HYDRION

OWNER'S MANUAL

Model: RO600

REVERSE OSMOSIS

Water Filtration System



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Thank you for purchasing Hydrion RO600 reverse osmosis undersink filter system, with 600G RO membrane.
If you have any questions or need any assistance, please contact: info@gethydrion.com

Installation guide

▶ Follow the step-by-step guide at gethydrion.com/pages/how-to-use

2-year warranty

1. Keep your order number. The system is covered for 2 years.
2. Scan the QR code to open the online guide.

INSTALLATION INSTRUCTION

1. Before Installation

▶ Inspect Box

Open the box and take out the system and all the components. Inspect them carefully, according to "Product Introduction" and make sure nothing is missing or damaged , during shipping. If any parts are cracked or broken, please do not proceed with the , installation and contact Hydrion for an exchange or diagnosis.

▶ Technical Parameters

Model	RO600	**Operating Temp**	4 to 38 °C
Rated Frequency	50HZ	**Rated Power**	85W
Flow Rate	1.6 L/min at 25 °C (77 °F)	**Rated Voltage**	110-240VAC
Working Pressure	1.4 to 5.5 bar	**Daily Production Rate**	600 GPD (2,270 L)
Applicable Water Source	Municipal water		

Rated flow 1.6 L/min at 25 °C (77 °F). Low water temperature will slow down water flow.
Please contact us for reference at: info@gethydrion.com

