RO Countertop System

Installation Manual



Customer Support **1-800-992-8876**

Reverse Osmosis

Overall System Connections

Your drinking water is going to be healthier and taste better from now on, and nothing makes us happier. Getting started is a breeze— your Reverse Osmosis System is already assembled and you just need to make a few connections before you're ready to go. Express Water's Countertop RO is the easiest simplest solution for safe clean water in your home.

We know life isn't always so simple though. If you have questions during your setup we can help. Just give us a call during normal business hours at: **1-800-992-8876**

Monday - Friday
10am - 5pm PST



Connection Points

A to B Connect the WHITE Tubing from the Diverter Valve Out (Point A) to the Sediment Filter's IN (Point B)

C to D Connect the BLACK Tubing from the Diverter Valve In (Point C) to the Union Connector (Point D)

A Diverter Valve Out Flow
B Sediment Filter In Flow
C Divert Valve In Flow
D Union Connector



Conditions

READ THIS FIRST

Please pay attention to the following installation and safety recommendations:

- Read the installation manual before installing this system.

NOTE! Please make sure your installation location has enough room for the RO Countertop System. We suggest an installation location where the RO Faucet can overhang your sink.

Incoming Water

Incoming water pressure must be between 45 PSI and 80 PSI. If your water pressure is under 45 PSI you will need a booster pump on your system. If your water pressure is above 80 PSI you will need a pressure regulator on your system. Test your water occasionally to make sure the system is performing. If your water is microbiologically unsafe or of unknown quality do not use this system without adequate disinfection before or after the system. Extremely hot or cold incoming water will damage the system and cannot be used.

Leaks

Inspect all connections after the installation to make sure no leaks occur, wait until after the system is pressurized to inspect again. Check system occasionally after installation or maintenance to make sure no leaks have developed.

General

This RO System unit is for climate controlled indoor use only. Exposure to overly high or low temperature ranges will damage the unit. Follow all of your state and local laws and codes regarding plumbing even if they differ from what is stated in this manual. If your state law requires use a professional licensed installer or plumber who meets the requirements of this system. All o-rings, fittings, filter canisters, and teflon tape wears out after a certain period of time. The lifetime of your components are subject to change with the quality of the water supplied. Do not handle an unwrapped filter directly with your bare hands as this can cause early filter failure. Use appropriate eye protection if you are performing any drilling.

Maintenance

The owner/user is obligated to properly maintain the RO System when necessary, at least once a year. This includes the following:

- Replace any o-rings used
- Replace any connectors and filter housings with proper replacement parts
- Sanitize your system as often as needed (this changes with the profile of your area's incoming water)
- Always use proper replacement filter cartridges with the correct size and length replacements
- Replace any teflon tape used

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Table of Contents

Introduction Page 8
Components List Page 10
System Diagram Page 11
Tubing Quick Connect Guide Page 12

Installation
- Diverter Valve Page 13
- RO Faucet Page 13

Using the System Page 14

System Startup Page 14

System Maintenance Page 15
- Filter Change Instruction Page 15
- Troubleshooting Page 16

FAQ Page 17
Warranty Page 18

Introduction

First, get ready to have safe clean water. You're going to need under 30 minutes for the initial installation and two hours to run the system and flush out your filters before you can drink the water.

Take a Look at Your System

First inspect your system and make sure all parts are present and have not been damaged during shipping. We've taken every step to make this process as easy as possible but if you discover any problems or run in to questions during your installation just give us a call:

1-800-992-8876 Monday to Friday 10 am - 5 pm PST

Take a Look at Your Faucet

If you have a standard kitchen or bathroom faucet you can get up and running right away, just remove your aerator and screw the diverter valve on. We support 13/16" male threaded faucets, 13/16" female threaded faucets, and 15/16" female threaded faucets. If you have another type of faucet you will need to visit a home or plumbing supply store to adapt from your faucet type to 13/16" male (as the diverter valve is 13/16" female).

