

SM-S112TL

Alkaline Ionic Water System

*Refinement of Alkaline Ionized water
(Hexagonal & Hydrogen Water)*

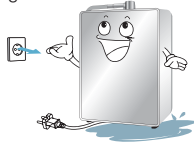


Warning: Incorrect installation and/or operation could void your valuable warranty.
Please protect your investment! READ THIS MANUAL CAREFULLY

Safety Precautions

If a break down occurs, do not make a repair by yourself. Contact the sales distributors or service center.

If your ionizer becomes submerged in water, unplug the power cord from the wall BEFORE removing the ionizer from the water. Failure to do so may cause electric shock!

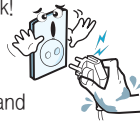


NEVER attempt to repair or service the unit yourself. Contact your dealer. Attempting to do so will void your valuable warranty!

Do not use your ionizer at voltages other than specified. Do not plug in your ionizer where it will exceed the rating of outlet or electric wiring. Failure to do so can result in fire, injury and / or damage to yourself, wiring or ionizer!



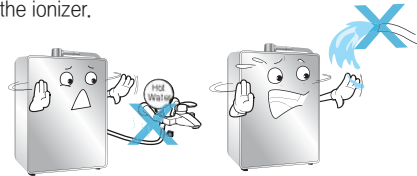
NEVER touch the power cord or plug with wet hands – this may result in electric shock!



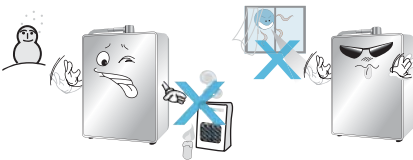
Ensure the power plug is firmly and properly inserted into the outlet – failure to do so may result in electric shock or fire!

Do not run hot water through your ionizer.

Do not clean by pouring water over or spraying the ionizer.



Protect your ionizer from freezing temperatures. Protect your ionizer from direct sunlight.



Unplug your ionizer if you plan not to use it for an extended period or turn off the main power switch on the back of the unit. Filter replacement may be necessary



Do not attempt to repair or service the unit yourself. Contact your dealer. Attempting to do so will void your valuable warranty!

Make sure to use your ionizer only with potable water which is suitable for human consumption.

DO NOT use your ionizer with well water, water with extreme hardness, high sediment or TDS levels without first consulting your dealer.



If the appliance makes strange or unusual noises or burning smells are detected, unplug the power cord immediately and contact your dealer to arrange service.



Do not close, bend, pinch, press or otherwise obstruct output ports or hoses.

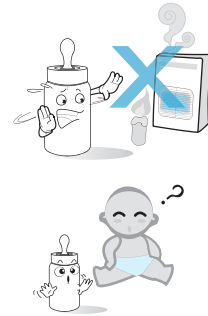


pH Reagent Liquid Precautions

Do not expose the pH measuring reagent to extreme heat, flames or fire. It is combustible.

- Do not drink the pH reagent liquid, put it in the eyes or drop on the body.
- If the liquid is ingested, induce vomiting immediately and call a doctor.
 - If the liquid gets in the eyes, flush immediately and thoroughly with cool water; call a doctor.
 - If spilled or dropped on your body, wash it off immediately.

Make sure to keep the pH reagent liquid tightly closed and out of the reach of children.



Some helpful tips

For storing your alkaline water, glass or ceramic is best. Always try and keep your stored water cool and away from direct sunlight. You can use plastic, but only use lexan (number7) or poly bottles (Can type). It is always best fresh out of the machine and ideal if consumed on a day-today basis.

Do not store alkaline water in stainless steel, bronze or aluminum containers.

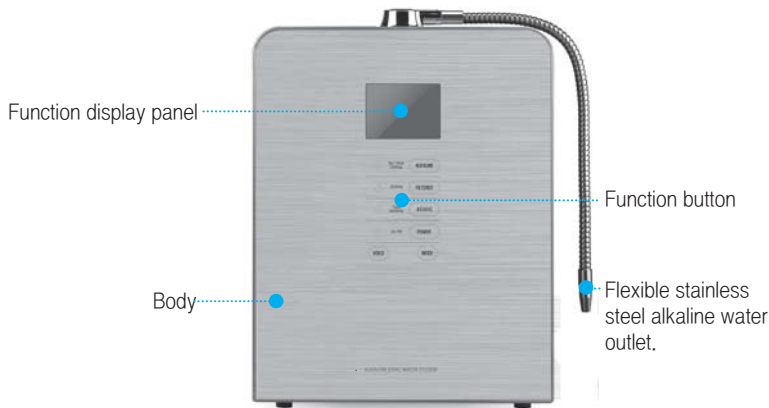
Save the box and Styrofoam your ionizer came packed in. This will help if your ionizer needs to be transported at a later date.

