

# **VEVOR<sup>®</sup>**

**TOUGH TOOLS, HALF PRICE**

Technical Support and E-Warranty Certificate [www.vevor.com/support](http://www.vevor.com/support)

## **WATER IONIZER MACHINE**

## **OPERATION INSTRUCTION**

**MODEL:EHM-959**

We continue to be committed to provide you tools with competitive price.

"Save Half", "Half Price" or any other similar expressions used by us only represents an estimate of savings you might benefit from buying certain tools with us compared to the major top brands and does not necessarily mean to cover all categories of tools offered by us. You are kindly reminded to verify carefully when you are placing an order with us if you are actually saving half in comparison with the top major brands.



**MODEL:EHM-959**






### NEED HELP? CONTACT US!

Have product questions? Need technical support? Please feel free to contact us:

**Technical Support and E-Warranty Certificate**  
**[www.vevor.com/support](http://www.vevor.com/support)**

This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves a clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there are any technology or software updates on our product.

	<p><b>Warning-</b>To reduce the risk of injury, user must read instructions manual carefully.</p>
	<p>Indoor Use only</p>
	<p><b>CORRECT DISPOSAL</b></p> <p>This product is subject to the provision of European Directive 2012/19/EC. The symbol showing a wheeled bin crossed through indicates that the product requires separate refuse collection in the European Union. This applies to the product and all accessories marked with this symbol. Products marked as such may not be discarded with normal domestic waste, but must be taken to a collection point for recycling electrical and electronic devices</p>

## IMPORTANT SAFEGUARDS

When using your Buffet Warmer, basic safety precautions should always be followed:

- 1.Read all instructions.
- 2.Check that the voltage indicated on the data plate corresponds with that of the local network before connecting the appliance to the mains power supply.
- 3.Do not leave the appliance unattended whilst connected to the mains power supply.
- 4.Do not immerse the appliance in water or any other liquids.
- 5.It is imperative to unplug the power cord after the appliance has been used, before it is cleaned and whilst being repaired.
- 6.Close supervision is required when using this appliance near children. Never leave the appliance within reach of children.
- 7.Repairs to electrical appliances should only be performed by a qualified electrician. Improper repairs may place the user at serious risk.
- 8.This appliance is intended for household use only and should not be

used for commercial purposes.

9. Do not operate the appliance with a damaged plug or cord, after a malfunction, or after being dropped or damaged in any way.

10. Do not use the appliance for anything other than its intended use.

11. Do not touch hot surfaces, use handle or knobs when working with the unit.

12. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision. Keep the appliance and its cord out of reach of children less than 8 years.

13. Type Y attachment: If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

## **SAVE THESE INSTRUCTIONS**

### **FCC INFORMATION**

#### **CAUTION:**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment!

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) This product may cause harmful interference.

2) This product must accept any interference received, including interference that may cause undesired operation.

#### **WARNING:**

Changes or modifications to this product not expressly approved by the party, responsible for compliance could void the user's authority to operate the product.

**Note:**

This product has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules, These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This product generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the distance between the product and receiver.
- Connect the product to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

## **INPUT WATER QUALITY REQUIREMENTS**

- The input water quality should meet the local drinking water quality standard. If the water quality is not good, it may not only shorten the water ionizer's lifespan, but even may be harmful to your health.
- The input water flow rate should be over 0.8L/min, then it will drive the water flow sensor to start the water ionizer. If your water flow is less than 0.8L/min, the water ionizer can't be turned on to work. Then you may need a pump to help.

## **DO NOT DAMAGE THE POWER CABLE AND PLUG**

- Do not force to bend, twist or squeeze the power cable and plug
- Do not drag the power cable

- Do not put heavy weight on it
- To avoid electric shock or catching fire, stop using the machine once damage is found on the power cable or plug. Please contact professionals to repair the damaged power cable and plug.
- Always insert the plug to the end. Stop using a damaged or loosened power plug. If not, it may cause the electric shock or catch fire.
- Clean the dusts on the power plug pins regularly. Because if the dust contacts the water mist, there is a risk of electric shock or catching fire. Do not use volatile solvents to clean the machine. Clean it with soft cloth and detergent.

### **DO NOT INSTALL THE WATER IONIZER IN THE PLACES BELOW**

- Near the Fire or high temperature(Over 60℃) place
- Outdoors or exposing to the sun or rain
- In steam or moisture place
- Do Not disassemble, repair or modify the machine on your own. Please contact the distributor/seller or professionals for any question.

### **TECHNICAL PARAMETERS AND SPECIFICATIONS**

Model	EHM-959
Power supply	AC115V 60Hz
Heating power	1100W
Electrolytic power	110W
Bide power	12W
Water pressure	0.1~0.3MPa
Inlet water TDS	50~1000mg/L
Flow rate	1.0~3.5L/Min
Best flow rate	2~3 L/Min
Continuously working time	≤30minutes
Filter usage life	10000L(Depend on the water quality)

Plates material	Titanium with platinum coating
Number of plates	8 PCS
Electrolytic plate area	1848cm <sup>2</sup>
pH range	2.5-11.2
ORP range	+500~-800mv
Inlet water temperature	5-40℃ (41-104°F)
Heat the water temperature	35-55℃ (95-131°F)

**Note:**1.The pH & ORP range, Filter usage life and Flow rate etc. is depending on your local water supply condition.

The PH data is laboratory data, different regions are affected by TDS value, the data may be different, which is a normal phenomenon.

When the heating function is working, the water temperature will be kept at about 35-55℃.

## METHOD OF ERECTION

### 1.Check The Accessories

Before installing the machine, please check if all the accessories are received. If any of them are missing, please contact the distributor/seller.



Tap adapter A



Tap adapter B



Coiler





Tee assembly



1/4"PE pipe



3/8" soft pipe



Accessory bag



Power cord

pH test reagent

Filter wrench

**Note:** If there is any improvement, it will be clarified in this manual. The product's appearance, color changes and specifications are subject to modification without notice.

## 2. Installation Environment

A. Install the machine in a place that will avoid the direct sunshine and the fire (Over 1 Meter).

B. This water ionizer is using AC120V or AC220-240V power supply. Please connect it to a separate power socket, and away from other appliances, such as microwave oven. To ensure safety, the ground wire is needed.

