

KYK Hydrogen Water Generator USER MANUAL

Higen1+ Premium



Thank you for being our Customer!

Dear KYK HIGEN1+ Customer,

Welcome to the Higen1+ family. I hope to find you well and healthy. Congratulations on purchasing the Higen 1+ and we appreciate your decision to join our family.

Please read the manually fully before using the Higen1+. It contains very useful information about the safe care, operation and ease of use of the Higen 1+.

Furthermore, with the information in this manual you can customize the water to suit your needs. You can maximize your Higen1+ performance and extend the life span of the product.

All of our KYK executives and staff members are dedicated to achieving the best for our customers. Our focus is on our customer benefits, health and happiness.

Please, feel free to contact us at any time. If you have any recommendation, we would appreciate the feedback. The feedback will help us improve our product offering.

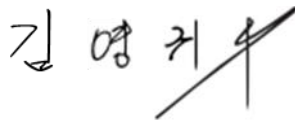
Again, I thank you from the bottom of my hearts for your choosing the KYK Higen1+, we know you will enjoy it. I hope it will help you be healthier and happier and bring your precious family all the riches you deserve.

Thank you.

Sincerely

 **KYK 김영귀 환원수**

President



| Table of Contents |

1. Major Components	4
2. Parts and Features	5
3. Before installation	8
4. Installation	9
5. How to measure your tap's aerator.....	10
6. Flow diverter installation	11
7. Installation checklist	15
8. How to use the Higen 1+	16
9. When to change the filter	18
10. How to change the filter	19
11. Summary of Operation Notices	22
12. Notices for Safety	23
13. Product Specifications	24

Note: Please read the manually fully before using the Higen1+. It contains very useful information concerning the care, operation and use of the Higen 1+.

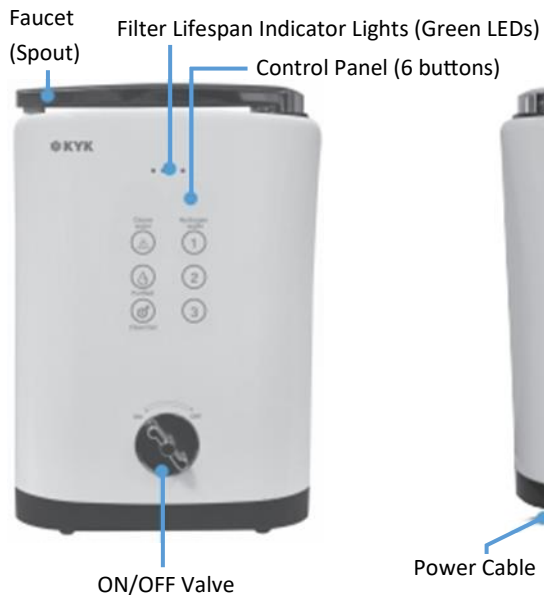


Major Components



Body

[Front]



[Rear]



