



OWNER'S MANUAL

REVERSE OSMOSIS

Water Filtration System



 www.smarterwaterusa.com

SmarterWater[®]
SW800G

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Register to get warranty

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 us for an exchange or diagnosis.

- Technical Parameters

Model	SW800G	Operating Temp	Min.39°F, Max.100°F
Rated Frequency	50HZ	Rated Power	85W
Flow Rate	0.56 gallons/m @25°C(77°F)	Rated Voltage	110-240VAC
Working Pressure	Min.20psi Max. 80psi	Daily Production Rate	800 gallons
Applicable Water Source	Municipal water		

Rated flow 0.56 gallons/m @25°C(77°F). Low water temperature will slow down water flow.
Please contact us for reference.

2. Packing List

▪ Preinstalled



System Housing
X 1 Set



PPC Filter
X 1



RO Filter
X 1



TC-A Filter
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



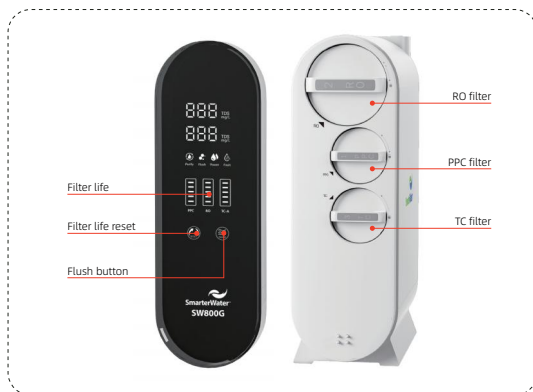
1/4" Quick Water Fitting
X 2



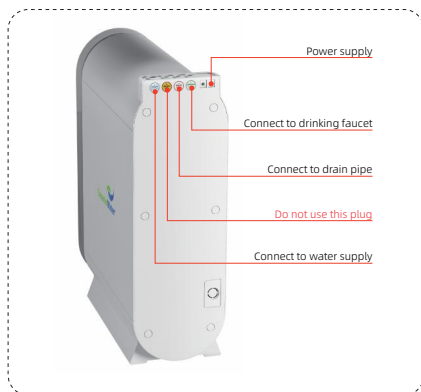
Lock Clips
X 1 Set

3. Product Introduction

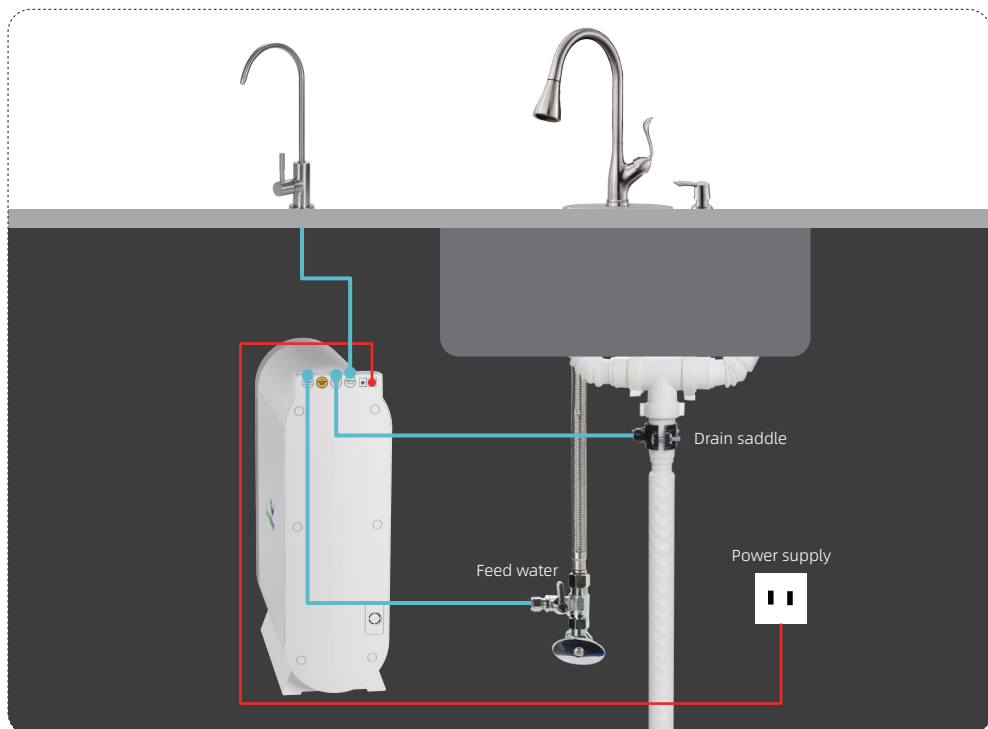
▪ Front



▪ Back

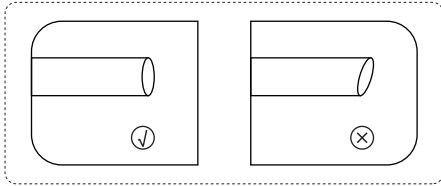


4. Sample Connection



5. Installation Tips

- How to cut the tubing?



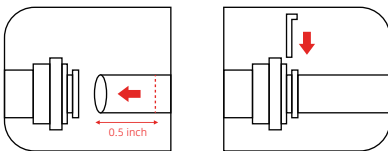
Please cut the tubing into two sections in proper length, make sure cut them squarely and cleanly.

