

IMT-M8

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# **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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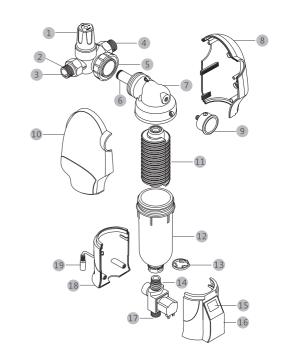
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# THE PRINCIPLE OF PERFORMANCE

# **Structure Diagrams**

- 1 Pressure Regulator Valve
- 2 G 3/4" connector
- 3 Inlet
- 4 Outlet
- 5 Nut
- 6 Outlet manifold
- 7 Housing end cap
- 8 up-right cover
- 9 Pressure gauge
- 10 Up-left cover
- 11 Strainer
- 12 Transparent housing
- 13 Clamp ring
- 14 Flush solenoid valve
- 15 LED display screen
- 16 Front cover
- 17 Flush port
- 18 Back cover
- 19 Power connector



### **Function & Feature**



Intelligent pre filter system (hereinafter referred to as pre filter) is a filter with the function of reducing dynamic pressure and maintaining static pressure. The factory default has been set, and the actual pressure can be visually displayed from the pressure gauge. When the water pressure exceeds the safety value, it can reduce the high water pressure and adjust the instantaneous water pressure wave by adjusting the knob of the pressure stabilizer valve. When

stop using water, the static pressure value behind the valve rises instantly, it can automatically control the water pressure not to exceed 0.4mpa to achieve the purpose of safe pressure control and avoid the risk of water leakage caused by water hammer. It is very practical for those with high water pressure and unstable water pressure.

.1.

### Patented pre filter

The vortex filter structure is cleaned thoroughly.

### Precisely water pressure controlling

Through the pressure regulator valve can precisely control the water pressure, pressure reduction, pressure stabilization, high pressure protection function;

Pilot-operated pressure stabilization structure, precisely pressure control, to solve the problem of the failure of diaphragm type pressure regulator due to diaphragm rupture.

#### Long service life

Large area of strainer filtration, long service life, not easy to blocked.

### Outlet water pressure monitoring

The pressure gauge is used to monitor the water pressure

### Clear at a glance when using

Transparent filter housing to view the filtration process more clear.

#### Automatic flush function

Full automatic flush regularly, no need manual maintenance.

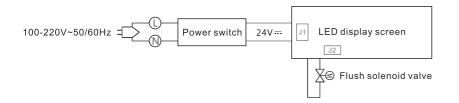
### Multiple interface connection

360° multiple mounting interface connection, easy installation.

### Central micro filtration system



# **Electrical diagrams**



### **Product Parameter**

Product Name: Pre Filter	Item No.: IMT-M8
Filter type: Stainless Steel Strainer	Filtration Accuracy: 50µm
Flow Rate: 6m³/h	Inlet Pressure: 0.1-0.4MPa
Application: Municipal Tap Water	Temperature:5°C~38°C
Voltage/Frequency: 100-220V ~ 50/60Hz	Rated Power: 5.8W
Product Size: 202x136x375(mm)	Anti Electric Shock Type: Ⅲ

#### Remarks:

The initial flow rate which is simulated the actual water consumption of user, is the actual flow rate of water purification system tested in IMRITA inspection center. It could be used as a reference value when select the products by user.

# Introduction of filter cartridge

Туре	Specification	Material	Qty
SUS strainer	50µm	Stainless steel 316	1 pc

# Life service for filter cartridge

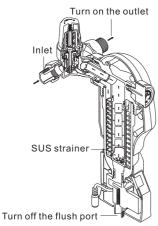
With the long-term use of the water purification system, the water flow will gradually decline, please replace the filter cartridge regularly in order to ensure the water flow reaching the standard.

Туре	Suggest to replace	Parts diagram
SUS strainer	5 years	

.2. .3.

### Water production principle

When the system in water production status, turn on the outlet, and turn off the flush port, the source water will first come to the outside of the strainer, then comes into its inside for filtration, to remove large particle impurities, and the filtered water will come out from the outlet. (As shown in Pic.1)

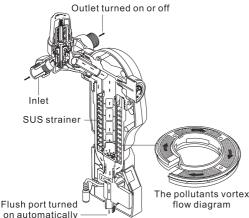


Pic.1 Water production principle

# Flush principle

After using a period of M8 pre filter, the strainer had intercepted lots pollutants, if it didn't flush in time, it would be blocked also would cause second pollution.

Pre filter flush: The flush solenoid valve will automatically turn on according to the flushing cycle when flushing; the pollutants flow through the vortex mesh directly discharged from the flush port till the set time finished, and the flush solenoid valve turned off automatically; (As shown in Pic.2).



