

# Puratek Aquarium Reverse Osmosis 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 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 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 Unit will have the following parts:

- Top Bracket including: Auto shut off, Oil filled pressure gauge, Restrictor bypass valve, Reverse Osmosis Chamber
- 100 GPD Reverse Osmosis Membrane
- Clear Canister for Sediment filter and sediment filter.
- Clear Canister for Carbon block and Carbon block.
- 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.



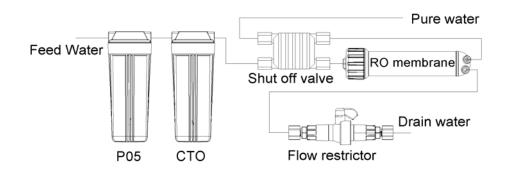
### **System Specifications**

Daily Production: 100GPD / 264l Inlet Water Temperature: 5-45°C / 41-113 F

Main Rejection: 99% Treatment Stages: 3

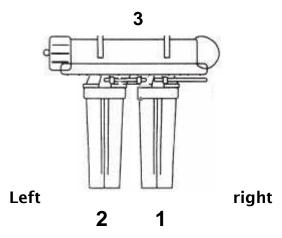
Back Flush: Manual

### **Reverse Osmosis layout and components**



#### Installation

Chambers when facing the Puratek unit





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

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

#### Manual Back Flush

It is recommended to flush your RO membrane from time to time; this will increase the membrane's life & avoid TDS creep.

Simply open the Restrictor Valve fully & allow the unit to flush itself. Closing the valve will direct the water through the restrictor & unit will start to produce water again.

#### Shut off function

Puratek units are supplied with a shut off valve. If used with a Float valve or any other means of water shut off, the valve will automatically stop the water flow to the RO membrane.



#### Filter change instruction

- 1- Shut off the water supply
- 2- Release the pressure from the water outlet by manually opening the float valve or any other valve used for water shut off.
- 3- Use filter housing wrench to open the Canisters.
- 4- Replace the filters.
- 5- Make sure the O-Ring is in place, and turn the housing counter-clockwise to close.
- 6- Make sure there are no leaks then turn the water supply on.
- 7- 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**

<u>PROBLEM</u>	CAUSE	<u>SOLUTION</u>
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. 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 Leaks	Clogged flow restrictor Fitting not tightened Missing o-ring Misalignment of hole in	Replace flow restrictor Tighten fittings as necessary. Reinstall the O-ring Realign drain saddle.
	drain saddle	



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

## www.vertexaquaristik.com