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MADE IN CHINA

IMRITA
WHOLE HOUSE WATER FILTRATION SYSTEM

MANUAL

IMT-U4

THANKS

Thanks very much for choosing IMRITA brand,and be the user of IMRITA.

Before the machine installation,we suggest you to read this manual carefully.

If you have any questions during use, please read this manual carefully or contact us directly.

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Your valuable comments on our products and services are most welcome.

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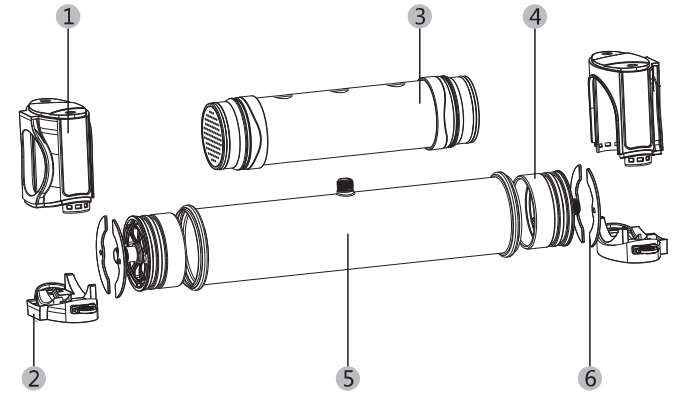
Structure Diagrams



1 Bracket
2 Bracket
3 Ultra filtration membrane
4 End cover
5 Housing
6 Baffle

Pic.1 Structure Diagrams

Function & Feature

Clean and healthy

High precision ultra filtration membrane screening and filtration technology, filtration accuracy up to 0.01 micron; Removal of sediment, rust, colloid and pathogenic bacteria are in line with the relevant national standards, while retaining beneficial minerals and trace elements in the water.

Long service life

Long service life of filter cartridge,modified PAN membrane formula, hydrophilic, strong pollution resistance; Mirror film making process, high surface finish, stain resistance and easy to wash; Frequent washing, timely exclusion of trapped pollutants, prolong the service life.

Solid and durable

304 stainless steel housing grinding process, water hammer dynamic pressure, static pressure, blasting test higher than the industry standard.

Safety and energy saving

Without electricity, rely on the tap water itself pressure can be filtered; No waste water is produced during the purification process.

Product parameters

Product Name: Ultra Filtration Water Purifier	
Item No.: IMT-U4	Filter type: Ultra Filtration Membrane
Filtration Accuracy: 0.01μm	Flow Rate: 1m^3/h
Inlet Pressure: 0.1-0.4MPa	Temperature: 5℃-38℃
Application: Municipal Tap Water	Product Size: 679x277x262(mm)

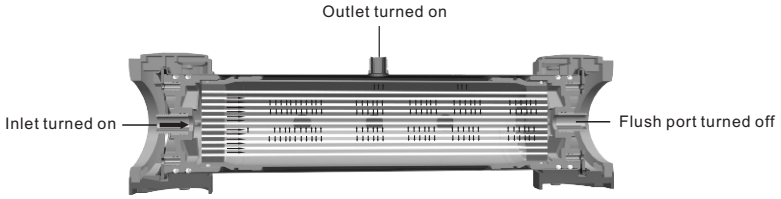
Life service for filter cartridge

With the long-term use of the water purification system,the water flow will gradually decline, please replace the filter cartridge regularly in order to ensure the water flow reaching the standard.

Type	Filtration accuracy	Material	Suggest to replace(months)	Qty (pcs)	Parts diagram
Ultra Filtration Membrane	0.01	PAN	24-36	1pc	

Water Production Principle

Turn off the sewage port when in water production,as pic.2 shows: the source water (tap water) flows via inlet,then flows through ultra filtration membrane to intercept the sands,rust,colloid,pathogenic bacteria,etc. Also retaining the original minerals and trace elements in the water at the same time, and the purified water comes out from the outlet.