2. Packing List

▶ Preinstalled



System Housing
X 1 Set



PPC Filter(ASR711)
X 1



RO Filter(ASR712-600G)
X 1



TC Filter(ASR713)
X 1



RO Faucet
X 1 Set



White 1/4" Tubing
X 1



White 3/8" Tubing
X 1



Red 1/4" Tubing
X 1



Feed Water Valve
X 1



1/2"-3/8" Converter
X 1 Set



Drain Saddle
X 1



Power Adapter
X 1



Blade X 1



Plumber Tape
X 1



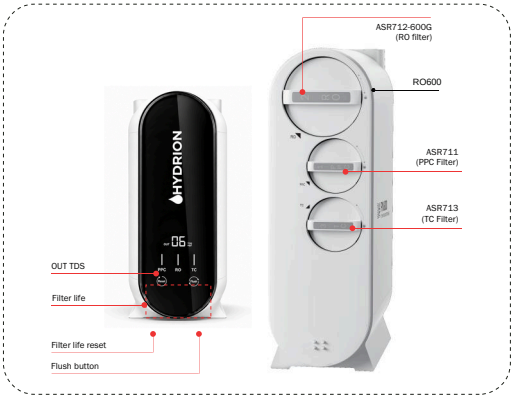
1/4" Quick Water Fitting
X 2



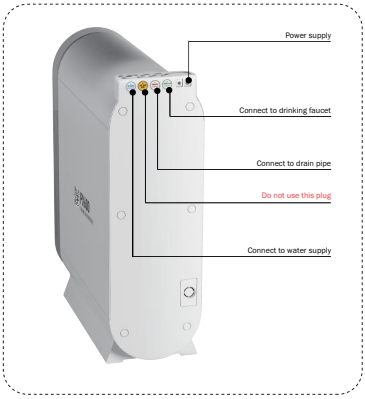
Lock Clips
X 1 Set

3. Product Introduction

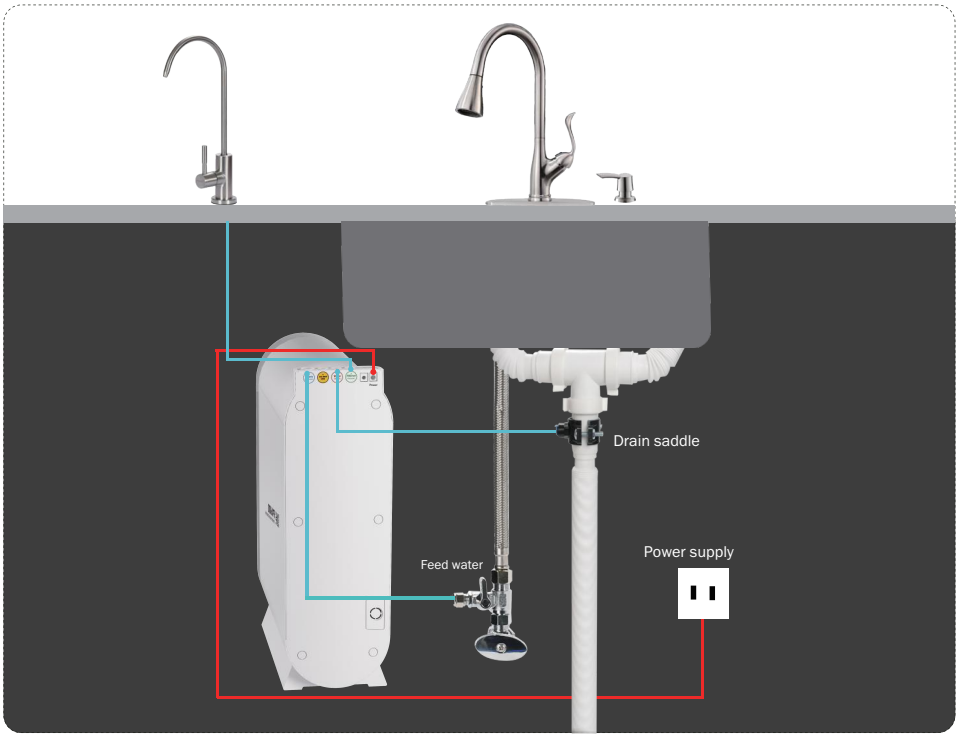
▶ Front



▶ Back

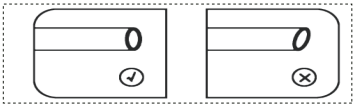


4. Sample Connection



5. Installation Tips

▶ How to cut the tubing?



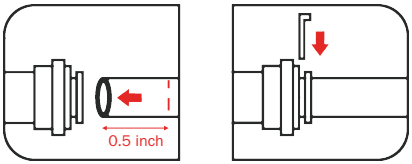
Please cut the tubing into two sections in proper length, make sure cut them squarely and cleanly.

▶ How to connect/disconnect the tubing?

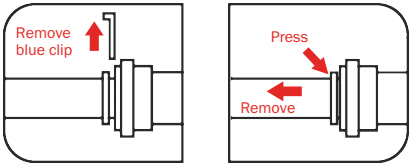
To connect: please push the tubing into the fitting and make sure it is fully inserted. Then put the blue lock clip on the fitting, it will lock the tubing in place.

To disconnect: please remove the blue lock clip from the fitting, push in the lock sleeve, and then pull out the tube from the fitting.

Note: If the tubing is not fully inserted, water leakage may occur. Pulling out the tubing directly will damage the fitting, which may also cause water leakage.



1. Insert to seal the connection



2. Remove to disconnect

▶ How to drill a hole on my sink (Optional)

Note: Please remember to wear safety glasses to protect your eyes before proceeding.

Use a 1/2” metal bit to drill. The recommended diameter of the hole ranges from 1/2” to 1.2” .

6. Installation Steps

Precautions:

- Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection.
- Testing was performed under standard laboratory conditions, actual performance may vary.

- For cold water use only.
- This filter must be protected from freezing, which can cause cracking of the filter and water leakage.
- Do not allow children under 3 years of age to have access to small parts during installation.
- The installation must comply with all applicable state and local regulations.

Step 1: Cut and Soften the 3/8" white tubing

▶ Please cut the 3/8" white tubing in proper length, make sure cut them squarely and cleanly. (Fig.1)



Fig.1

▶ Put one end of the tubing into boiled water for 5 seconds to soften itself.(Fig.2)

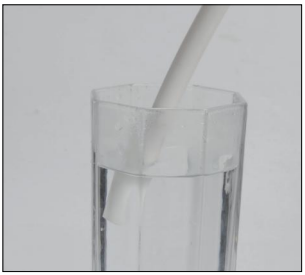


Fig.2

Step 2: Connect three-way feed water valve (3/8" or 1/2")

▶ Load the 3/8" tubing through the nut. (Fig.3)

▶ Connect the end of 3/8" tubing that has been softened into the 3-way feed water valve. Make sure push and squeeze the tubing to the very end.(Fig.4)

▶ Use a wrench to tighten the nut, please do not over tighten. (Fig.5)

Note: If the cold water pipe is 1/2", please connect one part of converter to the angle valve and connect another part of converter to the pipe before proceeding to the next step. (see Fig.6)