C. This water ionizer works with 0.1-0.3MPa water pressure. If your input water pressure is lower than 0.1MPa, please install a booster pump.

## 3. Installation Tools You May Need

A. Cross Screwdriver

B. Cutting Knife

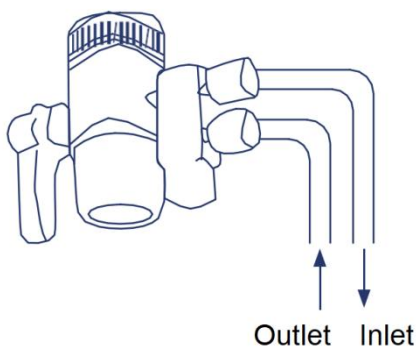
C. PTFE tape

## 4. Installation Diagram Overview

## Installing the hoses for the water

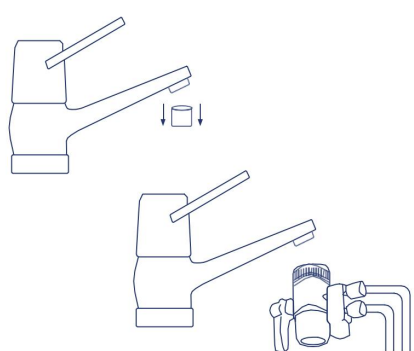
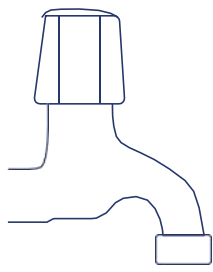


Cut the water hose into 2 pieces. Insert one hose into the IN outlet on the back of the unit and the other end should be inserted into the top insert on the adaptor. Repeat the process for the OUT outlet for the bottom insert. When getting ready to insert the other end of the hose into the adaptor, first insert the hollow bolt through the hose and screw the bolt into the adaptor as seen in the picture below.



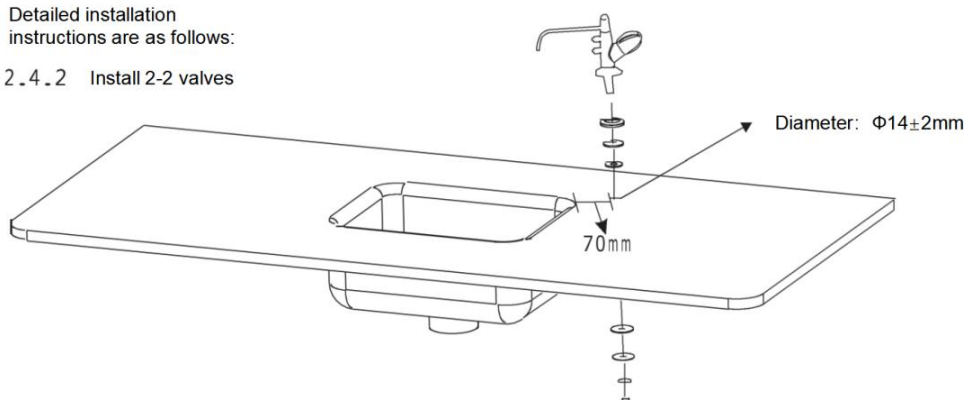
Insert the top hose to the OUT nozzle behind the unit and insert the bottom hose to the IN nozzle. The hoses are identical, so which hose is affixed to which part of the adaptor will not matter.

## How to connect the adaptor to 2 common types of faucets

	
<p style="text-align: center;"><b>Type A:</b></p> <p>Remove the outlet of the tap and fasten the adaptor. If there are leaks, turn it slightly as shown in the diagram until the leak stops, ensure that the washer has been inserted before tightening.</p>	<p style="text-align: center;"><b>Type B:</b></p> <p>Fix the installation ring first. Use the internal ring set and affix to the tap. Tighten with a wrench. Finally, affix the separator.</p>

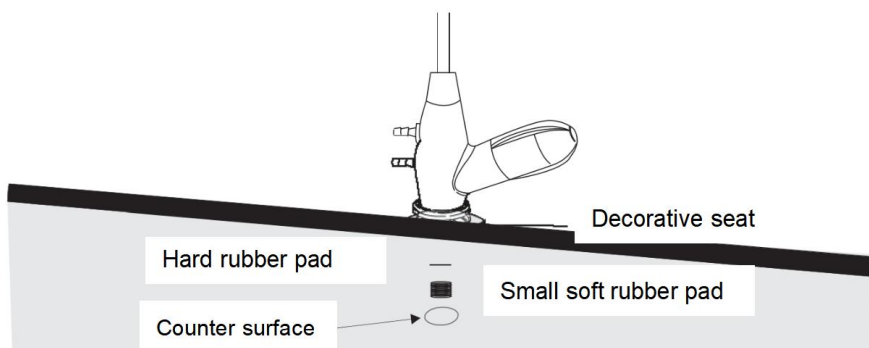
Detailed installation instructions are as follows:

#### 2.4.2 Install 2-2 valves

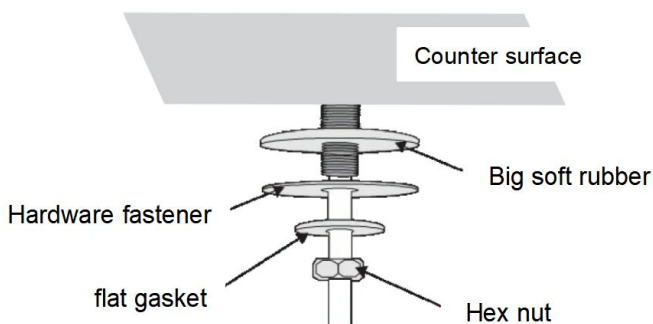


**Step 1: Drilling:** Within 70mm of the edge of the sink, drill a through hole (diameter 142mm) on the counter surface with an electric drill. Note: Marble counter tops need to use an  $\phi 14\text{mm}$  glass hole opener.

**Step 2:** Fix the 2-2 valve: Insert the 2-2 valve into the hole and fix it on the counter with a hex nut.



When fixing the 2-2 valve on the countertop, first put a decorative seat, and then put a hard rubber pad on the top of the screw, and then stick a small soft rubber pad.