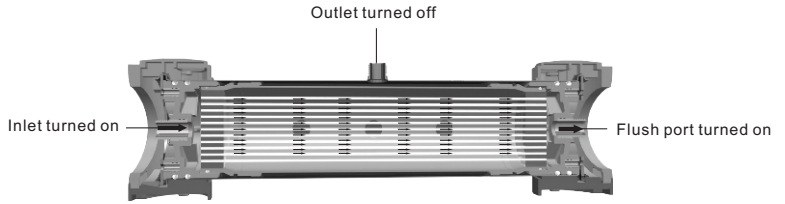


Pic. 2: water production principle

Flush Principle

During the use of the water purification system, the pollutants left by the adsorption and load of the membrane are collected in the water purification system (attached to the inner surface of the ultra-membrane). , if not discharged in time, will be easy to make the water purification system become a secondary pollution. At the same time, the water production of the water purification system is continuously decreased due to the contamination attached to the surface of the ultra filtration membrane and blocked the micro pores of the ultra filtration membrane, so that the water purification system should be flushed during the period to extend the service life of the water purification system.

When the flush valve is turned on,outlet is turned off, the system is under the flushing state; The tap water flows in through the water inlet, and the water directly rushes through the ultra filtration membrane to the sewage outlet, flushing off the pollutants attached to the wall of the ultra filtration membrane and discharging away through the sewage outlet.



Pic.3 flush principle

INSTALLATION

Installation Notice

In order to make the water purification system meet the requirements of water quality and demand, the water quality, inlet pressure, inlet flow and inlet temperature of the water purification system should meet the requirements of parameters in the table.

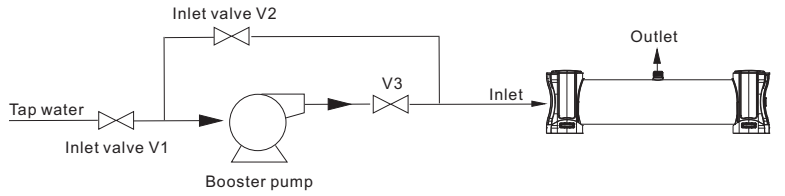
1,If the inlet water quality is not municipal tap water, a pre filter filtration system needs to be added.

2,If the inlet water pressure is too low, less than 0.1mpa for a long time, it is necessary to install a booster pump (as shown in pic 4).

Note:

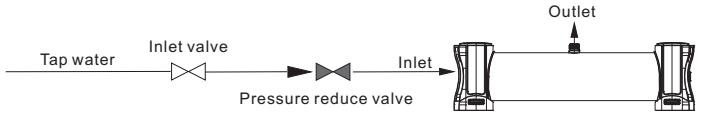
a. When the inlet pressure is above 0.1Mpa,turn on the inlet valve V1,by pass valve V2,turn off the valve V3,to make the tap water not flowing through the booster pump.

b. When the inlet pressure is lower than 0.1Mpa,turn on the inlet valve V1,the valve V3,turn off the by pass valve to make the tap water flowing through the booster pump(as shown in pic.4).



Pic. 4 booster pump installation diagram

3,If the inlet water pressure exceeds 0.4mpa, a pressure reduce valve should be installed for decompression.

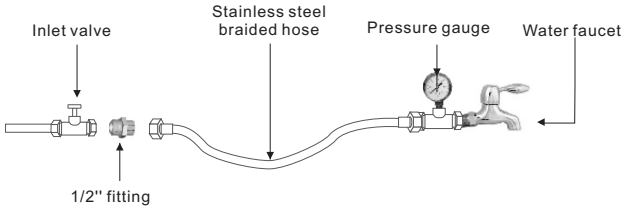


Pic. 5 pressure reduce valve installation diagram

Installation Steps

1.Checking the inlet water pressure.

Install a inlet valve on the inlet pipeline, use the pressure testing device to check the water pressure whether it between 0.1-04Mpa or not, as shown in pic. 6.