Bottom

Accessories



Adaptor Rings



Tap Water IN

Water OUT

Overflow Drain



Flow Diverter + Hose



Tubing



Water Pressure Reducer Valve



Water Softener



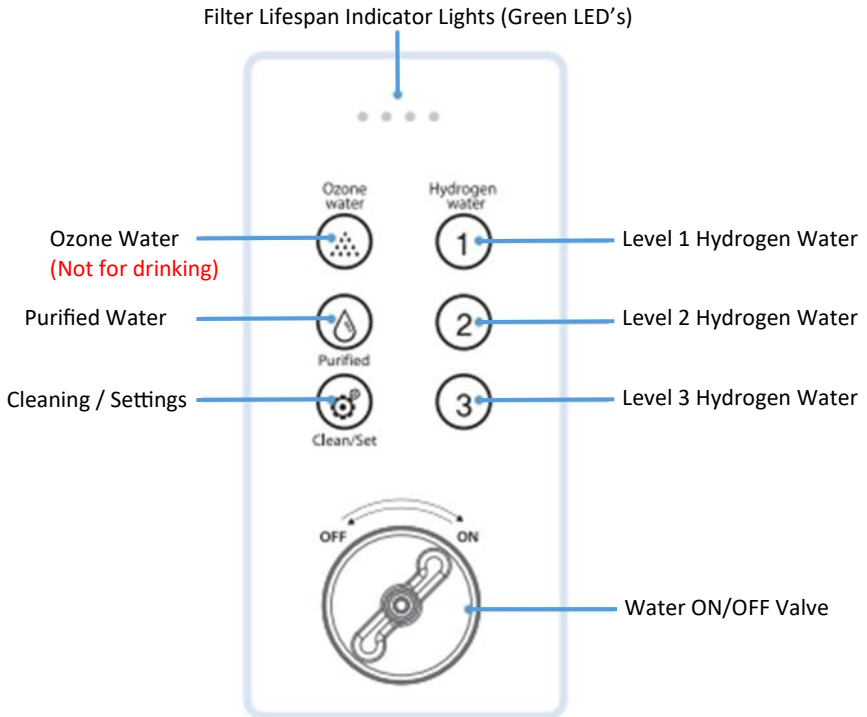
90° Elbow Connectors



Parts and Features



Control Panel



Cleaning / Setting

- Cleaning cycle starts automatically every 30 litres of continuous use to protect the electrolysis chamber.
- 2 settings available. Speaker volume and input water pH level (default 7.1).

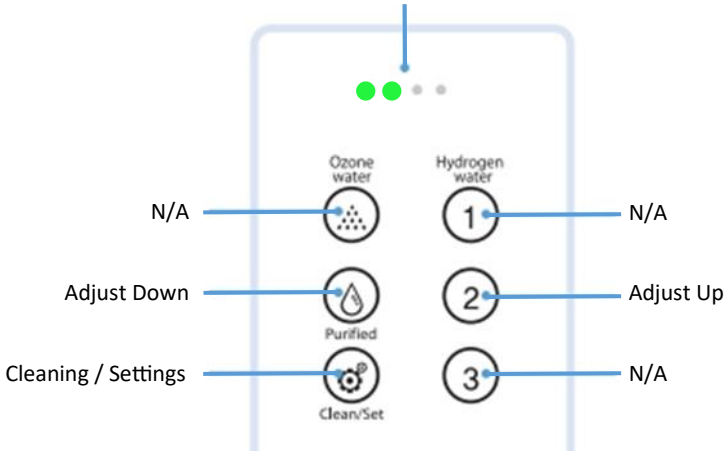


Parts and Features



Changing Setting - Volume

Filter Lifespan Indicator Lights (Green LEDs)



Clean/Set Button - Volume Setting

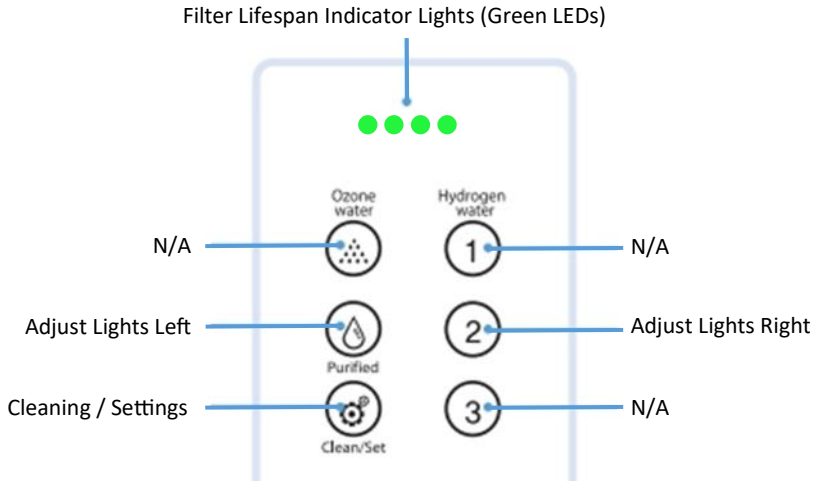
- To access the volume setting: Press the Clean/Set button for 3-4 secs, until the unit beeps.
- To adjust the volume: Press the Purified button for the low volume, and the No. 2 button for the higher volume. The green LED indicator lights will light up as you switch between the two.
- To apply the setting: Press the Clean/Set button until the unit beeps.



Parts and Features



Changing Setting - Input pH level



Clean/Set Button — Input pH Level Setting

- To access the input pH level: Press the Clean/Set button for 7-8 secs, until the unit beeps twice.
- There are 6 preset pH levels to choose from (see table below).
- The green LED indicator lights 1 to 4 (left to right) will light up as you switch between them.
- Press the purified button to move the green light to the left (lower pH), and the No. 2 button to move the green light to the right (higher pH).
- To apply the setting: Press the Clean/Set button until the unit beeps.

