

## PRE-INSTALLATION



### **DANGER! ELECTRICAL SHOCK HAZARD.**

*Only qualified personnel who have read and understand this entire manual should attempt to install, or service this **S4 Water Treatment System**, failure to do so could result in death or serious injury. DO NOT plug into an electrical supply until specifically instructed.*



### **WARNING! ALWAYS SANITIZE BEFORE USE.**

*Sanitize before use to eliminate any potential microbiological contaminates.*

### Materials Needed:

- Personal Protective Equipment. Rubber or Nitrile Safety Gloves and Protective Eyewear
  - Phillips Screwdriver
  - Temperature Gauge
  - Water Pitcher or Container to collect water from the faucet
  - 5-gallon container or drain basin
  - Sanitizer - Household Bleach (5.25% Sodium Hypochlorite) or Citric Acid Based Cleaner
  - ¼" Plastic Tubing, at least 10 feet in length, and assorted ¼" quick connect fittings
  - TDS Meter and Test Strips for measuring chlorine – Optional
1. Unpack the **Wellsys S4 Water Treatment System** and check exterior for damage.



### **CAUTION! FILTER FLUSH REQUIRED.**

*S4's Water Treatment Systems are not supplied with filters. Filters should be configured to optimize your system. Filters need to be configured and specified to do the job given the local water conditions, usage, maintenance schedule, and placement restrictions.*

*In order for our filters to perform as represented and to provide the best quality water possible, it is essential that filters be replaced periodically. The frequency of filter changes depends upon your water quality and your water usage. For example, if there is a lot of sediment and/or particles in your water, then you will have to change your filters more frequently than a location with little to no sediment. Be sure to replace your filters whenever you notice a decline in the performance, whether it is a drop in flow rate and/or pressure or an unusual taste in the water.*

2. Flush thoroughly per filter manufacturers' recommendation with fresh water to drain. More details provided in the **Filter Flushing** section further down.
3. Once flushed, install the filters. Following the flow direction on the filter.  
**NOTE:** Filters should not be flushed prior to 24 hours before installation to limit Microbial Growth.

## NOTES ON INSTALLATION

1. Do not install the product at the following locations:
  - Near Fires
  - Near Flammables
  - In Humid Places
  - In front of air conditioners
  - Where exposure to rain or snow is possible
  - Outdoors or in direct sunlight
  - Near chemicals (volatile materials, organic solvents, etc.)
  - Near toilets
  - Anywhere the temperature may fall below 50°F.
2. Use source water within following quality range:
  - Water pressure: 1-3.5kgf/cm<sup>2</sup> (103-345 kPa)(15-50psi)
  - Water temperature: 39-100°F (4-38°C)
  - Turbidity: 0.5 NTU or less
  - pH: 5.8-8.5
  - Hardness: 300ppm or less
  - Water Quality: Water quality meeting the Drinking Water Quality standard

\*Please consult your distributor if source water quality is out of the specified range.

\*The warranty will be void if the product is connected to source water that is out of the specified range.

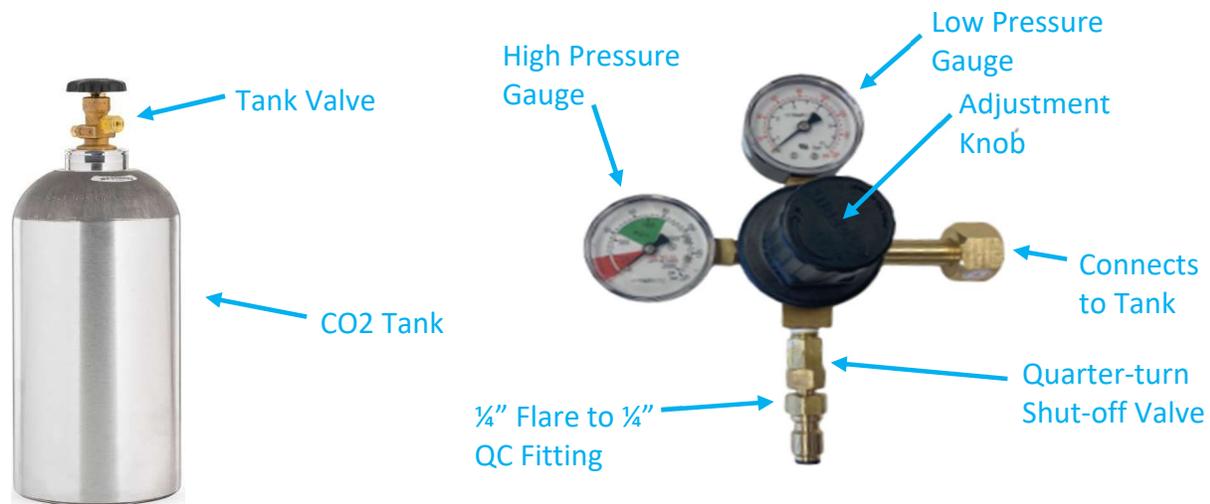
\*This product is not equipped with internal filtration. It is intended to be connected only to a potable water source.

