

Thank you for purchasing Ultra Pure Reverse Osmosis 75GPD system. Rest assured this was a great investment. Your Ultrasonic Humidifier is going to love you. In order to have years of great service, it is very important to change filters periodically throughout the year. More on that below.

Included Components:

RO System:

The RO system is the main component that holds the pre-filters, reverse osmosis membrane and post-filter. A bracket holds all this together that can be hung from a wall making changing filters much easier.

2. Angle Stop Valve:

The angle stop valve connects to the incoming cold water line to supply water to the RO system. This valve also has a ball valve that can be used to stop water going into the RO system.

3.Pre-Filter #1:

This is the first filter marked sediment filter. This filter removes large particles such as sediment, rust, sand and dirt.

4. Pre-Filter #2-3:

This is the 2nd and 3rd filter marked carbon filter. These filters remove chlorine from the water that damage the reverse osmosis membrane.

5. Automatic Shut Off Valve:

This valve is located below the reverse osmosis membrane and serves a critical roll. When the storage tank is full this valve shuts off city water from entering the system. When tank pressure gets below 20ish psi from city water pressure valve will open and allow water to enter the system.

This valve should not require any maintenance however when a sound is heard from the system this would be a great place to look. Call Ultra Pure Systems if this noise occurs.

6. Reverse Osmosis Membrane:

The RO membrane is the heart of your system that will remove 90-97% of all containments and minerals in the water. Most RO systems use a <u>thin filmed composite filter</u> that are much less efficient, Ultra Pure Systems uses an encapsulated RO membrane that is very efficient. When the RO membrane is exhausted, the entire RO membrane will get replaced.

 $VERY\,IMPORTANT\,THAT\,THE\,BLUE\,1/4"\,TUBE\,GOES\,INTO\,OUTLET\,WITH\,A\,RED\,FITTING\,WHEN\,RE-PLACING\,THE\,RO\,MEMBRANE.$

7. Post Filter

This filter often referred to as a coconut filter is an activated post carbon filter for a final polish and removes odors prior to water going into humidifier.

8. Bladder Tank:

Bladder tank is the white tank included with your system. This tank will store approx. 3 gallons of water that will fill your ultrasonic humidifier as needed automatically. No maintenance is required other than emptying the tank when humidifier will not be used for more than 2 months. NOTE: The 4 1/2GL capacity on the box is a nominal capacity.

9. Drain Clamp:

This black saddle clamp is designed to wrap around a standard 1 1/2" drain pipe below your sink. This is referred to concentrate water.

10: Blue and Red 3/8" Tubing:

The BLUE tubing can be cut to size to terminate into the left side of the post filter and the storage tank and the RED tubing will go to the ultrasonic humidifier inlet.

11. HM Digital Dual TDS Meter:

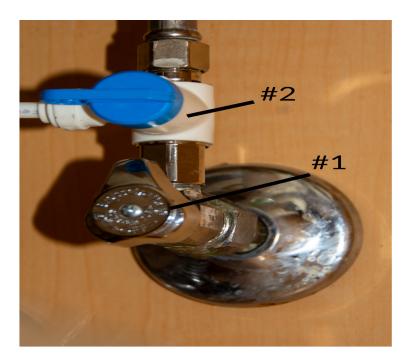
This meter can be installed so you will be able to monitor the quality of reverse osmosis water along with city TDS. Includes (1) 3/8" x 1/4" x 3/8" push connection tee (1) 1/4" x 1/4" x 1/4" push connection tee.

Installation:

Locate ideal location for the RO system taking into account that changing filters will be necessary. Locate RO system within 30' of your ultrasonic humidifier. If RO system is located further than 30' a booster pump may be required.

Contact Ultra Pure if water is not filling the basin of the humidifier. This could be due to low water pressure which a booster pump will resolve easily.

- 1. Use included screws to anchor the RO system to the wall.
- 2. Turn off cold water valve and install included angle stop onto the same threads as the braided hose that is going up to the sink faucet. After tightening onto the cold water valve, screw on existing braided hose on top of angle stop. Make sure blue handle # 2 on the angle stop is turned off. Turn on the water valve #1.



3. Push white 1/4" tube from RO system into Angle Stop and secure tube with red clip

4. Use a 1/4" drill bit and gently drill into the drain pipe making sure not to drill a hole through the other side of the pipe.

Remove black square foam from clear bag and remove center round cutout.

Remove white backing tape and adhere to inside of drain saddle so that hole in foam aligns with hole in saddle. 5. Secure saddle around pipe with bolt and screws. CONFIRM WITH A SMALL STRAW OR SMALL SCREWDRIVER, PUSHING SCREWDRIVER INTO HOLE OF SADDLE THAT THE SADDLE HOLE IS LINED UP WITH THE HOLE IN THE DRAIN PIPE.

5. Push black tube attached to RO system into drain saddle. Use red 1/4" clip to secure tube to fitting.



6. Locate blue 1/4" ball valve in clear bag, with Teflon, tape screw ball valve on to top of storage tank.



7. Locate Blue 3/8" tube and push one end into the storage tank the other end into the RO system as shown below.



Locate the Red 3/8" tube and push into the post filter as shown below. Push the other end into the Ultrasonic Humidifier.

Installing HM Digital Meter:

Included with your system is a meter that will assist with monitoring quality of reverse osmosis water. When TDS reaches 150 it's time to change the RO membrane. Push ON/OFF button once, IN displays city TDS and OUT displays RO Membrane



With a sharp blade, cut the white 1/4" tube approx 3" on the left side of the RO system. Use the included 1/4" tee and push both ends of the white tube into the tee. Proceed doing the same above step on the blue 3/8" tube on the opposite side of the RO system.

Remove the HM digital meter from the bag and push the IN into the 1/4" tee and the OUT into the 3/8" tee. Place red clips on all tubes.





Once all the steps above are complete you are ready to turn on the Angle ball valve # 2 that was installed onto the city water ball valve and tank ball valve that was screwed on step 6.

Open **slowly** and allow water pressure to build up in the RO system. RO water will start to be produced however it will take a few hours for the tank to fill and have adequate pressure to supply water to the humidifier.

<u>Check for leaks for the next few hours</u>. This is very important in the next 3-4 hours as pressure is building in the system leaks can suddenly appear.

Once your tank is full, inlet water automatically will shut off and resume making water when water pressure is low in tank.

Filter Preventative Maintenance:

Routine preventative maintenance is a very important part of owing a reverse osmosis system.

Installed with each system is an HM Digital battery conductivity meter that you will be able to see (PPM) parts per million of City Water and Reverse Osmosis conductivity.

Our recommendation is not to allow the reverse osmosis PPM reading exceed 150ppm.

City water is a visual so that you are able to see how the RO membrane is operating compared to City water PPM.

In addition to the reverse osmosis membrane there are (3) pre-filters. (1) sediment filter and (2) carbon block filters. We recommend changing these filters every 3-4 months. We have found the best way to remember this is to add a reminder on your calender. You can purchase these filters along with reverse osmosis membrane from our website @ www.ultrapureus.com.

If you have any questions, feel free to call us @ 800 729-5192 or email us at info@ultrapureus.com