Pic.2 Flush principle

# **INSTALLATION**

### Installation notice

- 1,Installation should be finished by professional workers; Please check whether the pre filter's accessory are complete and the pre filter whether is normal.
- 2, The pre filter system is installed as close as possible to the floor drain so that the sewage pipe can reach into the drain.
- 3, Pre filter should not to be installed outdoors, as far as possible away from ultraviolet light, heat, fuel and various chemicals, etc.
- 4,All the pipeline, joints, faucet which are related to water are comply with the national standard.
- 5, Please check it carefully after installation: whether there is any leakage in all the joints position and the value of pressure gauge.

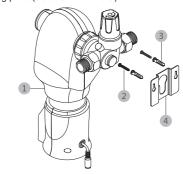
### Installation steps

1 M8 pre filter 2 Self-tapping screw 3 Expansion pin 4 Mounting plate

This product is used for household water filtration and is usually installed at the household total inlet (behind the water meter). The following installation instructions use PPR pipes as an example. If household water pipes are connected using metal hard pipes, add pipes based on actual conditions.

#### Fix the pre filter

- 1, Determining the installation position according to the products size (Reserve a distance of at least 300mm between the drainage connector and the ground. It is convenient to disassemble the transparent housing and clean the strainer, and it is more conducive to sewage discharge.), drill two holes on the wall using a hammer drill ( $\phi$ 6 drill bit), insert expansion pins into the wall and knock them flat.
- 2. Align the mounting plate screw hole with the expansion pin hole, use two self-tapping screws to screw into the expansion pin hole through the mounting plate screw hole, fix the mounting plate on the wall, pay attention to screw in place.
- 3, The pre filter is fixed on the mounting plate (as shown in Pic.3).



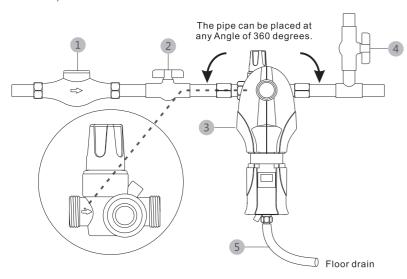
Pic.3 diagram of pre filter fixing

#### Pipeline installation

- 1, Turn off the total water inlet valve, and turn on the outlet to discharge the remaining water in system.
- 2, Connect one end of PPR pipe with the total water inlet valve by welding; Insert the random 1/2" or 3/8" inch outer connector into the 1 inch nut, connect the other end of the PPR pipe to the 1/2" or 3/8" inch outer connector, place the 1 inch gasket, and screw the 1 inch nut into the inlet of the pre filter.
- 3, Welding the one end of PPR pipe with branch water valve; Insert the random 1/2" or 3/8" inch outer connector into the 1 inch nut, connect the other end of the PPR pipe to the 1/2" or 3/8" inch outer connector, place the 1 inch gasket, and screw the 1 inch nut into the outlet of the pre filter.

# Note: The direction of water flow is consistent with the direction of the arrow on the product; The pipe can be placed at any Angle of 360 degrees.

- 4, Connect the stainless steel braided hose with the flush port.
- 5,Turn on the total water inlet valve slowly, the source water will flow to all the equipment through the pre filter; Turn on the household equipment outlet valve, water flows out and then turn off all the outlet. Pay attention to the press gauge and other joints connection where have any leakage. Suggest to produce water for 10 minutes to check there is any leakage after installation. (As shown in Pic.4)



Pic4. pipeline installation diagram

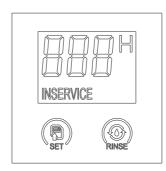
1 Water meter 2 Total water inlet valve 3 Pre filter
4 Branch water valve 5 Stainless steel braided hose

### Auto flushing parameters setting(As shown in Pic.5)

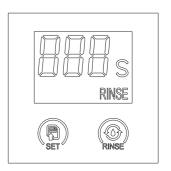
- 1, Connect with the power switch, the LED display lights on and shows work status, auto flush after 240 hours which the display shows. If the display come into black, press "SET" or "RINSE" to light on the screen.
- 2,Set the period of auto flush as follows:
- a,Press&hold "SET" and "RINSE" for more than 3 seconds to entry into flush period. The number "8" flash, press "SET" to shift around, and press "RINSE" to adjust the number 0-9.
- b, The unit of the auto flush period is hour, and can set it to any time between 1-999 hours, the default value is 240 hours.

