supply.
  - e) Damage caused by transporting or moving the machine.
  - f) Machine improperly installed.
  - g) Ordinary wear and tear of parts.
- 3) This warranty is valid in Royal Water only.
- 4) This warranty is only valid provided purchaser send the 'Sole Distributor' portion of this warranty card duly completed to the Sole Distributor in Royal Water within 7days from date of purchase.



Importer by