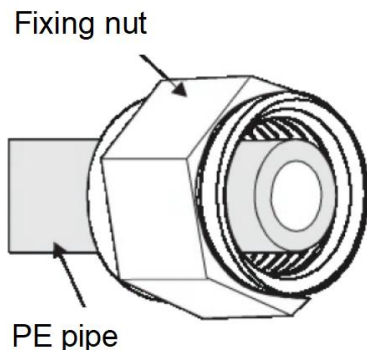


After the screw is inserted into the Counter surface, first put a big soft rubber pad, then put a hardware fixing piece, a flat gasket, and finally fixed with a hex nut.

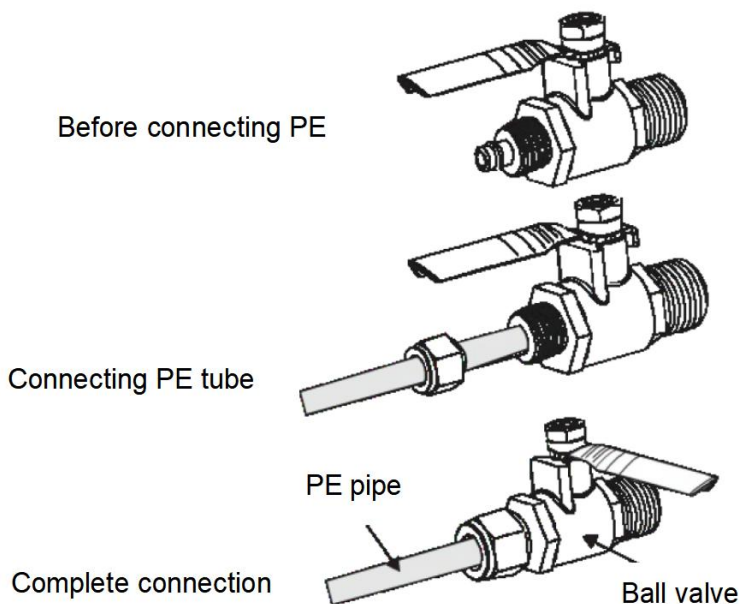
### Three-way ball valve installation

Should close the household main water valve switch, connect the three-way ball valve from the user's home water pipe, so that one end of the three-way ball valve is connected to the water inlet pipe, the other end is connected to the external water equipment pipe, and then connect the

PE water pipe (1/4" water pipe) from the three-way ball valve outlet.

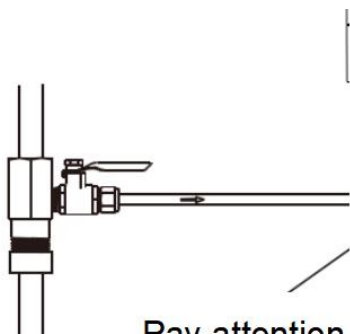


When connecting the PE pipe to the ball valve, insert the PE pipe into the fixing nut of the ball valve.



After the PE tube is inserted into the ball valve fixing nut, pull out the PE tube with sufficient operating length, insert the PE tube into the fixing screw of the ball valve base, and then screw the fixing nut into the fixing screw and tighten it with a wrench to set the ball valve in the closed position. At

this time, the three-way ball valve and PE pipe are installed and connected.



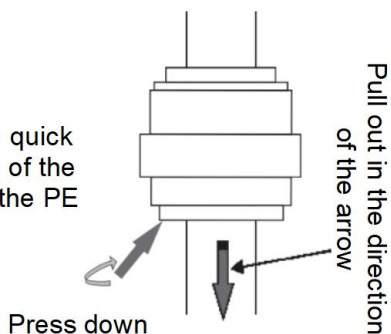
Pay attention to the

Then insert the other end of the PE pipe into the 1/4" straight-through quick connector, and the other end of the quick connector is connected to the bottom interface of the faucet adapter B, and the under-counter part is installed.



#### NOTE

If you want to take out the PE tube in the quick connector, just press down the inner ring of the quick connector with one hand, and pull the PE tube outward with the other hand.



### Installation of the water ionizer machine

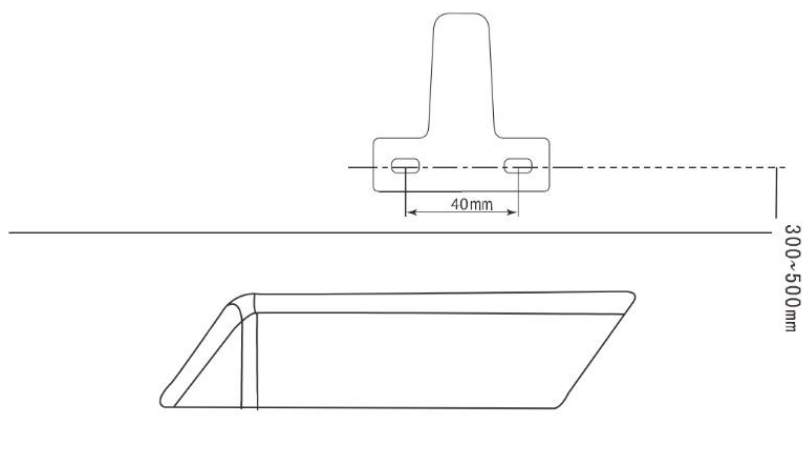
Fix the water ionizer machine on the wall with hanging kit.

The first step is to directly place the machine in a convenient and suitable position on the counter;

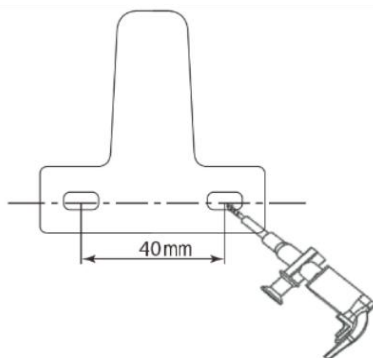
The second step is to measure the appropriate height above the sink (30-50cm above the sink is appropriate), take out the accessories in the accessory bag, take out the hanging plate to determine the machine

hanging holes position.