### Note: Press& hold "SET" to back to the auto flush parameters' setting.

- 4,Press&hold "SET" and "RINSE" for more than 3 seconds at the same time, then back to the work status.
- 5,Manual test for flush function: press "RINSE" to entry into flush mode, and "RINSE" will flash all the time until stop flushing
- 6, The following are precaution when setting
- a, It will return back to the work status when there is no operation for 15 seconds, and black screen, also all the set parameters will not be saved.
- b, The saved parameters will be memorized, and will not disappear due to power off.
- c, Press "RINSE" for 3 seconds, the screen will not be black; Then press "RINSE" for 3 seconds, it will turn off the screen.







Flush time setting

Pic.5 Auto flushing parameters setting

.6. .7.

# **USAGE & MAINTENANCE**

### **Notice**

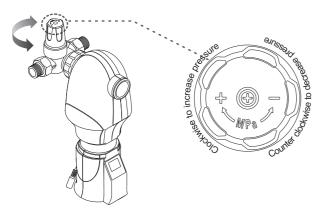
- 1, This product is suitable for municipal tap water. It is strictly prohibited to be used in freezing or water temperature higher than 38°C.
- 2,lt is recommended to manually test the flushing function of the strainer once a month to check whether the flushing function is normal.
- 3,In the normal cleaning and maintenance process, pay attention to protect the integrity of each part (maintenance service must use the original parts)

### Method

Turn on the total water inlet valve after installation, the pre filter began to work properly and can view the water pressure, when the water pressure too low or too high, professional installation personnel adjusts pressure regulator valve to discharge pressure within the normal range (0.1-0.4 MPa). The intercepted impurities also can be seen through the transparent housing after using a period of time, and need to flush the accumulated impurities which affect the water output and outlet pressure of the home water equipment.

1,The source water pressure is too high or too low or the water flow out less when turns on the water faucet or other water equipment, it can be adjusted by adjusting the pressure regulator valve of the pre filter. Press "RINSE", the pressure gauge shows the current water pressure after the water completely drains out from the flush port.

Clockwise rotate the pressure regulator valve to increase the outlet water pressure, counter clockwise rotate the pressure regulator valve to decrease the outlet water pressure.(As shown in Pic. 6)



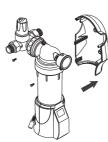
Pic.6 pressure regulator valve adjustment diagram

- 2,When the strainer accumulated some sticky substances or particles or it has been used for half a year, and cannot be washed clean after normal flushing, also the water output and outlet pressure of household water equipment are affected, then the strainer could be take out and cleaned it with cleaning liquid and brush(as shown in Pic.7)
- 1)Take off the up-left cover, and then use the screwdriver to take off the up-right cover.
- 2)Take off the transparent housing components and take out the strainer, then rotate the bottom fixed end cap out, disassembled each vortex mesh of the strainer, clean and remove the impurities attached to the strainer with a brush.
- 3)Assemble all the vortex mesh of the strainer after cleaning, and fixed each vortex mesh on the strainer's shaft. Tighten and fixed it on the end cap.
- 4)Put the strainer components into the transparent housing, and screw it into the end cap of the housing.
- 5)Fix the up-right cover with two screws, and finally install the up-left cover.

Suggestion: Turn on the water inlet valve for more than 3 minutes to check whether there is any leakage after assembling.



Take off the up-left cover



Use the screwdriver to take of the up-right cover



Take off the transparent housing



Take out the vortex strainer



Disassemble the vortex mesh of strainer



Clean and remove the impurities

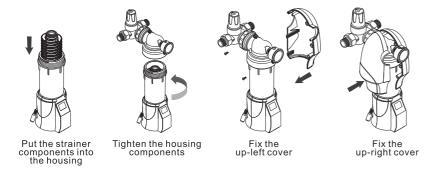


Assemble the vortex mesh



Assemble the strainer components

.8. .9.



Pic.7 disassemble&assemble strainer 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
Pressure values are not displayed	The pressure gauge is broken	Replace the pressure gauge
Deep purified water	Whether the source water is shut down	Wait to recover the source water
doe's not come out	Whether the water inlet valve is turned on	Turn on the water inlet valve
Less purified water runs from the faucet	Whether the total water inlet valve is turned on completely	Turn on the total water inlet valve completely
	Strainer is blocked	Cleaning the strainer
	The parts disassembled by self	Check whether the sealing ring falls off or is misplaced
Leakage in the joint	The parts in leakage position is loosen	Re tightened the parts
	The sealing ring in leakage position is aging or broken	Replace the sealing ring
Leakage in the joint of pressure gauge	The sealing spacer in pressure gauge is aging or broken	Replace the sealing spacer

# **PACKING LIST**

M8 Pre Filter	Screw Kit	G 1" Nut
G 3/4" Connector	Sealing spacer	Mounting Plate
Power Adapter	Manual	Packing List