

KYK

KYK Hydrogen Water Generator

USER MANUAL

Higen2⁺

➔ Special Features

① *Core technology of hydrogen generation*

High technology of Hydrogen water generation without Mg (magnesium), reservoir, ozone, deodorization by KYK's own patented technology.

General hydrogen machines artificially add Mg to increase the contents of hydrogen (ppb) or are equipped with a water tank in order to discharge water to the both sides of the electrolytic cell little by little. However, KYK's patented technology makes it possible to produce good quality of water with high level of hydrogen contents with a separated a membrane (ion membrane) without Mg and water tank.

If the product does not have an ion separation membrane in the electrolytic cell, the ozone odor is increased and it is harmful to drink. Therefore, the ozone odor may be removed through the activated carbon, but the method adds unnecessary complexity and the quality is also low. Even there is membrane, the layer blocks a route for ozone water to be discharged due to technological poorness.

At this time, ozone water, which is harmful for human bodies, might be mixed into the hydrogen water. In addition this advantage, the product has built-in filter chip and control system for various features such as inspection capacity, usage period, similar filter, reusable filter detection function for sanitary safety and equipment safety, as well as its two filter feature.

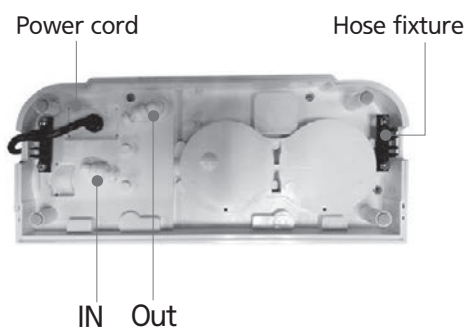
- ② *Good design certification with simple and luxurious design.*
- ③ *High-performance, high-efficiency SMPS type power control system with low power loss and low heat generation.*
- ④ *Voice message and ON / OFF function system for each application*
- ⑤ *Advanced 2 filters for clean, watery taste*
- ⑥ *Detection and control of filter usage and life span*
- ⑦ *Built-in filter chip with genuine filter, reusable filter detection function*
- ⑧ *Per-step color display and voice message system*
- ⑨ *Per-minute water discharge display in liters (ℓ)*
- ⑩ *Self-diagnosis error display system*

→ Name and Function of Each Part / Parts and accessories

Front side



Bottom



Rear View



Accessories



User manual



Hose

It contains a one of diverter valve according to the status of your equipment



Water pipe diverter valve
(Undersink Type)



Faucet
diverter valve (Tap Type)



Decompression
valve
(for water
pressure reduction)



6x8 90°
elbow
connectors

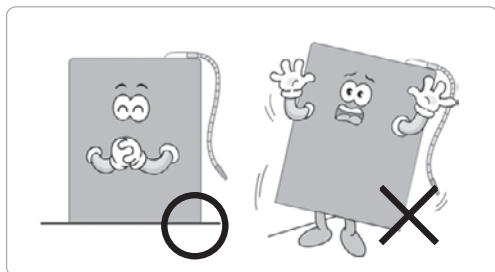


Bellows
(water
outlet pipe)

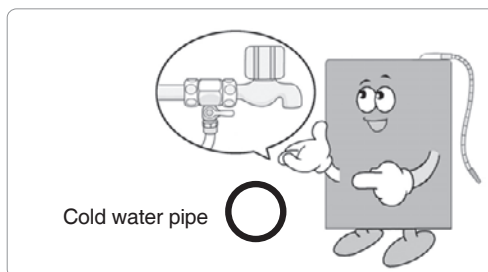
→ Notices before installing the product



Please observe the following before installation.



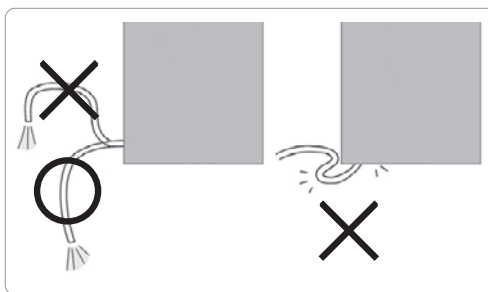
Do not install on a sloped surface.



