

APEC WATER

www.FreeDrinkingWater.com

IRON TOTAL SOLUTION SYSTEM

QUICK SETUP GUIDE Ver 3.0



Thank you for choosing the APEC Total Solution system.
You now own one of the finest and most complete whole house
water purification systems in the world.

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GET TO KNOW YOUR SYSTEM:

The Total Solution is a multi-stage system made up of four specialized water purification units which include an iron & hydrogen sulfide removal system, whole house water filter, whole house water softener and reverse osmosis drinking system. Please read the guide below to get a basic understanding of the different individual systems in your Total Solution package.

1



Stage 1: IRON & HYDROGEN SULFIDE REMOVAL SYSTEM

The IRON HYDRO & HYDROGEN SULFIDE removal system is highly effective for the removal of iron, hydrogen sulfide, and manganese from your incoming water source. The system utilizes an oxidation-reduction reaction & filtration process with high level of manganese dioxide which delivers superior water quality and contaminants reduction.

System Includes:



Bypass Valve
X 1



Elbow
Solvent Kit
X 2



Brass Sweat
Adapter Kit
X 2



1" Quick
Connect
X 4



Rubber
Orings
X 4



Plastic Split
Rings
X 4

2



Stage 2: BIG BLUE CARBON WATER FILTER - 10"

The 10" BIG BLUE CARBON water filter is designed to effectively remove chlorine, sediment, taste, odor and organic compounds to deliver clean, filtered water to every water outlet. It is rated to 25 microns and is able to treat over 35,000 gallons of water at a very fast flow rate.

System Includes:



Bracket
X 1



Screws
X 4



Wrench
X 1

3



Stage 3: FUTURA SALT-FREE WATER SOFTENER

The FUTURA whole house water softener provides naturally soft water without using salts or chemicals. Benefits include reduced hard water scale for long-lasting appliances and pipes, minimized water spots for easier cleaning, and softer skin and smoother hair. This unit is the 3rd stage system and it should be installed right after the Big Blue Carbon Water Filter but ahead of your existing water heater in the garage or basement.

System Includes:



Bypass Valve
X 1



Elbow
Solvent Kit
X 2



Brass Sweat
Adapter Kit
X 2



1" Quick
Connect
X 4



Rubber
Orings
X 4



Plastic Split
Rings
X 4

4



Stage 4: REVERSE OSMOSIS DRINKING SYSTEM

APEC's reverse osmosis system will provide you with unlimited ultra-fresh, healthy, and great tasting water right at home. You will enjoy the best quality water for cooking, making coffee, tea and ice while saving money, time, and hassle of buying bottled water. As the final stage of filtration, the reverse osmosis (RO) unit should be installed under the kitchen sink separate from the other two systems. This system provides ultra-pure water only at one source, from a dedicated faucet (provided) which is mounted on the sink counter.

Please see RO Manual for list of items it includes in the system.

This is only a basic introduction to the Total Solution System's features and setup. For complete installation information, please refer to the installation manual that is provided for each individual system.

BEFORE INSTALLATION:

Please take the system and all the components out of the box. Inspect the system and all the connection fittings carefully, make sure nothing is damaged during shipping. If any part is cracked or broken, please do not proceed with the installation and contact APEC or your distributor for an exchange or diagnosis.

For Iron & Hydrogen Sulfide Removal System, Big Blue Carbon Water Filter & Futura Salt Free Water Softener

- Use a licensed plumber to install these products.
- Check with your state and local public works department for plumbing and sanitation codes. You must follow these guidelines as you install the whole house water filter.
- Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after.
- This water filter system will withstand up to 90 psi water pressure. If your house's water pressure is higher than 90 psi, install a pressure reducing valve before the system is installed.
- DO NOT install the water filter in an outside location or anywhere it will be exposed to direct sunlight.
- Manufacturer warranty can be voided if the installation requirements above are not met.

For Reverse Osmosis Drinking Water System

(You can install by yourself or by a licensed plumber)

Recommended tools list:

- Variable speed drill
- Drill bit: 1/4" (for the waste line), 1/8" (as pilot, not mandatory), and 1/2" (for standard faucet hole, air-gap faucet requires 1&1/4" hole)
- 5/8", 9/16" open-end wrench, or adjustable wrench, pliers
- Phillips screwdriver
- Utility knife, or scissors
- Teflon Tape

Operating Parameter:

- Operating pressure: 90psi maximum
- Feed water temperature: 40 – 100 °F (4-37 °C)
- Do not connect this unit to hot water source
- Install the RO in a sheltered environment, avoid exposure to hot and cold weather or under direct sunlight
- 30 psi minimum of water pressure needed

System Placement Guide

1 Iron & Hydrogen Sulfide Water Treatment System

Install at point of entry location.
Must be installed before the Big Blue 10" Carbon Water Filter.