Get Ready for Pure Water

The flow through your faucet makes perfectly pure RO water at a rate of about 3 gallons an hour (this may be less depending on your home's water pressure) so we've found the ideal setup is filling a large pitcher or dispenser with water.

Replacement Sets

Express Water offers replacement filter sets for the EZRO5 Countertop Reverse Osmosis Water FIltration System. For purchasing information on replacement filters please visit our website at **www.ExpressWater.com**

Replacements Table

Cartridge	Sediment	Granular Activated Carbon	Reverse Osmosis Membrane	Post Activated Carbon
Type	5 Micron	5 Micron	100 GPD	5 Micron
Life Cycle	6 Months	6 Months	1 Year	6 Months
6 Month Half Set 	1	1		1
6 Month Full Set 	1	1	1	1
1 Year Set 	2	2	1	2

Components List

Your new **Reverse Osmosis Water System** should include the following items. If any item is missing please contact **Express Water**.

Please take a few moments to check all the following components:

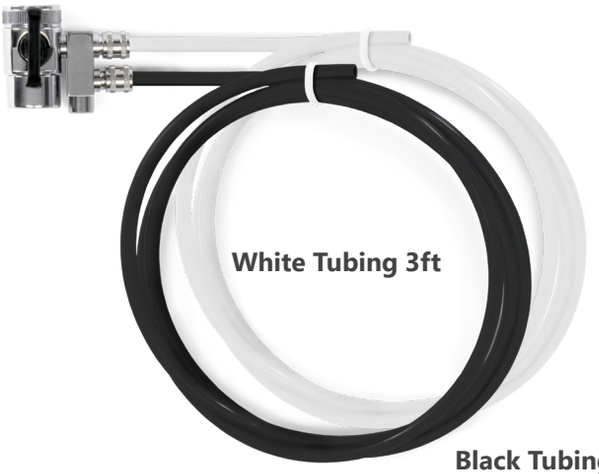
RO System



1 Post Activated Carbon
2 Sediment Filter
3 RO Membrane RO Membrane Housing
4 Granular Activated Carbon Filter

Components

Diverter Valve Female 13/16”
(Fits 13/16” male thread)



