



## UltRo Dual Flow Reverse Osmosis Water System

Congratulations on this great investment to your health.

### **\*\*IMPORTANT NOTE BEFORE YOU BEGIN\*\***

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.

*Please note: Although the UltRo is certified in the US, it is not certified in Australia. This means that we cannot be held responsible for damage as a result of installation by you, and that installation responsibility lies with the user.*

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### 1. Prior to installation

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

<b>Input Water Specs</b>	<b>Minimum</b>	<b>Maximum</b>
Inlet Pressure	289kpa/40psi	600KPa/87 PSI
Inlet Water temp	5o C/40°F	37°C/100° F
TDS Level		1500 ppm

b) Please ensure all local plumbing codes should be followed.

c) Locate your cold water supply, decide upon your drain placement, and tap/faucet placement on your bench.

d) Decide upon your UltRo water system and storage tank placement.  
(Allow room for easy access to future filter changes).

e) Contact a plumber if you are not familiar with standard plumbing codes, procedures, or are not able to handle the installation.



## 2. Parts enclosed

- The System + Wall screws
- Storage Tank
- Storage Tank Shut Off Valve
- Faucet
- Faucet Parts
- Drain Clamp (US size. We do not use all of it. See note later)
- Hex Feed Adaptor
- Plastic Filter Wrench
- Hydrogen Diffusion filter cartridge

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

## 3. INSTALLING YOUR INLET WATER ATTACHMENT

- a) The inlet 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.
- b) Locate cold water angle shut off valve underneath the sink (if you don't have one, you need to turn off your water at the mains) and turn it off. Open the cold water faucet to release the water pressure. On some faucets, the hot water may also 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.
- c) Disconnect the cold-water riser tube and install the hex feed connector.

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## 4. DRAIN HOSE INSTALLATION

- a) The drain clamp is US made and does not fit to AU undersink plastic drain pipes. We drill a 1/4" hole above the S-bend and on the vertical or horizontal pipe.
  - b) Best installation is on the horizontal part of the drain pipe. To reduce water drain noise make the hole at the 10 or 2 o'clock position.
  - c) We use the adhesive patch alone to secure the drain hose. You can use the adhesive patch on the pipe. Drill the hole, attach the patch, and push the hose through the patch. It's not under mains pressure and so works well as a simple alternative)
  - d) Check for leaks and correct operation.
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## 5. MOUNTING FAUCET/TAP HOLE IN SINK

Stainless Steel Sinks & Porcelain Sinks:

### Faucet Installation Instructions

- a) If you have one, use existing spray hose or faucet hole, or in the plastic bag with faucet washers, nuts and bolts, you'll find a circular black disk. This locates under the bench and compresses the faucet thread. The hole in this disk is the shape of the hole you need in your bench. If you already have a hole, ignore this and use the hole you have. If not, you may choose to drill 2 holes to suit, each hole 12mm or one big hole of 36mm.  
If you choose the make 2 holes be aware that the position of the holes will dictate the orientation of the faucet. Or, drill one hole.  
For stainless steel, we use a Sutton Cobalt BiMetal 38mm Hole Saw. Use tape to protect sink top.
- b) Slide Stainless plate onto faucet shank.
- c) Slide rubber washer onto faucet shank. (may be embedded on underside of SS plate)
- d) Insert shanks and tubing through hole in sink.
- e) Slide plastic locating washer, followed by locking nuts and washers onto both shanks under sink.
- f) Thread brass nuts onto shanks, position faucet and tighten nuts.
- g) 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.