Do not use an ionizer downstream of a sodium-based ion exchange softening system or Reverse Osmosis system without first consulting with your dealer.

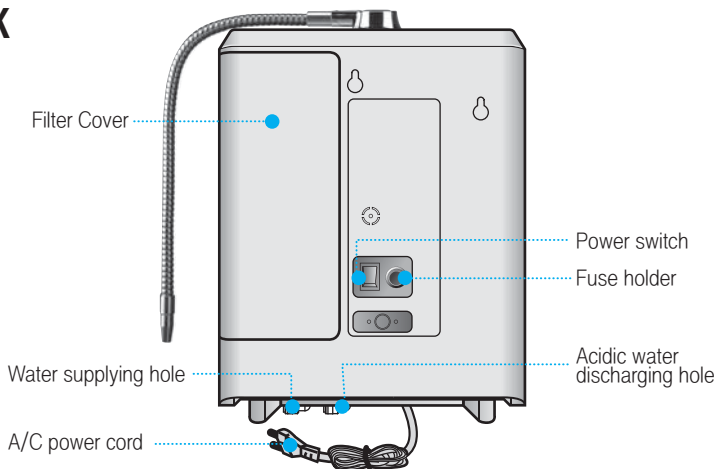


Names and functions of Parts

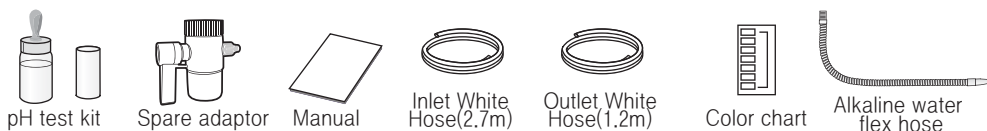
FRONT



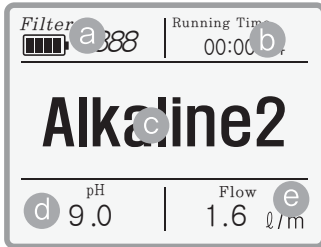
BACK



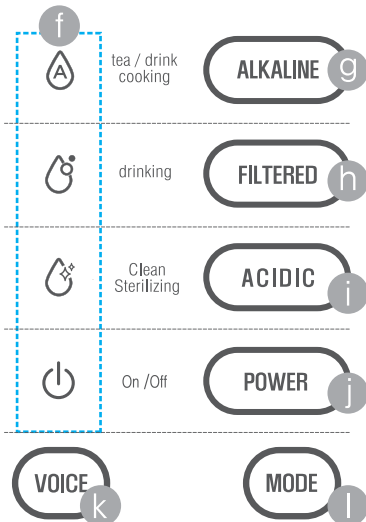
Accessories



INDICATORS



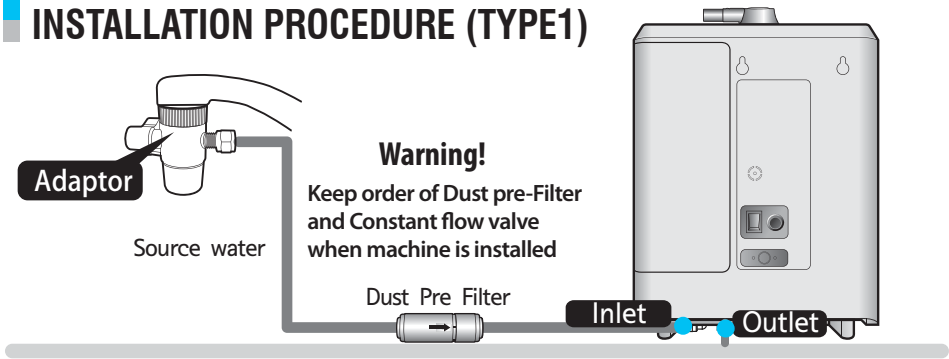
- a Displaying filter lifespan
Indicating total amount of filter use
- b Displaying water discharging time
Indicating time during which water is discharged
- c Displaying number of grade in use
Indicating number of grade in alkaline/acid and purification currently in use
- d Displaying pH
Indicating pH for each grade
- e Displaying volume of supplied water
Indicating total water flow per minute