3. When transporting the product, do not tilt it more than 45° from vertical.
  - \*Severe tilting can cause a performance degradation.
4. Install the product on a flat surface and adjust the level of the unit using a level gauge.
  - \*If the product is tilted more than 3°, overflow may occur.
5. Source water should not be above 100°F (38°C)
  - \*Hot water may cause performance degradation or system failure.
6. Keep the sides and rear of the unit at least 5 inches (127mm) away from walls or other objects for ventilation.
7. Do not bend the source water hose or place heavy objects on it.
  - \*If it is blocked, the water will not flow smoothly to the unit, and may cause performance degradation.
8. Do not place any heating system near the rear of the unit.
9. The power supply and source water must be directly connected to the unit.

## INSTALLING THE CO2 TANK

The S4 produces sparkling water, thus it requires a CO2 supply to create it. Commonly, CO2 is supplied using a steel tank pressurized with CO2 gas paired with a valve and regulator. This section outlines how to properly set up a CO2 supply to the S4. For this guide, it is assumed you already have a CO2 bottle fitted with a manual valve.

### CO2 Bottle and Regulator Overview



1. Use an adjustable wrench to install the regulator tightly to the CO2 Valve. **Be aware there should be a nylon washer zip-tied to the valve connector of the pressure regulator. Cut this washer free, remove the zip-tie, and place the washer inside the valve connector before installing on the tank valve.**
2. Connect several feet of 1/4" poly tube (LLDPE) to the regulator. This will later be used to make the gas connection to the unit. **If you do not have a shut-off valve on the regulator, install a ball valve to the end of the poly tube. Keep the ball valve closed, and do not open tank valve until this has been done.**
3. With the quarter-turn shut-off valve on the regulator closed, or the ball valve at the end of the poly tube closed, open the valve of the CO2 Tank.
4. Turn adjustment knob clockwise to raise pressure, counter-clockwise to lower pressure.
5. Set pressure 1bar more than water pressure to the unit (max pressure is 4 bar).
6. No Teflon tape is needed for flare fitting.
7. The gas bottle is ready to be placed into its storage area and connected to the unit when ready. **Gas bottles should always be secured to avoid tipping.**

## INSTALLATION

It is very important to follow all instruction listed. Failure to do so may cause the system to not operate properly and may impact the long-term reliability of the system. **DO NOT turn on the Hot Water switch at back of unit until the Hot Water tank has been primed with water.**



1. Always check local plumbing codes before tapping into water supply line and drain line. Tap into the water source with an approved connector.
2. Check incoming water pressure and ensure it is 50PSI max. If the water pressure is above 50PSI then a pressure reducing valve must be installed and set to lower the pressure to the optimal water pressure below 50PSI.
3. If using filters, flush/rinse them now in accordance with the flushing instructions.
4. Once the filtration system flushing procedures are complete, determine the best installation location. Consider user convenience, electrical access, and water access. The unit performs optimally if within 2- feet of a cold-water supply line. Connect only to a cold-water supply. Do not install Feed Water Assembly on the Hot Water Line. Do not place unit where it will be exposed to rain, freezing temperatures or direct sunlight.
5. The rear of the unit should be installed at least 2” from any vertical surface to ensure proper air circulation.
6. Check the available power supply to assure proper electrical service. In the U.S., the voltage specification is 110/120V 60Hz. Voltage outside of this specification will affect the system performance.
7. Connect the blue water supply line on the back of the unit to the product water from the filtration system using poly tube (LLDPE tubing), or to the water source if not using filtration. Turn the water supply on.
8. Connect the black gas line on the back of the unit to the CO2 line from the gas bottle regulator. Open the gas valve on the bottle and open the quarter-turn valve on the line, or the quarter-turn valve on the regulator (whichever option is installed).
9. With the 60PSI going into the system after 30 minutes, the TDS of the water should be reduced approximately 98% after the RO membrane vs. the incoming tap TDS.
10. Allow the system to fill. This should take 5-10min with UF or about 30min with RO.