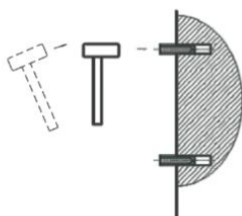
If the installation environment is not convenient to drill holes, please use nail-free glue to fix the wall hanging plate. After determining the position of the wall hanging plate, evenly apply the nail-free glue to the fixing surface of the wall hanging plate, and then stick to the fixed position of the wall surface (complete the operation within 5 minutes to prevent glue from solidification). After fixing with nail-free glue, it is necessary to wait 24 hours after the glue is completely solidified before hanging the machine on the wall.



The third step is to use an electric drill to drill two holes with a vertical depth of about 50mm and a diameter of 6mm according to the drilling position, and the center distance of the two holes is 40mm.



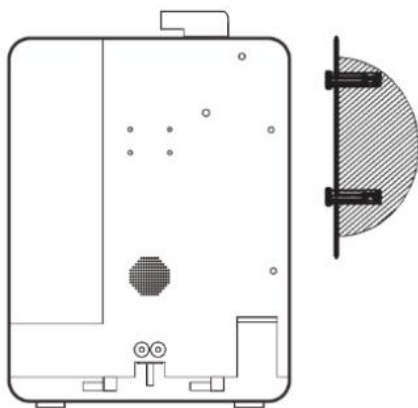
**Step 4:** Insert the plastic expansion tube into the hole.



**Step 5:** Fix the metal hanging plate to the wall with stainless steel screws.

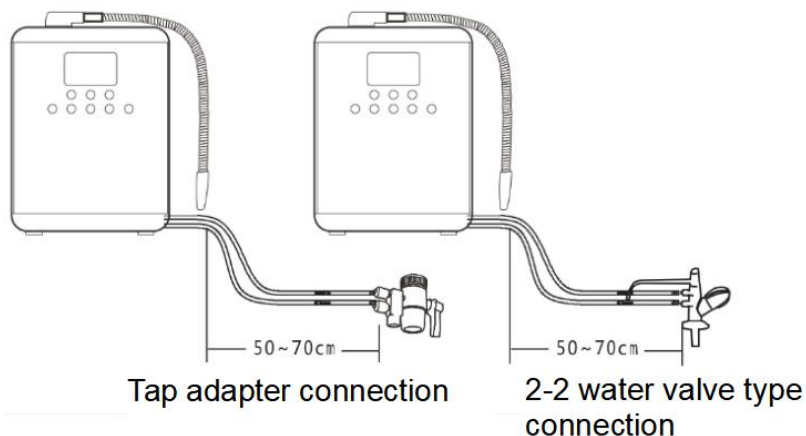


**Step 6:** Install the square metal hanging plate behind the water ionizer machine, and then hang it on the previously fixed hanging plate on the wall.



**Step 7:** Measure the distance from the adapter to the bottom of the machine, and cut off the appropriate length of the water inlet PE pipe and the drainage PE pipe.





**Step 8:** Take down the machine from wall. Cut the 3/8" hose into 2 pieces with appropriate length. Connect the hoses to the IN and OUT nozzles at the bottom of machine base.

**Tap adapter A:**

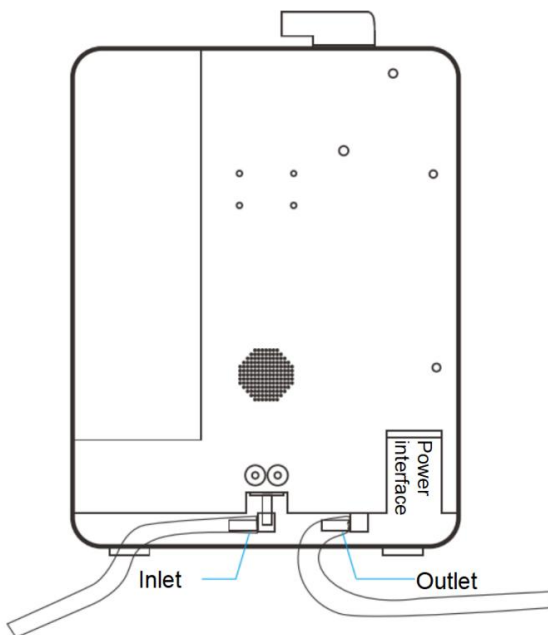
Insert one end of the first 3/8" hose into the top water outlet of the tap adapter A and fix it tightly with a pipe clamp. Connect the other end to the water inlet at the IN nozzle of the machine base and fix it tightly with a pipe clamp.

Insert one end of the second 3/8" hose into the bottom outlet of the tap adapter A and fix it tightly with a pipe clamp. Connect the other end to the OUT nozzle of the machine base and fix it tightly with a pipe clamp.

**Tap adapter B:**

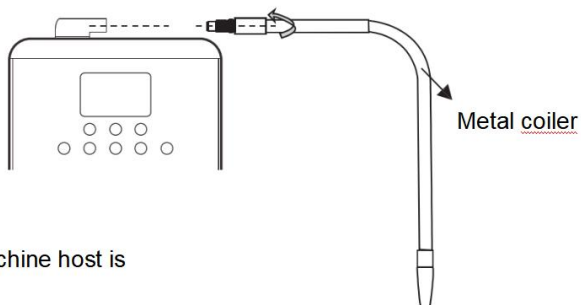
Insert one end of the first 3/8" hose into the bottom outlet of the tap adapter B and fix it tightly with a pipe clamp, and connect the other end to the water intake at the IN nozzle of the machine base and fix it tightly with a pipe clamp.

Insert one end of the second 3/8" hose into the top outlet of the tap adapter B and fix it tightly with a pipe clamp. Connect the other end to the outlet of the machine base and fix it tightly with a pipe clamp.



### Step 9: Install metal coiler

Screw the metal coiler clockwise into the outlet connector of the machine as showing in the picture below.



At this point, the water ionizer machine host is installed.