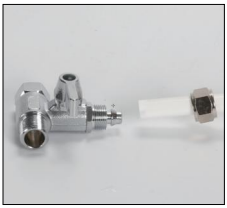


Fig.3

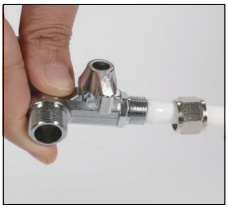


Fig.4



Fig.5



Fig.6

Step 3: Connect the water supply (COLD WATER ONLY)

- Shut off the water supply (Fig.7). Disconnect the cold water pipe from angle valve.
- Twist the feed water valve onto the angle valve and make sure the O ring is loaded. (Fig.8)
- Connect cold water pipe onto the feed water valve. (Fig.9) Valve installation complete.



Fig.7



Fig.8



Fig.9

Step 4: Connect the "SUPPLY" water tubing

- Except " DO NOT USE" one, remove all other three plugs by pressing the fitting sleeves. (Fig. 10)
- Connect the other end of 3/8" tubing into "Supply" port on the back of the system, make sure to insert the tubing about 0.8 inch to the end of the fitting (Fig.11).
- Put the lock clip on the fitting to secure the connection. (Fig.12)

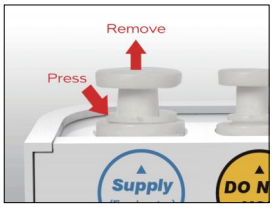


Fig.10

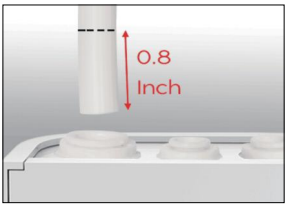


Fig.11



Fig.12

Step 5: Install the drain saddle

- Disassemble the drain saddle, and peal off the black sticker and stick to saddle valve (Fig.13)
- Choose a spot on the drain pipe that is convenient for installing the drain saddle. It is recommended to install the drain saddle on the vertical drain pipe. (Fig.14)

▶ Drill a 1/4" hole in the drain pipe. Make sure not to penetrate the opposite side of the pipe. (Fig.15)

▶ Mount the drain saddle and tighten the screws with a screw driver (Fig.16)

▶ Insert the 1/4" red tubing to the drain saddle about 1.4", and lock the fitting with a blue clip (Fig.17)



Fig.13



Fig.14

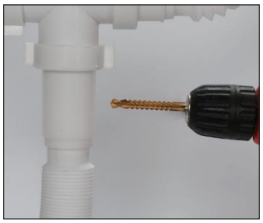


Fig.15

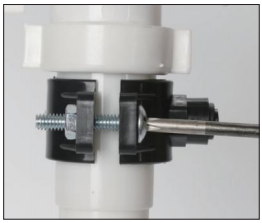


Fig.16

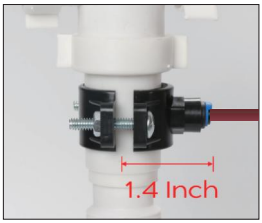


Fig.17

Step 6: Connect the "WASTE" water tubing

▶ Insert the other end of 1/4" red tubing into the "Waste" port on the back of the system.（Fig.18, Fig.19）

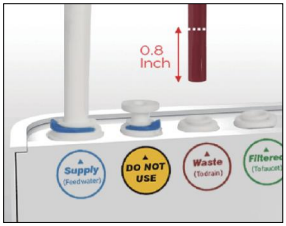


Fig.18

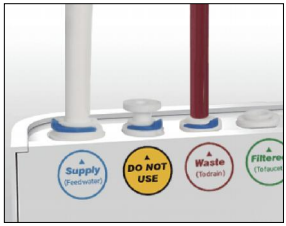


Fig.19

Step 7: Connect the "FILTERED" water tubing

▶ Cut the 1/4" white tubing in proper length, and insert one end into the “Filtered” port on the back of the system. (Fig.20)

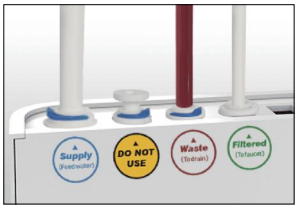


Fig.20

Note: Please make sure the tubings are fully inserted, otherwise may result in water leakage.

Step 8: Install the drinking faucet

Note: If the thickness of your counter is over 1.5" (3.85cm), please contact us at info@gethydrion.com to claim for longer stem.

