



# Custom Drinking Station Reverse Osmosis Drinking Water System

Congratulations on this fantastic investment to your health.

## **\*\*IMPORTANT NOTE\*\***

### **BEFORE YOU START**

**We recommend you call your local friendly plumber to ensure proper installation of your system. Failure to follow proper installation instructions voids all warranties and liabilities.**

**The system should be installed where it is protected from freezing.**

1. Prior to installing the feed water assembly, please ensure that the following water conditions are met.

Feed water condition	Minimum	Maximum
Inlet Pressure	280KPa/40 PSI	600KPa/87 PSI
Temperature	5° C/40° F	37° C/100° F
pH Level	2 pH	11 pH
TDS Level	---	2000 PPM
Working Pressure	280KPa/40 PSI	689KPa/100 PSI

2. All local plumbing codes should be followed.
3. Locate cold water supply, drain placement, and tap/faucet placement.
4. Locate water system and storage tank placement. (You should allow yourself room for easy access to future filter changes).
5. **Contact a plumber if you are not familiar with standard plumbing codes, procedures, or are not able to handle the installation.**

***Do Not Use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.***



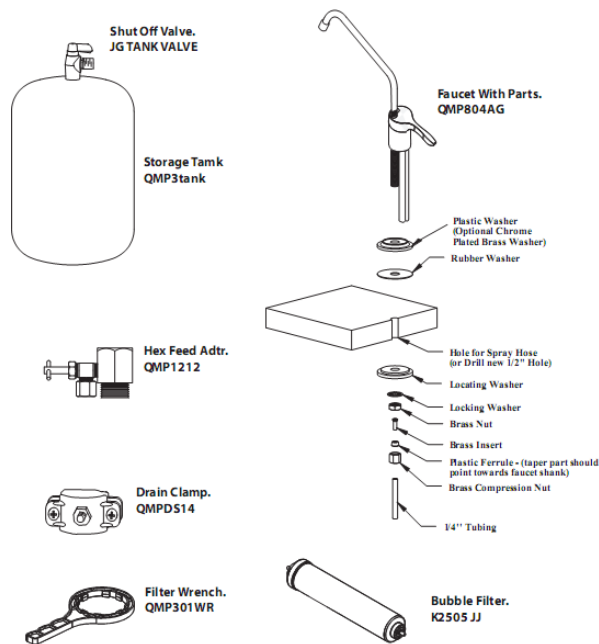
**This system conforms to WQA S-300 for the specific performance claims as verified and substantiated by test data.**

**Verify that you have received all parts.**

Part	Part Number
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AlkaRO75 with screws	AlkaRO75
Storage Tank	QMP3tank
Storage Tank Shut Off Valve	JG Tank Valve
Faucet with Parts	QMP804AG
Drain Clamp	QMPDS14
Hex Feed Adaptor	QMP1212
***Filter Wrench	QMP301WR
Bubble Filter	K2505 JJ
Membrane	TF 1812-75

**Note: \*\*\*Wrench is a removal tool only! Housings should be hand tightened only!!!**



Average Daily production is 12.2 GPD.

Average Efficiency Rating 5.8%.

This systems efficiency rating as verified by testing in accordance with 6.7.

“Efficiency rating means the percentage of influent water to the system that is available to the user as reverse osmosis treated water under operating conditions that approximate typical daily usage.”

This system is equipped with an automatic shut-off device that claim efficiency performance.

“This reverse osmosis system contains a replaceable component critical to the efficiency of the system. Replacement of the reverse osmosis component should be with one of the identical specifications, as defined by the manufacturer, to ensure the same efficiency and contaminant reduction performance.

