INSTALLATION GUIDE

WHOLE-HOUSE WELL WATER FILTRATION | PRO-WELL-1E

PRO AQUA

PURE WATER. NOTHING ELSE.

Don't miss out on **TWO (2) FREE YEARS** of additional system coverage

The PRO-WELL-1E includes a two-year warranty. Register your product within 60 days from time of purchase to add an additional two years of protection covered under our **PRO+AQUA** warranty.

1. Locate the serial number on the system.
2. Visit **www.proaquawater.com/warranty-reg**
3. Enter your purchase and serial number information.

No time to go online?

Let our **PRO+AQUA** Certified Tech Team do the work for you. Simply follow the steps below and in 2-3 working days we'll send you confirmation of your product being registered.

Purchaser Name: _____

Email: _____

Phone: _____

Address: _____

_____

City: _____

State: _____

Zip: _____

Order Number: _____

Order Date: _____

Serial Number: _____

Place of Order: _____

Registration with your mobile device is easy.

1. Fill out the form by handwriting your info.
2. Take a picture of the form with your device.
3. Scan the QR code with your device camera and click the banner that appears.
4. Attach the picture of the form to the email that opens.
5. Hit Send and you're DONE!

PRO AQUA

PURE WATER. NOTHING ELSE.

CONTENTS

Inspection & Preparation

PRO+AQUA filtration systems are designed in California, USA and are made from high quality, commercial grade filters and components.

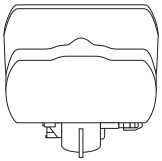
IMPORTANT!
Before installing - Please read the entire manual and become familiar with instructions and parts needed before proceeding with the installation.

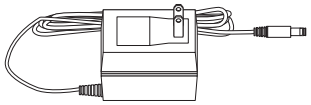
Record the date of purchase in your manual for future reference:

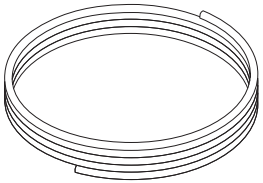
Date of purchase: _____

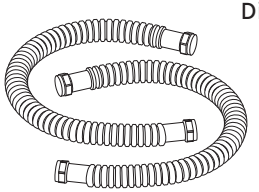
System Inspection Before Starting
Please take the system and all the components out of the box. Inspect the system and all the connection fittings carefully, make sure nothing was damaged during shipping. If any part is cracked or broken, please do not proceed with the installation and contact **PRO+AQUA** or your distributor for support.

Components List:

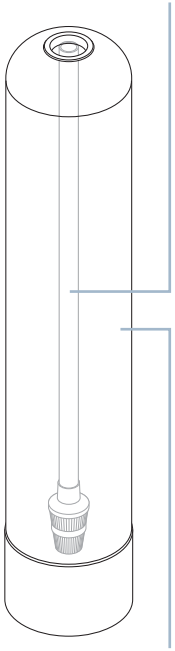

Electronic Valve Meter

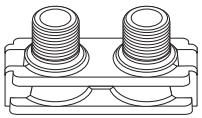

AC Power Supply

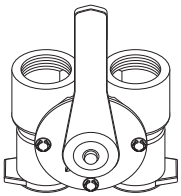

1/2” Drain Line Tube (15 ft)

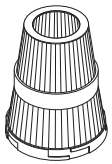

2 - 18” Flex Hoses

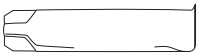
Riser Tube & Bottom Distributor (Pre-installed)

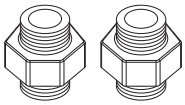

Media Tank (Pre-filled)

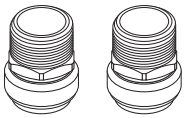

1” Yoke

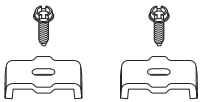

Stainless Steel Bypass Valve

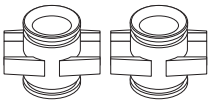

Upper Basket


O-Ring Lubricant


2 - 1” Fittings


Brass Quick Connect Adapters


2 - Metal Clips & 2 - Clip Screws


Adapter Coupling

Required Tool List for System Installation

- Channel locks
- Adjustable wrenches
- Screwdriver
- Teflon tape
- Razor knife

IMPORTANT!
Additional tools may be required if modification to home plumbing is required.

IMPORTANT!
The following condition for feed water supply must be met or warranty will be void and manufacturer assumes no responsibility for damage to system or property.