The inlet water supply hose must be connected to the cold water pipe. If you connect it to hot water pipe, our company will not be responsible for any damages which may occur.



When installing the product, do not install it outdoors and avoid a place of direct sunlight and moisture.

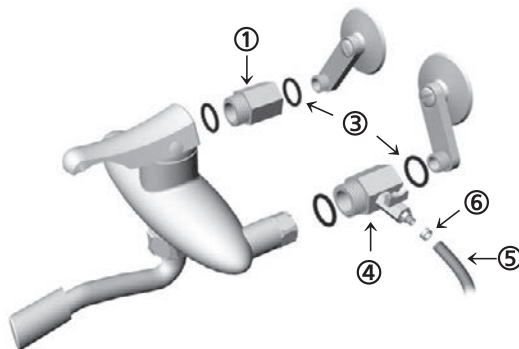
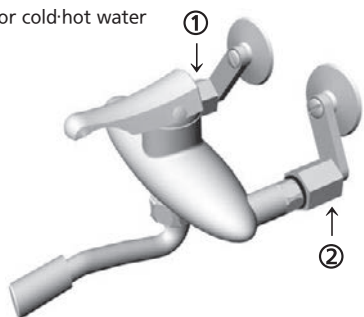


Do not have the outlet hose lifted higher than the product. Do not have the inlet water supply hose and the acid water (drainage) hose kinked or pressed by the main body. The length of the outlet hose should be shorter than 1M.

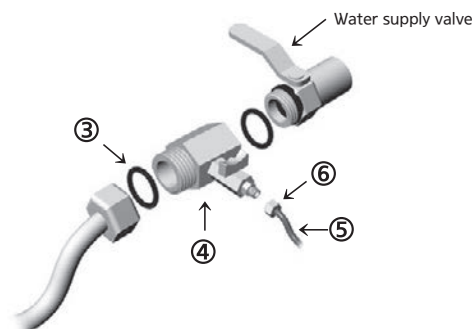
→ How to install

Installation of the cold and hot water diverter cock

For cold-hot water



For connection to one water pipe (cold water)



For connection to faucet

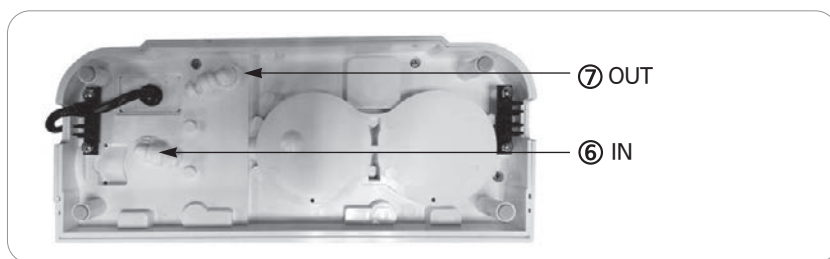


CAUTION

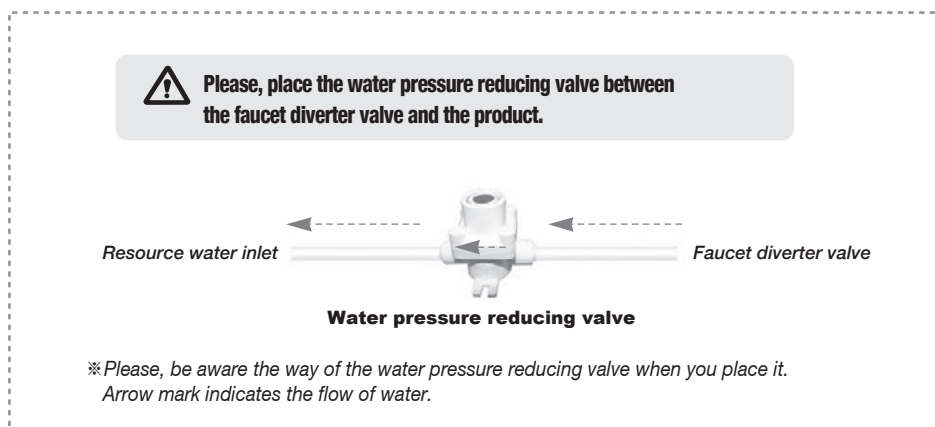
- It should be tightened to prevent leakage.
- Check for possible future leaks.