**This system contains replaceable components critical for the effective reduction of the total dissolved solids. Product water should be tested periodically to verify that the system is performing properly.**

**FEED WATER INSTALLATION**

1. The feed water assembly consists of a 13mm/1/2" hex feed adapter and flat washer with 1/4" shut off attached. Locate these parts in the installation kit. The hex feed adapter is connected at the end of the feed water line.
2. Locate cold water angle shut off valve underneath the sink and turn it off. Open cold water faucet to release the pressure. On single handle faucets, the hot water may need to be turned off to prevent any hot water from crossing over. If water continues to come out of the faucet with angle valve turned off, the house main water will have to be turned off.
3. Disconnect the cold-water rise tube and install the hex feed connector.

## **DRAIN CLAMP INSTALLATION**

1. The drain clamp should be installed above the trap and on the vertical or horizontal tailpiece (see diagram). Ensure drain line is mounted before the trap.
2. Best installation is on the horizontal drain pipe. To reduce noise apply the drain clamp so the hole is at the 10 or 2 o'clock position, fasten with screw driver using the gasket. Drill a hole with a 6.5mm or 1/4" bit through only one side of the pipe (see diagram).
3. First slide compression nut up the yellow tube 4cm / 1 1/4".
4. Hand tighten compression nut to drain clamp.
5. Use a wrench to tighten 1 to 1-1/2 turns.
6. Check for leaks and correct operation.

## **MOUNTING FAUCET/TAP HOLE IN SINK**

Stainless Steel Sinks & Porcelain Sinks:

### **Faucet Installation Instructions**

1. Use existing spray hose hole, or
2. Drill 13mm 7/16" or 1/2" hole in sink top.  
Recommend carbide drill, use tape to protect sink top.
3. Slide Stainless plate onto faucet shank.
4. Slide rubber washer onto faucet shank.
5. Insert shank and tubing through hole in sink.
6. Slide plastic locating washer, followed by locking washer onto shank under sink.
6. Thread brass nut onto shank, position faucet and tighten nut.
7. Check for leaks and correct operation.

**NOTE :** **Granite and Composite rock** bench and counter tops should be drilled by a professional to avoid cracking. Contact your local Granite bench store for details.

## **STORAGE TANK ASSEMBLY**

1. Install the ball valve onto the tank nipple.
2. Install the white plastic tube on the 1/4" shut off valve.

Note: if using a metal tank wrap nipple with Teflon tape.

### SYSTEM HOOK UP:

1. From Hex Feed Take 7cm 3” piece of blue hose from system connect pressure reduction to Hex Feed using this.
2. Red Line: Connect from system to pressure reduction valve. Ensure arrow on pressure reduction valve is running the with the flow of water.
3. Blue Line: Connect from tap into quick fit connection Of the bubble muffler and from the bubble muffler to where 7cm piece of blue hose came from on the manifold.
4. White Line: Connect from system to storage tank.
5. Yellow Line: Connect from system to drain clamp fitting, before trap as per diagram