2 Big Blue 10" Carbon Water Filter

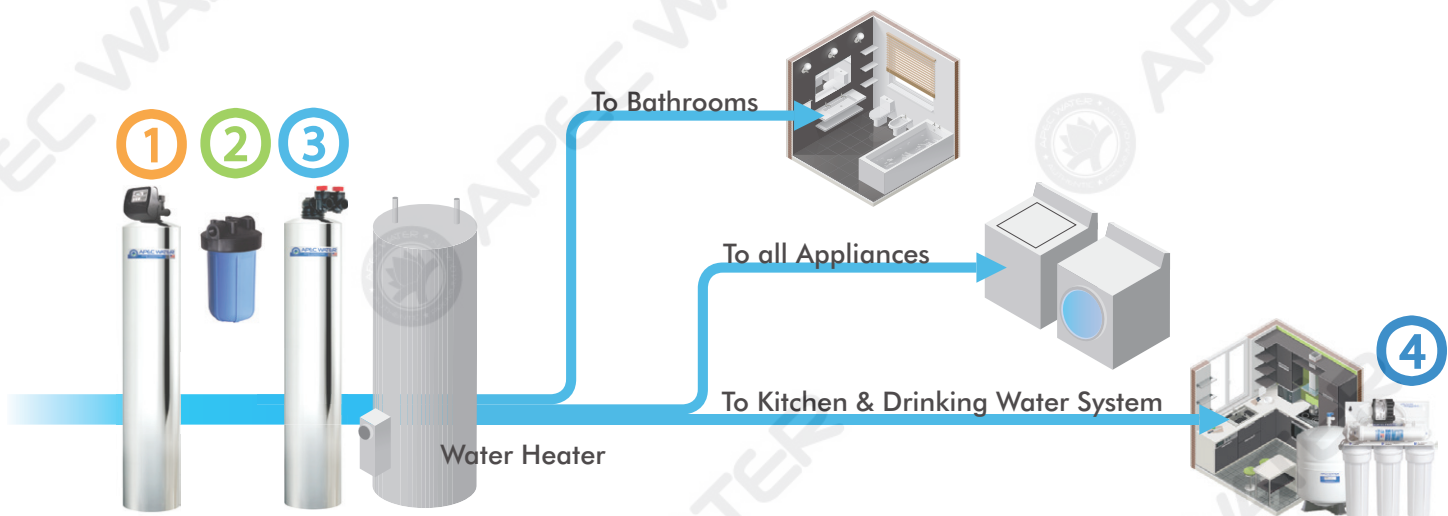
Must be installed after Iron & Hydrogen Sulfide Water Treatment System & before Futura Salt-Free Water Softener.

3 Futura Salt-Free Water Softener

Must be installed after Big Blue 10" Carbon Water Filter & before water heater.

4 Reverse Osmosis Drinking Water System

Install at point of use location with dedicated faucet for purified drinking water.



Determine Installation Location For Installing Both Units:

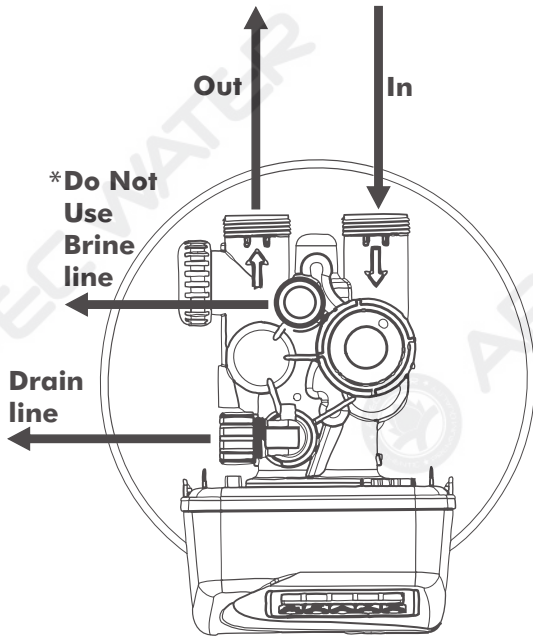
- An electrical outlet will be required for the (WTS) Iron & Hydrogen Sulfide Removal System, but not the Big Blue 10" Carbon Water Filter and Futura Water Softener.
- Do Not install the units with less than 5-10 feet of piping between its outlet and the inlet of the water heater.
- Do Not install the units where the location is subjected to room temperatures under 34 °F.
- The tanks should be on a firm, level surface.
- Provided the drain line is not reduced, the drain line for the Iron & Hydrogen Sulfide Removal System **should not exceed** 5 feet Vertical. It is best to use a 1/2" ID (inner diameter) or larger drain line.