1. Lock all water supply.
2. Remove the faucet part.
3. Wrap an appropriate amount of Teflon tape on the connecting screw part (4 places).
4. Insert ③ (an O-ring, rubber packing) into ① (a nipple with a hole) and ② (a nipple without a hole) correctly and fasten (connect) it to the piping.
5. Insert the O-ring (rubber packing) into the faucet part as shown in Step 4.
6. Fit ⑤ (the hose) to ④ (the inlet valve) and tighten ⑥ (the nut) appropriately.

→ How to install



7. Insert ⑤ (the hose) into ⑥ (the fitting, a water inlet port) on the bottom of the product tightly, all the way up to the end of step 2.
8. Cut an appropriate length of the hose and inter it to ⑦ (water drain outlet port) tightly, all the way up to the end of step 2.
9. Connect and turn the bellows (water outlet pipe) clockwise to the top of the unit (for attachment).
10. Before using the product, be sure to open the water supply valve to check for leaks and then operate the unit.
11. After finishing installation, press the water purification button and have water drained for 2~3 minutes before use.



- ⚠** If you mix up the raw water inlet with the water outlet, Hydrogen water will not be produced and be the cause of a failure.
So you must not install reversely between the raw water inlet and the water outlet.
If the failure happens because of a reverse installation, the man who installs the product will have to be charged with the failure.

→ Check Points at Installation



CAUTION Please be careful when installing.

- ✓ When the water pressure is low, install a booster pump to increase the water pressure of supplied water. If the water pressure is high, use a decompression valve to set a water pressure to 0.6 to 0.8 liters.
- ✓ The lime removal filter must be installed in areas where high calcareous contents exist in water, and the pre-treatment filter must be fitted in areas where hard water contents exist in water for water quality.

Please check the following.

① If there is no water flow.

- Make sure you removed the rubber stoppers on the inlet and outlet valves.
- Checks to make sure that you connect the hoses properly or that the valve is open and water can get through. Otherwise, please open the valve.

② When use the product with groundwater or water rich in lime, or in area where the water hardness is high:

- Groundwater: If its quality is bad, then you need to equip the preconditioning filter.
- Water rich in lime area/high water hardness area: you must install the additional filter for removing lime. Also, you need to operate the cleaning mode more often manually. Depending on the water quality, you need to install additional preconditioning filter.

③ After finishing installation and test for water flow and leak, plug the power cord into a wall outlet.