White Tubing 3ft

Black Tubing 3ft



Push Fit
RO Faucet

Faucet Adapters



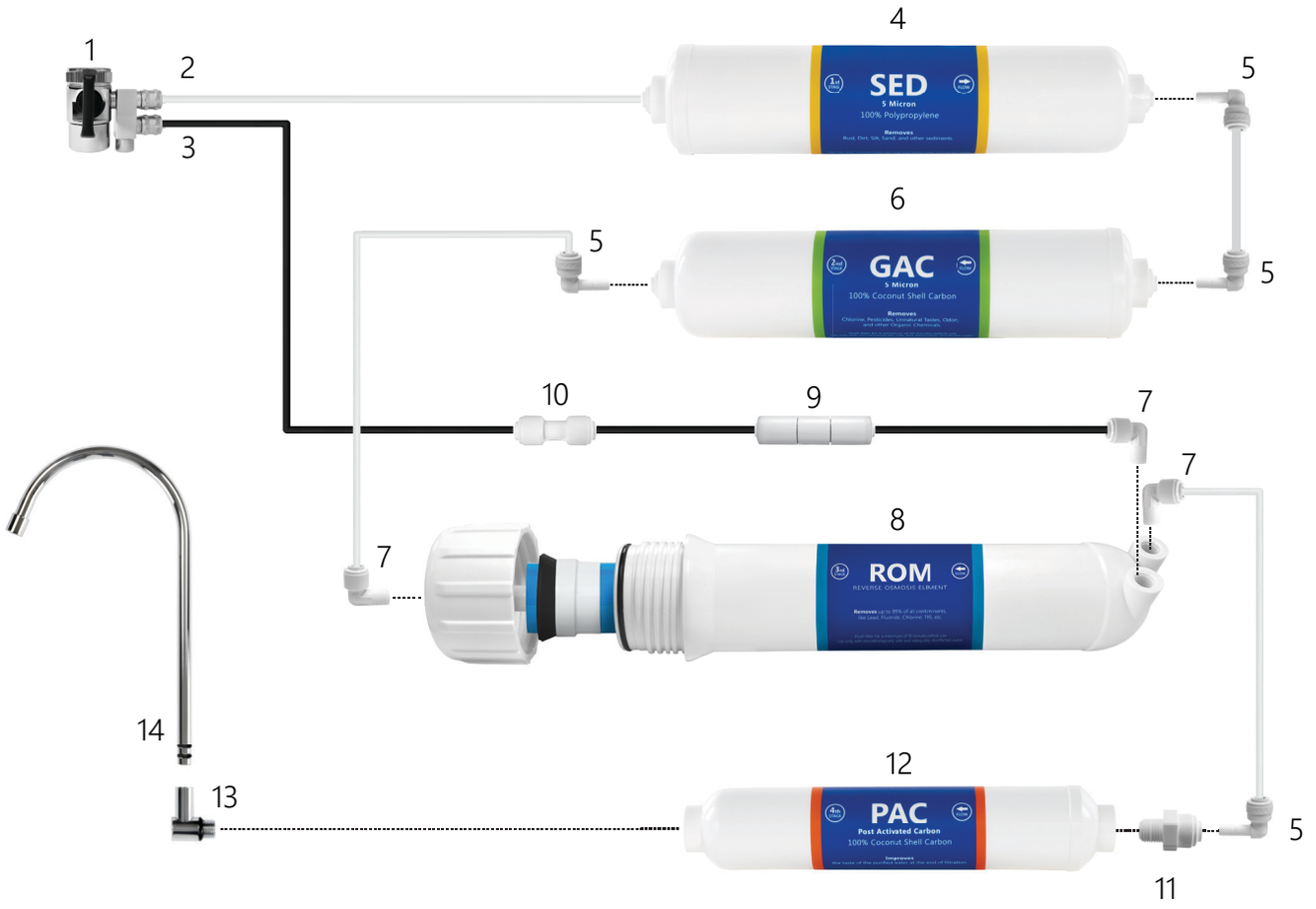
13/16
Male to
13/16 Male

15/16
Male to
13/16 Male

Locking Clips



System Diagram

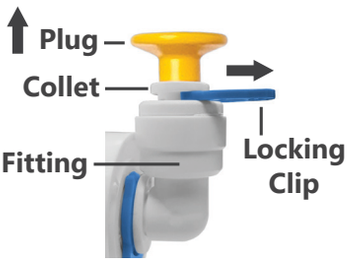


1. Diverter Valve
2. System Feed Tube
3. System Drain Tube
4. Sediment Filter
5. Stem Elbow 1/4”
6. Granular Activated Carbon Filter
7. Male Elbow 1/8”
8. RO Membrane Housing
9. Drain Flow Restrictor
10. Union Connector
11. Male Connector 1/4”
12. Post Activated Carbon Filter
13. Male Faucet Connector 1/4”
14. Push Fit RO Faucet

Tubing Quick Connect Guide

The tubing in your RO System uses a Quick Connect locking mechanism to lock the Color Coded Tubing in place. Be careful not to damage your tubing as you unpack it.

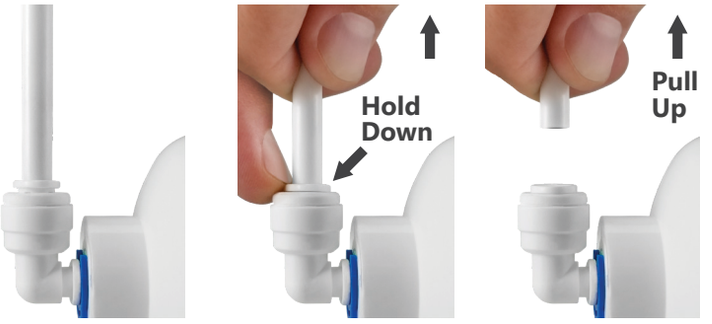
NOTE!
Make sure to remove any plugs before attempting to insert tubing.