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## 6. STORAGE TANK ASSEMBLY

- a) Install the ball valve onto the tank nipple.
  - b) Install the white plastic tube on the 1/4" shut off valve. Note: if using a metal tank, wrap nipple with Teflon tape.
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## 7. SYSTEM HOOK UP

- a) White Line From Hex Feed: Connect pressure reduction valve inline between the Hex feed and the UltRO. Ensure arrow on pressure reduction valve is running in the direction of the water flow.
- b) Red Line: Connect from system to Bubble muffler postfilter.
- c) Blue Line: Connect from faucet into quick fit outlet connection of the bubble muffler postfilter and from the bubble muffler to where 7cm piece of blue hose came from on the manifold.
- d) Other end of White Line: Connect from system to storage tank.
- e) Other end of Yellow Line: Connect from faucet to system fitting.
- f) Other end of Black Line: Connect from unit to trap as per diagram



## 8. START UP

- a) **Slowly** open the Hex feed adapter valve to allow source water to enter the system.
- b) Move the ball valve lever on storage tank to open position.
- c) Check all connections for leaks. Recheck several times during the first 48 hours of installation for any leaks. A leak at hose/connection point is fixed by pushing the hose hard into the fitting.
- d) Allow the system to run slowly between 3 to 8 hours to fill the storage tank.
- e) 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.
- f) The system will automatically fill up the tank again.
- g) The system is ready to provide you with great antioxidant water.

**It is typical for the water to appear Cloudy and for the spout to ‘sputter’. This is due to a buildup of hydrogen gas, the powerful antioxidant in your water. It will reduce with use.**

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## RECOMMENDED MAINTENANCE

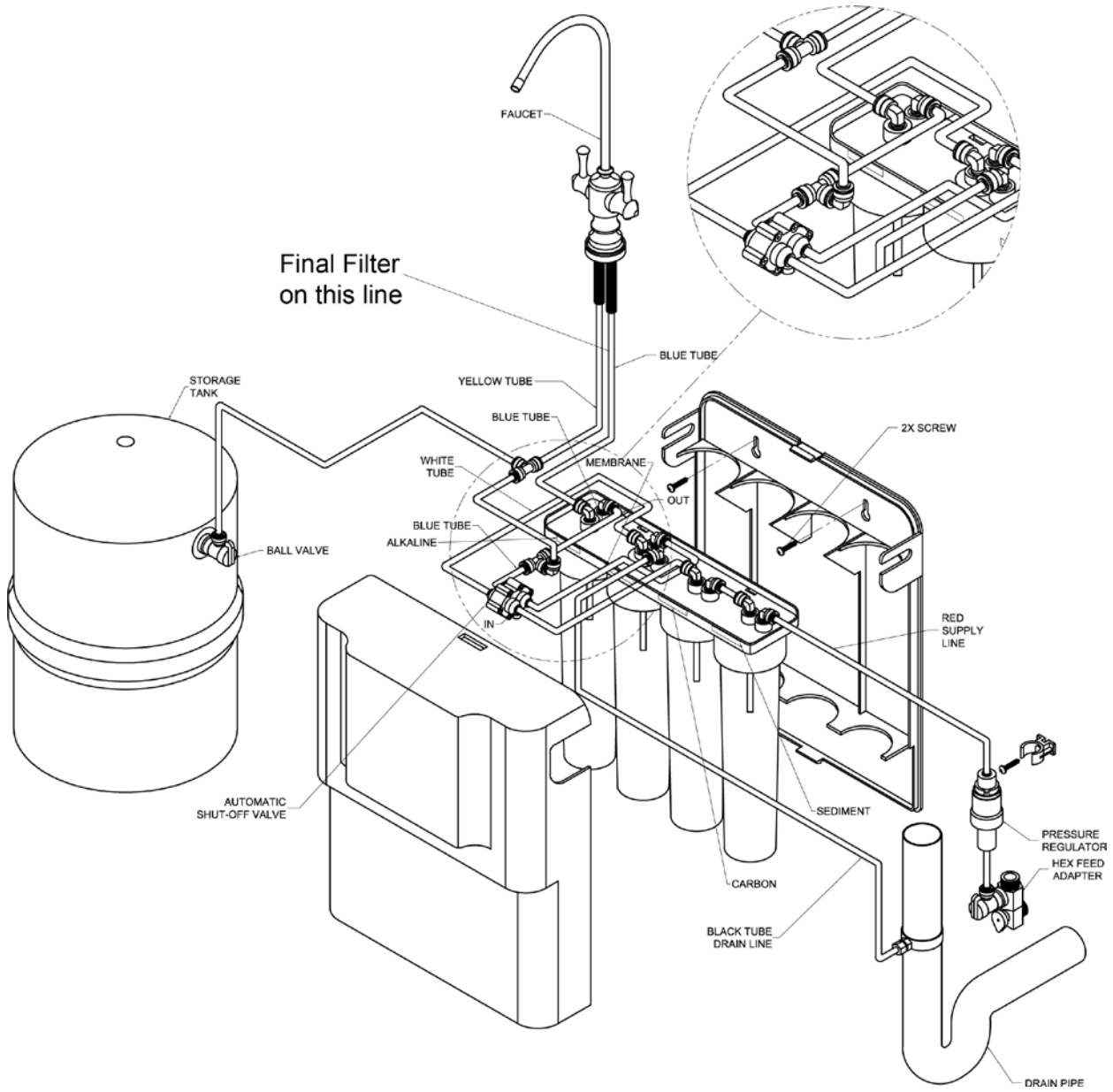
**For ongoing best water quality it is highly recommended that the tank is emptied monthly.**