System Operation Parameter and Installation checklist

1. **Water Temperature Parameters**
   System must not be installed at an area where it is exposed to direct sunlight and must be protected against freezing and extreme heat.
   - Maximum: 100 °F (37.8 °C)
   - Minimum: 40 °F (4.4 °C)

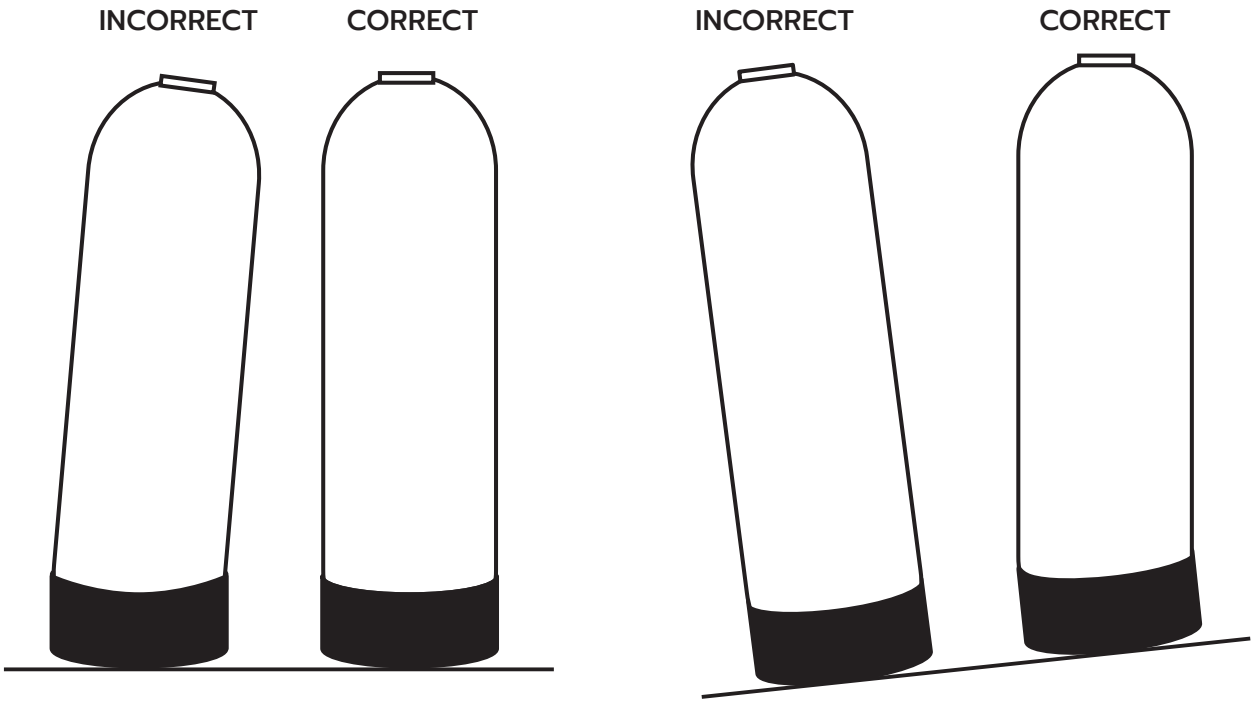
2. **Water Pressure Parameters**
   The maximum allowable inlet water pressure is 125 psi. If daytime pressure is over 80 psi, night time pressure may exceed the maximum allowed water pressure. Use a pressure reducing valve (PRV) to reduce the pressure if needed.
   - Maximum: 80 psi (5.98 kg/cm^2)
   - Minimum: 20 psi (1.406 kg/cm^2)

3. **Pre-installation & Environment Checklist**
   - Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
   - Properly ground to conform with all governing code and ordinances. Use only lead-free solder and flux for all sweat-solder connections as required by state and federal codes. DO NOT SOLDER WHILE SYSTEM IS CONNECTED.
   - Place the system as close as possible to the pressure tank (well system) or water meter (city water).
   - Place the system as close as possible to a floor drain, or other acceptable drain point (laundry tub, sump, standpipe, etc.).
   - Connect the system to the main water supply pipe before the water heater. Do not run hot water through the system. Temperature of water passing through the system must be less than 100 °F.
   - Place system in a place where water damage is least likely to occur if a leak develops.
   - An electric outlet with 120 volt is needed within 6 feet of the system. The transformer has an attached 8 foot power cable. Be sure the electric outlet and transformer are protected from moisture and water.
   - If installing in an outside location, necessary steps must be taken to assure the system, installation plumbing, wiring, etc., are protected from the elements and contamination sources.
   - The system tank should be located close to a drain to prevent air breaks and back flow.
   - System should be installed with a vacuum breaker to avoid damage to tank.

Inspection & Preparation

Installation Safety Guide

- Handle with care when moving the water filtration system. Do not turn upside down, drop, drag, or set on areas with sharp protrusions.
- The system works on standard 120v power plug only. Do not use any other transformer except the one that is included with the system.
- Transformer must be plugged into an indoor 120 volt, grounded outlet only.
- All tanks have level adjusting tank bases. These tanks are designed to work with a “floating” base. This allows the tank to be leveled on any surface. Some applications may not have a level surface to place the tank. The floating base allows the tank to be leveled within the base and ensures proper operation. Sometimes the base can shift during shipping. It can be adjusted back by lifting the tank up no higher than 5” - 10”, and letting it drop to help level the base.



