Thank you very much for selecting PurePro Water Corp. In order to bring the best use of your system, please read the user’s manual carefully before installation and follow the regulations.
Introduction of RO103

♦ RO103
Smart Control Box to auto flush the membrane, build-in TDS meter to know the water quality and membrane’s effectiveness from its LCD.

Smart microprocessor control system
The build-in TDS meter is able to know the water quality. It tells when should replace the cartridge filters as well as if the membrane need to be replaced from LCD display.

Auto flushing membrane to get the best water quality
The membrane always remains clean by build-in auto flushing and self-cleaning procedure. Water never stands still for a long time to avoid bacteria growing.

5 Indicators & LCD display
Easy to control the RO system and let you understand more about it. Smart to warn you if the operation is affected by any reason.

♦ Specifications
• Production: 80 GPD / 302 LPD
• Operation pressure: 5 - 80 PSI
• NSF standards water storage tank
• FDA approved polypropylene made flat cap housing (double O’ring)
• Safety approval: TUV (EN60950) & CE MARK
• NSF post carbon filter
• Automatic shut-off valve
• Special technical designs (Patented No. 068018. flush membrane)
• Flow restrictor, stainless steel check valve
• Long reach attractive faucet
• Feed water connector & deliver valve
• Drain saddle valve
• Four color coded 1/4 inch tubing for system connection
• Completely assembled & Water leaking testing
• Dimensions: (cm) 47 (L) x 42(H) x 20 (W) - system
  (cm) 28 (L) x 28(H) x 35 (W) - tank
• Weight: 14 kg - system
  4 kg - tank

<table>
<thead>
<tr>
<th>Filters</th>
<th>1st stage</th>
<th>2nd stage</th>
<th>3rd stage</th>
<th>4th stage</th>
<th>5th stage</th>
<th>Other items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
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</tbody>
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Maintenance checking list

RO103 Auto Flushing Membrane System
Reverse osmosis was originally designed to make sea water drinkable for the navy. It is ideal for anyone on a low sodium diet. An R.O. membrane has a pore size much smaller than bacteria virus, or the cryptosporidium parasite. When functioning properly it will remove all microorganisms from tap water and produce sterile water. Reverse osmosis is the reversal of the natural flow of osmosis. In a water purification system, the goal is not to dilute the salt solution, but to separate the pure water from the salt and other contaminants. When the natural osmotic flow is reversed, water from the salt solution is forced to pass through the membrane in the opposite direction by application of pressure—which is the term REVERSE OSMOSIS. Through this process, we are able to produce pure water by screening out the salts and other contaminants.

FAQ

Q: What is the guarantee on the PurePro system?
The PurePro System (excluding filters) is guaranteed for 1 years for material and workmanship. All defective parts will be replaced free within the first year under natural breakdown. The membrane has one year pro-rated guarantee.

Q: What factors affect the quantity and the quality of the water production?
There are four major variables to consider:
1. Pressure-The greater the water pressure, the better water quantity and quality it produced. Water pressure of 60 PSI is ideal.
2. Temperature-76°F is the ideal water temperature for R.O. 40°F water will cause the production of R.O. water to fall to half of that at 76°F. The maximum water temperature recommended is 85°F.
3. Total Dissolved Solids (TDS)-The higher the amount of dissolved contaminants in the water, the lower the quantity of water produced. A high level of TOTAL DISSOLVED SOLIDS can be overcome with additional water pressure.
4. Membrane-Different membranes have different characteristics. Some produce more water than others; some have better contaminant rejection capabilities; some have greater resistance to chemical abrasion for longer life. PurePro system includes RE1812-70 The Thin Film Composite (TFC) membranes combine the best of these characteristics and are considered the finest membrane in the world.

Q: Can the PurePro system be connected to an extra faucet?
It only takes a 1/4” tee and tubing to run the water to a refrigerator or a extra faucet. Some families run PurePro system to all of their bathrooms.

Q: What does the PurePro series drinking water taste like?
The taste of the PurePro water depends on the amount of contaminants in the tap water originally. If 95% of dissolved minerals and chemicals are removed, the R.O. water may taste like distilled water (no minerals), bottled water (low mineral), or natural spring water (moderate mineral content).

Q: How will the PurePro series water affect mixed beverages?
Because reverse osmosis removes invisible contaminants that mask flavor, it allows the natural taste of your beverages to come through. You will be able to use less coffee and still get the full flavor. Concentrated beverages like orange juice will taste tangier. You will probably be drinking a lot more water as well, since many people drink soda, Kool-Aid, concentrated juices, and beer as an alternative to bad-tasting tap water. Also, PurePro eliminates most of the lime build up on drip coffee makers, preventing the need for frequent cleaning. No longer will you find the white scum on the inside of pans after boiling water.
Components & Selected filters

Components

- European ceramic faucet
- 3.2G water storage tank
- Housing wrench
- Deliver-valve
- Water supply connector
- Drain saddle
- Tank ball shut-off valve
- Four color coded 1/4 inch tubing for system connection

Selected filters

- Mineral cartridge filter
- UVC water sterilizer
- Infra-red cartridge filter
- TDS meter

Operation regulation

A. With everything connected, turn on the water check for leaks.
B. Make sure the storage tank shut-off valve is “OFF”. Open the sink top faucet.
C. Within a few minutes (up to 15) the water will start to run from the faucet slowly.
D. Let the water run for at least 30 minutes. This flushes the carbon filters on first time use.
E. After initial flushing, open the shut-off valve on the tank and close the sink top faucet.
F. Tank will now full of water (usually 2 to 3 hours) after the tank has filled. Open the sink top faucet and drain all water until the storage tank is empty and there is only a small flow from the sink top faucet. ***DO NOT USE FIRST TANK OF WATER.***
G. Close the sink top faucet. The system is now ready for use.
H. Change filters regularly every 6 to 12 months and have the membrane checked annually.