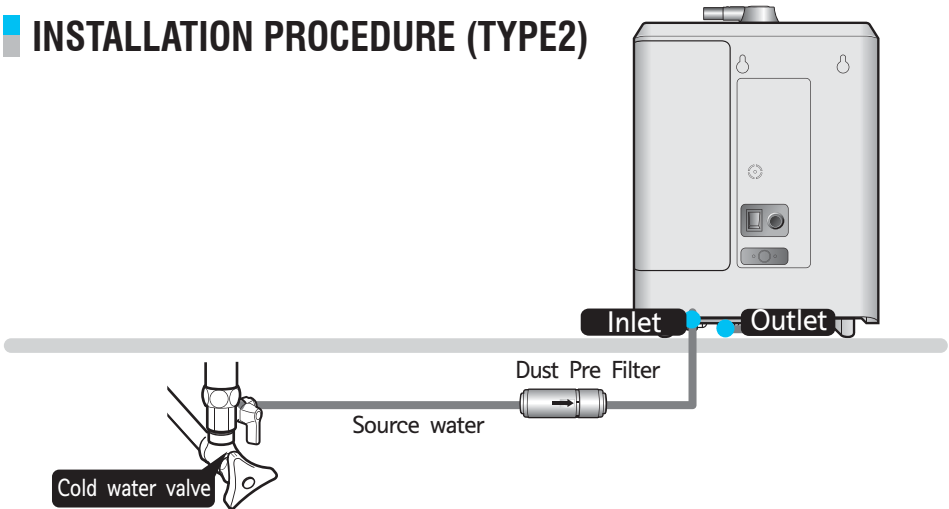
- f Setting display
Method to use lamp which is on when each function is selected
- g Alkaline selection button
Button which is used when function of alkaline water is selected
- h Water purification button
Button which is used when function of water purification is selected
- i Acidic selection button
Button which is used when function of acidic water is selected
- j Power button
Button which is used when on/off
- k Voice button (muting voice sound)
Function that can make voice sound on/off which is made when each function is selected
- l Setting button
Button which sets each function

How to Install

INSTALLATION PROCEDURE (TYPE1)



INSTALLATION PROCEDURE (TYPE2)




Installation Precautions

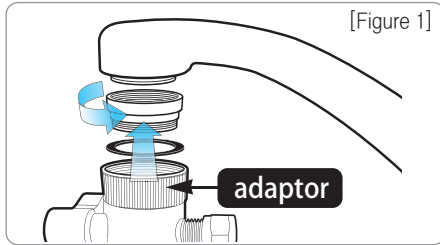


Caution

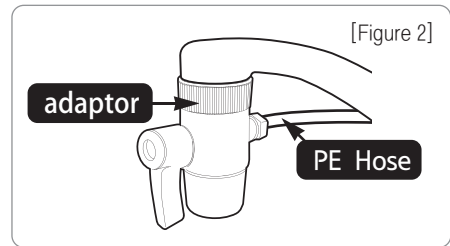
- Install the hose for acidic water lower than the main body.
(when the hose is longer in length or locate above the body, it can affect the generation of ion and the taste of water can be changed)
- Install water pump when the water pressure is low and shortage of water supply happens.
- When using the underground water with high hardness,
 - use the water softener.
 - push the acid water button for one minute once a day for water circulation

INSTALLATION PROCEDURE (TYPE1)

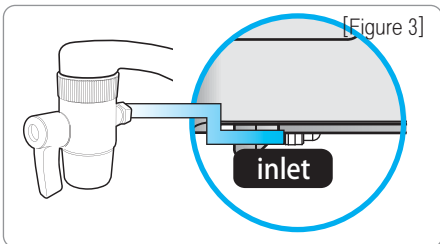
 Install after closing water supply.



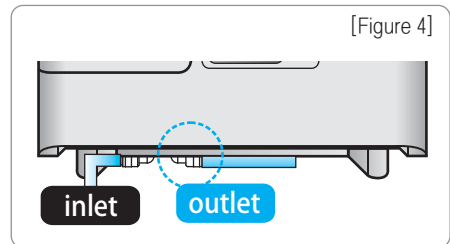
1 Please assemble the faucet top (water top) and the adaptor as shown above.



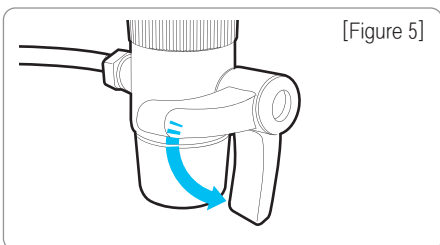
2 Connect 4Ø (PE) hose to the adaptor in "Figure 2"



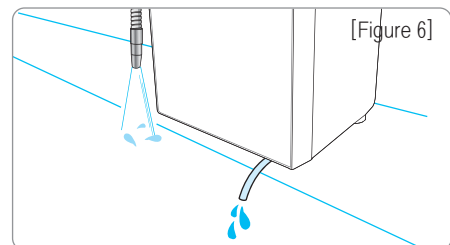
3 Push in and fasten the 4Ø (PE) 'hose in "Figure 2" into the water inlet at the bottom of the machine.



4 Connect hose to the outlet of acid water and connect it to the acid water tank or drain to sink bowl.



5 After finishing the connection of "Figure 4" open the water supply valve and adjust the water pressure.



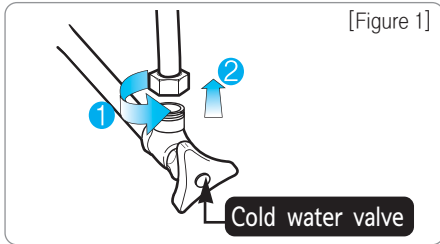
6 Check the leaks on the connections part after installation completed.