- How to connect/disconnect the tubing?

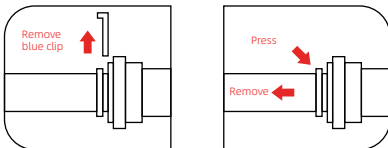
To connect: Please push the tubing into the fitting and make sure it is fully inserted. Then put the blue lock clip on the fitting, it will lock the tubing in place.

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.

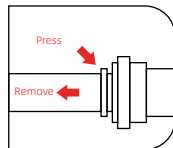
Note: If the tubing is not fully inserted, water leakage may occur. Pulling out the tubing directly will damage the fitting, which may also cause water leakage.



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

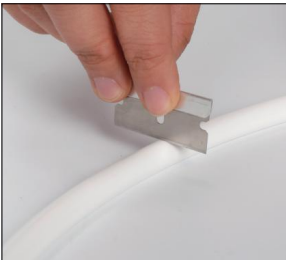


Fig.1



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. (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

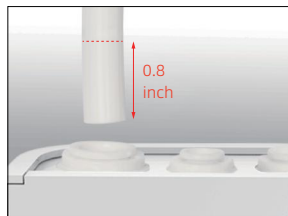


Fig.11



Fig.12

Step 5: Install the drain saddle

- Disassemble the drain saddle, and peel 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

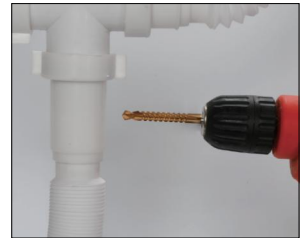


Fig.15

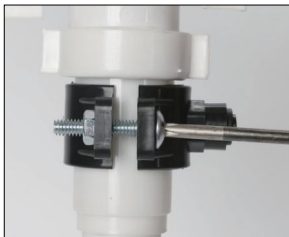


Fig.16

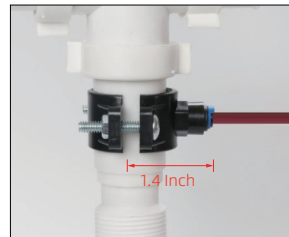


Fig.17

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.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 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)

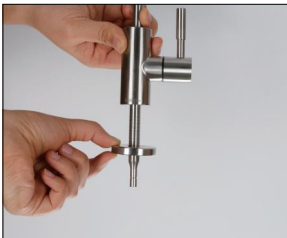


Fig.21



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)



