

# USER MANUAL

## SM-S230TL Alkaline Water Ionizer

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

### Enjoy drinking alkaline water that is:

- ⊕ Alkaline
- ⊕ Oxygen rich
- ⊕ Molecularly altered to improve hydration
- ⊕ Antioxidant

### Use acidic water that is:

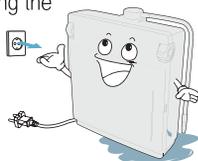
- ⊕ A fantastic astringent for skin care
- ⊕ A good antiseptic
- ⊕ Great for cleansing



# Safety Precautions

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



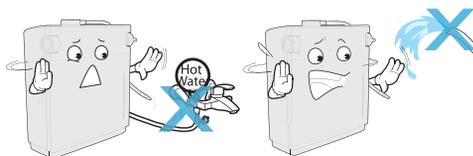
NEVER touch the power cord or plug with wet hands – this may result in electric shock!



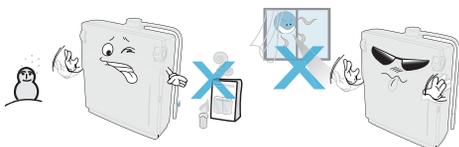
Ensure the power plug is firmly and properly inserted into the outlet – failure to do so may result in electric shock or fire!

Do not run hot water through your ionizer.

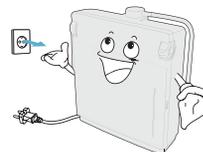
Do not clean by pouring water over or spraying the ionizer.



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



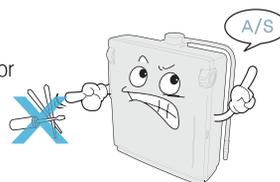
Unplug your ionizer if you plan not to use it for an extended period or turn off the main power switch on the back of the unit. Filter replacement may be necessary



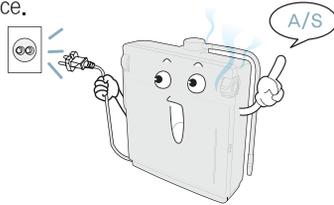
Do not attempt to repair or service the unit yourself. Contact your dealer. Attempting to do so will void your valuable warranty!

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 apply to 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 (number 7) or poly bottles (Nalgene type). It is always best fresh out of the machine and ideal if consumed on a day-to-day 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.



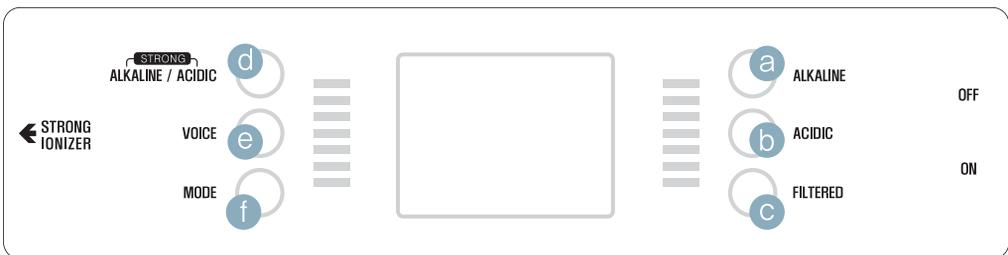


## Display part



- 1 General operation indicator LED – LED is lit when the function is selected
- 2 "Strong" indicator LED – LED is lit when the function is selected
- 3 Primary filter indicator – Primary filter level indicator
- 4 Secondary filter indicator – Secondary filter level indicator
- 5 Selected function display – Indicate the steps of alkaline / acidic, and purified water
- 6 Water inflow level display – Indicate the total inflowing water volume per minute.

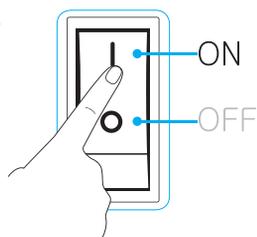
## Control Part



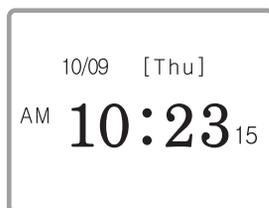
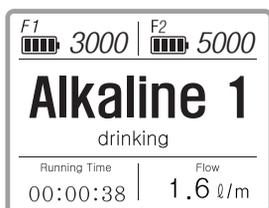
- a Alkaline water select button – Button to select alkaline water
- b Acidic water select button – Button to select acidic water
- c Filtered water select button – Button to select filtered water
- d Strong alkaline water / Strong acidic water select button – Button to select strong alkaline water / strong acidic water
- e Voice button – Button to control the sound volume of melody which rings each time of operation (alkaline, acidic, and filtered water)
- f Fixing button – Button to set and fix each function

## Initial operation

- 01** Turn the power switch on the rear panel after plug in the power cord into an power outlet.