How to Install

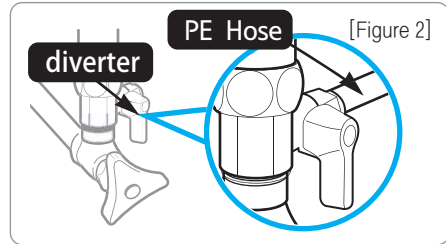
INSTALLATION PROCEDURE (TYPE2)



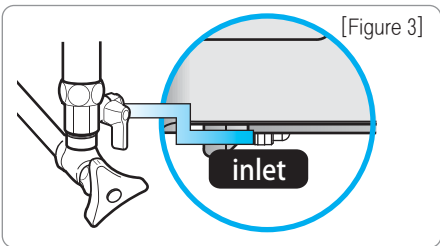
Install after closing water supply.



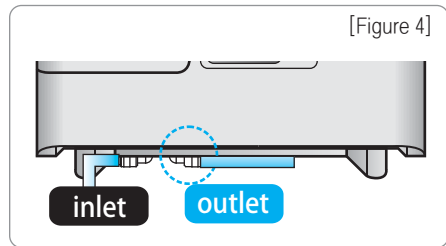
1 Loosen the nut of the cold water valve.



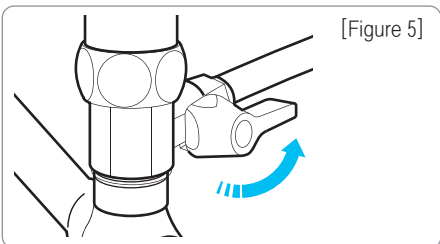
2 Connect 4Ø (PE) hose to the Diverter in "Figure 2"



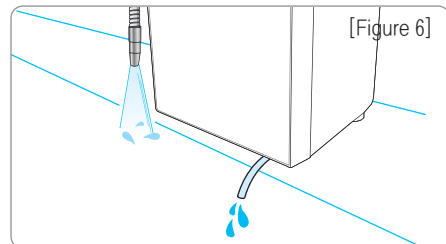
3 Push in and fasten the 4Ø (PE) 'hose in "Figure 2" into the water inlet at the bottom of the machine.



4 Connect hose to the outlet of acid water and connect it to the acid water tank or drain to sink bowl.



5 After finishing the connection of "Figure 4" open the water supply valve and adjust the water pressure.



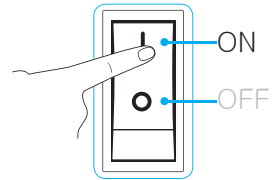
6 Check the leaks on the connections part after installation completed.

How to Use

1. POWER UP YOUR IONIZER.

Turn on power switch on back side after plugging power cord into socket.

- Signal sounds, initial screen appears and disappears again which makes it stand-by status.



2. START WATER FLOW THROUGH YOUR IONIZER

- Press the "POWER" button which opens the internal valve in your ionizer.
- The Digital Filter Life Indicator will begin and you will hear your ionizer's "voice" announcing the selected mode of operation.



NOTE

The water may initially come out discolored (light to charcoal gray) due to carbon particulates in the new filter. This is not harmful and is typical of all carbon filters. Allow the water to flow for 2-3 minutes in the "Filtered Only" mode and this will flush all the carbon dust.

How to Use

TO SELECT ALKALINE WATER

1. Repeat steps 1–3 above, or with water already running through the machine then:

2. When pressing alkaline water selection button, graphic lamp is on which indicates character of alkaline water, number of grade, and announcement can be heard which informs alkaline water grade.

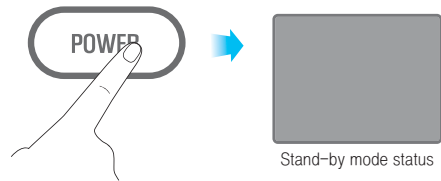


▶ Whenever you press alkaline water selection button repeatedly, it changes number of grade.



HOW TO STOP

Press the power button, water supply is stopped and it is converted to stand-by status automatically.



NOTE

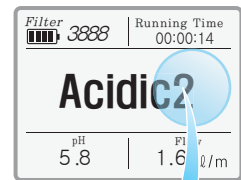
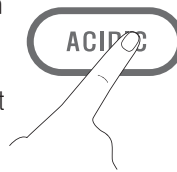
If alkaline water function is set previously, alkaline water used in previous step is discharged

TO SELECT ACIDIC WATER

NOTE : Acidic water is used except for drinking. **DO NOT DRINK.**

1. Repeat steps 1–3 above, or with water already running through the machine then:

2. When pressing acidic water selection button, graphic lamp is on which indicates character of acidic water, number of grade, and announcement can be heard which informs acidic water grade.

