



***Puratek* Aquarium Reverse Osmosis / Deionization Installation and Maintenance Manual**

Thank You for your purchase of a ***Puratek*** System by ***Vertex™ Aquaristik***. With proper installation and maintenance, this system will provide you with high quality water for years to come. All ***Puratek*** products are rigorously tested for safety, efficiency and reliability.

We prioritize with ease of use, Maximum Purity & Minimum Waste water production.

Please take a moment to read these instructions to ensure optimal performance. When using or installing electrical devices, take care and/or consult a professional. Your safety is our number one concern.

Important Reminders

Be sure to follow these directions carefully. Failure to do so may result in damage to your ***Puratek*** RO/DI Unit and or possible damage to property.

Dealers and or the manufacturer are not responsible & cannot be held accountable for any personal or property damage resulting from the use or misuse of this product.

Carefully remove your new ***Puratek*** RO/DI Unit from its original packaging, inspect the unit for damages. All damages must be reported to your dealer ***WITHIN*** 48 hours of receipt and marked by the delivery driver on the waybill.

Each ***Puratek*** RO/DI Unit will have the following parts:

- Top Bracket including: Booster pump, Oil filled pressure gauge, Electronic Controller, Electronic Components, Reverse Osmosis Chamber
- 100 GPD Reverse Osmosis Membrane
- Clear Canister for Sediment filter and sediment filter.
- Clear Canister for Carbon block and Carbon block.
- Clear Canister for DI Cartridge and DI Cartridge.
- 0.25" OD tubing.
- Water line connections & Accessories.
- Filter Housing wrench.

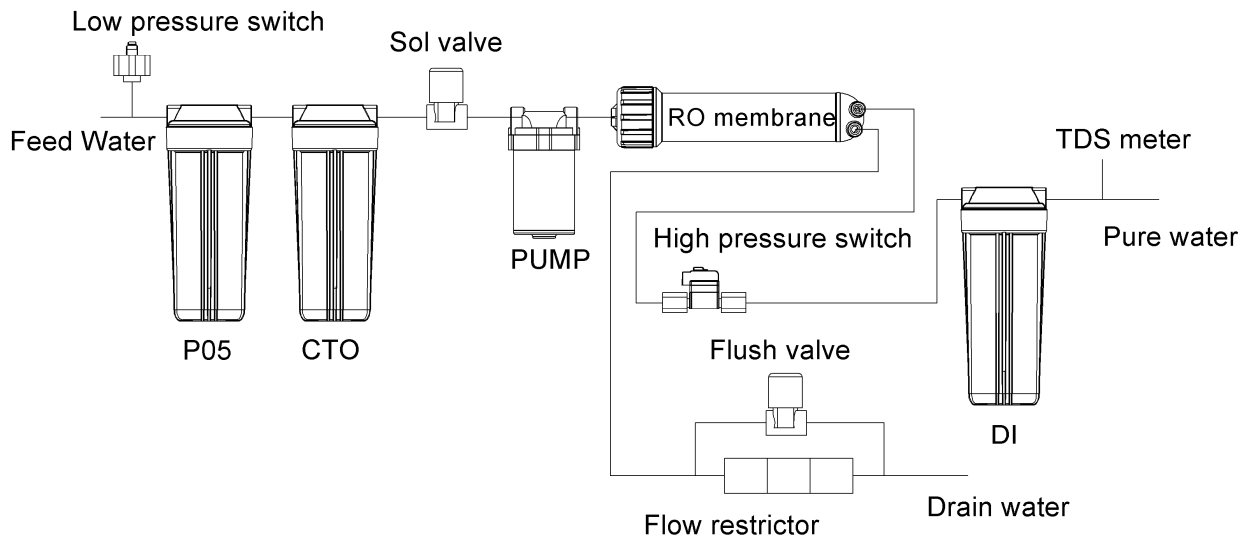


Once you have verified that there is no damage and that all the parts are present, you may begin installation.