11. Prime the Hot Tank by dispensing hot water from the front of the unit until water begins to flow. Once complete, turn on the red Hot Tank switch on the back of the machine. This will enable the heating process for Hot Water feature. \*In the event that the hot water switch is turned on BEFORE the hot tank is primed, it is likely that a “dry heat” event will occur. The hot tank, empty of water, will begin to heat rapidly and trip the overload thermostat on the hot tank. This overload will have to be manually reset for the hot tank to operate correctly. The overload thermostat is located ON the hot tank itself, and the red reset button must be pressed to manually reset and restore operation to the hot tank. If this must be done, do so with the unit disconnected from power.

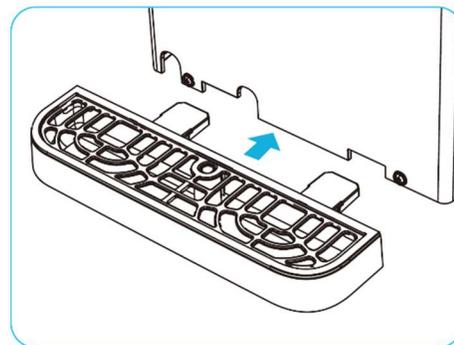


12. The S4 **WILL NOT** dispense sparkling water until the temperature in the ice bath has reached 41°F. This may take up to an hour to reach temperature, at which time sparkling will become selectable as a dispense option.

### How to Assemble the Water Tray

Push the water tray onto the unit until you hear a “click” sound.

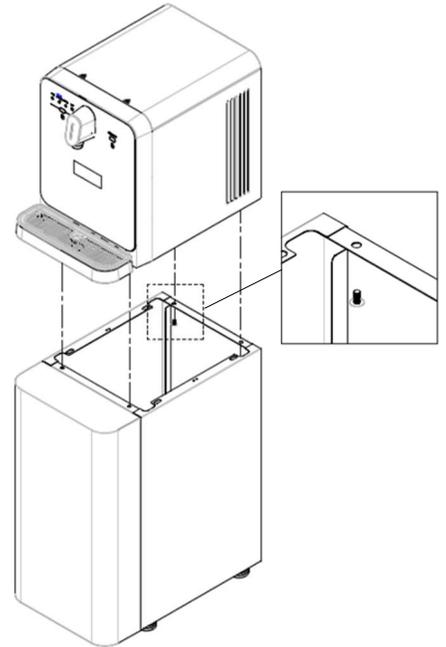
\*This machine has an audible “beep” indicator when the water or ice is dispensed. To turn off the “beep” sound, simultaneously press and hold for 5 seconds both the HOT WATER and AMBIENT WATER select buttons until all LED indicators flash 5 times. To enable the “beep,” repeat the same process.