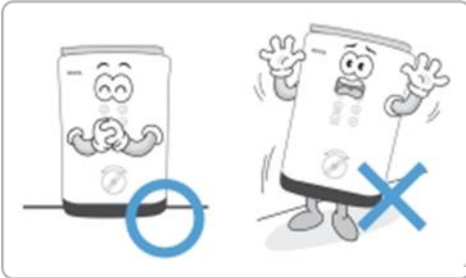
1st light Blinking	1st light On	2nd light On	3rd light On	4th light On	4th light Blinking
pH 6.5	pH 6.8	pH 7.1	pH 7.4	pH 7.7	pH 8.0



Before Installation



Read the recommendations below before installing your Higen 1+ unit



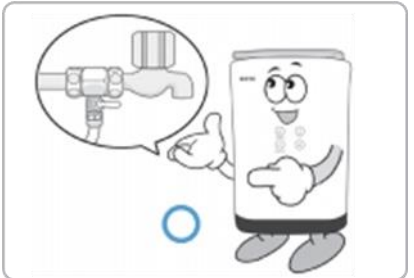
Do not tilt the product.



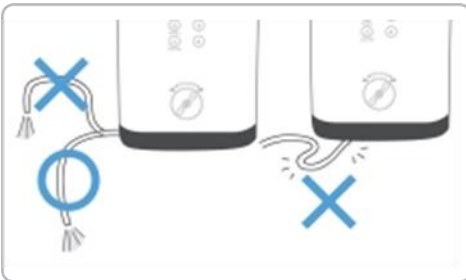
Install the product at least 100mm away from any walls.



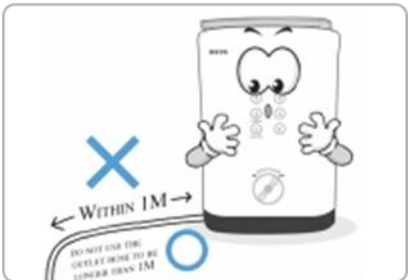
Keep the product dry, and avoid high moisture areas or direct sunlight.



Damage can result from running hot water through the unit and will void any warranty.



Water OUT tube must not be (raised) higher than the base of the product.



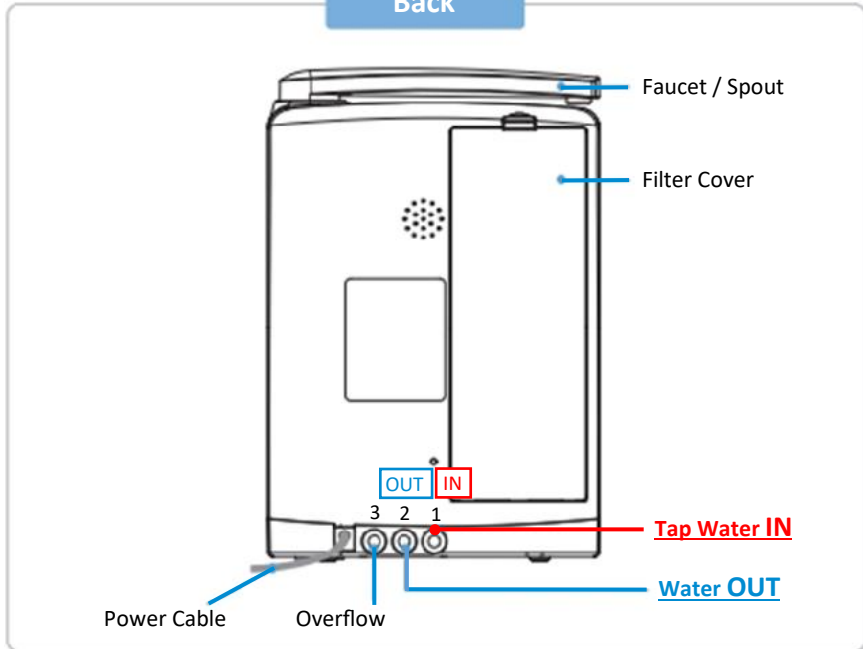
Water OUT tube must not be longer than 600mm from the unit.