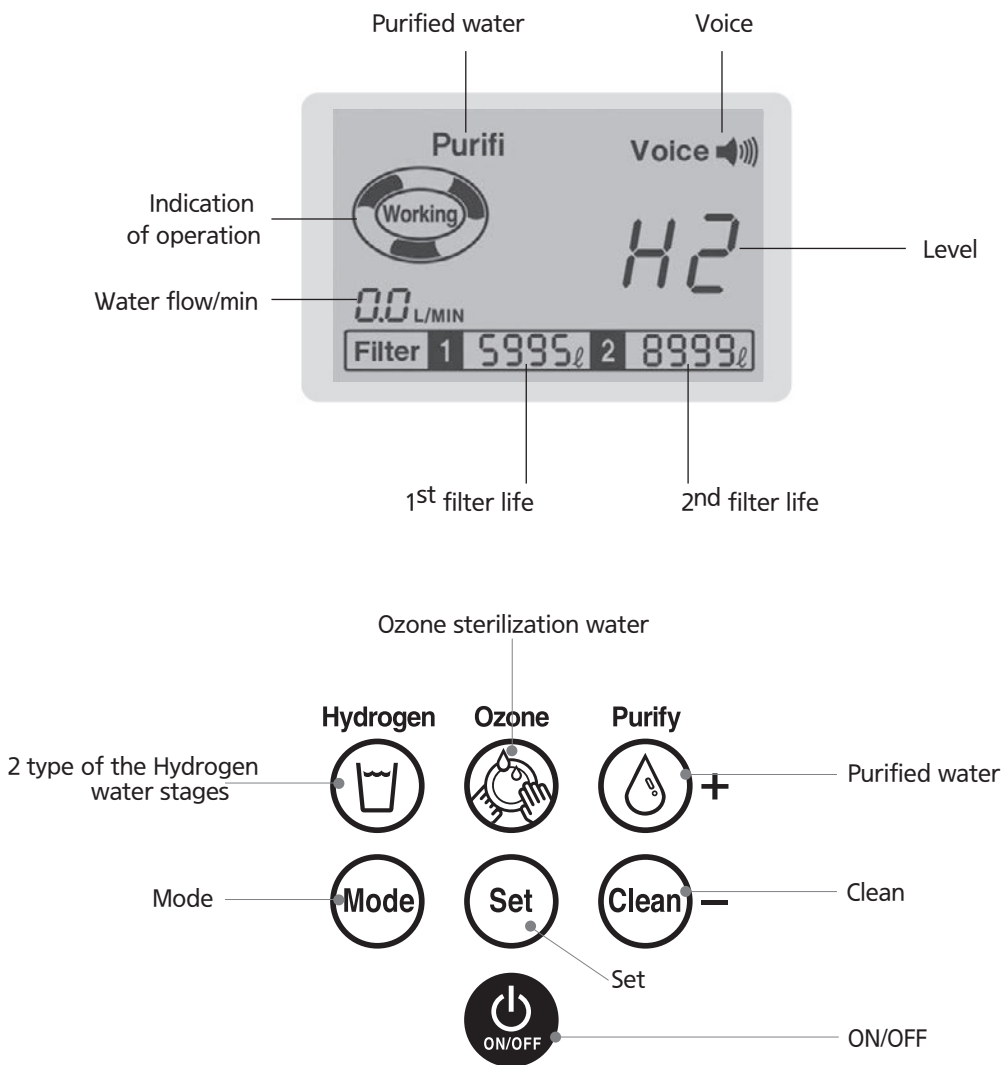
④ How to check water pressure and how to set

- Using measuring instrument: ①Measure the raw water pressure with the instrument. ② If its pressure is low, then please increase the raw water pressure level. ③If the pressure when the water comes through the machine is low, then please adjust the water pressure valve to increase.(Standard-0.6L~0.8ℓ/min)

⑤ Installation Precautions

- During the initial setup, leave faucet diverter valve locked to operate the product first. After turn on the machine, adjust the water pressure while slowly turning the faucet diverter valve. (Water pressure for normal operation: 1.0 ~ 3.0bar (1.0 ~ 3.0kgf/cm²) If the water pressure of the raw water exceeds 3bar after passing through the pressure reducing valve, then the water which automatically adjusted to 3bar will be supplied to the product. However, the water pressure is not automatically increased when the water pressure of the raw water is less than 3.0bar (3kgf).

Description of Functions of Front Panel



Caution



Clean button:

It will clean for 3 minutes when touching the clean button.

Depending on the quality of the original water, apply daily / 3 times a week / 1-2 times a week.

sterilization water



- Touch the action button gently.
 - ※ The first time after connecting the power supply, it will automatically clean for about 120 seconds.
 - ※ After cleaning, if you touch the motion sensor once again in standby mode, it will start.

Hydrogen



- When you touch the Hydrogen button, a step-by-step stage is displayed on the LCD screen. When you touch the operation / standby button, a voice message tells you that the level of hydrogen water currently selected.

Level 1 “H 1” Level 2 “H 2”

- ※ Set a desired level. Each touch will move up one level.
- ※ The device remembers the most recent hydrogen level, and the level of hydrogen water will be discharged.

Ozone



- Touch the ozone water (sterilized water) button, “03” appears on the LCD screen
- When you touch the action / standby button, ozone water (sterilized water) comes out with a voice message.
 - ※ If you have used ozone water before, level 2 water will come out.

Purify



- When touching Purify, the LCD “- - -” shows this, and when touching action/standby button, purified water will be discharged with a voice message and the screen will turn green.



