



5 STAGE WITH BOOSTER PUMP REVERSE OSMOSIS

INSTALLATION MANUAL

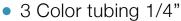
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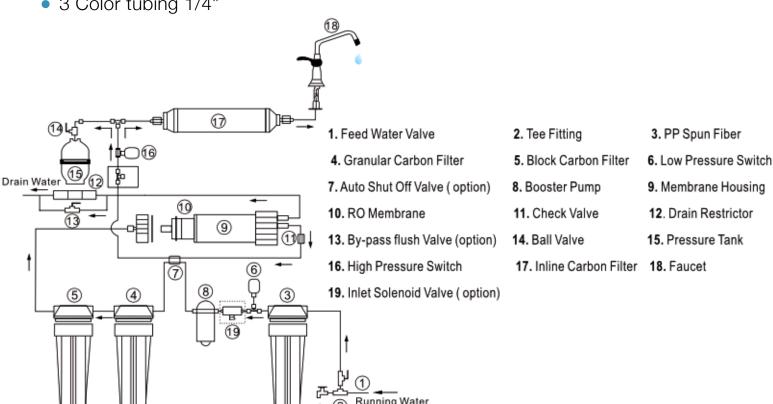
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PACKAGE INCLUDES

- Reverse Osmosis Unit
- 3.2 Gallon Tank
- 3 Filter cartridges reside inside the 3 housings
- Faucet with washers and a white quick connect faucet adapter
- 1 RO Membrane
- 1 Post Filter (T33 Carbon Filter)
- 1 Booster Ballast and High Pressure switch
- Wrench for opening filter housings
- Drain clamps
- Feed water adaptor 1/2" & 3/8"





KNOW YOUR RO SYSTEM

Congratulations on your purchase! This is your first step to cleaner, healthier and better testing water. This unit has been manufactured to the highest quality to ensure you receive best product possible.

• Source Water Pressure: 14.5-43.5 psi

Feed Water Temperature: 40-100 F



- 1. Stage 1 Sediment filter
- 2. Stage 2 GAC filter
- 3. Stage 3 CTO carbon block filter
- 4. Stage 4 Membrane
- 5. Stage 5 In-line carbon filter
- 6. Booster pump
- 7. Booster Ballast
- 8. Quick-Connect fitting for water outlet



- Please inspect the system before start installing the unit. Make sure nothing is damaged during shipping. If any part is broken or damaged, please contact Bluonics for an exchange or diagnosis.
- Read through all installation before proceeding with the installation.
- DO NOT connect the system to HOT water source
- This system contains filters that need to be replaced at certain interval.

First 3 Stages : Every 6-9 month

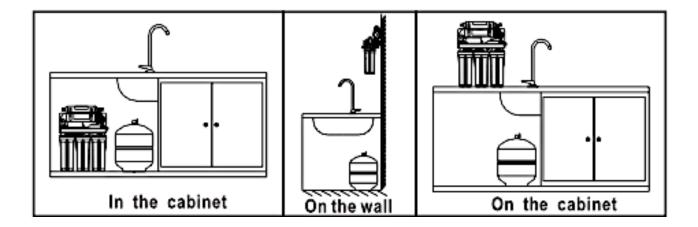
RO Membrane: Once every 4 years

In-line Carbon Filter: Once every 2 years

- The unit can be placed flat or upright, and on top, inside or under the cabinet.
- When choosing a location for the unit, remember to have easy access to cold water line, drain pipe, power outlet and enough room to change the filters.
- Do not disassemble, open or modify this unit. Tampering with the unit may cause failure or damage and will void all warranties.



Important: Make sure the blue valve on the RO is in ON position to start the unit on flushing mode. See page 13 for details on flushing.



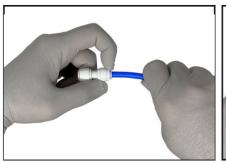
WE MADE IT EASY FOR YOU, WITH QUICK CONNECT

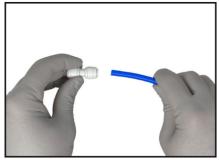
FITTING

The quick connect fittings come with an end plug that needs to be removed before the tubing can be connected. Please disconnect the end plugs from the quick connect fitting before connect the tubing.