Note: If your counter top or granite does not have an existing hole, please drill one (1/2") before proceeding.

- Follow the steps below and mount the faucet onto the sink top. (Fig.21, Fig.22, Fig.23)
- Mount the rubber and fasten the hand fixture underneath (Fig.24, Fig.25, Fig.26)
- Connect the other end of 1/4" white tubing from the "FILTERED" port into the 1/4" quick fitting. (Fig.27, Fig.28, Fig.29)

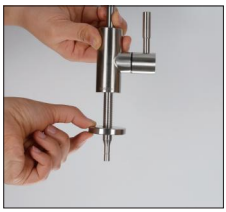


Fig.21



Fig.22



Fig.23



Fig.24



Fig.25



Fig.26



Fig.27



Fig.28



Fig.29

Step 9: Connect the power cord

- Turn on the angle valve and 3-way feed water valve. Check for leaks. (Fig.30)
- Insert the DC head of the power adapter into the "POWER" port on the back of the system. (Fig.31)

Note: It is important to turn on the water supply first then connect the power supply!

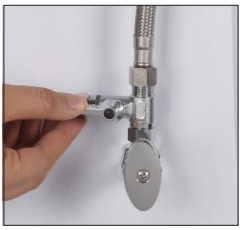


Fig.30



Fig.31

7. First Time Usage

- The system will automatically flush for 30 seconds after the power supply is plugged.
- Before first use or after filter replacement, please flush the filter system by turning on the faucet for 20 min.

Note: When the system keeps producing water continuously for 30 minutes, the system will enter into protection status and all the components stop working. The indicators will flash in red. In this condition, please unplug the power for 10 seconds and then power on again.

Note: Please fully open the drinking faucet when dispensing water. Otherwise, it may cause system to malfunction（Fig.32, Fig.33）



Fig.32



Fig.33

8. User Interface

Power-on

When the system is powered on, you will hear a beep. All indicators will be on for 3 seconds, and then the system will automatically flush for 30 seconds. After flushing, if there is no water production, it will turn into standby status.

TDS Display

When the system is powered on and keeps producing water for 30 seconds, the system will automatically test the TDS of RO water. The TDS reading will be unchanged if the system is in standby status or is being flushed.

Filter life indicator

Different colors suggest different remaining lifespan:
A. Indicator constant lit in white/blue the filter is normally working.
B. Indicator flashed in red: the filter lifetime is about to be expired (remaining lifespan <5%).
C. Indicator constant lit in red: the filter is expired.

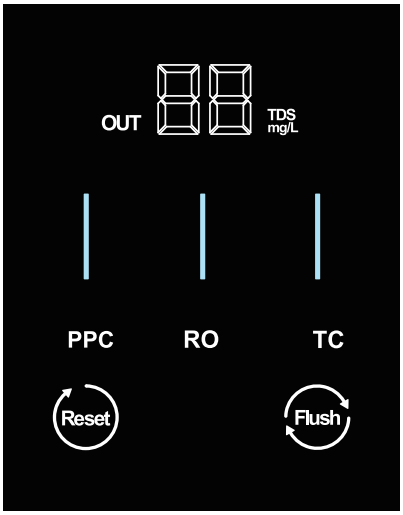


Fig.34

Note: If the filter is expired, the buzzer will keep beeping when producing water to remind users of replacing filter. Filter life may vary depending on source water quality and water usage.

Long-time operation reminder

When the system keeps producing water continuously for 30 minutes, the system will enter into protection status and all the components stop working. The indicators will flash in red. In this condition, please unplug the power for 10 seconds then power on again.

Automatic flushing

A. Flushing when powered on: when powered on, the system will be automatically flushed for 30 seconds.

B. Flushing when cumulative water production reaches 10 minutes:

If the cumulative water production reaches 10 minutes, after returning into standby status, it will be automatically flushed for 10 seconds.

C. Flushing when constant water production: if the system constantly keeps producing water for 10 minutes, it will be automatically flushed for 15 seconds.

D.Flushing when in standby status: When the system is in standby status, it will automatically flushed for 30 seconds every 24 hours.

Manual flushing

When the system is in standby status, press the "Flush" button, the system will start flushing.
Press the "Flush" button again to stop.

Note: When the system is being flushed, the indicator will flash in blue.