QUICK INSTALLATION DIAGRAM for Iron & Hydrogen Sulfide Removal System & Futura System

Pre Installation Preparation:

Futura Salt Free Water Softener

The media in the Futura Softener will need to be soaked for 15 to 20 minutes before installing. The salt free ceramic media has already been placed in the Futura media tank by the manufacturer. Place the Futura Softener at the location of Installation, as the Tank will be heavy to move once filled with water. Place a garden hose into the up-flow side of the tank head until water is flowing out of the down-flow side. Shut the water off and let it soak for 15 to 20 minutes.



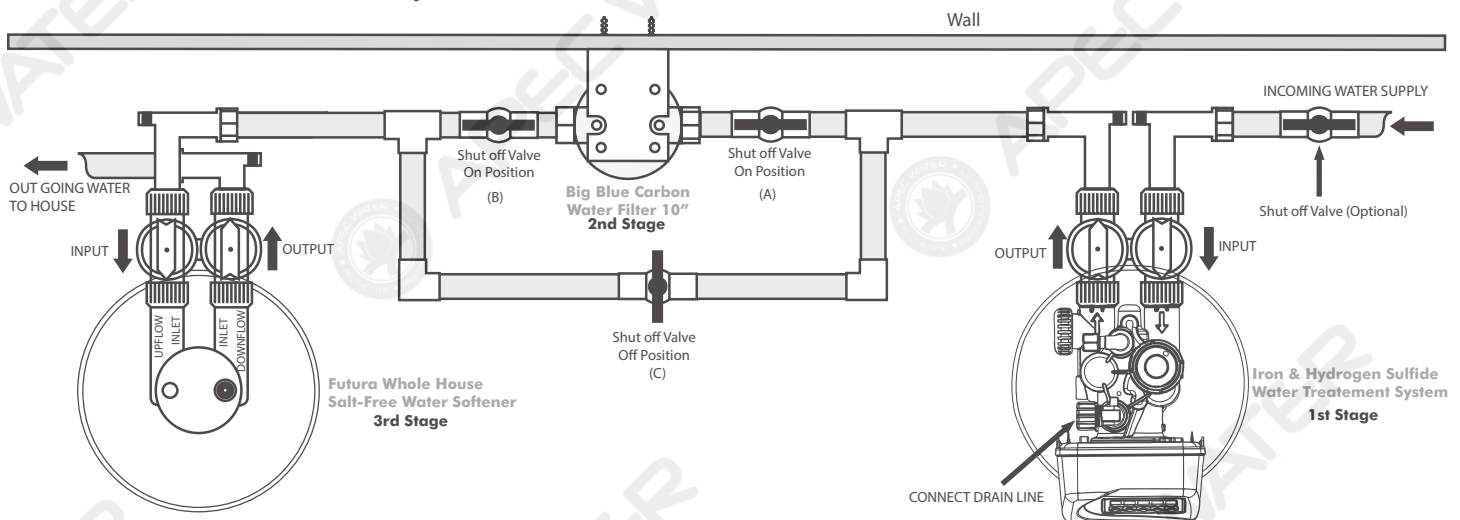
Iron & Hydrogen Sulfide Removal System

The media in the Iron Hydrogen Sulfide Removal System does not have to be pre-soaked, however after the system is installed, please **manually backflush** the unit once before use and it may be best to have Futura unit set in **Bypass Mode** during the first flush. The head has been factory pre programmed to regenerate once a week, but you can set the regeneration time to your preference by adjusting the time and date settings. Please refer to pages 5-6 to manually backflush the unit and general setup.

Please note: The Control head of the Iron & Hydrogen Sulfide Removal System only requires 3 connections. Inlet, Outlet and Drain Line.