Installation

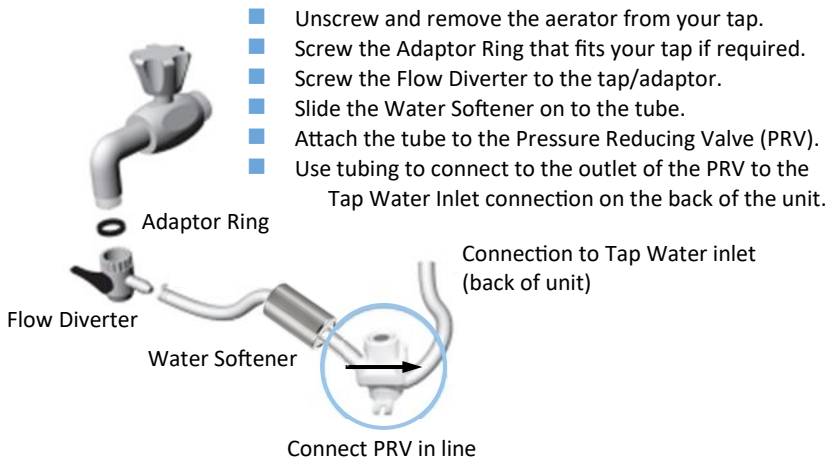


Back



1

Installation Connecting to the end of a tap



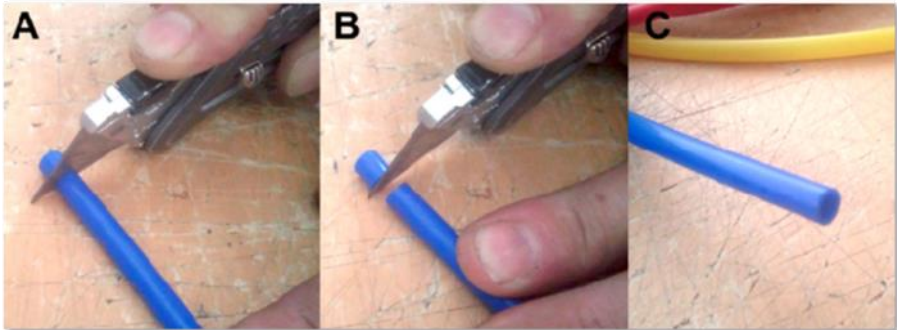


Installation



How to Cut the Tubing for Connection

- Use a very sharp knife or razor blade to get a clean right angle cut.
- Check to make sure you have a clean and even end.



Caution

- All threaded connections to the cold water supply should be covered with Teflon tape to avoid the chance of leaks.
- If you need to relocate the unit, be careful not to over-stress any connection. Over-stressing a connection can cause the connections to leak after the unit is relocated. Over-stressing can cause the O-rings and seals to distort and not seal or seat properly. Under mains pressure conditions these over-stressed joints may leak or break.
- If connections are overtightened, then leaks are possible. And if connections are too loose, then leaks are also possible. For best result ensure connections are tight enough to not produce any leaks but not too tight to damage them. Use Teflon tape on all male thread connections.
- If the tube between the inlet and water drain port is installed incorrectly, it may mean the unit will not generate hydrogen and cause the unit to fail. Any failure due to incorrect installation is not covered by warranty.

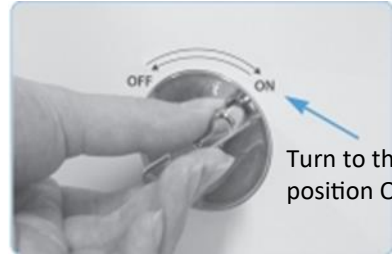


Installation



2

Turn OFF the water control valve before connecting the water supply tubing to the machine.



Turn to the position OFF

3

Attach the 90° elbow connectors to water input and output ports on the back of the machine.



4

Connect water supply tubing to the elbow connector.



Caution

Inlet and outlet check

- Ensure the water inlet and outlet are connected correctly. Refer to Page 9 Unit Back diagram. If the unit is used with the inlet (IN) and outlet (OUT) reversed, then it will cause severe internal damage to the hydrogen cell and the unit will stop working. This error is not covered under the product warranty.



Installation



Please place the water Pressure Reducing Valve (PRV) between the tap flow diverter valve and the unit.



Water Pressure Reducing Valve (PRV).

Note: Please be aware the water flow direction when installing the PRV. The arrow indicates the flow direction of the water.

How to measure your tap's aerator



Standard tap adaptor rings are supplied with the Higen 1+. These adaptors meet the Australian tap thread sizes standard and will fit most taps in Australia.

If these adaptor rings don't fit to your tap, please call AlkaWay on 1800 268 469 or email us at info@alkaway.com.au with a photo of your tap and a photo showing a very clear measurement of your aerator as pictured above. Make sure the ruler runs exactly through the center of the aerator (measure in mm).