### SYSTEM START UP

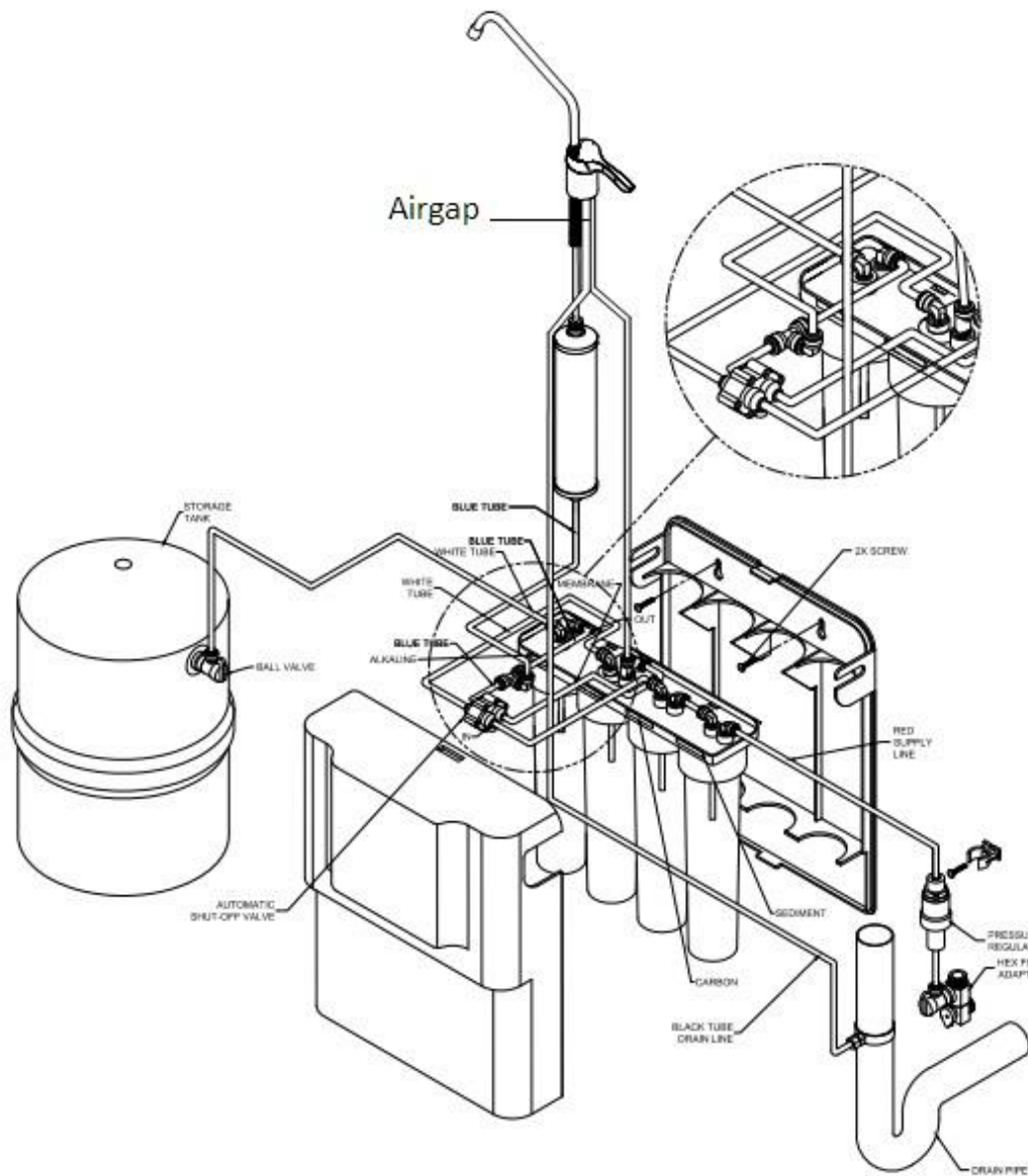
1. **Slowly** open the Hex feed adapter valve to allow source water to enter the system.
2. Move ball valve lever on storage tank to open position.
3. Check all connections for leaks. Recheck several times during the first 48 hours of installation for any leaks.
4. Allow the system to run between 3 to 8 hours to fill the storage tank.
5. Turn on the tap/faucet on top of the sink and let the water run for a few minutes clearing all new tube and filters. **It is recommended that you fill the tank overnight, and drain it to completely flush the system during initial start up.** To do this just open the tap/faucet and let the water run until the water stops running which means the tank is empty. Now turn the tap/faucet off
6. The system will start automatically to fill up the tank again.
7. The system is ready to provide you with great antioxidant water.

**It is typical for the water to appear Cloudy and produce Air as the filters are hydrolyzing; this should go away in approximately two weeks depending on usage.**

### RECOMMENDED MAINTENANCE

**For on going best water quality it is highly recommend that the tank is emptied monthly.**

Filters for your system as a rule must be changed every 12 months minimum. However in some area’s where the source water is not good the sediment and carbon filter may need to be changed as often as every three months. This is not common, although it does occur.