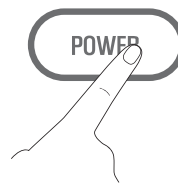


- ▶ Whenever you press acidic repeatedly, it changes number of grade.

1 → 2 → 3 → 4 → 1 → 2 → 3 → 4

HOW TO STOP

Press the power button, water supply is stopped and it is converted to stand-by status automatically.



Stand-by mode status



Acidic water is not drinking water. Be careful not to drink acidic water, confusing it with alkaline water.

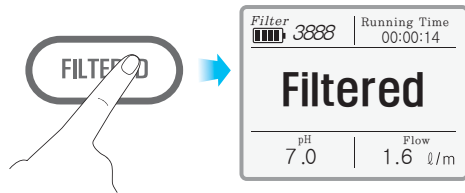


NOTE

If acidic water function is set previously, alkaline water used in previous step is discharged

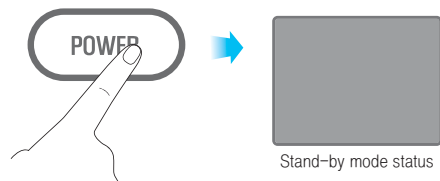
TO SELECT "FILTERED" WATER

1. Repeat steps 1–3 above, or with water already running through the machine then:
2. When pressing filtered water selection button, graphic lamp is on which indicates character of filtered water, number of grade, and announcement can be heard which informs filtered water grade.



HOW TO STOP

Press the power button, water supply is stopped and it is converted to stand-by status automatically.

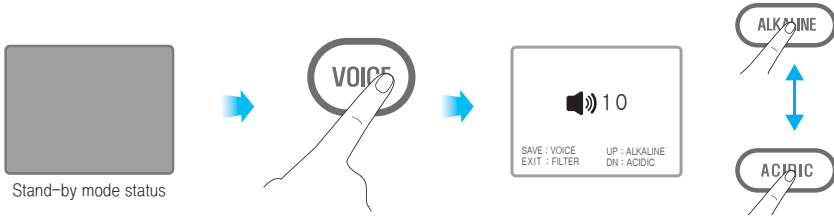


NOTE

If filtered water function is set previously, filtered used in previous step is discharged

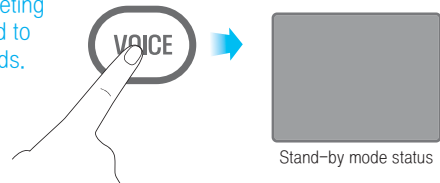
VOLUME ADJUSTING FUNCTION FOR VOICE INFORMATION

1. Press VOICE button for 3 to 5 seconds under stand-by mode.
Adjust volume by alkaline and acidic button. Volume consists of 0 to 10 steps.



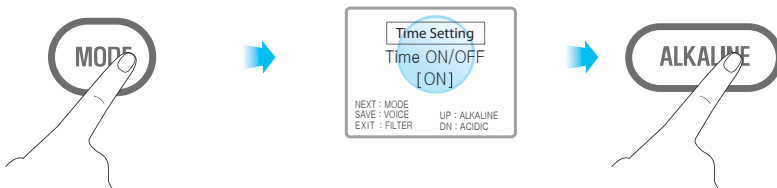
2. If saving volume by pressing VOICE button, it is converted to stand-by screen.

※If there is no additional operation after completing volume adjustment, it is saved and converted to stand-by status automatically after 10 seconds.



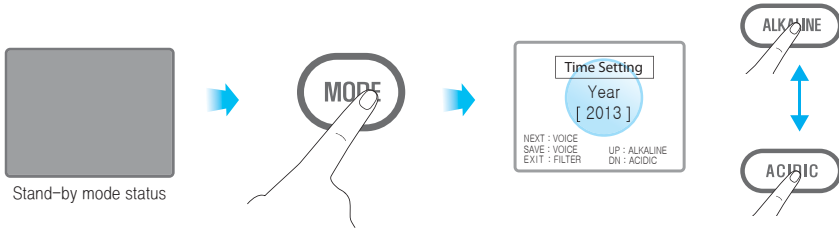
STAND-BY SCREEN ADJUSTING FUNCTION

After entering setting mode screen by pressing setting button among stand-by mode, set ON/OFF function for stand-by screen by pressing alkaline button.



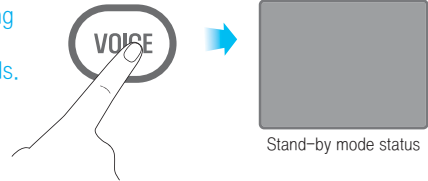
TIME AND DATE ADJUSTING FUNCTION

1. After entering time setting mode screen by pressing setting button among stand-by mode, select year, month, date, hour and minute by setting button and adjust them by alkaline button and acidic button respectively.