Installation



Flow Diverter Installation

Removing aerator from your tap

- Most modern mixer taps have an aerator that can be unscrewed counter-clockwise (make sure you keep this in a safe place, as often they are unique to each tap and hard to replace).

Attaching the flow diverter to your tap

- Screw the adaptor ring to the diverter (hand tight). Then screw the adaptor ring diverter assembly to the tap (use a little Teflon plumbers' tape if needed), taking care not to twist the hose.

Shortening hose from the flow diverter

- If you need the hose to be short, remove the hose by unscrewing the knurled collar from the diverter and pull off the hose from the diverter. Then cut the hose to the required length. Push the hose back onto the diverter and re-screw on the knurled collar tightly.

Using the flow diverter

Push the diverter pin to divert flow into your Higen 1+.

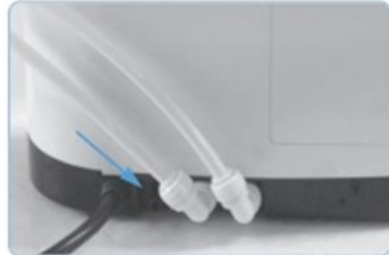




Installation



- 5 Connect drain tubing to the elbow connector. Read Caution below.



Caution

- The water drain hose **MUST** be less than 600mm long. Shorter is better. A longer drain hose will cause an increase in back pressure. This will cause the unit to produce lower concentrations of hydrogen and potentially cause it to fail.
- Place the drain hose end for water drain port lower than the machine.

- 6 Plug in the power. You will hear a start-up sound and all lights will turn on for 3 seconds.

The hydrogen water level is automatically set to level 2.

- 7 Push bar across on the flow diverter so when tap is turned on water will flow to the unit. Cold water only. Turn the ON/OFF valve ON to start water flow.



Caution

- Check the hose connections for leaks before using the device.
- Diverter installation on the end of your tap is recommended. Flush machine by pressing the purified water button. Run for 5-10 minutes or until water runs



Installation Checklist



How to check the water pressure and flow rate

If the water pressure is too low or high, a warning buzzer will sound, when the ON/OFF valve is turned on. The warning buzzer will sound if the water flow is lower than 0.5 liters/min or higher than 3.5 liters/min. To adjust the flow, turn the adjustment screw on top of the Pressure Reducing Valve (PRV).

(The working water pressure is 21 to 42 PSI and water flow is 0.7- 0.8L/ min)

- A simple way of measuring the flow rate is time how long it takes to fill a 200ml cup with water from the unit. It should take about 13-14 second. This equates to a flow rate of around 0.7-0.8L/min (Which is normal operation).

Source water: Ground/bore, rain or town water?

The Higen 1+ is **only suitable for town water** supplies. Contact us for more details on 1800 268 469.

For areas with high limestone/calcium in the water, we supply a water conditioner (high powered magnet on the inlet tube) to help control build up. Contact us on 1800 268 469 for more information.

For hard water, choose appropriate pre-filter to be installed before the unit. Contact us on 1800 268 469 for more information.

Clean the machine by pressing the Clean/Set button regularly. To protect the electrolysis cell, after 30 liters the unit will give you audio alert and go into automatic cleaning for 60 seconds.

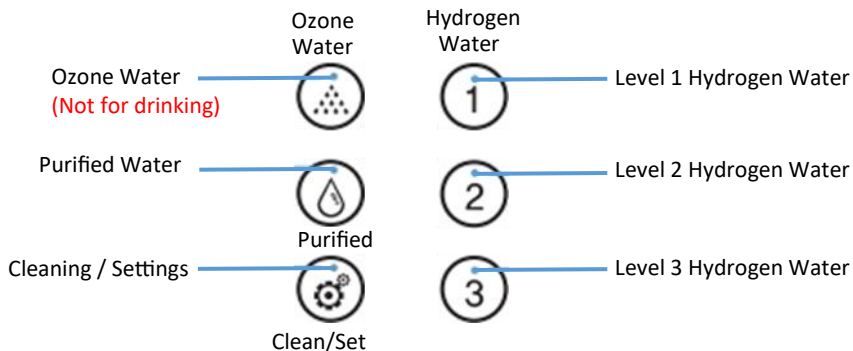
Diverter installation: To prolong the life of the flow diverter, turn off the tap, push bar over (diverting the water) then turn on the tap. This will help protect the flow diverter. Turn the ON/OFF Valve on to access the water.