**Diagram shows an airgap faucet installation,  
CLEANING, SANITIZING, AND CARTRIDGE REPLACEMENT PROCEDURE**

1. Mix mild cleaning solution of dish washing liquid and clean potable water in plastic bowl.

2. Shut off water supply and empty storage tank to relieve system pressure.  
Verify tank valve is open. Close feed water supply valve and open product water faucet.
3. **CAUTION:** Use air hand pump to avoid damaging tank. Verify product water valve is open before proceeding. Air valve is located on tank base. Pre-charge should be 55 kPa (8 psig) with tank empty and tank valve open.
4. **CAUTION:** Do not attempt to remove filter housings until water flow stops. This reduces pressure inside the system so housings may safely be removed. Remove each housing by turning it anti clockwise. Remove each filter cartridge as it's housing is removed. Discard filters.
5. Remove filter/membrane housing "O" rings and wash them with cleaning solution. Rinse them well with clean potable water. Inspect them for damage (i.e., nicks, scratches). Replace damaged "O" rings.
6. Clean filter housings and manifold ports, inside and outside, with washcloth and cleaning solution. Do not use abrasive materials.
7. Rinse manifold/housings with clean water.
8. Inspect manifold and filter housing "O" ring groove area for damage (i.e., nicks or scratches). Replace damaged components.
9. Place a small amount of "O" ring lubricant over surface of housing "O" ring. Install "O" ring into filter housing groove.

**WARNING: WEAR SAFETY GLASSES WHILE PERFORMING THIS PROCEDURE. READ "WARNINGS" INFORMATION ON BLEACH CONTAINER BEFORE USING CONTENTS. HANDLE SANITIZING SOLUTION CAREFULLY. AVOID CONTACT WITH UNPROTECTED AREAS.**

10. **CAUTION:** Excessive concentrations of bleach will damage plastic and rubber components. Rinse all parts that contact bleach thoroughly with clean water. Mix sanitizing solution of 1.5 ml (1/3 teaspoon) of household bleach and 3.8 L (1 gallon) of clean, potable water in the bucket. Mix solution well.
11. **CAUTION:** Tighten filter housings by hand only. Do not use tools as they will over-tighten and damage housings. Take care not to cut or pinch o-rings. Add 236 ml (one cup or 8 oz.) of sanitizing solution to each filter housing and install them onto the manifold (do not install filters or membrane at this time). Tighten each filter housing by hand only.
12. Slowly open source water supply valve.
13. Open product water faucet. Close faucet as soon as water begins to flow from spout.
14. Wait 5 minutes, then close source water supply valve.
15. Wait 25 minutes, then open product water faucet and let water flow to drain.
16. **CAUTION:** Do not attempt to remove filter housings until water flow stops. This reduces pressure inside

the system so housings may be removed safely. Remove filter housings and dispose of water. Rinse filter housings and manifold ports thoroughly with clean potable water.

## **Trouble Shooting RO Problems**

**If no water comes out of the faucet after you have connected the system, and waited the required time for clean water to be produced and stored in the tank, please use the guide below as a method of determining the problem in the system.**

**1. Ensure supply of water to system is flowing.** With the Hex feed adaptor turned off disconnect elbow on the inlet supply (red hose) to the system. Slowly open hex feed adaptor on water supply. Water should flow freely from the tube. If there is no flow, close angle stop valve, remove hex fed assembly and check for blockage. Reassemble Hex feed and tighten all connections. Retry system.

**2. Check the flow to the drain (yellow tube).** Disconnect the yellow tube from the drain clamp assembly. Open the faucet. Water should begin to slowly trickle from the yellow tube. If it does not, turn the water supply to the system off (hex feed), remove the yellow tube where it is connected to the membrane housing. There is a small flow restrictor inserted in the fitting. Remove fitting carefully. Check to be sure that it is not clogged and water can flow through it. Gently blow through the flow restrictor. Air should pass through. If it does not, clear the valve or replace it. Reassemble yellow tube to the membrane housing and to the drain.