Release Tubing/Plugs

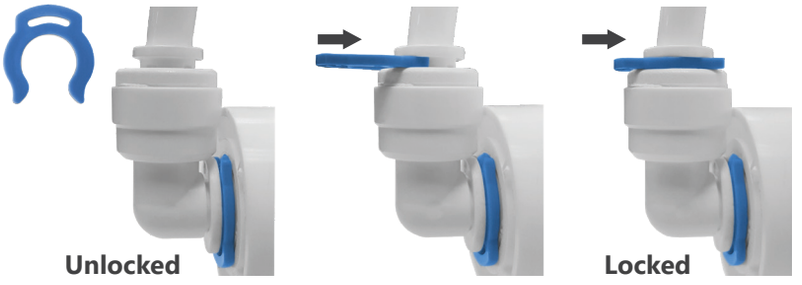
If there is a Locking Clip on the Collet it must be removed before the Tubing can be released. Push and hold the Collet in to release the lock while pulling out on the Tube/Plugs.

NOTE! Collet must be held down while pulling up on the tube to release the tube.



Insert or Remove Locking Clips

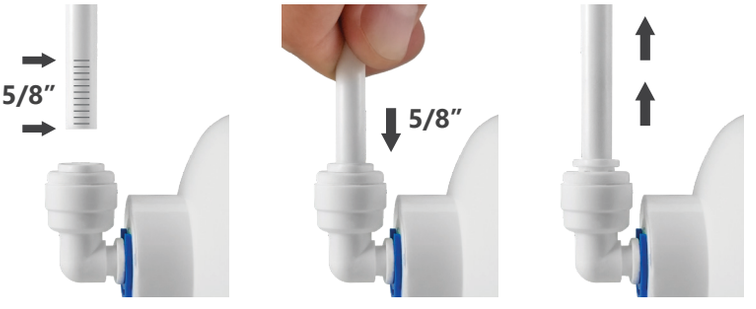
To lock a Tube in place make sure the Tubing is fully inserted then slide the open end of the Clip between the Collet and Fitting. The Clip must be removed before the Tubing can be removed. To remove the Clip pull away until it slides out from between the Collet and Fitting.



Attach Tubing

Push Tubing in straight and level with the Collet. The Tubing will go 5/8ths of an inch into the Collet before the lock is activated. Pull out on the Tube to make sure the lock has activated and the Tubing is secure.

NOTE! Once connected, make sure to check tubing is secure.



To Cut Tubing

Make your cuts against a flat cutting surface with a razor blade, or use a handheld tube cutter. Any cuts to your Tubing must be perfectly straight.

NOTE!
Improperly cut Tubing may leak water or fail to lock into Fittings.
Wait until all elements of your RO System are in their final locations before cutting your Tubing. Make sure you measure the length you will need before cutting.

Installation

CAUTION!
The water supply to the unit **MUST** be **COLD WATER ONLY**. Using **HOT WATER** will severely damage your RO System.

Diverter Valve

1. Identify if your faucet is compatible with the 13/16" female threaded diverter valve

- If it is not compatible you may need the 13/16" male to 13/16" male adapter -or the- 15/16" male to 13/16" male adapter

- If your faucet is not compatible with either of these adapters you will need to purchase an appropriate adapter to connect your faucet to the diverter valve



13/16" to 13/16" **15/16" to 13/16"**



2. Screw on Diverter Valve (with appropriate adapters if needed)



3. Remove the black plug from the Union Connection and insert the Black Tubing



4. Remove the blue plug from the Sediment Filter and insert the White Tubing



5. Check to make sure tubes are fully inserted

RO Faucet



1. Push the RO Faucet stem into the Faucet Adapter on the Post Activated Carbon Filter

2. Make sure the faucet is fully pushed in

Using the System





When the diverter valve is in the vertical position water will come through your sink's faucet into your sink. You can still use faucet as you normally would.