- ▶ Along with beep sound, all the icons appear instantly and disappears.

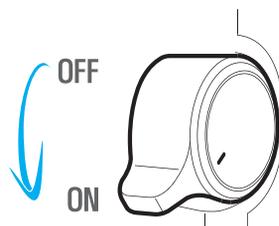


standby

- 02** When water be supplied by turning the water valve ON in standby mode, voice comment will be made and the filter life counter start.



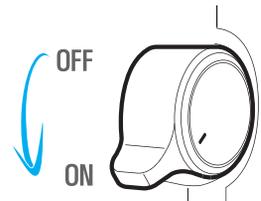
standby



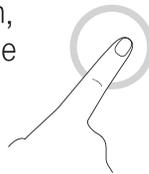
# Alkaline drinking water

※Alkaline water of 4 stages are recommended only for a special purpose.

- 01 Water will be supplied by turning the water valve ON in standby mode.



- 02 Pushing the alkaline water selection button, the text showing the alkaline water and stage number will flash, and the alkaline water stage will be announced.



ALKALINE

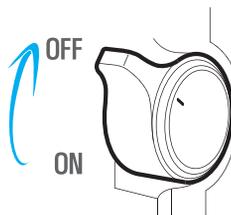


- ▶ The stage of alkaline water will be changed by pushing the alkaline water selection button.

1 → 2 → 3 → 4 → 1 → 2 → 3 → 4

## How to stop

Turning the water supply valve to OFF direction will stop the water supply and convert to stand-by mode.



Note

When the previous operation function was alkaline water, when turning the water supply valve to ON direction, the alkaline water will be produced without separate manipulation.



Do not use salt water or hard water.  
– May damage inside or shorten the lifetime of the machine.

# How to Use

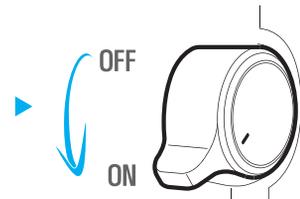
## Using acidic water

This function is to make a lot of acid water for cleaning face or take a bath.

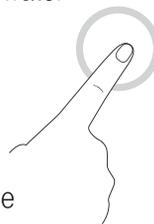
- 01** Supply water to inside by turning the water supply valve ON in standby mode



standby



- 02** Pushing the acidic water selection button, the text showing the acidic water and stage number will flash, and the acidic water stage will be announced.



ACIDIC

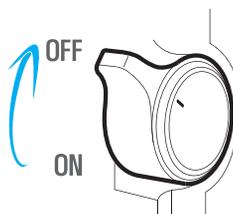


- ▶ The stage of acidic water will be changed by pushing the acidic water selection button.

1 → 2 → 1 → 2 1 → 2 1 → 2

## How to stop

Turning the water supply valve to OFF direction will stop the water supply and convert to stand-by mode.



standby



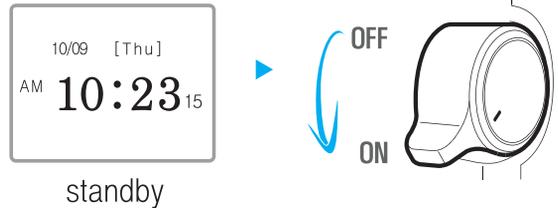
※ Acidic water is not for drinking so please be careful not to drink the acid water confused with alkaline water.



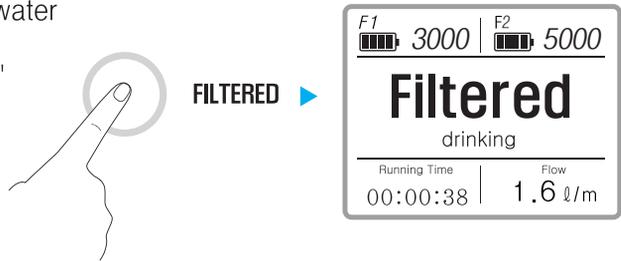
When the previous operation function was acidic water, when turning the water supply valve to ON direction, the acidic water will be produced without separate manipulation.