## Stand Fastening

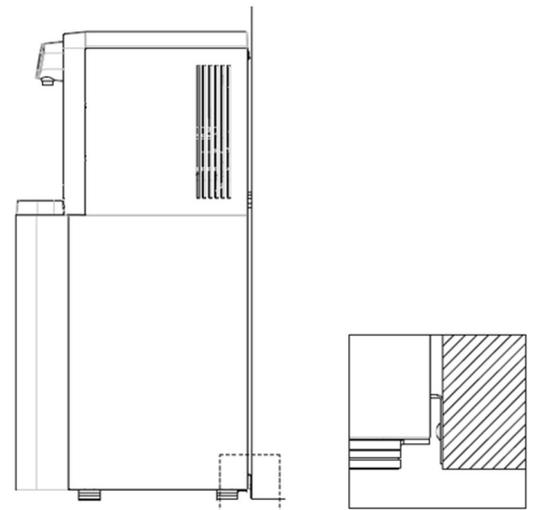
1. Remove the Drip Tray of unit and the Front Cover of Stand.
2. After placing the unit on the Stand, place your hand behind the Stand to secure the M6 hex bolts (x4).  
\*After tightening, ensure it is stable and there is no danger of tipping or falling.
3. Once fixed, return the Drip Tray of unit and the Front Cover of Stand.

\*If holes on the top of the base do not line up with the holes on the bottom of the unit, holes may need to be drilled to accommodate the unit. Refer to the Base Hole Modification section further down in the manual.



## Bracket Fastening

1. Place the bracket on the wall at the installation site and mark the positions (x2).  
\*There is only one bracket that could be fixed on the top or bottom side of the Stand.
2. Drill two holes in the marked position to fix the bracket to the wall.
3. Ensure the unit is fixed with the wall-mounted bracket, so that the unit does not fall if pushed.



## SANITIZING

Sanitize the reservoir using a Hydrogen Peroxide or another approved cleaner. Follow all instructions on sanitizing and flush with fresh water through the drain until odor and taste is acceptable.

**⚠️ WARNING! USE PROPER PERSONAL PROTECTIVE EQUIPMENT**

*Always ensure proper ventilation and use proper personal protective equipment such as gloves and eye protection when using chemicals. Refer to Material Safety Data Sheet for specific requirements of each chemical product. Take all necessary precautions to prevent sanitizer from contacting eyes, clothing, and any other surfaces in could damage (carpets).*

**⚠️ DANGER! ELECTRICAL SHOCK HAZARD.**

*Do not plug in unit unless qualified. Only qualified personnel who have read and understand this entire manual should attempt to install or service this unit.*

**⚠️ CAUTION! NEVER TURN ON HEATER BEFORE FILLING HOT TANK.**



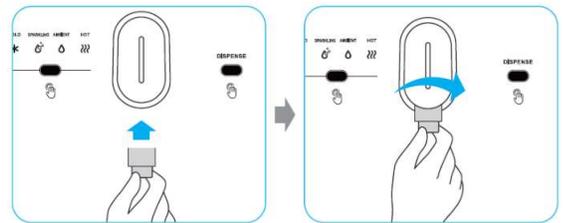
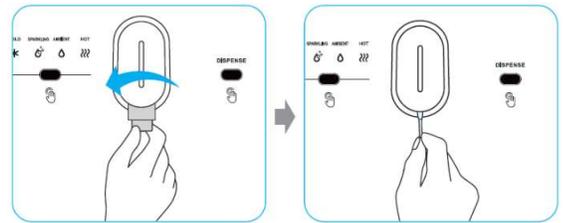
### Flushing the Reservoir and Hot Tank

During the following steps you should check for any leaks or loose fittings.

1. Turn the water to the system on, plug the system in and let the reservoir fill. RO systems will fill in 1-2 hours and UF systems will fill in 5-10 minutes.
2. Wave hand over “Dispense” to ensure water dispenses from Cold. Wave hand over “Select” until Hot is selected and front LEDs change to Red. Wave hand over dispense again while the dispense light is red and ensure water dispenses from the Hot tank (it will not be hot yet, as you have not turned on the Hot tank switch).
3. Place a pitcher or bucket under the dispense nozzle and dispense about 1 gallon of water from the machine using cold and ambient dispense.
4. Located behind the front panel is a hot tank drain. Have a bucket ready below the unit to catch the water about to drain from the machine. Remove the cap and insert the supplied drain tube with double gasket fitting into the drain fitting, routing the other end to a bucket. The drain port will open once the fitting is inserted. Allow the system to drain until water flow stops.
5. Remove the drain line and allow the system to fill again. Drain one more time to rinse any cleaning agent from the system.
6. Remove the drain line from the drain port and restore the cap to its original position.