Fig.30

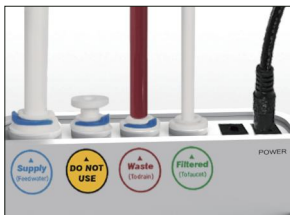



Fig.31

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

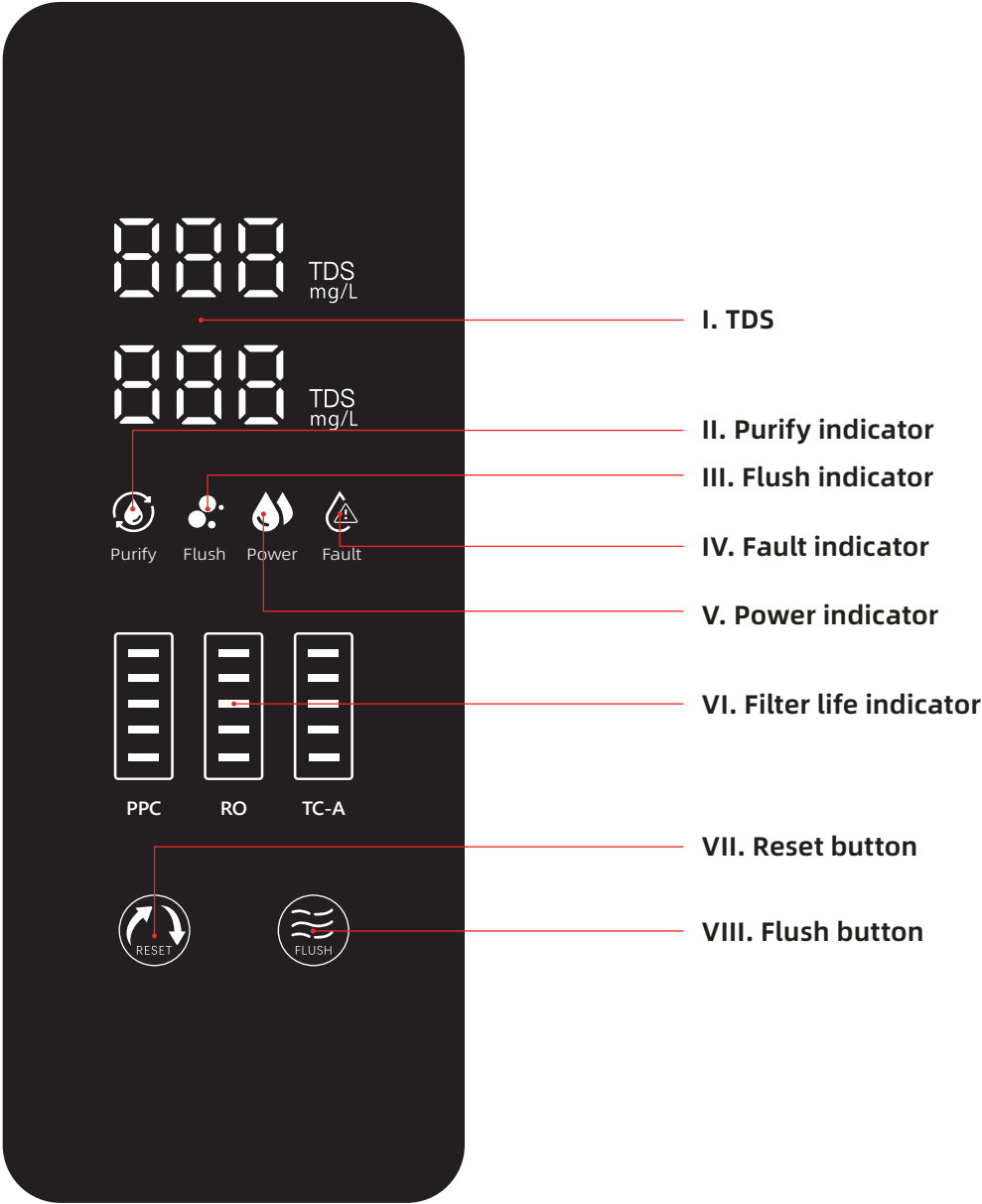


Fig.34

■ 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. The power indicator will always light in blue when the system is plugged in.

■ 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.

■ Water production

When the system is producing water, the power indicator will flash in blue.

■ Filter life indicator

Different colors suggest different remaining lifespan:

- A. Indicator constant lit in 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



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.

■ 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 successfully 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 filter 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	Recommended Replacement Period
1st stage	PP+CB 2-in-1 filter	6 months or cumulative water production for 19 hours (around 450-500gal)
2nd stage	RO membrane	Two years or cumulative water production for 77hours (around 1800-2000gal)
3rd stage	Post carbon filter	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)