You **DO NOT** connect the Brine Line. The Brine line is only used when salt is needed like in a water softener application.

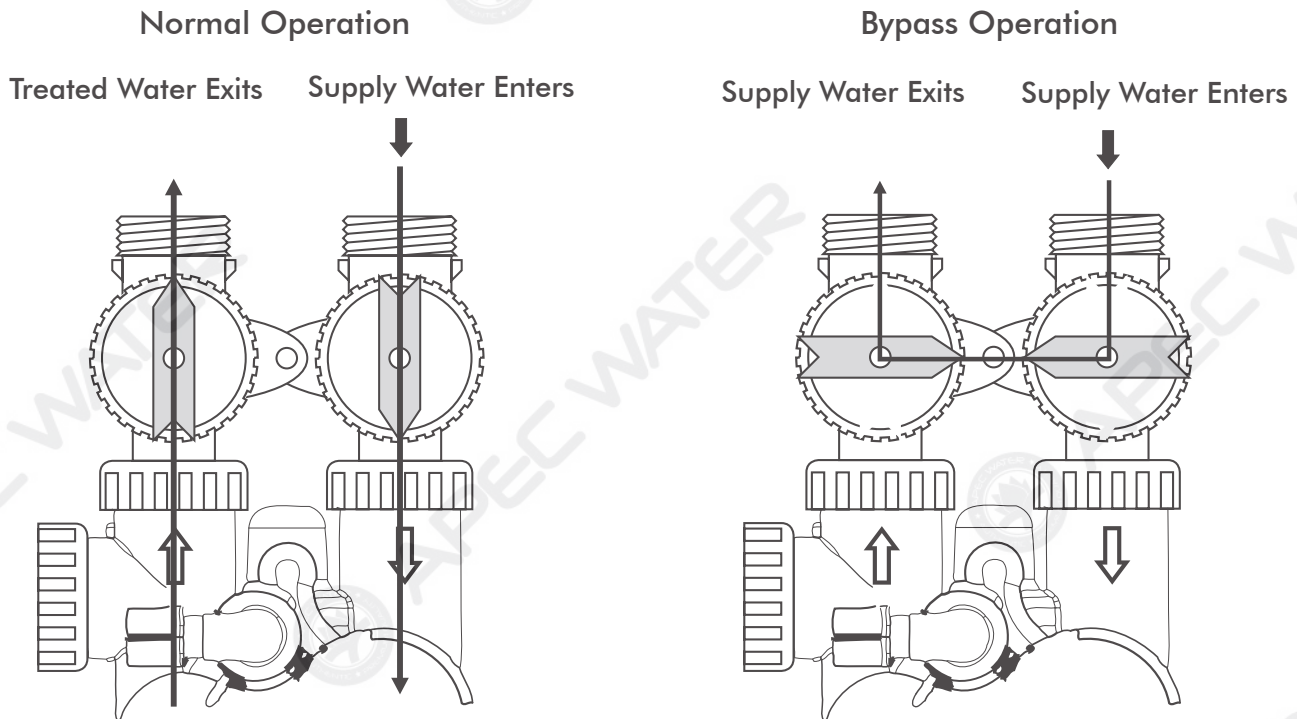
This is an overview for system installation.



Please Set Time of Day on Iron & Hydrogen Sulfide Removal System Control head once installation is completed.

Shutting Off Water To The System For Maintenance

To **shut off water** to the system, please position arrow handles as shown in the bypass operation diagram below. If your valve doesn't look like the diagram below, simply pull up on the **Red Arrows** and turn them to match what it is shown on the below figures.



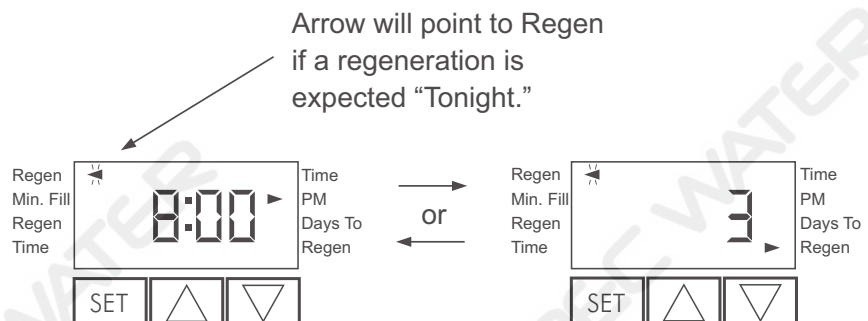
Note: Filter cartridge replacement or system maintenance for **(Stage 2) Big Blue Carbon Filter**, please see the *Whole House Water Filters Installation Instruction & Owners Manual* for detail information.