How to Use the Higen 1+



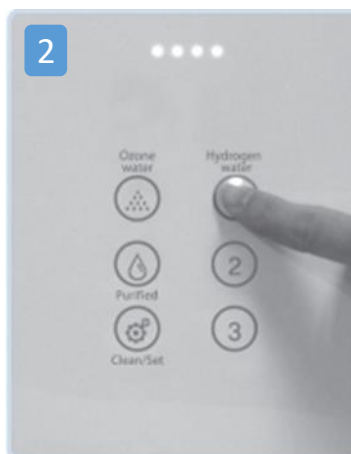
Once you touch the button, the LED lights will be turned on



How to operate the Higen 1+



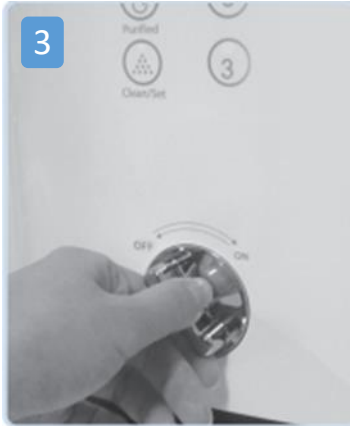
1 Pull forward the faucet/spout towards the front of the unit.



2 Press button for desired level or type of water. An LED light will light up and a beeper will sound to show what was selected.

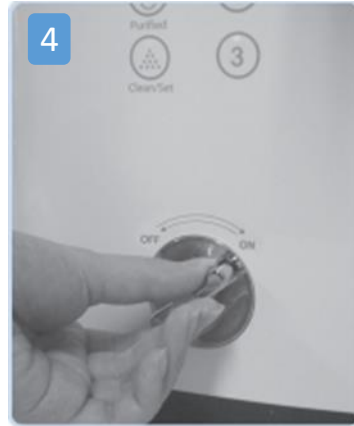


How to Use the Higen 1+



Once you turn the ON/OFF valve to the On position the water will flow and the green LED lights will start blinking.

DO NOT DRINK OZONE WATER



The optimized amount of flow is 0.7-0.8 Liters per minute (including Ozone water).

The water flow can be controlled by the ON/OFF Valve. Turn the knob to adjust the flow.

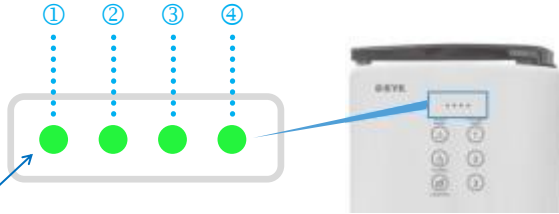


Notes

- Once you start water flowing from the Faucet/Spout the filter lifespan indicator lights will light up. The lights indicate how much filter life is left (for 3 seconds). Then the lights will cycle on from left to right as the units is dispensing water.
- Default setting for Hydrogen Water is level 2.
- To protect the electrolysis cell, after 30 liters the unit will give you an audio alert and go into automatic cleaning for 60 seconds.
- Even after turning the ON/OFF valve to the OFF position, the water could come out for another 3-5 seconds. Please don't worry as this is the normal.
- Replace the filter every 12 months even if the filter capacity hasn't been exceeded.



When to Change the Filter



LED filter lifetime indicator lights

1

Water treatment capacity and service life of filter:

- Filter life time will be effected by the quality of the source water.

Filter replacement time:

- Filter life is 3000 litres or 12 months. So replace the filter at 3000L or 12 months, which ever comes first, even if there is still filter capacity.
- When the ON/OFF valve is turn on, the green LED lights will light up (solid for 3 seconds). These lights indicate how much life is left in the filter.
 - 4 lights means 100% filter life left to use,
 - 3 lights means 75% filter life left (25% used),
 - 2 lights means 50% filter life left (50% used),
 - 1 lights means 25% filter life left (75% used) and,
 - no lights means filter life is used up. Replace the filter.



Caution

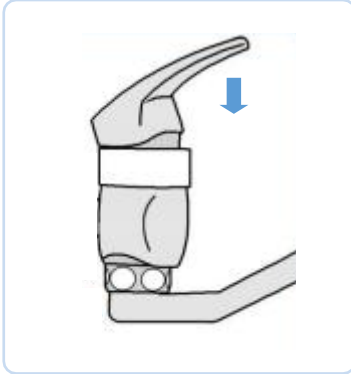
- For poor quality source (inlet) water, a prefilter filter is required before the Higen 1+ unit. Contact us on 1800 268 469 for more information.
- In case of any abnormal scent from the outlet water, replace filter with a new one even if the filter is less than 12 months old.
- Replace the filter every 12 months even if the filter capacity hasn't been exceeded.