# For the production of purified water.

- 01** Supply water to inside by turning the water supply valve ON in standby mode

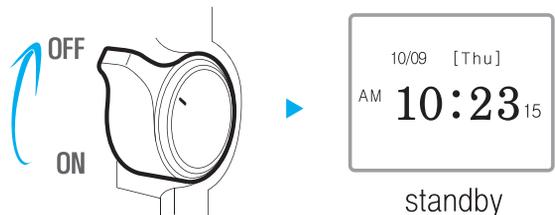


- 02** Pushing the filtered water selection button, the text showing the filtered water will be displayed, and oral notification "it is filtered water" will be announced.



## How to stop

Turning the water supply valve to OFF direction will stop the water supply and convert to stand-by mode.



※ Turning the water supply valve at stand-by mode will let filtered water outflow. (However, sound and graphic will not flashing)



## Method to generate strong alkaline water strong acidic water

※ Inputting 440ml of electrolytic promotion solution, 30 ℓ of strong acidic water can be produced.



**Warning**

Be sure to make sufficient air ventilation, as hazardous gases will occur during the generation of strong acidic water. The hazardous gases may cause casualties in a confined space worst case.

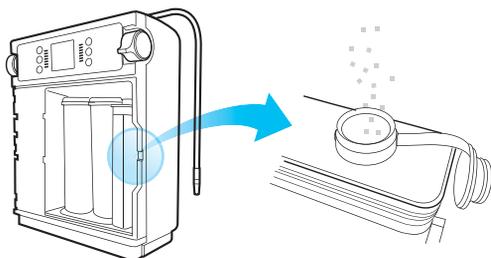


**Warning**

When producing strong acidic water, be sure to put the electrolytic promotion solution into the main tank in advance.  
(designated electrolytic promotion solution should be used)

## Method to input electrolytic promotion solution(part)

**01** Open the filter cover and inlet opening of the electrolytic solution tank, and put the electrolytic promotion solution.



**02** Insert the electrolytic solution tank into the correct position of the main body.

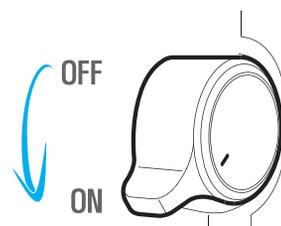


## Method to use strong alkaline water / strong acidic water

**01** Supply water to inside by turning the water supply valve ON in standby mode



standby



- 02** Pushing the strong alkaline water/strong acidic water selection button, the text showing the strong alkaline, and the notification telling the strong alkaline will be announced. Pushing the strong alkaline water/strong acidic water selection button repeatedly, it will convert to strong alkaline water or strong acidic water.

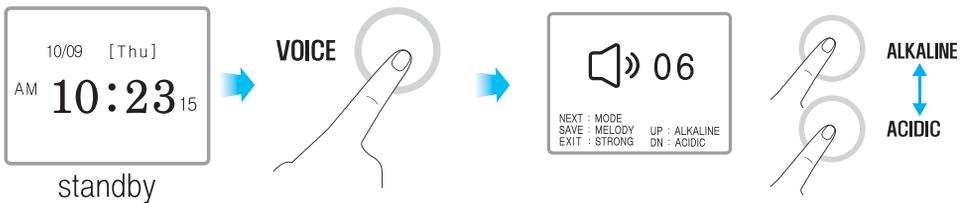


※After producing strong alkaline water/strong acidic water 30 seconds of cleaning job will be implemented before returning to the setting function.



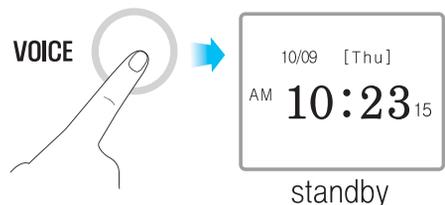
## Volume control on the voice information

- 01** Push melody button for 3 – 5 seconds. Adjust volume by the alkaline and acidic button. Volume is consist of 0 ~ 10 steps.



- 02** After adjusting voice button, it converts to stand-by mode screen.