Filters for your system as a rule must be changed every 12 months minimum. However in some areas 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.

**WARNING:** While away from home for extended periods, turn off your water supply at the inlet valve under the sink and open the faucet to drain. This ensures no hydrogen gas buildup occurs within the system.

# **ALKAWAY**

THE ULTIMATE WAY TO REMOVE FLUORIDE





## CLEANING, SANITIZING, AND CARTRIDGE REPLACEMENT

**Please note: These instructions are required by law to be given. It is up to you whether you follow them.**

1. Mix a mild cleaning solution of dish washing liquid and clean potable water in plastic bowl.
2. Shut off water supply and empty the storage tank to relieve system pressure. This is accomplished by turning on the faucet and letting it run to dry.  
Verify tank valve is open. Close inlet valve and open water faucet.
3. **CAUTION: You can use an 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. Emptying the tank reduces pressure inside the system so housings may safely be removed.**  
Remove each filter housing by turning it anti clockwise.  
Remove each filter cartridge after its housing is removed. Discard old 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.

**WE RECOMMEND YOU 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 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.
17. **CAUTION:** Do not remove protective plastic bag from replacement filter/membrane cartridges until so instructed. This keeps it sterile.  
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.
18. **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.
19. Turn feed water valve slowly to open position.
20. Confirm system is producing water. Unit will be sending rinse water to drain.
21. Replace manifold to mounting bracket and replace cover by gently pushing cover onto the mounting back plate until it snaps into place.
22. Open product water faucet. Let water flow until all air has been expelled from the system.
23. Close product water faucet.  
Wait 30 minutes, check connections for leaks, and correct if necessary.
24. Allow storage tank to fill overnight.

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

25. Discard (to drain) first full tank of water by opening product water faucet until water flow stops, then close faucet. This flushes any leftover sanitizing solution from system.
26. System is ready to use. Should there be any aftertaste 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.





## IMPORTANT USER INFORMATION

**The UltRo is not just a high performance water filter. It is also a water alkalizer and a water hydrogen generator.**

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 is installed between the system and the faucet to act as a muffler and diffuse the excess gas.

### **Getting the most from your system.**

It's a good idea to allow the faucet to run a little to clear the lines of gas. The sputtering that may occur is hydrogen gas pushing its way up the lines, and that's why we include the extra hydrogen diffusion cartridge. (See added instruction sheet at end for details). It's proof that the system is working as intended, creating molecular hydrogen in solution. The water will also have magnesium and calcium in it, making it the perfect alkaline water and the perfect hydrogen producer.

A pH test kit is included. 'Play' with the two taps to see the effect they have on the pH of the water. Ideally you want a pH of at least 8.5. The red tap will give acid water. This is excellent for the skin, for cleansing and many other antibacterial uses.

To get pure water (recommended with medicines) turn on both taps at the same time. This will give close to neutral water.

Please ensure you change filters within the recommended time periods. Longer use WILL cost you money as your system will not last as well.

## AlkaWay Ultro Parts Sheet



Valve for Storage Tank



Valve to connect cold water line to UltRo.



UltRo to Postfilter hose



Bracket to mount Post-RO filter



Faucet Fittings



UltRo to Tank hose



Ring Spanner to remove filters.