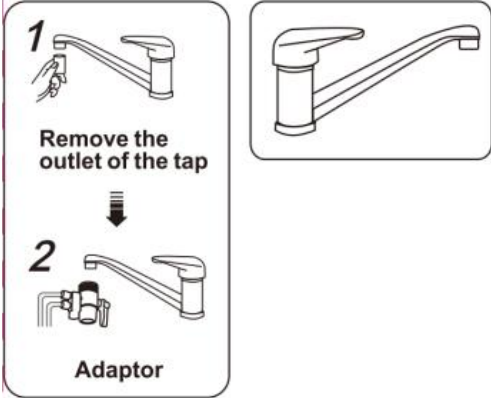
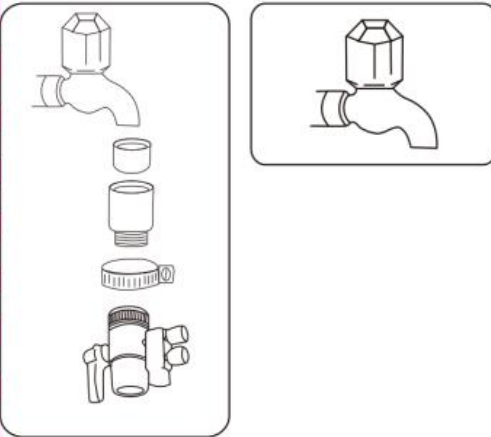
Plug in the power cord.

First, make sure that the specifications of the power supply to be connected are consistent with the requirements of the nameplate, and then insert the power cord plug (one end is connected to the lower end of the machine, the other end is connected to the power supply).

After the power cable is plugged in, the LCD and indicator light up. In daily

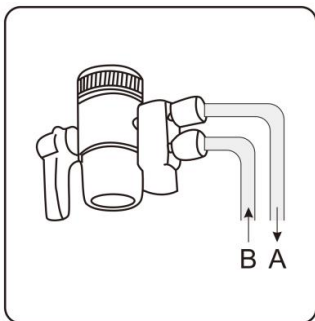
use, the power cable plug can not be disconnected.

## HOW TO CONNECT THE ADAPTER TO THE FAUCET

 <p>1 Remove the outlet of the tap</p> <p>2</p> <p>Adaptor</p>	<p><b>Type A:</b></p> <p>This type of faucet is with the external threads, after removing the outlet nozzle of the tap. Connect the adapter to the tap and fasten the screw. Ensure the washer has been inserted before tightening.</p>
	<p><b>Type B:</b></p> <p>Connect the black rubber part to the faucet. Remove the inside small rubber ring if necessary. Fasten the steel ring with the screwdriver. Then fix the adapter to the screw threads at the bottom of the black rubber part.</p>

## HOW TO CONNECT THE HOSES TO THE ADAPTER

- Insert the hoses through the hollow bolts first. Fix the hoses on the nozzles, then fasten the hollow bolts.



**Top hose (A): Tap water outlet.**

Connect the other end to the Pre-filter Inlet. The tap water will flow into the Pre-filter set.

**Bottom hose (B): Drain water outlet.**

Connect the other end to the Outlet in the back of the unit. The drain water will flow out from the Outlet.

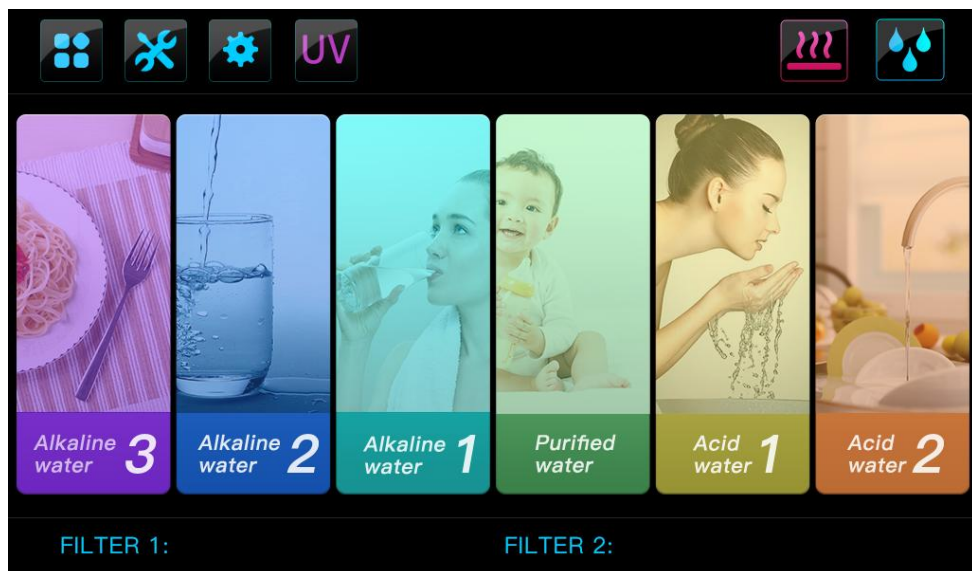
## PRODUCT MAIN FEATURES

This Multifunctional Water Ionizer can be used freely in different water quality and different standards of the power supplies.


- A large 4.2-inch colorful LCD screen display, displaying more information.
- The LCD displays pH and ORP, flow rate, temperature, filter usage life etc., helping user to select suitable water.
- Elegant and solid CDC touch control panel, brief, clear and easier to be used by children & elderly people.
- By using high-power SMPS power supply, it is suitable for many different power supplies in the world, safe and reliable.
- The electrolysis with the Microcomputer automatic control system can work perfectly with the water TDS from 50 to 1000PPM.
- It has a built-in water filtering system, showing the filter life span in time, to make sure the water quality is safe for both body health and machine life time.
- It has the self-cleaning function, to prevent scaling and maintain the high performance.
- Japan imported stainless steel Spouts, never rust, free to be bent to any direction.
- 9pcs large size Titanium with Platinum coating plates, applied with Japan imported ionic membrane, providing higher efficiency electrolysis and longer working life.




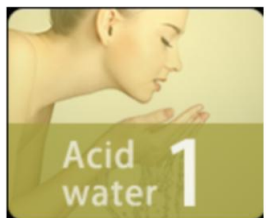

- Built-in overheat protection system, prevents high temperature water from entering the machine, assure the machine.
- It comes with 6 different water levels to meet different the daily usages: Cooking, Coffee/Tea, Drinking, Purified water, Skin Washing, Sanitizing.
- It comes with the water flow rate controller which can turn on/off the water on the machine. More convenient than controlling by the kitchen faucet.