System Specifications

Power:	AC110V-DC24V
Daily Production:	100GPD / 264l
Inlet Water Temperature:	5-45°C / 41-113 F
Main Rejection:	99%
Treatment Stages:	4
Back Flush:	Automatic
Product to Waste water Ratio	Approximately 1:1.5

Reverse Osmosis layout and components

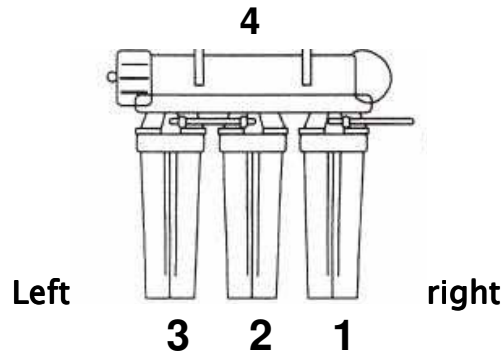


This unit is fully automated by using a Microprocessor Controller.



Installation

Chambers when facing the *Puratek* unit



- 1- Insert Sediment filter in Canister # 1.
- 2- Insert Carbon block in Canister # 2.
- 3- Insert DI Cartridge in Canister # 3.
- 4- Insert RO Membrane in Canister # 4.
- 5- Tighten shut all canisters & use silicone lubricant on O-rings if necessary.
- 6- Connect the Water line Connector supplied to the Cold water line, use Teflon tape to ensure complete seal.
- 7- Connect the water inlet on Chamber # 1 to water source using the tubing supplied.
- 8- Connect Tubing to the Water Outlet on Chamber #3 using the tubing supplied. This is your product water supplying a reservoir or pressurized tank.
- 9- Connect the Waste water line (blue color tube) attached to the unit to drain.
- 10- Force all tubing in the quick disconnect fittings all the way& reinsert the blue security lock back on.
- 11- Turn on the source Water.
- 12- Recheck to see all connection are complete & canisters are shut properly.
- 13- Plug the unit into the wall receptacle.

After following the above steps, your installation is. Dispose of the product water for the first half hour after installation, repeat the same practice after future membrane exchanges every time.



Microprocessor controller Functions

- The Microprocessor is programmed for 10second delay.
- After the delay the unit will flush itself for Maximum efficiency, this will last for 15 seconds. The Microprocessor's flush LED is on during this function.
- After flushing the Membrane, the unit starts producing water. The Microprocessor's making RO LED is on during this function.
- While producing water, the LCD will display the water purity in Parts per millions.
- It will take 20 seconds for the unit to display the correct calibrated PPM.
- If the water source is interrupted, the unit will shut itself off & the Source water LED will go on.
- The unit is programmed to flush itself once every 2 hours for 15 seconds, during this function the Flush light will go on.
- The unit is equipped with high pressure switch which will turn itself off if the outlet water line closed by means of float valve or any other.

Filter change instruction

- 1- Turn Off the unit and disconnect from Electricity.
- 2- Shut off the water supply
- 3- Release the pressure from the water outlet by manually opening the float valve or any other valve used for water shut off.
- 4- Use filter housing wrench to open the Canisters.
- 5- Replace the filters.
- 6- Make sure the O-Ring is in place, and turn the housing counter-clockwise to close.
- 7- Make sure there are no leaks then turn the water supply on.
- 8- After changing the RO Membrane, dispose of the product water for half hour.

Filters and Membrane storage

- *Sediment & Carbon Block Filters do not have a shelf life.
- *Reverse Osmosis Membranes could be stored in the refrigerator for up to one year in it's sealed original packaging. If the membrane dries out, it will not produce water.
- *DI Cartridges can be kept in a cool & dry place for at least one year in it's sealed original packaging.



Trouble shouting Guide

<i>PROBLEM</i>	<i>CAUSE</i>	<i>SOLUTION</i>
Milky colored water	Air in system	Air in the system is a normal occurrence with initial startup of the Unit. This will disappear after some times.
Slow production	Low water pressure Crimps in tubing Clogged pre-filters Fouled membrane	This system requires min 40 psi incoming water pressure. Check booster pump. Replace pre-filters Replace membrane Check tubing for crimps or blockage
Offensive smell	Fouled membrane Dirty Tank/ Reservoir	Replace membrane Drain and storage tank
No waste water	Clogged flow restrictor	Replace flow restrictor
Leaks	Fitting not tightened Missing o-ring Misalignment of hole in drain saddle	Tighten fittings as necessary. Reinstall the O-ring Realign drain saddle.

For more information about this or any other Vertex™ products contact your dealer or visit us at:

www.vertexaquaristik.com

Thank you