- Touch the clean sensor, and the LCD will turn red and show “- - -” and when touching the action/standby button, it will clean for 3 minutes.
 - ※ When the cleaning starts, the device will say cleaning starts soon.
 - Do not drink while cleaning and a bell will ring to tell users not to drink.
 - ※ Use forced cleaning when you need to clean the electrolysis cell.
 - ※ Once cleaning is finished, hydrogen water mode will automatically turn on.





Caution

“Clean” Depending on the quality of the original water, apply daily / 3 times a week / 1~2 times a week.

How to adjust volume

1. layed with “ding” sound

 Push the Mode button for 3-4 sec, and the bell will ring  , and the LCD will show

At this time,  touch the Mode button twice, to make **Voice**  the Voice blink.

(Previously set volume will be turned)

2. When “Voice” is blinking, use  + or  - button to adjust volume.




+

Volume up



-

Volume down

3. To set after the change, push  the set button, and with a melody, the settings will complete and the device is ready to be used again.



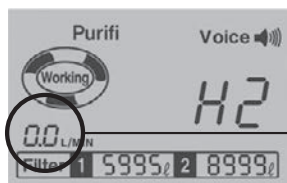
Self Diagnosis Error Display

If the number of the error is displayed on the LCD window as below, please contact the corresponding processing or A/S center.

Check

It appears whenthe water flow rate is less than 0.4liters per minute oe 2.0per minute or more device protection.

※ Recommended flow rate: 0.7~1.0 L/min



E0 This appears when piping is misconnected or source water is blocked.

E1 This appears for filter expiration, similar product, reused filter or abnormal

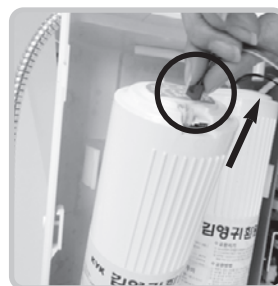
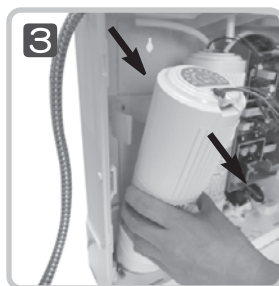
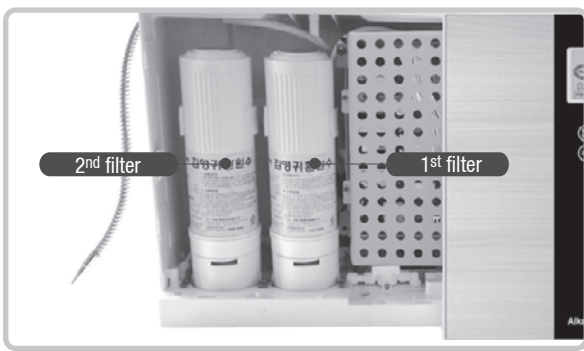
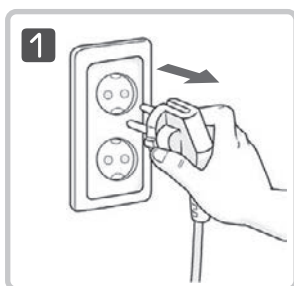
→ When and how to replace the filter

Check the filter life number on the display and prepare for filter replacement.



If supplied water has poor water quality, bad smell, or bad taste, the filter must be replaced before reaching its useful life. If the water quality of supplied water is getting significantly worse, a pretreatment (external) filter should be needed

How to replace the filter



→ When and how to replace the filter



- 1** Turn off the power.
- 2** Lift the front cover of the product after simply pushing the circular hook on both sides of the product simultaneously, and the front cover will be opened. Lift the front cover to about 1/3 height and place it aside to the right.
- 3** After setting the front cover on the right side, hold the filter to be replaced (primary filter – right, secondary filter – left), pull them forward and remove the harness wire (electric line) connected to the filter chip from the filter.



The filter-sensing sensor chip is attached on the filter's upper part. You may not take out the chip. Only the harness wire must be taken out.