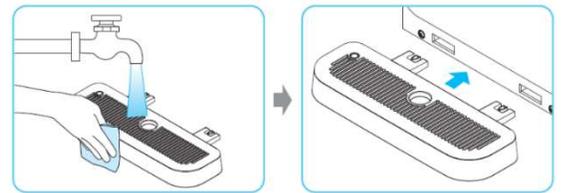
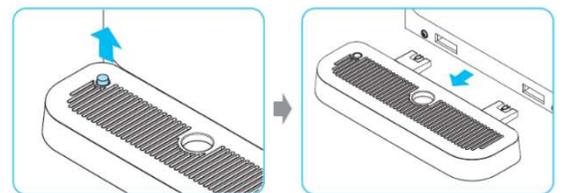
## Water Dispensing Spout Cleaning Method

1. Turn the water dispense faucet to the left, unscrew from spout and remove.
2. Wipe the inside of the faucet with a soft cloth and cleaning agent.  
\*DO NOT use detergents, thinners, benzene, or wax for cleaning. This may cause discoloration or peeling off and may cause health problems.
3. After cleaning, assemble the water dispense spout by turning it to the right and screwing it back on.



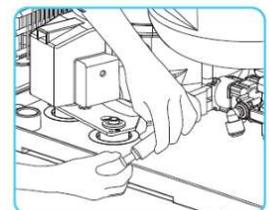
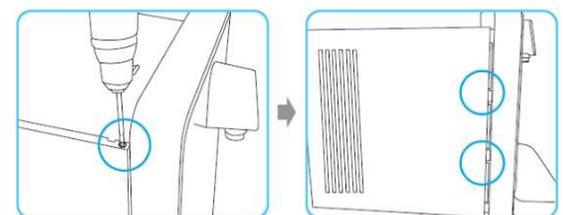
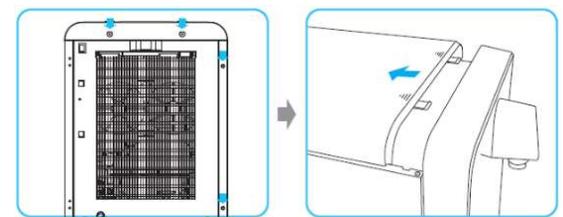
## Drip Tray Cleaning

1. The float rises when the drip tray is full of water.
2. Pull the drip tray out for cleaning.
3. Clean up the drip tray with soft cloth or sponge with running water and approved cleaning agent. Dry off.
4. Push the drip tray back into the unit.



## Drip Tray Cleaning

1. Use a screwdriver to remove the 4 screws on the back of the unit.
2. Slide the top cover back to remove it.
3. Remove the left panel by loosening one screw.
4. Gently press the side panel in and slide it back to remove it.
5. Open the coolant drain hose plug and drain the coolant to a bucket. \*The Ice Bath hold about 6L of water.
6. Once drained, reassemble in reverse order of removal.



## **FINAL INSPECTION**

After installation and sanitization, verify the following:

1. There are no leaks or loose components.
2. The hot water is over 160°F.
3. The cold water is below 50°F.
4. Confirm acceptable product water flow.
5. If using the Wellsys S4 RO filtration setup, system should fill at a rate of about 5.1L/min.  
**Note: Incoming water pressure and the drain correctly functioning will have a significant impact of water flow. The flow will also improve as the membrane breaks in.**
6. If using the Wellsys S4 UF filtration setup, system should fill in about 5-10min.
7. If the system is not filling, then check the water supply and also make sure the leak stop has not been tripped. **\*The leak stop can be reset by removing the cap below the unit and draining the water out.**
8. Ensure the systems exterior is clean and all components are in place.

Other items to check:

1. Once the system has been flushed it should remain plugged in and water should, at a minimum, be dispensed occasionally. **\*Avoid storing in your vehicle or warehouse with residual water in the tank, this will result in a bad taste after installation.**
2. Always drain the system before moving it. It is not necessary to drain the hot tank completely through the rear hot tank drain if installing the same day. Leaving water in the hot tank will allow you to turn the hot tank on immediately after installation of the system but if left overnight may result in a taste complaint.
3. Never lay the system on its side.