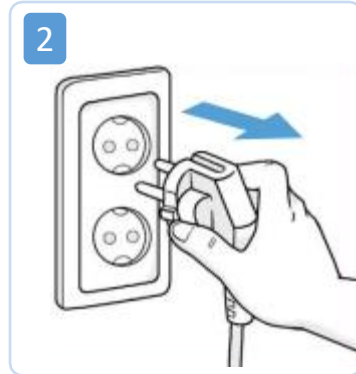
How to Change the Filter



How to change the filter



Turn off the water.



Turn off the power to the unit and unplug it.



Remove the filter cover by gently pushing down on the on the locking hock.



Gently tilt the filter forward.

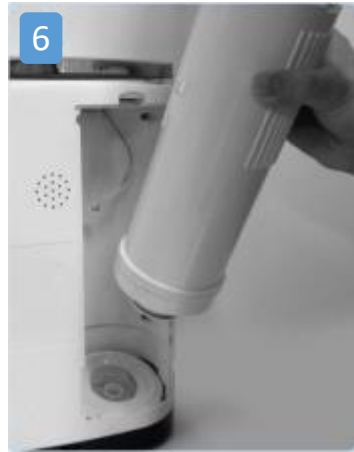


How to Change the filter



5
Disconnect the electric connection to the filter monitoring sensor (PCB) located on the top of the water filter.

NOTE: DO NOT PULL ON THE WIRES.



6
Turn the filter 90° (¼ turn) counter-clock-wise. Then pull the filter free.



7
Please remove the plastic cover from the new filter. Place the filter onto the filter holder and press it into place. Ensure the PCB board is facing toward you as shown in image (left). Turn the filter 90° (¼ turn) clock-wise to lock it into position.



Make sure that the rubber ring in the connection between the filter and the main body is not detached or jammed. Failure to do so may cause a water leak.



How to Change the filter



8
Reconnect the electric connector to the filter monitoring sensor (PCB). Please refer to the above image, be careful with the electrical wire when you push the filter back into position.



9
Gently push the filter into position (vertically inside the unit)
Close the filter cover. Plug the power in and open the valve to flush water for 3-5 minutes. This is to remove any loose particles from the filter. Run water until it clears before drinking.



Summary of Operation and Notices



- When you use this product for the first time, run water through it for 3-5 minutes to remove any loose particles from the filter.
 - If you do not use this product for more than two days, run water (flush) through it for 1-2 minutes before reusing.
 - If you do not tend to use this product for a long time (over 1 week), please unplug it, remove the filter, and dry it out.
-

These items will void the warranty.

- Do not use this product for any purpose other than what's described in this manual.
- Do not intentionally modify this product.
- Do not take this product apart.
- Do not modify this product internally.

- Do not use alcohol to clean and wash the machine (Only use a gentle soap).
- Do not place heavy objects on this product.
- Do not lift this product body holding the faucet/spout as it will break.
- Do not drop, shock or shake the unit. It will cause internal damage.

- Town tap water is best. Do not use overly contaminated water with this product.
 - Do not use ionized water, well water, groundwater, rain water, contaminated water, high mineral water, hard water and water contained with high amounts of heavy metals.
 - Do not use hot water in the machine. Room temperature water is the best.
 - Always keep the disposal outlet open so water can drain.
-

- Change the filter regularly.
 - When the filter change signal is displayed, please change the filter as soon as possible.
 - Be careful when you change a filter not to damage the O-Rings.
-

- Use AC110V/120V(American type) or AC 220V-240V (Australian type) with this product only.
- If there is a problem with this product, please call your customer service centre on 1800 268 469.



Safety Notifications



To avoid electric shock, leaks and/or fire

- This product must only use AC110V/120V and AC 220V-240V power supplies.
- Keep the electrical plug free of dust and dirt.
- If the electrical plug is broken, do not use the unit. Have the plug replaced by certificated repair person.
- Do not connect too many electrical plugs to one power socket.
- Dry your hands before inserting or removing the electrical plug.
- Do not bend or pull the electrical plug out by the cord. Gently pull on the plug.
- Do not take apart or repair the Higen 1+ unit without the correct certification.