Pic.6 inlet water pressure checking diagram

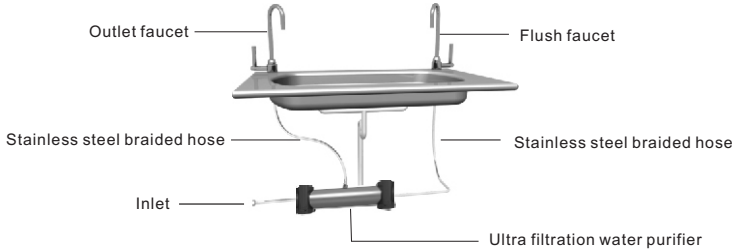
2.Pipeline installation

1) Take down the end cap of water inlet, water outlet and flush port of water purification system;

2) Use the stainless steel braided hose to connect the inlet with inlet valve.

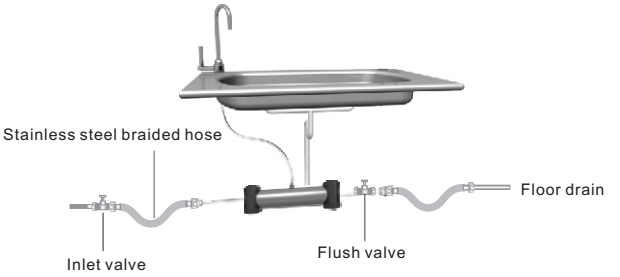
3) Drill a ø 16 hole on the countertop of the kitchen cabinet, install the 1/4'' tap water faucet delivered as the water purification faucet, and connect the water purification faucet to the water purification port(outlet) of the water purification system with a stainless steel braided pipe (one end of which has a 1/2'' screw connection and one end has a 1/4'' screw connection).

The stainless steel braided pipe is used to connect the flush port of the water purification system with the original tap water faucet, and the tap water faucet is used as the flushing faucet. In this way, the flushing process of the water purification system can be realized while using tap water, which is conducive to sewage discharge and prolong the service life of the filter cartridge. If the length of the stainless steel braided pipe delivered is not enough, it can be connected with the braided pipe on the tap water faucet with the 1/2'' fittings. As show in pic.7.



Pic.7: Pipeline connection diagram

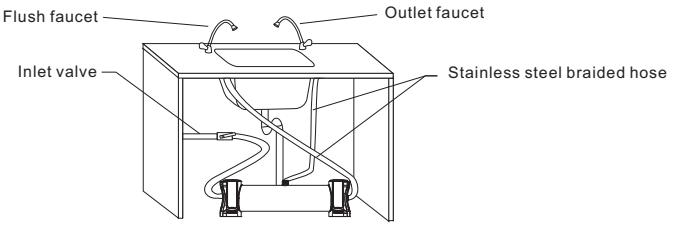
5) If do not want to install or cannot install outlet faucet, you can use the original tap water faucet as water purification faucet. A flush valve shall be installed at the flush port of the water purification system to drain the sewage to the floor drain or put it in a container for cleaning. As shown in pic. 8.



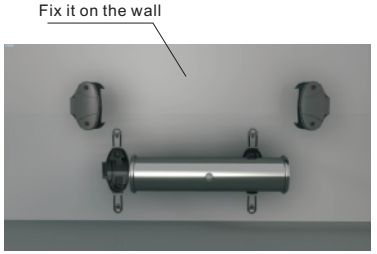
Pic. 8: Pipeline connection diagram

3.Fixed water purification system

If the pipes are properly connected, straighten the water purification system, as shown in pic. 9. When the horizontal position cannot be installed, first remove the lower bracket and fix it on the wall with expansion pins, then install the upper bracket and the fuselage on the lower bracket and insert the latch tightly, as shown in pic. 10.



Pic. 9 Under sink installation diagram



Pic.10: Under sink installation diagram

4. Detection of water leakage

After installation, check each joint carefully for whether there is water leakage.