Reset button

A. **Select filter:** when the system is powered on, long press the "Reset" for 3 seconds, the buzzer will beep and you can start to select the filter you want to change. Press "Reset"button to change between the filters and the selected filter lifetime indicator will flash.

B. **Reset:** after selecting the filter, long press "Reset" button for 3 seconds. You will hear a beep. The selected filter's indicator will return to blue light once the filter is changed and sucessfully reset. If you do not operate within 10 seconds, it will automatically exit this mode and resume normal display.

C. **Revocation of reset:** select the wrong-operated filter, long press "Reset" and "Flush" buttons for 3 seconds. The buzzer will beep for 3 times. The filter indicator will return to the color status before reset. (Note: the reset can be revoked within 5 minutes. If the system is powered off after the reset, the revocation will be invalid.).

9. Replacement of Filter Cartridge

- The replacement filer cartridges are: PP+CB 2-in-1 filter, RO membrane and Post carbon filter.
- Please replace filter cartridges regularly according to the recommended replacement period shown below.

Position	Filter	Model Number	Recommended Replacement Period
1st stage	PP+CB 2-in-1 filter	ASR711	6 months or cumulative water production for 19 hours (around 450-500gal)
2nd stage	RO membrane	ASR712-600G	Two years or cumulative water production for 77hours (around 1800-2000gal)
3rd stage	Post carbon filter	ASR713	One year or cumulative water production for 38 hours (around 900-1000gal)

10. Filter Replacement Instruction

Step 1: Cut off the power and turn on the water faucet to release water pressure

- Cut off the water supply and power before replacement. (Fig.35, Fig.36)
- Turn on the water faucet to release water pressure.（Fig.37)
- Remove the front cover of the filter.（Fig.38)
- Unscrew the cartridge needs to be replaced counter clockwise.（Fig.39）Screw the new cartridge clockwise into the system.
- Connect the power code and turn on the water supply.（Fig.40)

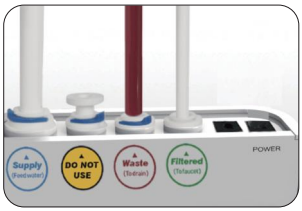
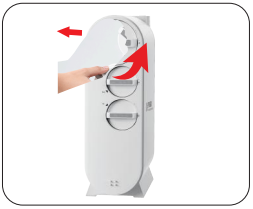


Fig.35


Fig.36


Fig.37


Fig.38


Fig.39

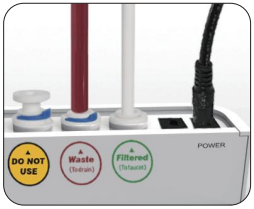


Fig.40

Step 2: Reset the filter lifetime

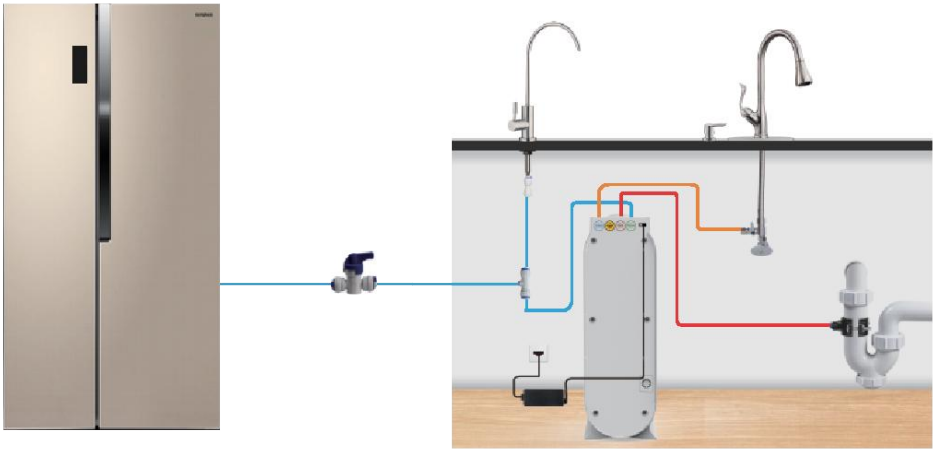
Long press the "Reset" button for 3 seconds, the buzzer will beep and you can start to select the filter you want to change. Press "Reset"button to change between the filters and the selected filter lifetime indicator will flash. After selecting the filter, long press "Reset" button for 3 seconds. You will hear a beep. The selected filter's indicator will turn into blue light, which means the filter is successfully reset. If you do not operate within 10 seconds, it will automatically exit this mode and resume normal display.