When the diverter valve is in the horizontal position water will be sent to the RO System and pure clean drinking water will come through your RO faucet.

When using the RO Faucet the waste water (carrying rejected contaminants away from the RO membrane) will pour from the smaller port into your sink. Never drink this waste water, although it can be use for some household uses like water plants.

System Startup



Turn the Diverter Valve to the horizontal position to direct flow to your RO System.

Turn on the cold water from your feed faucet.



Once you are sure there are no leaks and water has begun to come out of the RO Faucet, let the system run for two hours. This will flush out any loose carbon fines and prime your filters. Inspect your system occasionally during this time to make sure there are no leaks.

Your water may be cloudy for the first week of operation. This is just air bubbles escaping from the new system. You can shift the sides of your system up and down while running your water to help this air escape.

Now your system is ready for use and the water from the RO Faucet is ready to drink.

System Maintenance

Filter Change Instructions

This RO System contains Filters that must be replaced at regular intervals to maintain proper performance. Use only authentic Express Water filters.

How to Change the SED (Sediment), GAC (Granular Activated Carbon), and PAC (Post Activated Carbon) Filters
(Recommended about every 6 months)



1. You will need Express Water inline Sediment, Granular Activated Carbon, and Post Activated Carbon Filters. We also recommend a bucket or bin large enough for the system to sit in. The system will release water when it is disassembled.

2. Make sure that water flow to the system is off

3. Place the RO System in the bucket or a sink and disconnect the the elbows from each side of the SED, GAC, and PAC filters. For detailed directions of disconnecting these refer to the Quick Connect Guide (Page 12)

One side of the SED has an inflow tube instead of an elbow

One side of the PAC has the faucet adapter which must be unscrewed

4. Note the correct orientation and flow direction of these filters then remove the filters and discard them.

5. Set the new filters in place in the same orientation

6. Reconnect the stem elbows, tube, and faucet adapter to the new SED, GAC, and PAC filters

7. If these are the only filter you are changing begin the “System Startup” instructions on Page 14.

How to Change the RO Membrane
(Recommended about once a year)
NOTE! Make sure water flow to the system is off



1. Remove the 3 stem elbows attached to the Reverse Osmosis Membrane Housing. For detailed directions of disconnecting these refer to the Quick Connect Guide (Page 12)

2. Unscrew the cap from the Membrane Housing and remove the Membrane inside, be sure to note the correct orientation of the membrane

3. Wash out the RO Membrane Housing
Mix ½ gallon of water with 1 tbsp of household bleach
Note: Do not add bleach directly to the membrane housing
Scrub the inside of the membrane housing with the bleach mixture
Rinse the housing until all traces of bleach are gone as bleach will damage your membrane

4. Install the new RO Membrane in the Housing in the correct direction you noted earlier (the single large rubber ring will face towards the cap). Make sure to push the Membrane in firmly and check to see if the o-ring is in place. Then close the Housing by tightening the cap with your hand.

5. Now reattach the stem elbows to the RO Membrane Housing. If this is the only/last filter you are changing begin the "System Startup" instructions on Page 14.

Filter and RO Membrane Storage

- Store unopened filters in an airtight container to prevent them from absorbing air. This prolongs the shelf life of the filters and avoids any possible odors or contamination from the air.

- Using this method it is okay to store filters for several years. Store in a cool, dry, dark place (avoid heat and moisture contamination).

Troubleshooting

Problem	Cause	Solution
Milky colored water Air bubbles in the water	- Air in system	* Air in the system is a normal occurrence with initial startup of the RO System. This milky look will disappear during normal use within 1 to 2 weeks.
Slow production or no water from RO Faucet	-Low water pressure -Crimps in tubing -Clogged Pre Filters -Fouled RO Membrane	*Make sure tubing is straight. *Replace SED and GAC. *Replace RO Membrane.
Water taste or an offensive smell	- Drain line clogged - Inline Post Carbon Filter is depleted - Fouled RO Membrane - Sanitizer not flushed out	* Replace Inline Post Carbon Filter. * Replace RO Membrane.
No drain water	- Clogged Flow Restrictor	* Replace the Flow Restrictor.
Leaks	- Fittings are not tightened - Twisted O-Ring - Misalignment of hole in Drain Saddle - Threaded Connections	* Tighten fittings as necessary. * Replace the O-Ring. * Realign Drain Saddle * Replace Teflon Tape with 7-10 rounds