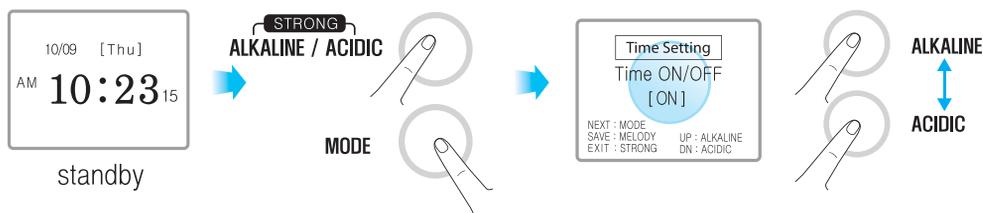
If there is no additional operation after volume adjustment, the set volume will be automatically stored after 10 seconds, and returns to stand-by mode.



## Time and date adjustment

Push the strong alkaline water & strong acidic water button at the same time in stand-by mode to enter time setting mode, select Year, Month, Day, Hour, Minute, and adjust by the alkaline button and the acidic button.

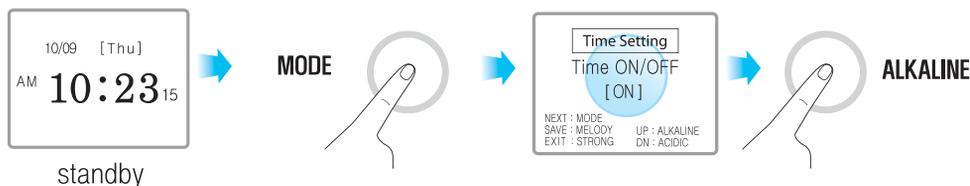
Push the voice button to save, and it returns to stand-by mode.



## Stand-by screen adjust function

Push the mode button in stand-by mode to access, and push alkaline button repeatedly to set up stand-by screen ON/OFF.

Push the voice button to save, and it returns to stand-by mode.



## Method to replace filter

### <Option>

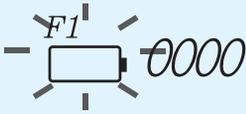
Only the genuine filter must be used!

- ※ When replacing filter, be sure to check whether it is a genuine filter(tag attached) before the replacement.

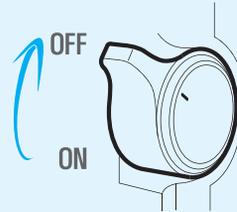


In case of using a non-genuine filter, it may cause problem on electrolyzer as specks of dust, resulting from the activated carbon, invaded to the electrolyzer. If problem happen by using a non-genuine filter, free repairing is not possible even during the warranty period.

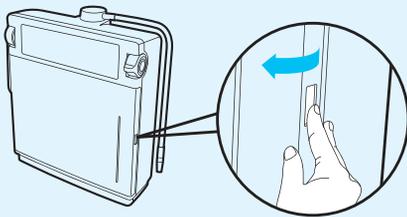
- 01** When the filter lifetime finish, filter number graphic shows '0000' to tell the filter replacement time.



- 02** Turn the water supply valve to OFF direction to stop water supply.



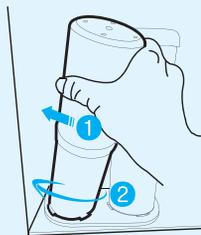
- 03** Push the hook in the right side of the filter cover and pull it out to remove.



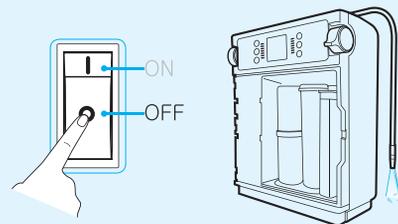
- 04** Take out the filter by turning it in counter-clock wise.



- 05** Insert and align the new filter (Genuine filters) to the hole in the bottom and turn in clockwise.



- 06** Turn off the power, open the water supply valve for 2-3 minutes to confirm the leakfree and assemble the filter cover.