## Controlling Panel Overview



## LCD Display Introduction

	<p><b>Alkaline Water Level 3 (pH 9.5~11.2)</b></p> <p>Suitable for cooing noodles, rice, soup and making bread. Maintaining the natural tastes of food materials.</p> <p>Speeds up the process of cooking and leaves vegetables fresh.</p>
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	<p>Washing vegetables and fruits to remove pesticide residue.</p> <p>Eliminates odor of meat and fish.</p>
	<p><b>Alkaline Water Level 2 (pH 8.5~10.0)</b></p> <p>Removes bitterness and enhance the taste of tea and coffee.</p> <p>Strong antioxidant for removing the free radicals from body.</p>
	<p><b>Alkaline Water Level 1 (pH 7.5~9.0)</b></p> <p>Suitable for drinking and improving your overall health.</p> <p>It's recommended to gradually increase daily consumption and adapt according to your personal preference.</p>
	<p><b>Purifier water Level (pH 6.8~7.0)</b></p> <p>Suitable for infant formula preparation or taking medicine.</p>
	<p><b>Acidic Water Level 1 (pH 4.5~5.5)</b></p> <p>Due to having a similar pH as the skin, it's suitable for washing both face and hair.</p> <p>Ideal for bathing sensitive skin and infants, sunburn relief.</p> <p>Good for brushing teeth to keep fresh breath.</p>
	<p><b>Acidic Water Level 2 (pH 2.5~4.5)</b></p> <p>Sterilization and disinfection for cleansing the kitchenware and tableware etc.</p> <p>Fruits and vegetables soaking to remove agricultural chemicals.</p>



UV LED: When choose alkaline water levels, the UV light turns on automatically.



Cleaning button: As soon as output water quality reaches the set up automatically cleaning quality, the indicator light is on. When the machine is working, press cleaning button to start cleaning the system.



Heating button: Produce constant temperature hot water which is less than 60 Celsius Degree. When heating, the red lights around the screen flash.



Setting button: Setting the input water TDS, Filter life, Automatic cleaning tips, Time, Language and Volume.



Technician settings: Please operate following the professional guidance.



Home page.





Save button: Save the settings.


## How to operate

### Setting filter life

When the unit arrives, it will arrive with 2 filters inside the unit. However, it is important to set the life of the filters in accordance to your water source quality and usage amount.

1. Press the Technician Settings Button  to enter the Technician setting interface. Press Reset filter and confirm if the new filter elements



have already been installed. After confirm, press Home Page Button  and you will find the filters lifespan will return to default settings.

2. To adjust the filters lifespan, press the Setting Button  and adjust the Filter 1 and Filter 2 life from 1000L to 12000L, in accordance to your local input water quality.

3. Press the Save Button  to save the settings.

### **Setting auto cleansing**

The unit is designed to auto-clean every 60L, but depending on your water source you may wish to alter this. To do so:

1. Press the Setting Button  and set the Automatic Cleaning Tips from 30L, 60L to 90L. You need to press the Cleaning Button  to complete the cleaning process manually.

2. The EL is for automatic cleaning every 60L. It will run the cleaning process automatically when you turn on the water and start the machine. You can adjust it in accordance to your local input water quality.


3. Press the Save Button  to save the settings.

### **Setting the TDS (total dissolved solids)**

You can customize your TDS settings depending on the level of HARD or SOFT water from your water source. You may need a TDS meter if you




don't know the hardness level of your water.

1. Press the Setting Button  and set the TDS from 50 to 600 ppm. You can adjust it in accordance to your local input water quality.

2. Press the Save Button  to save the settings.

### **Setting the time and date:**

1. Press the Setting Button  and enter the time and date, and press

Confirm button .

2. Press the Save Button  to save the settings.

## **Function Setting**

**Do not turn on the water tap when you are going to set the machine.**

### **1. Water temperature setting:**

Press and hold the Drinking water button for 5 seconds to enter the temperature setting. Adjust the readings by pressing the Cleaning button to increase, and Heating button to decrease.

### **2. Time setting:**

Press and hold the Coffee / Tea water button for 5 seconds to enter the time setting. Adjust the readings by pressing the Cleaning button to increase, and Heating button to decrease. After setting up the hour, press the Coffee / Tea water button again to set up the minute. Press the Coffee / Tea water button to save the setting and exit to standby state.

### **3. PH level setting:**

Press and hold the Cooking water button for 5 seconds to enter the pH

level setting. You can set up 1-2-3 for low, middle and high electrolysis strength. Adjust the readings by pressing the Cleaning button to increase, and Heating button to decrease. Then press the Cooking water button to save the setting and exit to standby state.

#### **4.Filter lifespan setting:**

Press and hold the Skin Washing water button for 5 seconds to enter the filter lifespan setting. The filter life setting range is 1000L to 9000L. Adjust the readings by pressing the Cleaning button to increase, and Heating button to decrease. Then press the Skin Washing water button to save the setting and exit to standby state.

Note: When the filter lifespan is less than 100Liters, the filter lifespan indicator will flash to remind replacing the filter.

#### **5.Cleaning Setting:**

Press and hold the Skin Washing water button for 5 seconds to enter the filter lifespan setting, then continue to press Skin Washing water button for 3 times to enter the cleaning setting. Press Cleaning button to increase and Heating Button to decrease. You can choose from "30, 40, 50, 60, 70, 80, 90, EL" according to the input water quality. The numbers mean every time the water discharge capacity reaches the corresponding amount, the red cleaning light is on. You will need to press the cleaning button manually to start the cleaning program. If set to "EL", every time the water discharge capacity reaches 90L, the red cleaning light is on, and automatic cleaning process will start next time as the water running though.

After setting, press Skin Washing water button to save the setting and exit to standby state on the Coffee / Tea water level.

When cleaning program is running, the music plays, red cleaning light flashes, and the LCD turns red. After 1 minute, the cleaning process will stop automatically and return to standby state in the default Coffee / Tea water level.