FAQ's

Does this system filter Fluoride, Lead, Pharmaceuticals, and Arsenic?
Yes, as well as Cyanide, Phosphate, Pesticides, Sodium, Cadmium, Sulfates, and many other contaminants up to certain levels. You may need other changes to media for high levels of these substances.

What PSI do I need? What is the operating pressure?
The minimum PSI for the system is 45 and the maximum PSI is 80. If your PSI is too high you can purchase a Pressure Regulator to reduce your pressure to acceptable levels. Let us walk you through these options; call us at 1-800-992-8876 Monday - Friday 10am - 5pm PST or visit expresswater.com

Does this unit soften water?
Your RO System will soften water. However, hard water does reduce the lifespan of your filters.

What is the discharge rate?
The typical discharge range is one to three gallons for every one gallon produced. Your water pressure, incoming water quality, and water temperature will affect your RO System's discharge rate.

How often do I change Filters? Is there an indicator?
The Sediment, GAC, and PAC Filters should be changed every 6 months. The RO Membrane should be changed every one year at the same time as the second change of the 6 month filters. There is no direct indicator for filter changes. However, if you notice a drop in water quality before the 6 months or 1 year mark this may mean that due to your water quality your filter has degraded. If you reach 6 months or 1 year without noticing a change in taste you should still change your filter at this point as they are no longer viable.

Can I add additional filters to my current system?
Yes, each system is fully upgradeable. Check the Upgrades and Accessories section at ExpressWater.com for more information.

Can I reuse discharge water?
Never consume discharge water. With proper installation it is possible to utilize your discharge water. Contact Express Water to speak with a qualified representative who can give you more information based on your situation.

How long does the system last?
With proper maintenance and average water quality an RO System should last 5-10 years.

Does this produce aquarium safe water?
While the water is perfectly safe for human consumption, we suggest installing our Deionization Filter Upgrade to create water for aquatic life.

Why do I need to flush the system?
New filters (or filters that have experienced extended disuse) can develop carbon residue. Two hours of constant flow is recommended to release any extra carbon before the water is safe to drink.

1 Year Limited Warranty

EXPRESS
WATER

We Cover
This warranty covers any defects in the parts or manufacturing of your Express Water Countertop Reverse Osmosis Water Filtration System. We will give you new replacement parts in exchange for any defective parts.

What to Do
Give us a call at 1-800-992-8876 or send an email to support@expresswater.com and describe the problem to our support. Be sure to have a copy of your purchase confirmation email or receipt. Our support will verify that the product and problem are under warranty and help you arrange to send your defective part back to Express Water with your receipt and contact information (name, address, phone number, email address). Support will help arrange sending of the defective part, the delivery of your replacement part, as well as guiding you through the installation.

Time Covered
This warranty is effective for 1 full year from the date of original purchase.

Not Covered
This warranty does not cover labor for removal or installation, accumulation of dirt or grime (you are responsible for your own cleaning), systems with the serial number removed or altered, damage from improper storage (high or low temperature, sun damage, etc), damage from a system not installed as instructions directed, anyone other than original purchaser, damage from system abuse or unintended operation of system, acts of God, improper water source, modification, negligence, commercial use of the system, filters, RO membrane, incidental damages from system failure, systems used with parts not provided by Express Water (including tanks, filters, faucets, pumps, diverter valves), or cosmetic damages.

Your State
Some states has further regulation on damages and warranty coverage. You may have other rights depending on your state.

For warranty questions, service, or help give us a call **Monday - Friday 10 am to 5 pm PST:**
1-800-992-8876

Email us:
support@expresswater.com

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