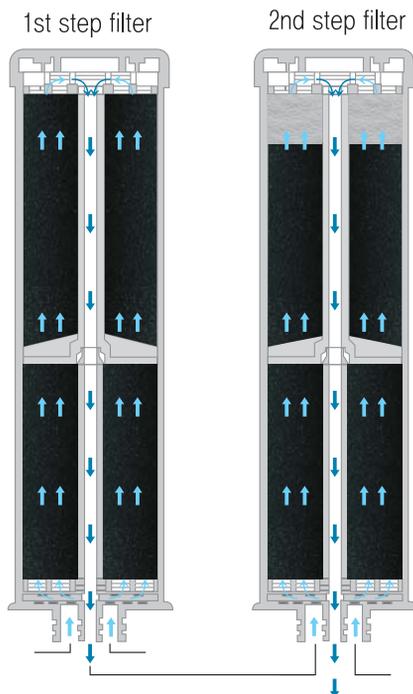
## Filter Reset

Press and hold the mode button and strong button in stand-by mode for more than 3seconds while the switch will sound signature referral to reset the screen as follows



Primary filter reset – press and hold the button for more than 3 seconds or alkaline  
Second filter reset – press and hold the button for more than 3 seconds or acidic  
Cancel – if you press the strong button briefly switches to stand-by

## Composition of filter



### Recommended filter replacing cycle

Valid life for filter can vary greatly depending on the season and the environment (water quality, water pressure, water volume).



Caution

- ① When replacing only the 1st step filter in accordance to filter replacement cycle, be sure to do flushing job so as not cause vacuum to the secondary filter.  
(Depending on the water pressure, air does not pass through 2nd step UF filter [hollow fiber membrane], create vacuums and water cannot escape and eventually damage the water inflowing side)
- ② In the initial state, we recommend that you use after passing a minimum water flow of 20 ℓ (1 kg/cm<sup>2</sup>) for about 5 minutes to remove hydrophilic substances while not turning on the power.  
(If water pressure is low and less than 1 kg/cm<sup>2</sup>, more time is required)



Note

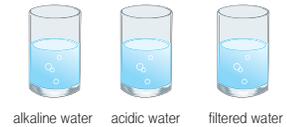
- Replace Filter when the following symptoms appear without blinking the filter replacement icon.
- ▶ Due to the using of heavily contaminated water, the filter is blocked and generate less water.
  - ▶ Due to the inflow of contaminated water, water smells excessively.
  - ▶ Removing excessive amount of foreign matters (muddy water and invisibleingredient) in a short period of time.
  - ▶ When using after a long time non-use.

# pH measurement method



According to the installation conditions and environment, responding color of the reagent may varies compared to colorimetric sample.

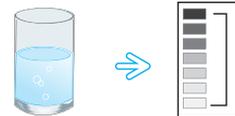
- 01** Fill the test tubes each two-thirds of alkaline water, acidic water and purified water.



- 02** Put 4~5 drops of pH reagent and shake well. (if not shake it fully, the pH reagent and ion water may not mix well enough)



- 03** Take out each step of ion water, compare to colorimetric sample and get the pH degree.



Caution

- ▶ Never drink the water that is mixed with reagent.
- ▶ Put the pH measurement reagent and colorimetric sample in a plastic bag and store in a cool dark place out of direct sunlight.
- ▶ Keep out of the reach of children or around the fire.
- ▶ Wash out with sufficient water in case the pH measurement reagent contact with your eyes and mouth.



Caution

## Change of PH test solution due to the free carbon contained in the underground water.

If the test water contain a large amount of underground water, owing to the abundant quantity of free carbonic acid ( $\text{H}_2\text{CO}_3$ ), pH value of alkaline water may temporarily shows neutral zone in a few second (after 1 to 2 seconds) after electrolyzed.

This phenomenon is due to the ionization of free carbonic acid dissolved in groundwater and is not due to the missing of the characteristic of alkaline water.

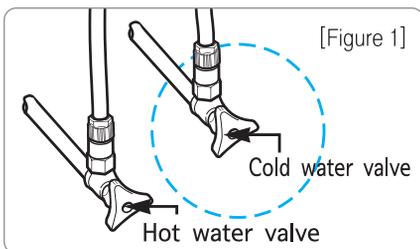
There is no change in making delicious healthy water.