Step 3: Flush the filter

Turn on the faucet to discharge the filtered water after replacement. If you replace the RO membrane, please do not use the water in the first 20 minutes. If you replace CP filter cartridges, please do not use the water in the first 10 minutes.

11. Hook Up to Your Refrigerator/Ice Maker

- The RO600 system can also supply your refrigerator or ice maker through an optional ice maker connection kit (not included). Please contact info@gethydrion.com for advice on a compatible kit before you connect one.



12. Tankless Operation

Note: That since the tankless RO system produces instant fresh pure water to the faucet, there would be approximately 0.5-1 second of time lag for water outflow.

The RO600 makes fresh water on demand, without a storage tank.
If the water seems to start late or the pump switches on and off:

1. Always open the faucet fully when you draw water.
2. Check that your water pressure is at least 1.4 bar (20 psi) and that no tube is bent.
3. If the pressure in your home is unstable, contact info@gethydrion.com and we will help you find a solution.

13. Maintenance

▶ Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection.

If you don't use the system for a long time:

A. If the system has not been used for more than 2 days, please turn on the faucet and discharge the filtered water at least 5 minutes before usage.
B. If the system will not be used for more than 1 week, please seal the filter cartridges and store them in the refrigerator but do not put them in the freezer. Discharge filtered water for at least 10 minutes before next time usage.
C. If the system will not be used for a long time, please cut off the water supply, cut off the power and turn on the handle of the faucet to release the internal pressure and avoid damage to the system.

▶ Please replace the filter cartridge regularly according to the filter life indicator.

▶ The testing was performed under standard laboratory conditions, actual performance may vary depending on the source water quality and water usage. In case of premature blockage and failure of the filters , it is recommended to replace the filter in accordance with actual usage.

▶ Clean the system with clear water if necesary. Do not drench the system! Wipe only. Do not apply steel wool, abrasive cleaner or corrosive liquid to the filter to avoid damage to the filter system.

▶ Keep the drain water pipe unobstructed to avoid damage to the filter or internal components.

▶ When the drain pipe is blocked, do not use the system (please turn off the power) to avoid the waste water from soaking the floor.

▶ Check the system and water pipe fittings regularly for water leakage to avoid any property damage.

▶ Regularly check whether the power supply and wires are damaged or loose to avoid major accidents caused by electric leakage.

14. Trouble Shooting

Fault	Possible Cause	Solution
No water out of faucet	The system is not connected to the power adapter or the connection is loose.	Please check if the adapter is connected properly.
	Cold water valve, 3-way feed water valve or the faucet is off.	Please open the valves.
	Lifetime of the filter cartridge is expired.	Please replace the filter cartridge or contact customer service team.

No water out of faucet	Connection of pipeline is incorrect.	Please check the pipelines and make sure the connection is correct.
Low water flow	Filter is blocked.	Please replace the filter according to the instruction.
	Water pressure is low, or water supply is insufficient.	Please contact customer service team.
	PE pipes are bent.	Please check PE pipes.
Filtered water in poor quality	Lifetime of the filter cartridge is expired.	Please replace the filter according to the instruction.
	The system has been off work for more than 2 days.	Please discharge water for 5 minutes before usage.
	Quality of feed water is too bad.	Please ensure the water source is municipally treated water or has been properly disinfected prior use.
Water leakage	Pipes or filters are not installed properly.	Please reinstall the system according to the instruction or contact customer service team.
	The O rings are missed.	Please contact customer service team.
	Other components are damaged	Please contact customer service team.
Unchanged filter lifetime indicator	Electronic controller or display panel is damaged.	Please contact customer service team.
System is unstoppable for a long time after turning off the faucet	The circuit board is boken.	Please contact customer service team.
	The high pressure switch is broken.	Please contact customer service team.
	The “FILTERED water” tubing is mistakenly inserted into “WASTE” port.	Check the system, water pipe fittings and connections, or contact customer service team.
	Filter is blocked.	Please check if the “FILTERED” tubing and “WASTE” tubing were in the right place.
	Feed water is cut off.	Please disconnect the power and wait for water supply recovery.