TUBING CONNECTION

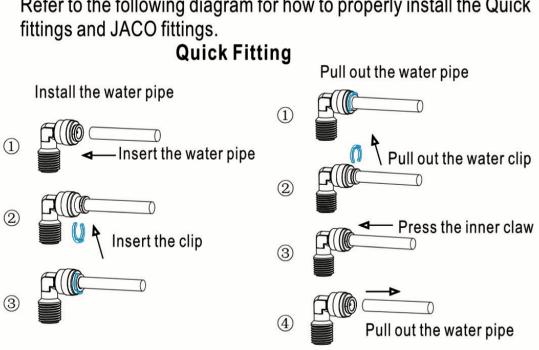
Refer to the following diagram for how to properly install the quick fitting.



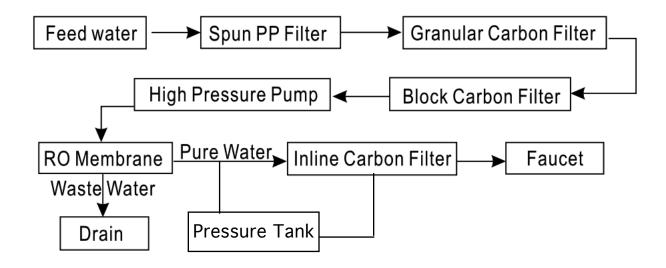


Tubing Connection

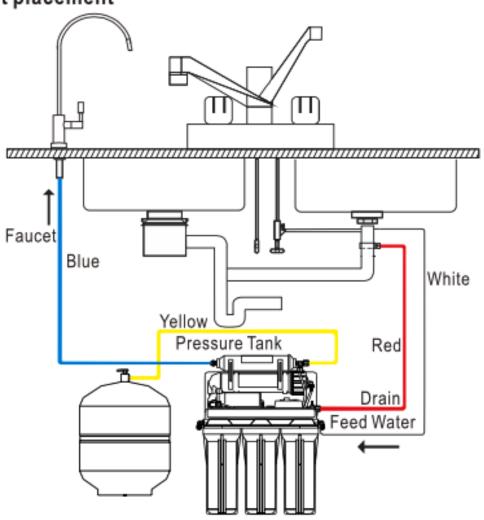
Refer to the following diagram for how to properly install the Quick



HOW YOUR SYSTEM WORKS



Unit placement



Assemble filters and filter housings

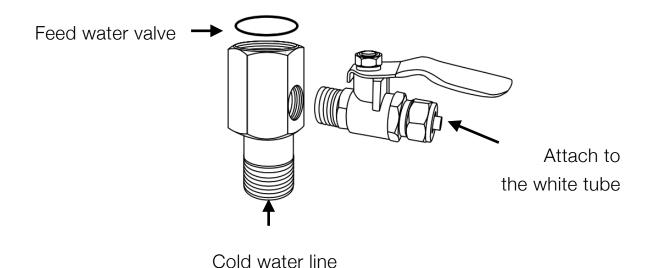
- Open the three filter housings on the bottom (use the wrench and turn them clockwise).
- Remove plastic wrap from all 3 filters, put them back into the housings and twist the housings onto the main RO unit. Turn clockwise to tighten.
- Make sure the O-ring in each housing placed correctly in the groove.

Note:

Sometimes it is easier to open the housings with the system laid down.

Feed Water Valve and T-Fitting

- Locate the cold water valve under the sink and turn it off.
- Choose the adapter that is the correct size for your cold water main pipe.
- Install T-fitting and feed water valve as diagram and connect it to source water.
- Wrap the threads of feed water valve and T-fitting with teflon tape.
- Connect white feed water tubing from the unit to feed water valve.



Note:

The water supply to your unit **MUST** be from **COLD WATER LINE**

Hot water might damage your unit.

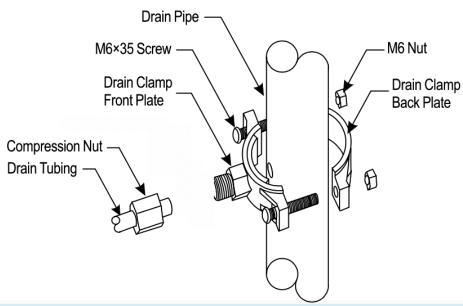
Softened source water will extend the life of the RO Membrane.