- 4** Hold the middle part of the filter and turn it to the left (OPEN), and pull it up to make it taken out.
- 5** Align the bottom of the new filter with the filter socket part of the product where the filter is to be mounted. For perfect mounting, turn it to the right direction (CLOSE), marked on the top of the new filter, all the way to the end.
- 6** Insert the wire of the filter-sensing sensor into the replaced filter and slide the filter back.
- 7** Put back the front cover by sliding it in from the top.
- 8** Re-connect the power cord and touch the operation sensor. The product will do a self-cleaning process for about 20 seconds. When it turns to the standby mode, touch the Water Purification button again, let the water flow for about 2~3 minutes. Now water is ready to serve you.

➡ Notices for Safety

- This product must only use AC110V/120V(American type) and AC 220V~240V (European type) .
- Do not install the product in a place with high humidity (such as a bathroom and an outdoor place) or a place near fire or under direct sunlight.
- Be sure to install the product and have it connected to a cold water pipe.
Do not move it during operation.
- Do not use hot water with this product.
- Do not apply shock to or disassemble the product.
- When you do not use this product for a long time please unplug it.
- The hose connected to the product must not be kinked or twisted.
Do not wipe the product with thinner, benzene, wax, alcohol, etc.
- Do not use groundwater, contaminated water, hot water of 35 °C or higher, water containing metal components, salt, lime, etc., or water not suitable for drinking water quality standards.
- Do not lift this product body holding the stainless steel tube, it will break.
- Do not place heavy objects on this product.
- Be careful when changing the filters to not damage the O ring. Change the filters carefully.
- Change the filter regularly.
- Please be careful for your safety!
 - There is a risk of accident due to careless use by children.
Be careful that children do not play with the product.
 - Please don't use it without enough knowledge and experience or Instruction and supervisor direction in case of lack of physical, mental ability and sensibility.

→ Product Specifications

Product Name	KYK Hydrogen Water Generator	Model	Higen2 ⁺
Manufacturer	KYK Co., Ltd. (#407~410, 555, Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea)		
Manufacturing No. and Date	As shown as on the backside of the product.		
Standard Voltage and Frequency	100~240V~, 50/60Hz		
Size and Weight	Size : 340(W)× 340(H)× 150(D) (mm) / Weight : 6kg	Power Consumption	70W
Composition and Water Supply Type	Stationary or Wall-mounted / Direct connection to tap water		
Confirmation Letter of Declaration	XH070308-17002A		
Electromagnetic wave certification NO.	MSIP-REM-K72-kykhizen2plus		
Available Water Pressure	3.0 kgf/cm ²	Available Temperature	5°C~35°C
Controlling Method	Touch sensor	Electrolysis Method	Continuous electrolysis
LED Indication	Hydrogen / Ozone / Purify / Mode / Set / Clean Filter usages(1 st , 2 nd filter) / Water flow/min		
Filter Replacement Time	① Check the filter life number on the display and prepare for filter replacement. ② You should replace the filter promptly, If the water's taste, smell, color etc. is not normal condition because of the decline in regional raw water quality or a period of water shortage, even though the filter life does not come to the end.		
Filter Type	Composite Filters(1 st , 2 nd)		
Filter Change Instructions	Filter Change(See the user manual)		
Filter Shell Material	PP		
Power Source Protector	Fuse		
Over-current Detector	Automatically stop the electrolysis		
Overheat Protection Device	Temperature detector circuit installed inside SMPS power supply automatically stops the device.		

Warranty Registration

Terms of Warranty	One year parts and labor
Purchase Date	
Name	
Phone number	
Address	
Seller	
Name	
Address	

1. Our company will pay for repair, labor and shipping for one year guarantee performance and operations.
If repair of the product is not possible, we will replace the product.
2. Customer will pay for repair charges including shipping under the following conditions:
 - (1) A malfunction occurs after the warranty has expired.
 - (2) The unit is damaged by the customer.
 - (3) Damage is caused by customer attempting to repair the unit themselves or the unit is repaired by an unauthorized service center.
 - (4) Damage is caused by using the incorrect electrical voltage.
 - (5) Damage is caused by using an imitation filter.
 - (6) Damage is caused by a natural disaster.
 - (7) Poor performance and failure due to failure to observe notices and precautions
 - (8) Damage is caused by exposing the electronics to water or moisture.
 - (9) Presented without this Warranty Certificate.



KYK Co., Ltd.

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