SETTING UP TIMER CONTROL VALVE

Please note: For complete instructions refer to manual.

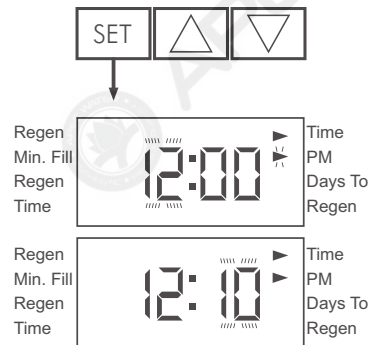
GENERAL OPERATION

When the system is operating one of two displays will be shown: time of day or days until next regeneration. Pressing ▲ or ▼ button will toggle between the two choices.



TO SET TIME OF DAY

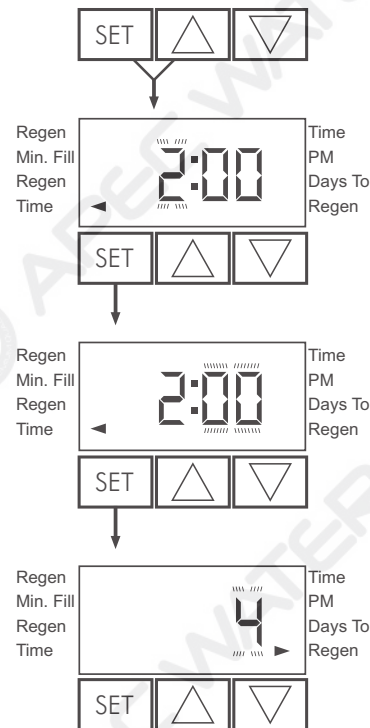
In the event of a prolonged power outage, time of day flashes, indicating that it needs to be reset. All other information will be stored in memory no matter how long the power outage. Please complete the steps as shown to the right. To access this mode, press "Set."



1. Accessed by pressing SET for approximately 3 seconds.
2. Adjust hour with ▲ or ▼ . With 60 Hz line frequency detection on power-up, timekeeping is 12 hour with PM indicator. With 50 Hz line frequency detection on power-up, timekeeping is 24 hour without the PM indicator. Press SET to go to the next step.
3. Adjust minutes with ▲ or ▼ .
4. Press SET to complete and return to normal operation.

TO SET TIME OF REGENERATION AND DAYS BETWEEN REGENERATION

For initial set-up or to make adjustments, please complete the steps as shown. Access this mode by pressing SET and ▲ for approximately 3 seconds. The number of days between regenerations may need to be varied based on usage and water conditions. (This step will not appear if the 7-day clock option is selected.)

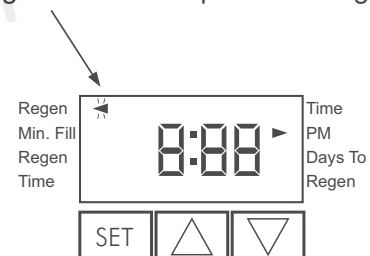


1. Accessed by pressing SET and ▲ simultaneously for about 3 seconds.
2. Set Regeneration Time Hour. Set the time for regeneration to start. Press SET to go to the next step.
3. Set Regeneration Time Minutes. Press SET to go to the next step.
4. Set number of Days between regeneration cycles.
5. Press SET to complete and return to normal operation.

MANUAL REGENERATION

NOTE: If you need to initiate a manual regeneration, either immediately, or tonight at the pre programmed time (typically 2 a.m), complete the following steps.

Arrow will point to Regen if a regeneration is expected "Tonight."



For Immediate Regeneration:

Press and hold ▲ and ▼ simultaneously until valve motor starts (typically 3 seconds).

For Regeneration Tonight:

Press and release ▲ and ▼ simultaneously (notice that arrow points to Regen).

ERROR MESSAGES

If the display shows "E1," "E2," "E3", or "E4" (for error), call a service technician.