Examination indicator lights or flashes in red, or the beezer keeps beeping	Leakage detection system is abnormal.	Please contact customer service team.
	System is leaking.	Check the system, water pipe fittings and connections, or contact customer service team.
Button failure	The button is misoperated.	Please operate the button according to the instruction.
	The button is damaged.	Please contact customer service team.
Indicators on user interface disappear	The system is not connected to the power adapter or theconnection is loose.	Please check if the adapter is connected properly.
	The panel is damaged or it' s cable is loose.	Please contact customer service team.

15. Frequently Asked Questions

Q: Why there are many white bubbles in the water?

Normally for the first time use of the RO system, the water seems to have white bubbles in it, which is normal and totally drinkable. It is because when the pump is pressurizing the water, it will pressurize the air at the same time.It will make the air molecules smaller, thus the solubility further increases. The air can' t be released at that time because of the pressure in the RO system. However, when you turn on the tap to get a cup of water, the pressure of air is released. So you will see a huge number of bubbles in the water. It looks cloudy and white, but they are just bubbles. After you put the water still for a while, all bubbles will be gone, the water is totally good for drinking.

Q: Why TDS is higher at the beginning, but back to normal range after about one minute?

Osmosis is a natural phenomenon happens in all RO system, no matter if you have a conventional RO system or tankless RO system. When the RO system starts to work, pressure from the pump overcomes natural osmotic pressure, forcing feed water through the RO membrane that removes the impurities. When the RO system stops working, the pump stops offering pressure as well. At that time, because of different concentrations, a small fraction of ions will enter into pure water and cause TDS to rise by a small amount. However, even if the TDS reading is a little high at the beginning, the quality water is still unbeatable by any other filtration methods including carbon, KDF, ceramic, UF, UV, etc.. The water is totally good to drink and you don' t have to wait for about 1 minute to get the water, since the whole system will not release any harmful substances to the water. The TDS removing rate for RO600 is about 94-95%, if your incoming TDS is high, the outlet TDS will be high too.

Q: Why out TDS value of RO600 is higher than normal RO system?

The first two stages of the system are able to eliminate more than 99.99% of all substances from your tap water, removing more than 94% of TDS value. The pure water then goes through the 3rd remineralized stage of the system which restores essential minerals, adjusts PH level and further polishes the water taste, serving customers with optimal water solution. However, the essential elements such as calcium and magnesium may raise the TDS value of the water again.
If you consider the remineralized water to be undesirable, please contact us for an exchange of the last alkaline filter to universal post carbon filter.

Q: My granite is thicker than 1.5 inch and the faucet stem is not long enough, what should I do?

Please feel free to contact us to claim for a longer thread stem. Simply email us your order ID, full name, shipping address and contact phone number for delivery. We will arrange the shipment for you ASAP.

Q: Why the system does not work after connecting the power cord?

Maybe you have plugged the power cord into the socket specially designed for garbage disposal, please change another socket.

16. Limited Product Warranty

Reverse Osmosis Undersink Water Filter System Warrantor: HYDRION

TWO-YEAR LIMITED HYDRION WARRANTY

The Hydrion RO600 undersink reverse osmosis units are warranted to the original purchaser.
To be free of defects in material and workmanship by Hydrion, Hydrion will replace or repair components of the unit that Hydrion has deemed to be broken within the limits of the warranty without charge. The customer is not responsible for any freight involved with shipping the item back for inspection and shipment of replacement items. Hydrion is not liable for cost of removal, installation, transportation or any other charges in connection with a warranty claim.

1. Hydrion is not liable for anything that we deem as abuse of the units, including but not limited to, misuse of product outside of intended use, equipment modifications, unauthorized repairs, improper installation, damage from freezing, hot water, fire or other acts of God outside of Hydrion control.

This warranty will be void if defects occur due to failure to observe the following conditions:

- Incoming water to the system cannot exceed 38 °C (100 °F).
- Do not use outdoors or in a location that is subjected to direct sunlight or freezing. This warranty will not be effective unless and until the system is shown to have been used in accordance with the installation and maintenance instructions accompanying the product.

2. Filter Cartridges are considered as disposable items, thus are not covered by warranty.
3. Customer is responsible for proper operation, which includes complete and continual leak inspection.

- Most of the unit components are made of plastic and eventually can break or crack from stress.
- There are no other warranties which extend beyond what is described above.

To receive warranty service, please contact Hydrion at info@gethydrion.com

Warranty service

1. Email your order number and a short description to info@gethydrion.com
2. Scan the QR code below to open the online guide