INSTALLATION

Drain Clamp Installation

- Locate the drain pipe under the sink.
- Drill a 1/4" hole through one side of the drain pipe, enough for the 1/4" tubing to pass through one side the drain pipe. **DO NOT** drill through both sides.
- Connect RED WASTE WATER TUBING from RO unit to drain clamp.
- Use the adhesive sponge inside the clamp to cover any gap between the pipe and the drain clamp.





Note:

Mount drain line as low as possible, no sag in the line as this may cause excessive noise as the reject water is flowing to the drain.

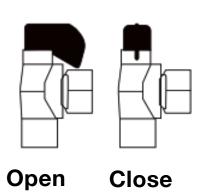
When cutting the tubing make clean square cut.

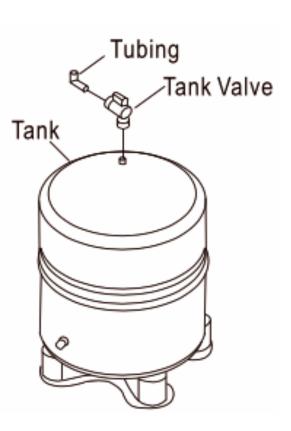
INSTALLATION

Pressure Tank Installation

- Keep Pressure Tank within 10 feet from the faucet
- If longer length of tubing is needed, use 3/8" tubing only to prevent pressure drop
- Tank can weight up to 30lbs when full, find firm and level flooring
- Install ball valve by screwing valve on to tank and apply teflon tape to prevent leaking
- Hand tighten plastic valve
- Shut-off ball valve
- Connect red or yellow tubing from post filter to pressure tank

Tank Ball Valve Position

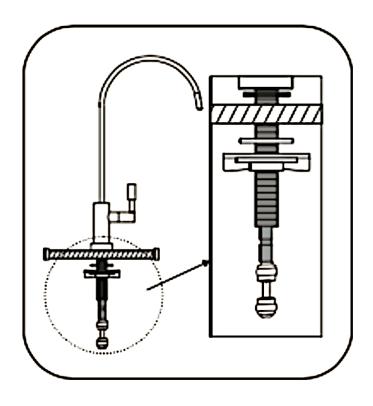




INSTALLATION

Faucet Installation

- Find a convenient location in your sink or near the sink.
- Drill a 1/2" diameter hole in the sink or in the counter top.
- Make sure the faucet stud will be accessible from below before drilling the hole.
- Place washers, plates, seals and nuts in order as per diagram and tighten on the counter.
- Connect the quick connect to the base of the faucet and to the outlet of the inline carbon filter (stage 5 filter).

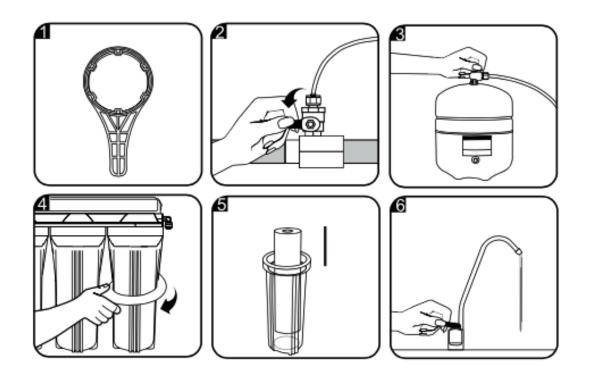




Goes to blue tubing

Filter Installation

- Make sure the filters are unwrapped and in appropriate housing according to the label and tighten housing with wrench.
- Make sure all the housings are leveled to avoid leaking.
- **DO NOT** put the membrane in the system until you are done with <u>flushing the prefilters</u>. Pump and membrane can be severely damage if you system runs without flushing the three pre-filters.



Note:

When installing housings, make sure housing are level to avoid leaking.

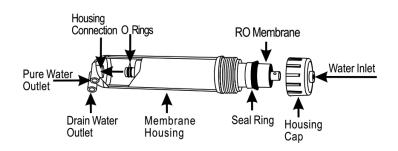
Pre-Filter Flushing

 Before installing the membrane, turn the blue valve (in the picture below) in ON POSITION.