**3. Verify that the shut off valve on the tank is working properly.** Try to lift the water storage tank. Is it heavy? If so then water is passing through the shut off and filling the tank. If water continues to run to the drain (yellow tube) when the tank is full then the automatic shut off valve may be defective or the rubber seal around the membrane maybe caught. Shut off the water at hex feed. Firstly, unscrew the membrane housing check to see that the rubber skirt at the top on the membrane is seated to form a tight seal; if not, carefully remove membrane and reinsert ensuring the rubber skirt is not caught. Test the system again, if it still continues to send water to waste then replace the Automatic shutoff valve. Be extra careful when removing this valve. Mark the tubing so that you are able to reconnect the tubing exactly the same way as it was connected.

**4. If the tank is heavy but no water is coming from the tap it indicates that water is being produced.** There may not be enough air pressure in the tank to expel the water measure the air pressure in the bottom of the tank. The fitting is usually on the bottom or on the lower side of the tank. Ensure there is about 5-7 lbs of air pressure in the tank. This will be enough pressure to force out the water, which is stored there. If the pressure is low, use a bicycle pump to increase the pressure in the tank. Tank must be completely empty when performing this air test.

**5. Check water flow from the last housings.** With supply turned off, remove the feed supply (blue 1/4" tube) from the post filter feeding the tee to the faucet. Turn on water supply. Water should flow freely from the blue tube. If not one of the filters may be clogged and should be replaced. Reconnect the fittings. Check to see if water is being effectively produced. If the tank is empty water may not be flowing from the membrane. Turn off the water supply to the system at the hex feed adapter. First step is to see if water is going to drain by removing the yellow tube from the Drain clamp. Turn on water supply and if water is running to drain but not flowing from the blue tube coming from the auto shut off valve you may need to replace the membrane.

**6. If this procedure fails to correct your problem, please contact the dealer from which the system was purchased.**

## **CLEANING, SANITIZING, AND CARTRIDGE REPLACEMENT PROCEDURE**

1. **CAUTION:** Do not remove protective plastic bag from replacement filter/membrane cartridges until so instructed. Install "O" rings into filter housings. Open top of filter bag enough to expose filter cap and "O" ring grooves. Place a small amount of "O" ring lubricant on surface of each "O" ring.

2. **CAUTION:** Tighten filter housings by hand only. Do not use tools as they will over-tighten and damage housings. Take care not to cut or pinch o-rings. Install filter and membrane cartridges. Hold cartridge by its protective plastic bag and insert cartridge into manifold turning it 1/4 turn as it enters the port. Slide bag from cartridge and discard. Replace each filter housing as each cartridge is installed.

3. Turn feed water valve slowly to open position.

4. Confirm system is producing water. Unit will be sending rinse water to drain.

5. Replace manifold to mounting bracket and replace cover by gently pushing cover onto the mounting back plate until it snaps into place.

6. Open product water faucet. Let water flow until all air has been expelled from the system.

7. Close product water faucet. Wait 30 minutes, check connections for leaks, and correct if necessary.

8. Allow storage tank to fill overnight.

### **9. WARNING: DO NOT USE THE FIRST FULL STORAGE TANK OF WATER**

Discard (to drain) first full tank of water by opening product water faucet until water flow stops, then close faucet. This flushes sanitizing solution from system.

10. System is ready to use. Should there be any after taste or odor, drain storage tank and let refill over night. This process removes sanitizing solution from system, sanitizes fittings and tubing, and sends solution to drain.

### **If using an alkaline System;**

**When the system is new or replacement cartridges are installed the Media produces excess gas in the water; this is normal and will go away in a couple of weeks. We have added a sediment filter that can be installed between the system and the faucet to act as a muffler and defuse the excess gas.**

Replacement components can be found by going to [www.h2otogo.net](http://www.h2otogo.net)