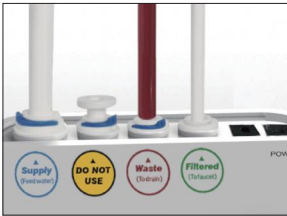


Fig.35



Fig.36



Fig.37



Fig.38



Fig.39



Fig.40

Step 2: Reset the filter lifetime

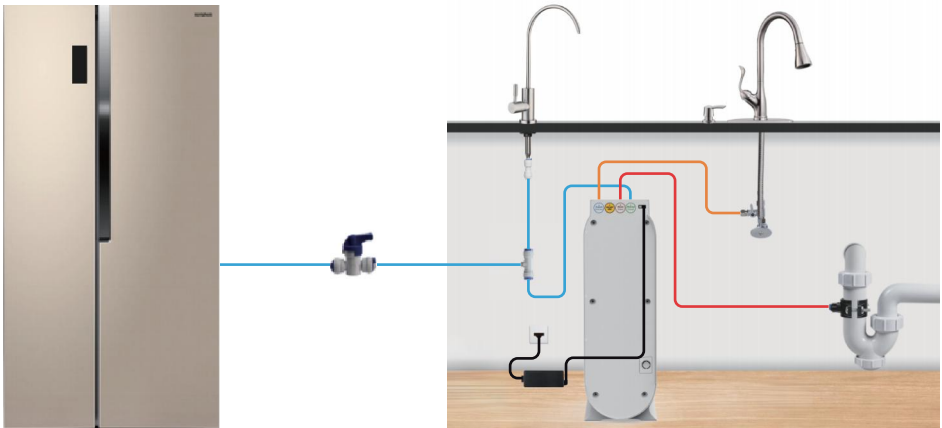
Long press the "Reset" button for 3 seconds, the buzzer will beep and you can start to select the filter you want to change. Press "Reset" button to change between the filters and the selected filter lifetime indicator will flash. After selecting the filter, long press "Reset" button for 3 seconds. You 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 RO system can be connected with your refrigerator/ice-maker by utilizing an extra ice maker connection kit (not included).



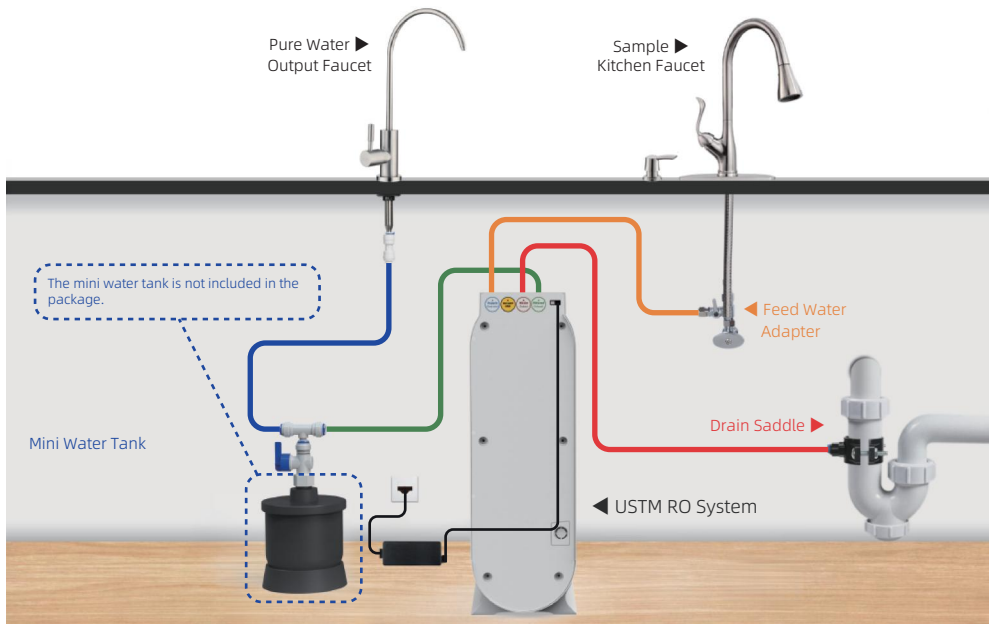
12. Mini Tank Available Now!

⚠ 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.

-- Mini water tank --

If you are encountering the following problems of tankless RO systems:

1. If you consider the lagging outflow to be undesirable.
2. If you are encountering the constant on and off issue of the system pump due to unstable/lack of water pressure.



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
 - 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 necessary. 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 offaucet	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 unstopable for a long time after turning off the faucet	The circuit board is broken.	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 beeper 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 the connection 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 Does the Water Have White Bubbles?