# How to Installation

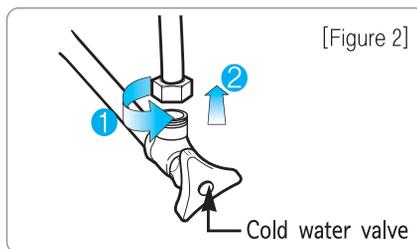
## Installation Procedure



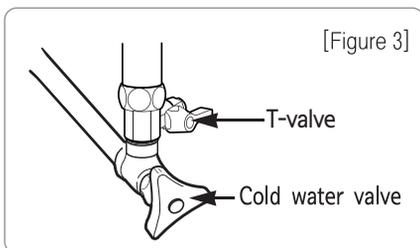
Install after closing water supply.



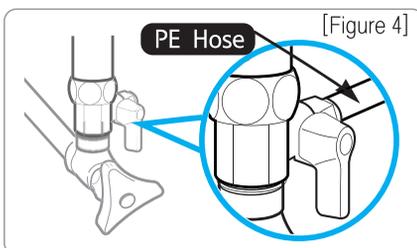
**01** Close the cold water valve located at the bottom of the sink bowl.



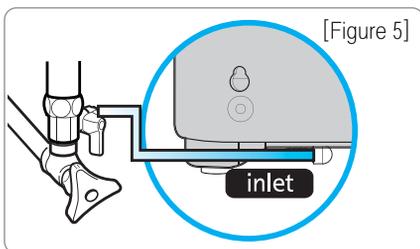
**02** Loosen the nut of the cold water valve.



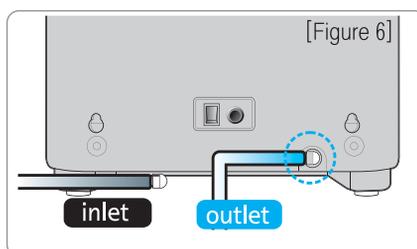
**03** Insert the T-valve, a connector (small) in the cold water valve.



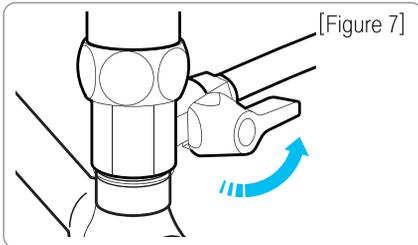
**04** Connect 4Ø (PE) hose to the T-valve in "Figure 3"



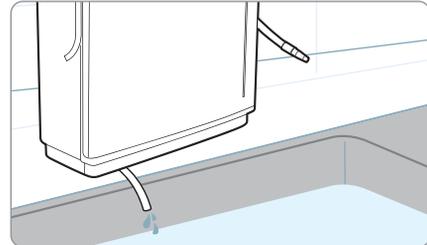
**05** Push in and fasten the 4Ø (PE) 'hose in "Figure 4" into the water inlet at the back of the product.



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



**07** After finishing the connection of "Figure 6" open the water supply valve and adjust the water pressure.



**08** Check the leaks on the connections part after installation completed.

## Installation Precautions



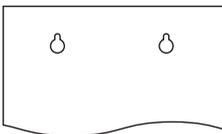
Caution

- ▶ 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 acidic water button for one minute once a day for water circulation

## Wall hanger installation



Caution 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.

# Product Specifications

## Product Specification

Product Manufacture Permission Number	No. 610 by KFDA (Korea Food & Drug Administration)
Feature	Ion Water Generator
Model	SM-S230TL
INPUT Voltage	AC 120V or 240V, 50Hz~60Hz
Power Supply	SMPS
Power Consumption	Max 350W
Overall Dimension	376 x 185 x 435 (WxHxD) mm
Applicable Water Inflow Pressure	0.7~5kgf/cm <sup>2</sup>
Applicable Water Temperature	5~30°C
Unit Operation Type	One Touch Automated Ionization Start
Electrolysis Method	Continuous Electrolysis
Electrode	12(5+7) Plate (Platinum over Titanium)
Electrolysis Capacity	DARC system (3.5L/min. at 3.5kgf/cm <sup>2</sup> )
Electrolysis Setting	Alkaline (4level) / Purified Water / Acidic (4level)
Cleaning	Auto Reversing Cleaning
pH Value	pH 3.0(±0.5)~11(±0.5)
Filter Replacement	Easy Replaceable Cartridge
Filter Composition	Activated Carbon Filter, UF Membrane Filter(optional)
Filter Life	Approximately 6months (20liter/day)
Filter Life Indicator	LED Module Indicator
ON/OFF Valve	Manual Valve

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





# Alkaline Water Ionizer