USAGE & MAINTENANCE

First Use

1.Please flush the central water filtration system when first use to flush the protective liquid of the membrane. Turn on the flush valve and inlet valve for flushing 20 minutes, till the water becomes clean.

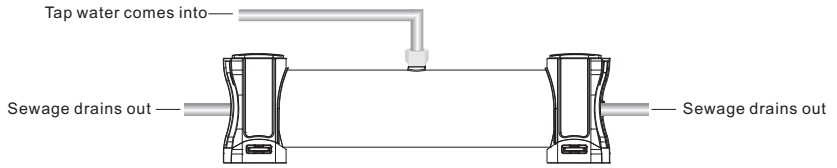
2.In the process of flushing,turn on and off the flush valve frequently (off for 3 seconds, on for 10 seconds) to make the water flow form a pulsating impact, which will make the flushing effect better.

3.Turn off the flush valve,turn on the outlet valve for water production 15 minutes.

Daily Use

1. When the accumulated water reaches 300 liters, it should be flushed: turn on the flush valve and turn off the outlet valve, then the water purification system can be flushed. The time of each flushing is about 30 seconds, so as to flush away the trapped pollutants, thus prolonging the service life.

2. Back flush to restore water flow: when the water flow of the water purification system is still less than the nominal value after flush, it should be back flushed to restore water flow. Turn off the inlet valve,disassemble the two braided hoses separately which is connected the inlet and outlet; and then exchange the both braided hose to connect inlet and outlet separately,as shown in pic. 11, then turn on the flush water faucet(valve),turn on the water inlet valve, to wash away the intercepts in the strainer under the tap water pressure,repeat the backwash 3-5 times.



Pic.11: Back flush diagram

Usage Notice

1.Frequent flushing can effectively prolong the service life of water purification system.

2.The rated total water volume of the water purification system has the relations with the inlet water quality; If the inlet water quality is better, the rated total net water will rise, on the contrary, if the water quality is poor, the rated total net water will decrease, the corresponding filter service life will be shorter.

3.With the long-term use of the water purification system, the water flow will gradually decrease, but the water quality is still qualified.

4.If the water purification system has not been used for more than three days,please flush it before reusing; It is recommended to manually flush for more than 10 times, then turn on the outlet valve 10 minutes for water production and discharge it.

5.The water purification system should always keep the wetting state in the ultra filtration membrane after use. After the ultra filtration membrane filter element dries, the water production will sharply decrease and cannot be recovered.

6.When the tap water restores after shut off, firstly turn on the other water faucets to drains out the sands,rust in the water pipeline.

7.When going out for a long time (more than 2 day), make sure that the water inlet valve is turned off, so that the water purification system is in an unconfined state, which can prolong the service life of the water purification system and prevent unnecessary risk loss.

8.Replacement of filter cartridge should be carried out by local retailer or under the guidance of local sale service professionals.

9.When the water purification system fails, please immediately turn off the tap water inlet valve and turn off the outlet valve. Do not disassemble the water by oneself.

10.Please call the customer service if find anything unusual or unknown in the process of using this water purification system.

Filter Cartridge Replacement

If the water flow gradually decreases in the process of using the water purification system, and still cannot meet the requirements after repeated flushing and back flushing, the ultra filtration membrane filter cartridge needs to be replaced.

Replacement of filter cartridge(as shown in pic. 12):

1.Disassemble all the braided hose on the system.

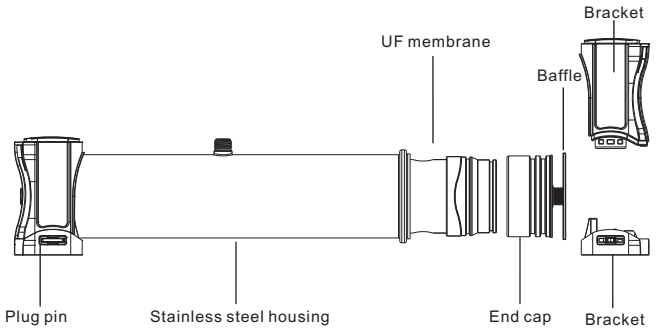
2.Disassemble the bracket away from the system.