When using the RO system for the first time, it is normal to notice white bubbles in the water. This is safe and the water is completely drinkable. The bubbles occur because the system pressurizes both the water and the air inside. Under pressure, the air molecules become smaller, increasing their solubility in water.

Due to the pressure within the RO system, the air cannot be released immediately. However, when you turn on the tap to pour a glass of water, the pressure is released, causing a large number of bubbles to appear. These bubbles can make the water look cloudy or white, but they are harmless.

If you let the water sit for a while, the bubbles will dissipate, leaving the water clear.

Q: Why Is TDS Higher Initially, But Returns to Normal After About One Minute?

This is a natural phenomenon that occurs in all RO systems, whether conventional or tankless. When the RO system starts operating, the pump creates pressure that overcomes the natural osmotic pressure, forcing feed water through the RO membrane to remove impurities.

When the system stops, the pump also stops providing pressure. During this downtime, due to the difference in ion concentrations, a small fraction of ions may re-enter the purified water, causing a slight increase in TDS (Total Dissolved Solids).

Even if the TDS reading is slightly elevated at the beginning, the water quality remains excellent and far superior to other filtration methods, such as carbon, KDF, ceramic, UF, or UV. The water is completely safe to drink, and there is no need to wait for one minute before consuming it. The system does not release any harmful substances into the water.

For the 800G system, the TDS removal rate is approximately 94-95%. If your incoming water has a high TDS, the outlet TDS will also reflect this proportionally.

Q: How Does the TDS Display on the Machine Work?

When the system is running, the TDS sensor in the 800G continuously monitors the water quality and updates the TDS reading every 30 seconds. Therefore, the TDS value displayed on the machine reflects the result from the most recent test.

If you want to see a real-time TDS reading, allow the machine to run for approximately 30 seconds.

Q: Why Doesn't the System Work After Connecting the Power Cord?

The issue might be that the power cord is plugged into a socket specifically designed for a garbage disposal. Please try using a different power outlet.

Q: Why Is There a Difference Between the TDS Reading from a TDS Meter and the Displayed Reading?

The TDS reading from a TDS meter reflects the TDS of static water in a container, whereas the reading displayed by the system shows the TDS of flowing water. This difference in conditions leads to variations in the readings. Additionally, discrepancies may occur due to errors in the TDS meter's measurements.

16. Smarter Water USA – Limited Warranty

Reverse Osmosis Undersink Water Filter System **Warrantor: SmarterWater**

Warranty Coverage

Smarter Water USA, LLC warrants the 800GPD Under-sink Reverse Osmosis Unit to the original purchaser against defects in materials and workmanship under normal use for a period of one (1) year from the date of purchase.

Under this warranty, Smarter Water USA will, at its discretion, repair or replace any defective component at no cost to the customer within the warranty period.

Warranty Exclusions

This warranty does not cover:

- Removal, installation, transportation, or shipping costs related to warranty claims.
- Incidental or consequential damages, including but not limited to property damage, personal injury, or financial losses resulting from the use or inability to use the product.
- Damage due to misuse, abuse, or improper installation, including:
 - Using the unit outside its intended purpose.
 - Unauthorized modifications or repairs.
 - Improper installation or maintenance.
 - Exposure to freezing temperatures, direct sunlight, hot water (above 100°F), fire, or other environmental factors beyond Smarter Water USA's control (Acts of God).
- Filter cartridges, as they are considered consumable items that require regular replacement.
- Plastic components that may naturally weaken or crack over time due to stress and usage.
- Customer Responsibilities
 - The customer is responsible for proper operation, maintenance, and routine leak inspections.
 - The system must be installed and used in accordance with the provided instructions for the warranty to remain valid.
 - This unit is designed for indoor use only and should not be exposed to direct sunlight, freezing conditions, or extreme temperatures.

How to Claim Warranty Service

To request warranty service, please contact Smarter Water USA Support at support@smarterwaterusa.com with:

1. Proof of purchase (receipt or order confirmation)
2. Description of the issue and any relevant photos/videos
3. Product serial number (if applicable)

Extended Warranty 150% Option: Register your product within 90 days of purchase at www.smarterwaterusa.com under the Support section to receive a 150% extended warranty (an additional 6 months of coverage).

This warranty is non-transferable and applies only to the original purchaser. No other warranties extend beyond what is explicitly stated in this document.