2. When saving it by pressing VOICE button, it is converted to stand-by screen automatically.

※If there is no additional operation after completing volume adjustment, it is saved and converted to stand-by status automatically after 10 seconds.



How to Replace the Filter

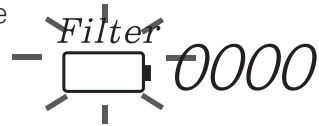
IMPORTANT! Stop water flow prior to filter replacement.

HOW TO REPLACE THE FILTER



If you do not use genuine filter and use similar product instead, electrolysis function is not activated, only purified water is discharged and problem may occur at the time of electrolysis because dust and grain generated from activated carbon is flowed into electrolytic cell. Use genuine filter definitely. If there arise some problems, free service is not available. (Period for free service: 1year)

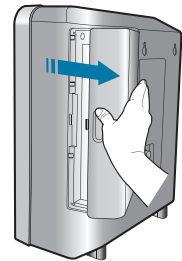
1. When lifespan of filter comes to an end, graphic figure of filter indicates 0000 and filter change icon flickers, which is informing that it's time to change filter.



- Stop supplying water by turning power switch on back side of product to OFF position.

2. Open the filter housing cover.

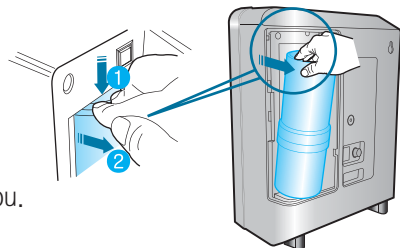
- slide the cover to the left and remove it.



3. Remove the expired filter.

- Taking hold of the filter securely with your right hand, press the filter firmly down against the spring loaded mechanism to disengage the top of the filter and then pull it toward you and up to remove it.

- The upper part of the filter is separated from housing by pressing firmly down. Once you have engaged the spring loaded mechanism, you can then easily remove the filter from the main body by pulling it toward you.

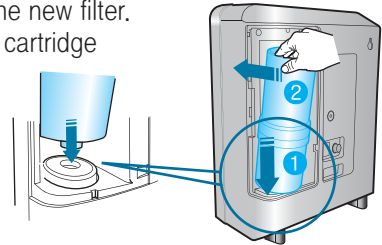


Check for leakage by running water through your ionizer before replacing the housing cover.

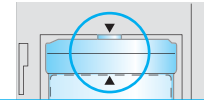
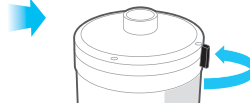
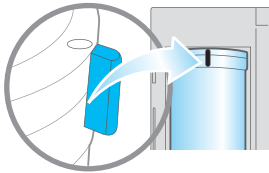
How to Replace the Filter


4. Insert the new filter into the compartment.

- Remove the plastic caps covering both ends of the new filter.
- Seat the large opening on the bottom of the filter cartridge onto the base in the center of the filter cushion.
- Push the filter down and into the housing compartment ensuring the opening at the top of the filter is seated properly into the fitting at the top of the housing.



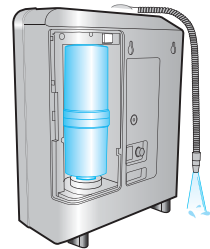
5. After having projected part of genuine filter face toward front, equip it in line with bottom groove and push it inside. Equip filter by turning projected part of filter until it can not be turned any more in one direction.



 When replacing the filter, the direction of the arrow should be same with filter's arrow.

5. Flush out the carbon dust.

- The water will initially come out discolored (light to charcoal gray) due to carbon particulates in the new filter.
- This is normal and is typical of all filters.
- Allow the water to flow for 2-3 minutes in the "Filtered" mode until the water runs clear



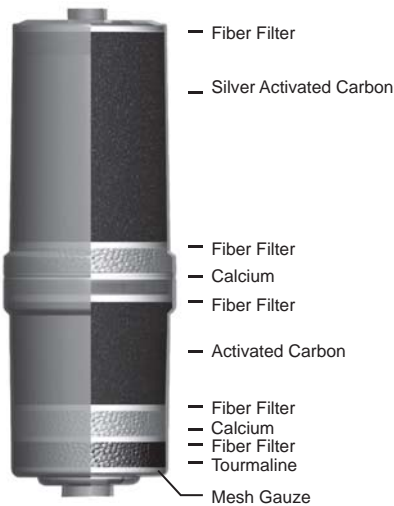
6. Replace the filter housing cover.