## General Use & Instruction For Different pH Water

	Function	Uses Of Different pH Water	Same pH Foods Reference
Alkaline Water Purified Water	Cooking/ Food Cleaning	<p><b>pH 9.5~11.0 Cooking Water Level</b></p> <ul style="list-style-type: none"> <li>•Good for cooking rice and noodles,preserves its nature flavor longer.</li> <li>•Good for making soups and helpful for maintaining their nutrients and colors.</li> <li>•Soaking vegetables,beef,pork and fresh fish to remove fishy taste and keep the food's nature flavors</li> <li>•Effective reduce pesticides on fruits and vegetables.</li> </ul>	Ginger Grapes Kelps Seaweeds
	Preparing Coffee and Tea	<p><b>pH 8.5~10.0 Coffee /Tea Water Level</b></p> <ul style="list-style-type: none"> <li>•After initial period use,this level is suitable for daily drinking</li> <li>•Good for making tea or coffee,reduce bitterness and give better taste.</li> <li>•Strong antioxidant for removing the free radicals from body</li> </ul>	Mushrooms Soy beans Spinach

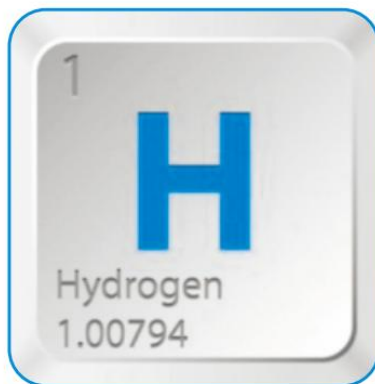
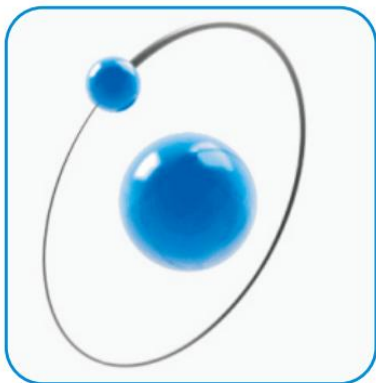
	Daily drinking	<p><b>pH 7.5~9.0 Drinking Water Level</b></p> <ul style="list-style-type: none"> <li>•Suitable for daily drinking and improving your overall health</li> <li>•Improve conditions for upset stomach,constipation,diarrhea and gout.</li> </ul>	<p>Banana Carrot Chestnut lettuce Red beans</p>
	Purified water	<p><b>pH 7.0 Purified Water Level</b></p> <ul style="list-style-type: none"> <li>•No color,no taste,no impurity</li> <li>•Suit able for taking medicine,making milk and for baby's diet</li> </ul>	<p>Asparagus Bread Milk Miso Tofu</p>
Acidic Water	Purified water	<p><b>pH 4.5~5.5 Skin Washing Water Level</b></p> <ul style="list-style-type: none"> <li>•Not suitable for drinking</li> <li>•Close to the skin pH value,it has and astringent effect when face cleaning.</li> <li>•Ideal for bathing sensitive skin and infants,sunburn relief</li> <li>•Minimize the appearance of pores</li> <li>•Good for brushing teeth to keep fresh breath.</li> <li>•Restores shine to hair.</li> </ul>	<p>Beef Beer Clam Rice Octopus</p>

	Sterilization & disinfection	<p><b>pH 3.0~ 4.5 Sanitizing Water Level</b></p> <ul style="list-style-type: none"> <li>•Anti-bacterial for tableware and floor cleaning.</li> <li>•Eliminates the residual agricultural chemicals on fruits and vegetables when soaking them in acidic water.</li> <li>•Good for cleaning tough stain on dishes</li> </ul>	<p>Cheese Egg yolk oats squid</p>
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## The Benefits Of Hydrogen In Alkaline Water

### • What is Hydrogen? -----"The fuel of life."

Nobel Prize winner Albert Szent-Gyorgyi said in his 1937 Nobel Lecture, "A living cell requires energy not only for all its functions, but also for the maintenance of its structure" ... "bring out the fact that our body really only knows one fuel, hydrogen."



### • Hydrogen is the smallest and lightest antioxidant.

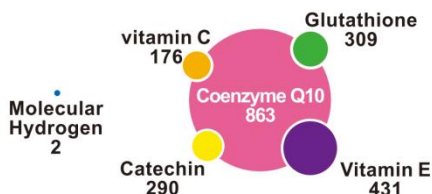
Due to the free electrons and reactive nature of both atomic and molecular forms of hydrogen, it is considered one of the strongest antioxidants with a high reduction potential. Due to its small size, it also penetrates easily

through cell membranes, to rejuvenate and repair our cells damaged by harmful Free Radicals.

Antioxidants prevent the oxidation of cells through chemical combination with free radicals. As it is known to all, Oxidation damage is caused by harmful free radicals. It is one of the main causes of diseases. And hydrogen is one of the best anti-oxidants that selectively eliminates harmful free radicals because of its applicable reducibility. It is hundreds of times more effective than anti-oxidants like

Vitamin C. The advantage of Hydrogen is No side-effects. It can be used or consumed without limitations. or restrictions. Hydrogen is an inner gas that scientists found the bacterium in our large intestine would produce hydrogen by fermentation.

Molecular Hydrogen is the smallest antioxidant known in the world.



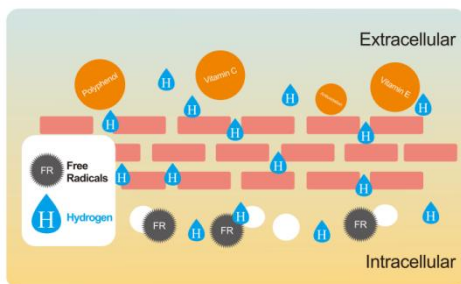
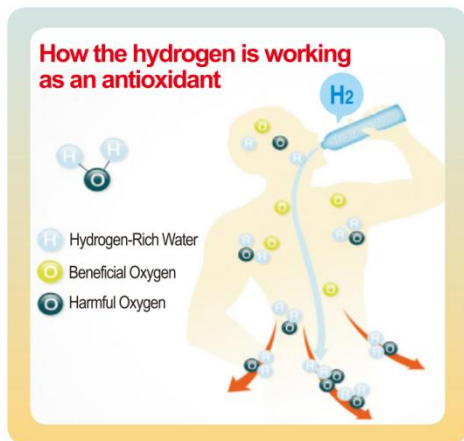
Selective powerful antioxidant ability that only targets and neutralize toxic free radicals(OH)



H<sub>2</sub> is extremely small and effective. Able to reach into our cells and into our brain where most antioxidant is blocked out to effectively neutralize free radicals and prevent damage.