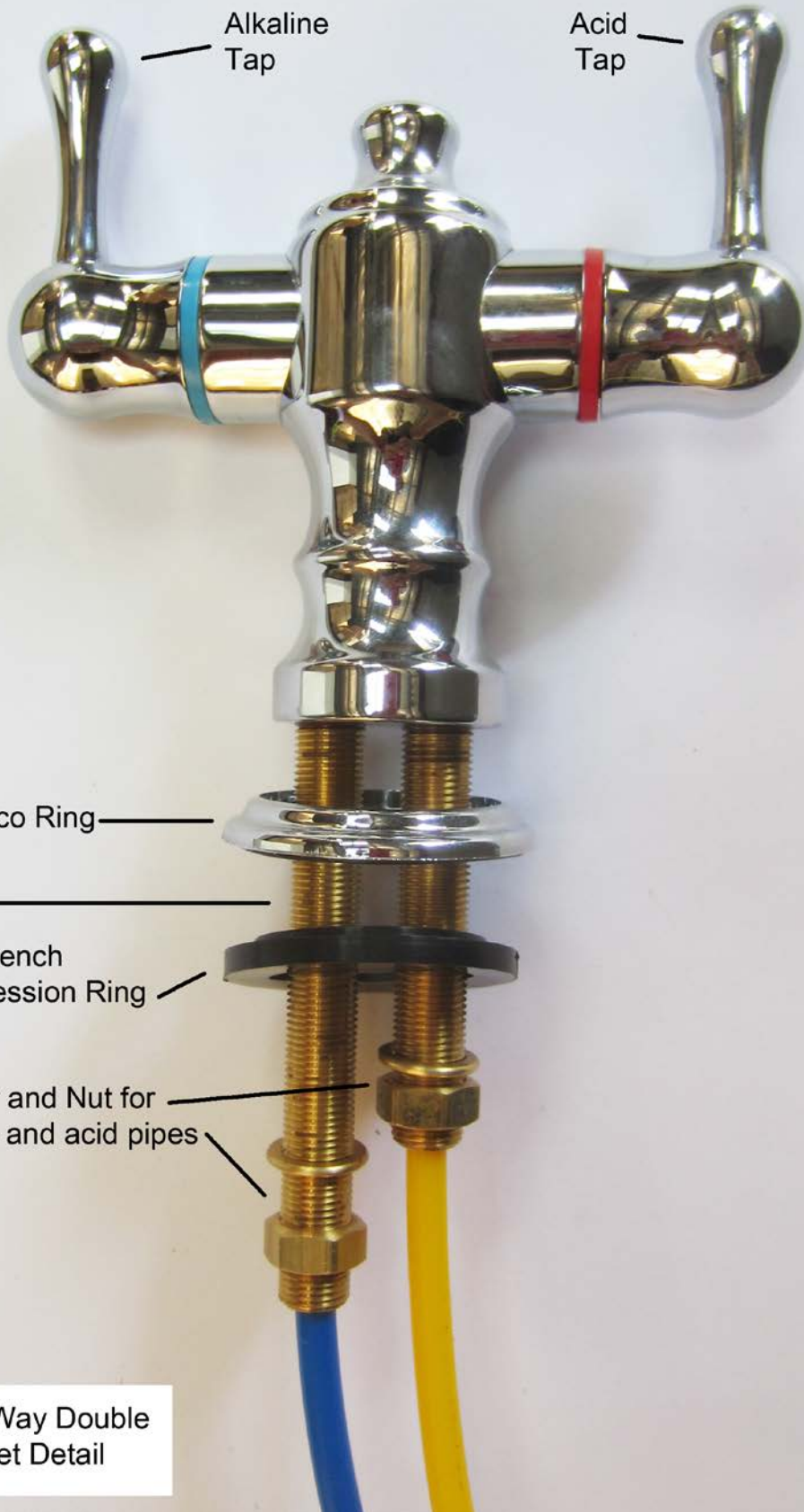
Double Faucet



DRAIN OUTLET CLAMP



THE ULTIMATE WAY TO REMOVE FLUORIDE



AlkaWay Double  
Faucet Detail