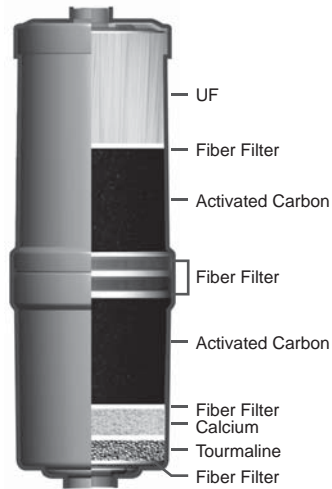
Please replace filter when any one of the flowing occur:

- When severely polluted water has been run through the ionizer and filter
- Excessive odor in output water and/or severely decreased flow rate
- After prolonged period of inactivity of over 30 days

Filter Composition(options)



High Performance Carbon Filter



High Performance UF Filter

! CAUTION

It is better to use UF(Combined hollow fiber membrane) filter initially, with power off, after making water of 20 l (1 kgf/cm²) flow for approx. 5 minutes at minimum without fail, in order to eliminate hydrophilic substance.

(If water pressure is below 1 kgf/cm², a time longer than 5 minutes is needed)

Recommended period for changing filter

Effective period of use of filter may differ greatly depending on season and usage environment (quality and pressure of water and amount of use)

Reference

Change filter when follow phenomena occur even filter life indicator.

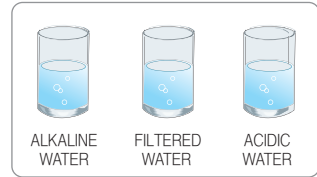
- When water flows little because filter is blocked due to heavily contaminated water
- When water smells because seriously contaminated water is flowed in
- When lots of foreign substance in water (turbid water, invisible substance) is eliminated in a short time
- When reusing it after you do not use it for a long time

How to Measure pH

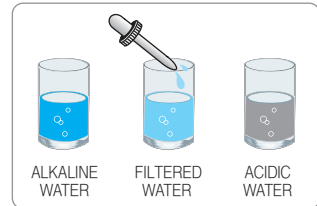
HOW TO MEASURE pH

Important Note: Water quality and mineral content vary greatly in different localities and will directly impact performance of your ionizer with respect to pH.

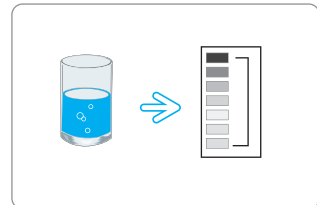
1. Fill three test containers provided about 1/4 full with alkaline, acidic and filtered water each.



2. Drop 2 or 3 drops of the pH reagent into the container and shake it.
If the reagent and water are not mixed well, the correct result may not be and shake it.



3. The pH value is determined by matching the color the pH color chart provided.



CAUTION

DO NOT consume water containing reagent.

Keep the pH reagent liquid, color chart, and OPEN FLAMES!

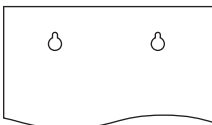
For contact with eyes, flush liberally with fresh water, seek medical help.

If ingested, induce vomiting, seek medical help.

WALL HANGER INSTALLATION



Install after closing water supply.



1. Soak the installation drawing to water and paste it in parallel with the wall.

2. Drive the nail in position.
(leave the nail head about 1cm).

3. Hang on the device body to the nail.

Some Uses for Alkaline and Acidic Water

You can get alkaline/acidic electrolyzed-reduced water by electrolyzing the water after filtering impurities.

Alkaline reduced water is the optimal water for health because it is rich in minerals including calcium. Acidic water is good for skin.

Some uses for the different levels of Alkaline Water



- 1 For initial consumption period (4-7 days). Let your body adjust slowly to the increase in pH. Many people find that this lower level is actually perfect for them.



- 2 After the adjustment period you can drink the water at this next level. This level is also great for cooking rice and other grains – fluffier and great tasting!



- 3 Some people like this for drinking though it can start to taste strong. It is superb for making tea or coffee as it enhances the taste and reduces bitterness!



- 4 Generally most people find this very strong tasting and with powerful detoxifying effects. Great for boiling vegetables! Alkaline water will eliminate the bitter taste and brings out more of their natural color.

What would I use the Filtered Water for?



The pH of Filtered water is neither raised nor lowered and would be the same as your tap water. This water is simply cleaned of impurities by the advanced filtration system. You can use it both as drinking water and taking medications with.

Some uses for the different levels of Acidic Water

The Acidic water has both antiseptic and antibacterial properties. It also has an astringent effect and can be used for cosmetic purposes.



- 1 Use it while brushing your teeth, gargle with it and use it as a natural mouth wash!



- 2 It is an excellent astringent; use it for washing your face or as a natural after shave.



- 3 In the kitchen use it to help clean kitchen utensils.



- 4 This setting has sterilizing properties—use it to sterilize cutting boards, dish towels etc.