3.Remove the stainless steel housing from the bracket and unscrew the baffle plates at both ends of the housing with a hex wrench.

4.Take out the expired filter cartridge.

5.Put a new filter cartridge into the housing.

6.Assemble the systems in order.



Pic.12: Filter Cartridge Replacement Diagram

Malfunctions and Handling

The following table is a list of possible malfunctions and their causes, please refer to their general troubleshooting methods.

Malfunction	Troubleshooting	Handling
Leakage of the water purification system	The sealing ring is damaged or aged	Replace a new sealing ring
There is some off odor in purified water	The protective liquid remains when first use	Please flush the system according the first use requirement
	The system hasn't been using for a long time	Turn on the outlet or flush valve for flushing
	The smell of tap water is too bad	Add an activated carbon filter cartridge
The purified water flow decrease	Bad quality of the inlet water	Flush and back flush the system several times ; or add a pre filter system
	The inlet pressure or flow is too low	Adopt pressurization measures
	The inlet temperature is to low	It is normal phenomenon

Storage Notice

1.Store in ventilated and cool place.

2.It can be sealed for one year before the first use. After one year, it should be re-sealed for sterilization. Please consult the customer service department for details.

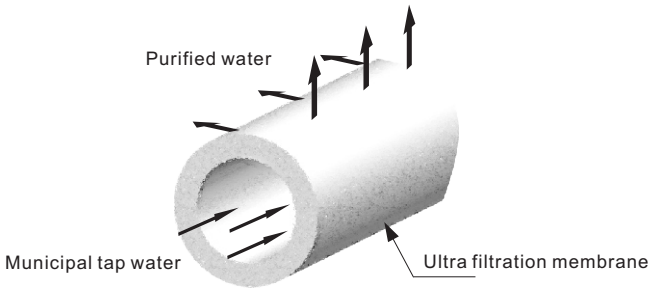
APPENDIX

Ultra filtration membrane technology

Ultra filtration membrane technology is a kind of ultra filtration membrane and the membrane pore size related to the size of the screening process, driven by the pressure difference on both sides of the membrane, ultra filtration membrane as the filter medium, under certain pressure, when the original fluid flow through the membrane surface, ultra filtration membrane surface with many tiny pores allow only water and small molecules through and become through the liquid, and concentrate in the volume is greater than the membrane surface micro aperture that substance is trapped At the inlet side of the membrane, it becomes concentrated liquid, thus achieving the purpose of purification, separation and concentration of the original liquid. Ultra filtration membrane separation technology, as one of the 21st century high and new technologies, has become a standard of separation process with its obvious characteristics of normal temperature, low pressure operation, no phase change and low energy consumption. It has been widely used in Europe and The United States and other developed countries and regions, and has become the mainstream technology of deep purification of drinking water. Ultra filtration membrane technology has replaced the traditional separation technology to a large extent to save energy, reduce consumption and improve separation quality.

Filtration Principle of ultra filtration membrane

In the presence of pressure difference of the ultra filtration membrane on the both sides, when the water flow through the membrane surface, ultra filtration membrane surface with many tiny pores (per meter long ultra filtration membrane silk pipe distribution about 6 billion 0.01 micron pores) allow only water molecules and small molecules by beneficial minerals and trace elements, and the volume is greater than the pore diameter of materials (including sediment, rust, colloid, suspended matter, and pathogenic bacteria and other harmful substances) are intercepted, so as to achieve the purification of tap water. (As show in pic.13)



Pic. 13 Filtration Principle of ultra filtration membrane

PACKING LIST

Ultra Filtration Water Purifier	Stainless steel braided hose
1/2'' male fitting	Self taping screws kits
Water faucet	Manual