To avoid Higen 1+ problems and failures

- Do not expose the Higen 1+ unit to highly wet environments such as rain, your bathroom, or your shower.
- Do not place heavy objects on the Higen 1+ unit.
- Install the Higen 1+ unit on a solid and horizontal countertop or shelf.
- Only use cold water with the Higen 1+ unit.
- Do not move the Higen 1+ unit while it is operating.
- Do not shock or shake the Higen 1+ unit.



To avoid Leaks

- Do not twist, bend or kink the water inlet tube.



To avoid body damage - Staining and Peeling

- Do not use thinner, benzene, or wax when you clean the Higen 1+ unit.



To avoid distortion of the KYK Product exterior

- Keep the Higen 1+ unit out of direct sunlight and away from heat sources.



To avoid impure water and the KYK unit malfunctioning

- Be sure to only supply clean, quality water to the Higen 1+ unit. Do not hook up directly to a lake, river, ionized water, groundwater, rain water, contaminated water, high mineral water, hard water and water contained with heavy metals, etc.



Product Specifications



Manufacturer Approval Code	2213	Product Approval Code	15-297
Product Name	Hydrogen Rich Water Generator / Hyd-HISHA		
Manufacturing Company	KYK Co.,Ltd (#406~410 Sun-il technopia, 555 Dunchon road, Joongwon-Gu, Sungnam City, Kyunggi-Do, KOREA)		
Manufacturing No. and Date	See rear of product		
The object of Product	It is a device to produce Hydrogen Rich Water with concentration 600~1200ppb. Hydrogen is a powerful antioxidant.		
Voltage and Frequency	AC220V, 60Hz	Power Consumption	150VA
Dimension and Weight	220(W) X 322(H) X 100(D)mm / 2.4kg		
Water Connection	Free standing. Direct connection to tap water.		
Source Water Temperature	5°C - 35°C	Available Water Pressure	3.0kgf/cm ² (42 PSI)
Electrolysis	Continuous electrolysis		
Displayed Contents	Displays levels, water purification, filter life		
Electrolysis	Performance Output	Hydrogen Rich Water 0.7 ~ 0.8 L/min (±10%)	
	Water Type	3 levels of hydrogen water, 1 purified and 1 ozone water	
	Electrolysis Cell	PEM	
	Electrode Cleaning	PEM Cleaning system - Automatic every 30 litres	
Filter	Estimated filter life	3,000 litres (may differ region to region, State to State)	
	Filter change indication	<ul style="list-style-type: none"> - When the light of Filter Life LED begins to blink once, - Once there is any change in water taste and scent. Change filter at anytime, - Filter expires by time (12 months) or capacity, whichever comes first. - Use KYK genuine filter only. KYK is not responsible for any damage caused by non-genuine filter use or user's mis-use. 	
	Filtering Material	Composite filter	Notification Filter Change (refer to manual)
Power Source Protector	Fuse		
Over-current Detector	Automatically stops the output of electrolytic cells		
Over-temperature Protector	Temperature detector circuit installed inside SMPS power supply automatically stops the device.		

Warranty Registration



Terms of Warranty	Two year parts and labour	Purchased date:	Retain proof of purchase
Customer	Name:		
	Address:		
	Phone No.:		
	Email address:		
Contact Seller for warranty queries	Company:	AlkaWay	
	Email:	info@alkaway.com.au	
	Phone No.:	1800268469	

1. Our company will pay for repair, labour and shipping for a two-year period on performance and operations. If repair of the product is not possible, we will replace the product.
2. Customer will pay for the repair charges including shipping under the following conditions:
 - a. A malfunction occurs after the warranty has expired.
 - b. The unit is damaged by the customer,
 - c. Damage is caused by customer attempting to repair the unit themselves or the unit is repaired by an unauthorized service center,
 - d. Damage is caused by using the incorrect electrical voltage,
 - e. Damage is caused by using an imitation filter,
 - f. Damage is caused by a natural disaster,
 - g. Damage is caused by exposing the electronics to water or moisture.
3. This warranty does not exclude Australian Consumer Guarantees.





KYK Co., Ltd promises to treat every customer fairly and respectfully with their health and happiness our number one priority.

KYK Co.,Ltd

The head office address / Manufacturing Company
#407~410 Sun-il technopia, 555 Dunchon road, Joongwon-Gu,
Sungnam City, Kyunggi-Do, KOREA

TEL. 82-31-777-3939 FAX. 82-31-777-3456

Made in Korea