Trouble Shooting Guide

Abnormal condition	Cause(s)	Resolution
The Function Display Panel does not come on.	A power plug is not properly inserted, or it is inserted into a faulty outlet.	Properly insert power plug into a correctly functioning power outlet
	The fuse is blown. The fuse is not inserted properly.	Replace the fuse. A spare fuse is located in the rear-panel fuse holder. (3A / 250V fuse)
pH test shows alkaline water color as neutral (7) while acidic water color gets yellow (6). This is normal if initial pH is 6.5	Faulty or evaporated reagent: alkaline / acidity are always produced in inverse proportion. Therefore, showing an acidic color means inversely that alkaline water has to be generated from the unit. Lack of alkaline color can result from a chemical reaction where carbonic acid in water evaporates some test reagent elements.	Test pH value on level 3 or 4 water; replace reagent.
Power supply is suddenly cut off while operating the unit.	Elevated level of salt in the water or high TDS; extended operation at high pH; sudden change in electrical current. In these cases your machine will shut down automatically to protect the electrodes and circuitry.	Wait – the unit will become operational again after about one hour. Your Machine has a safety mechanism built-in to protect the electrodes and circuitry. This mechanism will shut the Machine down automatically. This mechanism protects the unit from overuse or excessive electric current.
Low output of alkaline water from the unit.	Filter is clogged. Premature clogging may be caused by sudden drop in water quality and an influx of sediment or other contaminants, which stress the filter.	Replace your filter. Clean Pre-filter
	Low pressure in your household plumbing.	Ensure water supply valves are fully open. The water pressure in house may be too low.
	The input hose is bent, kinked or otherwise restricted.	Straighten the bent hose.

Trouble Shooting Guide

Abnormal condition	Cause(s)	Resolution
The Function Display Panel / display indicators do not come on even after turning the tap on.	Faulty PCB (Printed Circuit Board)	Immediately unplug the unit and contact Customer Svc. arrange service.
Strange smell from Alkaline water.	Expired filter from ordinary use or premature clogging due to contaminants in water quality.	Replace your filter.
	Sudden change in water quality with elevated level of Sulfur (not Chlorine). Elevated Sulfur levels are observed in some areas during summer months. These levels fall within safe drinking water standards, yet will cause a reaction with ionized water causing a unique smell.	Select lower pH level (1-2). If still present, filter replacement may be necessary.
Water appears murky; white snow like particles in the bottom of your glass.	You have high hardness (calcium primarily) in your water. The white is extracted CaCO_3 (Calcium carbonate). After CO_2 in water is bonded with Ca where elevated levels of CO_3 exist in your water. In water where elevated levels of CO_3 exist, what you see after ionization is CO_2 in the water bonded with Ca.	This is calcium! It is not only harmless, but actually good for you. Remember the Machine separates and condenses the alkaline minerals and this is what you are seeing. You can lower the setting (1-2) and reduce this effect. Typically this only occurs in hard water areas. add a softening pre-filter
At first no smell, but then smell from the alkaline water about one hour after.	Your water bottle or receptacle is foul and needs cleaning. Contamination mixes with alkaline water when filling your bottle. Expired filter.	Clean your bottle or receptacle. Try selecting lower pH level (1-2). Replace your filter. Clean container with vinegar
Water leakage from the filter cartridge housing.	Filter not installed correctly into filter housing.	Remove your filter and reinstall it properly following the filter replacement instructions. Increase the quantity of source water inflow.
No acid water flow from the acidic output port.	Acidic output hose is bent, kinked or otherwise restricted.	Straighten the bent hose; increase water flow from supply.

Product Specification

Product Manufacture Permission Number	No. 610 by KFDA (Korea Food & Drug Administration)
Feature	Ion Water Generator
Model	SM-S112TL
INPUT Voltage	AC 120V or 240V, 50Hz~60Hz
Power Supply	TRANS(5P) , SMPS(5/7P)
Power Consumption	SMPS(250W)
Overall Dimension	270 x 383 x 135 (WxHxD) mm
Applicable Water Inflow Pressure	0.7~5kgf/cm ²
Applicable Water Temperature	5~30°C
Unit Operation Type	One Touch Automated Ionization Start
Electrolysis Method	Continuous Electrolysis
Electrode	5/7 Plate (Platinum over Titanium)
Electrolysis Capacity	DARC system, (3.5L/min. at 3.5kgf/cm ²)
Electrolysis Setting	Alkaline (4level) / Purified Water / Acidic (4level)
pH Value	pH 4.0(±0.5)~10.5(±0.5)
Filter Replacement	Easy Replaceable Cartridge
Filter Composition	Activated Carbon Filter, UF Membrane Filter
Filter Life	Approximately 6months (20liter/day)
Display Method	TFT LCD(3.2 INCH)

Protection type and class against electric shock : Class II device, Type B applied part

SM-S112TL

Alkaline Ionic Water System

*Refinement of Alkaline Ionized water
(Hexagonal & Hydrogen Water)*

Importer