## The Benefits Of Hydrogen In Alkaline Water

•How is the Hydrogen-rich water working as an antioxidant?



The free radicals which are outside of the cells can be removed by the polyphenol, Vitamin C and Vitamin E.

While the free radicals inside of the cells only could be removed by the hydrogen-rich water. The hydrogen-rich water can penetrate the cell freely, because of its smaller size. That's why our body needs hydrogen-rich water.

Our water ionizer is designed to produce plenty of Hydrogen in the alkaline water, as soon as water passing through. During the electrolysis process, hydrogen and oxygen are separated and only hydrogen can pass through the ion membrane, enabling the dissolved hydrogen and electron concentration to be maximized.

## PRINCIPLE OF OPERATION

The basic principle of the water ionizer is electrolysis of water to change the PH and Oxidation-Reduction Potential (ORP) to separate the hydrogen and the hydroxide ion.

In general, the water cannot decompose into  $\text{O}_2$  and  $\text{H}_2$  in the state of nature, but according to Faraday law of electrolysis, if add cathode and anode into water. When the current is switched on, the water will be electrolyzed

The Anode materials are usually platinum or platinum. They are not easy to

dissolve. The oxidationreduction reaction of cathode and anode is as follows

$2\text{H}_2\text{O} + 2\text{e}^- = 2\text{OH}^- + \text{H}_2$  Alkaline electrolytic water with reductive

$\text{E}_0 = 0 - 0.0591\text{pH}$

$\text{H}_2\text{O} = 2\text{H}^+ + 1/2\text{O}_2 + 2\text{e}^-$  Acidic electrolytic water with oxidative

$\text{E}_0 = 1.228 - 0.0591\text{pH}$

After the hydrogen and oxygen are produced on the surface of the cathode and anode, the water around the electrodes become alkaline and acidic. At the same time, the ORP are changed. The porous semipermeable membrane or the semipermeable membrane that Cation-anion can selective to go through will be insert into the two poles to limit the water. The acidic water with high concentration and oxidative will be collect from positive pole, the alkaline water with high concentration and reductive will be collect from negative pole. This is the operation principle of water ionizer.

## Precautions For Use

**Before using this water ionizer, please read these precautions carefully. Please operate this water ionizer following the precautions to avoid the damages to the machine or your health.**

- City or municipal water is recommended. Well water or ground water which contains impurities, chemicals and heavy metals is not recommended.
- Please replace the water filters timely, to assure the water quality is good for your health and machine's lifespan.
- Don't connect it with a water heater. Make sure the inlet water temperature is below 113 Fahrenheit degrees (45 Celsius degrees). Keep the machine away from high temperatures and direct sunlight.
- Don't use water to rinse the machine directly, and don't use alcohol and other volatile solvents to wipe it, either. Please use a soft cloth with soapy water to wipe it gently.
- Don't use the aluminum or copper container for the alkaline or acidity



water, as the water could be contaminated by these types of containers.

- Don't disassemble the machine & components. Don't block, fold or break the outlet tube. When the machine is working, for the purpose of expelling water freely, don't keep the Drain water outlet tube in a high place. And the Drain water tube should be no more than 60cm in length.
- Every morning before collecting alkaline water from the ionizer, allow the water to run for 10~30 seconds to flush out the water in the machine and filters. And the end of the day, it is suggested to flush for 10-15 seconds in the “Purified water” level and “Sanitizing” water level to prevent scaling.
- The ionized alkaline & acidic water should be used as soon as possible within 24 hours.
- Don't take medicine with alkaline water. Please use purified water.
- Don't drink acidic water.
- Please disconnect the power plug when not using the machine for long period.

## Troubleshooting

**Issue 1:** The power supply light is not on or LCD screen does not display.

Solution: please check electricity power supply is connected properly and re-plug in the cord.

**Issue 2:** Touch control panel does not function or respond (but the machine can still work normally).

Solution: Please unplug the power cord and wait a minute, then plug in the power cord. After the power is re-applied, the unit should return to normal operation. Note: Do not share the power supply with a large power appliance. Do not locate the ionizer near electromagnetic radiation appliances, i.e. microwave ovens.

**Issue 3:** Background light on LCD is not on and the LCD is dark, when water passes through.

Solution: The tap water pressure is LOW (Less than 0.8L/minute water output), please increase the water pressure and check if the filter blocked or not. Replace filters as needed.

**Issue 4:** Acidic / alkaline water or purified water does come out.

Solution: Please replace the water filters if needed. If water pressure is too low, please increase water pressure. If “ cleaning indicator” light is “ ON”, please initiate cleaning cycle.

**Issue 5:** There is some white sediment in the alkaline water.

Solution: The produced alkaline water is usually whitish color, because it contains the air bubbles during the production. It will return to clear very soon. This is normal, and the water is OK to drink.

**Issue 6:** A white film appears on the inner wall of the alkaline water container.

Solution: This is a crystallization of calcium carbonate by gas in the air after the reaction of (solid components of calcium) . These white substances are normal when generating alkaline water. It does not imply there is anything wrong with the water. The water is OK to drink.

Note: If this condition persists, please use food grade citric acid or white vinegar to clean the electrode plates. Allow the machine to soak for a few hours and flush thoroughly. Please see maintenance procedures. Note: If the machine will not be used for a long period of time, please unplug the power cord, remove the filter and remove the shunt Watergate and water purifier. Drain thoroughly and place the filter cartridge in a sealed plastic bag/film and store in the refrigerator.

**Issue 7:** Alkaline water output amount reduces gradually.

Possible causes and solutions:

Inlet Water Pressure- make sure input water pressure is sufficient –above 40 psi.

Filter blockage – please make sure filter life is OK and replace filters as needed.

Excessive build up of calcium deposits in the outlet tube - please clean the outlet tube as needed. Soak in citric acid as needed.

Excessive build up of calcium deposits on the electrolysis plates – please contact customer service for support.

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