SYSTEM INSTALLATION: RO (Reverse Osmosis) Drinking Water System

There are 4 main connections:

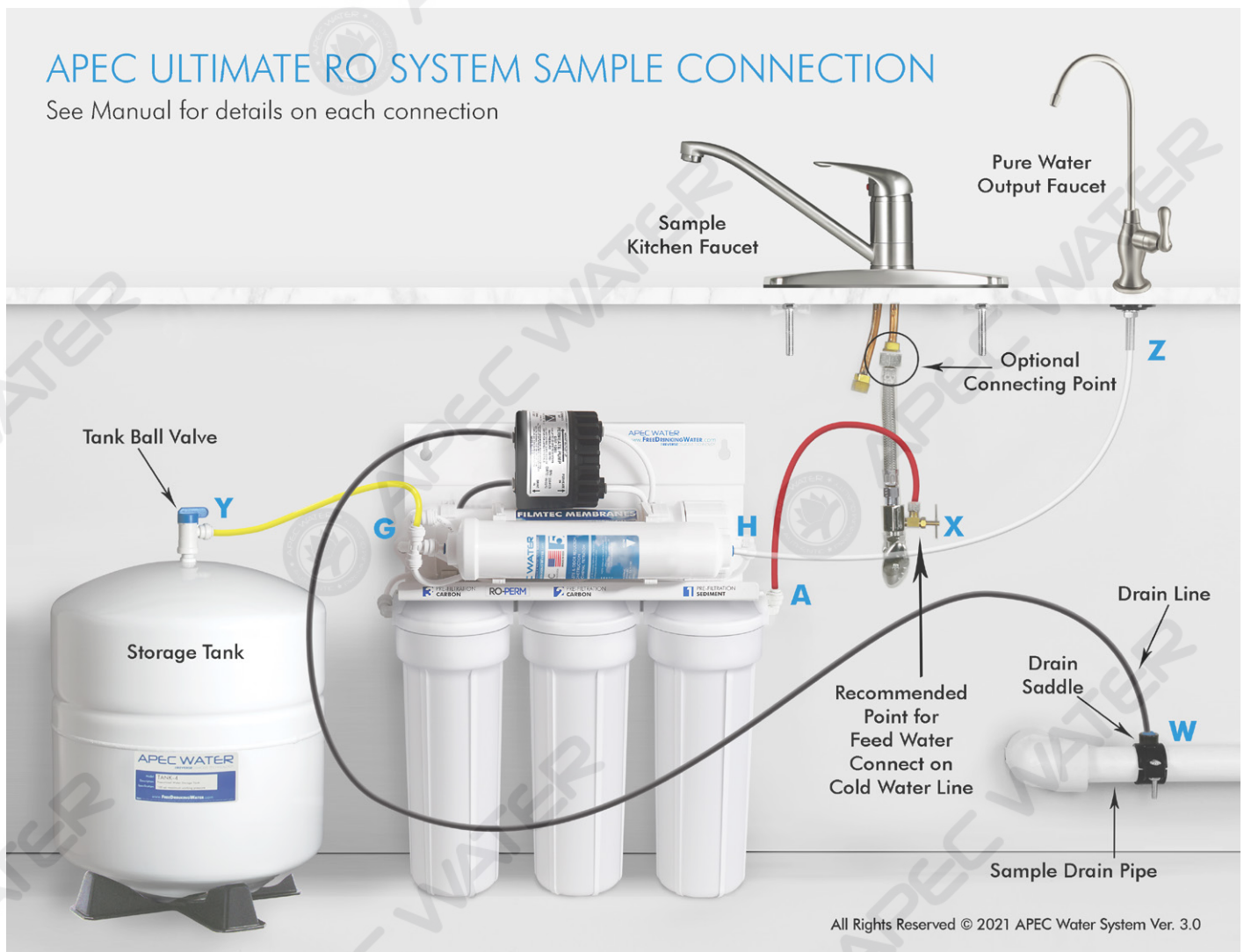
Point A to X: Using the provided Male and Female feed water adapter provided. Connect RO feed water line to COLD water supply — Red tubing.

Point G to Y: Connect product water from 5th-stage filter to tank — Yellow tubing. This tubing is a 2-way line, Product water enters and leaves the tank via this line.

Point H to Z: Connect product water from 5th-stage output to RO faucet — Clear tubing.

Drain line to W: Connect waste water from 4th-stage membrane to drain outlet — Black tubing.

* The quick setup guide should only be used as a summary. Please refer to the manual that is included with each individual unit for proper installation.



WARRANTY POLICY

Please refer to individual system manual for warranty coverage and details.



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