- Open main water valve and allow water to run through the first 3 pre-filters.
- Discard water into a container or drain and continue flushing until output water is visibly clear.
- Tuns the blue valve on OFF POSITION.
- Remove membrane housing cap, open the membrane package and insert the RO membrane into the housing with the small double O-rings facing inward.



- Install membrane housing cap and tighten with wrench.
- Open the main water valves, wait approximately 2 minute before opening the faucet.
- Allow system to flush for first 10-15 minutes with faucet open, after this, your system is ready to use.

MAINTENANCE

Filter Maintenance

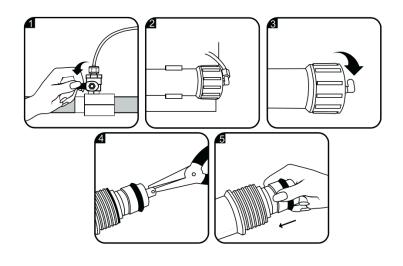
To ensure the unit operates at its optimum level, routine maintenance is required. The frequency of maintenance depends on the quality of the feed water. Here are some guidelines for filter replacements, keep in mind the frequency of filter replacement may vary.

- Change Sediment PP Filter every 3-6 month
- Change Granulated Carbon Filter and CTO Carbon Block Filter every 6-12 month or as required
- Change RO Membrane every 24-48 month
- Change inline Carbon filter every 12-24 month

If you are not going to use the unit for an extended period time, please disconnect unit from power supply and drain the system, if the unit has been shut down and not used for an extended period of time, perform the same flushing procedure as in the initial set-up.

Membrane Replacement

- Close feed water valve.
- Open faucet and drain any remaining water from the system.
- Open membrane housing and removed used membrane.
- Follow the same procedure as RO Membrane installation to replace the membrane.



BLUONICS RO SYSTEM TROUBLESHOOTING

| Bluonics Reverse Osmosis Troubleshooting. | | | | |
|---|---|--|--|--|
| Problem | Causes | Solutions | | |
| RO tank not filling up | Feed water pressure below 40 psi | Need a booster pump or increase water pressure | | |
| | Tank valve closed | Open valve | | |
| | Feed water valve closed | Open valve | | |
| | Tank pressure too high | Release tank pressure | | |
| | Membrane or filters are clogged | Replace | | |
| Slow water flow from faucet | Storage tank pressure too low | Add some pressure to the tank | | |
| | Tank air bladder is damaged | Replace tank | | |
| | Ro Membrane or Filters are in bad condition/Clogged | Replace | | |
| | Membrane not properly seated | Readjust | | |
| | Clogged flow restrictor | Unclog or replace | | |
| | Feed water valve closed | Open Valve | | |
| | Tank valve closed | Open Valve | | |
| Water constantly goes down the drain | Clogged flow restrictor | Clean or replace | | |
| | Defective shut-off valve | Replace | | |
| Noisy air gap faucet or drain | Air pockets in Ro after installation | Tilt the system and let it run for a while | | |
| | Tank not filled yet | Wait 2-3 hrs until tank is filled | | |
| | New system or recent filter replacement | Will subside over time | | |
| | Bent tubing | Straighten all water lines | | |

| Bluonics Reverse Osmosis Troubleshooting. | | | |
|---|--------------------------------------|--|--|
| Problem | Causes | Solutions | |
| Cloudy water | Trapped air in the system or filters | Will subside over time | |
| Bad water taste | Depleted filters or membrane | Replace Filters | |
| | Fouled membrane | Replace + clean system periodically | |
| | Stagnant water | Flush entire system | |
| Leaking | Worn out or Misplaced O-ring | Reposition/replace | |
| Noisy Gurgle | Too much water to the drain. | Locating the saddle on the crossover | |
| Pump Not running | Low feed water pressure | Need a booster pump or increase water pressure | |
| | Loos power connection | Check power supply | |
| | Transformer burnt out | Replace | |
| Pump is on but no water | Pre Filters clogged | Replace | |
| Tubing Leaks | Incorrect connection | Check and reinstall | |

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