Caution

1. Do not use hot water (over 45°C)!
2. Do not freeze the machine!
3. Switch off electricity and water source if away for more than 5 days, and drain out pure water.
**Operation regulation**

1. **Plug in electricity.**
   - Image of a plug.
   - Text: Plug in electricity.
2. **Turn on water source.**
   - Image of a hand turning a knob.
   - Text: To RO system.
3. **Switch on water tank.**
   - Image of a water tank with a handle.
4. **Micro computer controller signals are on.**
   - Image of a micro computer controller.
5. **Pump starts to function.**
   - Image of a pump.
6. **Let the water run for at least 30 minutes. This flushes the carbon filters on first time use.**

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**Cartridge Filters**

<table>
<thead>
<tr>
<th>Cartridge Filters</th>
<th>Filter Description</th>
<th>Shelf life</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage 1</strong></td>
<td>5 Micron Sediment Filter</td>
<td>6 Months</td>
</tr>
<tr>
<td><strong>Stage 2</strong></td>
<td>Block Carbon Filter</td>
<td>6 Months</td>
</tr>
<tr>
<td><strong>Stage 3</strong></td>
<td>1 Micron Sediment Filter</td>
<td>6 Months</td>
</tr>
<tr>
<td><strong>Stage 4</strong></td>
<td>TFC Membrane</td>
<td>4 Years</td>
</tr>
<tr>
<td><strong>Stage 5</strong></td>
<td>Post Carbon Filter</td>
<td>1 Year</td>
</tr>
</tbody>
</table>

- **Stage 1**
  - This 5 micron sediment filter is made of 100% pure polypropylene fibers. High capacity filter removes dusts, particles and rusts.
- **Stage 2**
  - This block carbon filter is composed of high-performance carbon that removes free chlorine, odor, organic contaminants, pesticides and chemicals that contributed to taste and odor.
- **Stage 3**
  - This 1 micron sediment filter is made of 100% pure polypropylene fibers. High capacity filter removes dusts, particles and rusts.
- **Stage 4**
  - Made in USA. High rejection TFC type membrane with the capacity of producing 80 gallons per day. This membrane removes the following hard water contaminants that may be present in your water: lead, cooper, barium, chromium, mercury, sodium, cadmium, fluoride, nitrite, nitrate, and selenium.
- **Stage 5**
  - NSF approved. This post carbon filter is designed to improve taste. It removes any residual impurities and odors from the tank and provides a finer conditioning of pure water.
**Each part of main body**

- Post carbon filter
- Micro computer controller
- Transformer
- Pump
- The 1st stage housing
- The 2nd stage housing
- The 3rd stage housing

**Change membrane**

1. Unplug electricity.
2. Turn off water source.
3. Switch off water tank.
4. Loose the Joco fitting anticlockwise.
5. Remove the membrane housing cap anticlockwise.
6. Remove the membrane by a pincer.
7. Install the membrane by carefully pushing the spigot end into the socket at the far end of the housing until completely in.

**Instructions**

- Joco:
  - 1. Unplug electricity.
  - 2. Turn off water source.
  - 3. Switch off water tank.
  - 4. Loose the Joco fitting anticlockwise.
  - 5. Remove the membrane housing cap anticlockwise.
  - 6. Remove the membrane by a pincer.
  - 7. Install the membrane by carefully pushing the spigot end into the socket at the far end of the housing until completely in.
Change filters

1. Prepare a housing wrench.
2. Turn off water source.
3. Switch off water tank.
4. Unplug electricity.
5. Open housings clockwise with a wrench.
6. Put the replacement filters in the housings and double O’ring.
7. Drain out 1 Gallon of water to purify replacement filters.

Be sure tighten with O-ring to prevent from leaking.

LCD display

Micro Computer Controller

- **Function express**
  - **POWER**: Bulb is lightening as connecting power.
  - **SOURCE**: The system starts to function 20 seconds after plugging in.
  - **PROCESS**: The system begins to produce water.
  - **FLUSH**: Flushing RO membrane for 45 seconds.
  - **FULL**: Pump stops when tank is full of pure water.
Tubing connection diagram

CONNECTING THE COLOR TUBING:
A. Connect the WHITE tubing to the water supply connector.
B. Connect the BLUE tubing to the sink top faucet.
C. Connect the BLACK tubing to the drain saddle.
D. Connect the RED tubing to the storage tank.

Installation diagram

Input water:
1. Hand tighten plastic shut-off valve to tank. Then connect color tubing.
2. Install water tank:
3. Drill a 1/4" hole into the drain pipe.
4. Mount drain saddle aligning holes.

Install European ceramic faucet:

Assemble membrane:
1. Remove the membrane housing cap.
2. Replace the membrane.