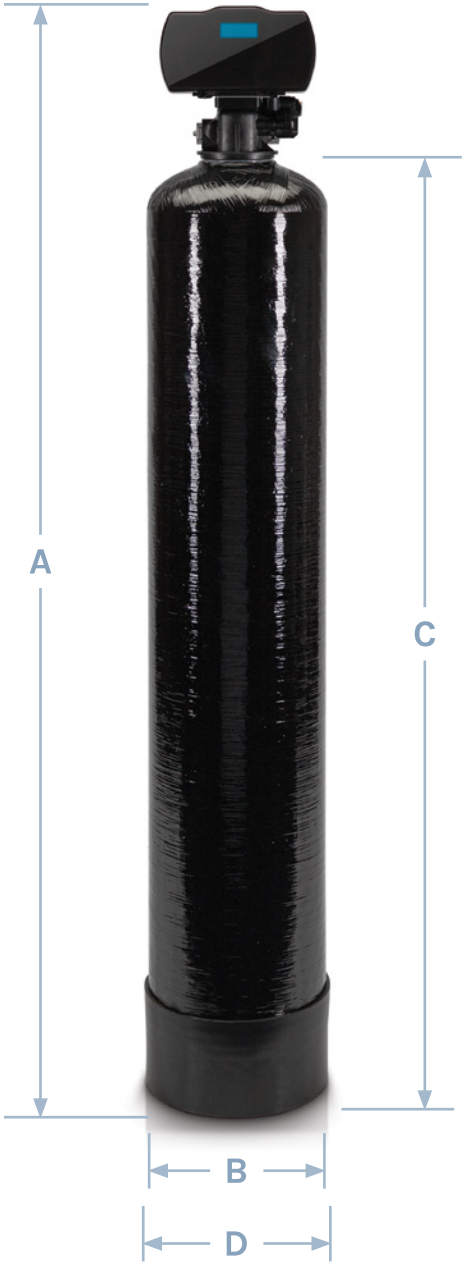
PRO-WELL-1E

A. Total height: 55”

B. Tank width: 9”

C. Tank height: 48”

D. Tank base: 9.5”



Pre Installation

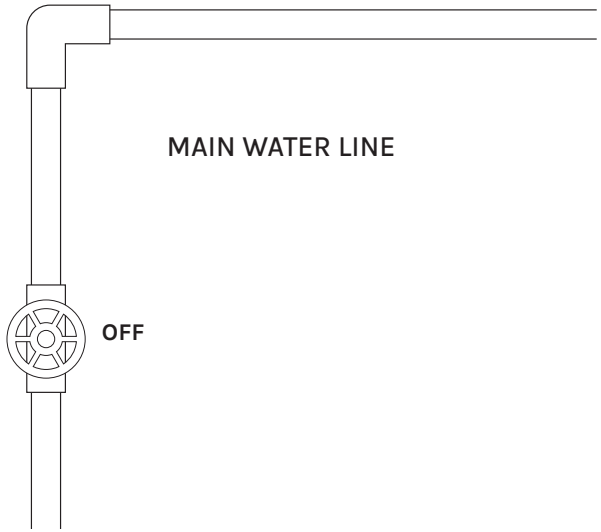
IMPORTANT!
Locate and test the main water supply valve to the home before installing the system. If the main water supply valve fails to shut off the water completely during the test, we recommend contacting a licensed plumber to fix the valve before starting the installation.

WARNING!
If the system is installed on a metal (conductive) plumbing system, i.e.. copper or galvanized metal, the plastic components of the system will interrupt the continuity of the plumbing system. As a result, any arrant electricity from improperly grounded appliances downstream or potential galvanic activity in the plumbing system can no longer ground through contiguous metal plumbing. Some homes may have been built in accordance with building codes, which actually encouraged the grounding of electrical appliances through plumbing. A grounded “jumper wire” bridging the equipment and reestablishing the contiguous conductive nature of the plumbing system must be installed prior to your system use.

WARNING!
Electric hot water tanks: Turn off the power to the unit first to avoid damage.
Well water: Power off the well water pump and then shut off the main water supply valve.

Shut Off Main Water Supply

Locate the main water supply valve to the house and turn off.

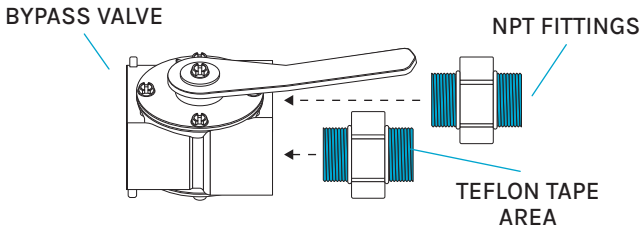


1 Bypass Assembly & Installation

Depending on your installation, we have provided various connection options in 1” and 3/4”.

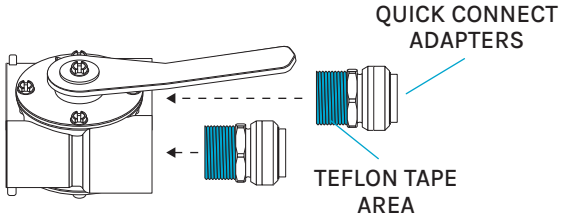
Installation using 1” NPT fittings

Apply teflon to the fittings (included) and install to the bypass valve using an adjustable wrench.

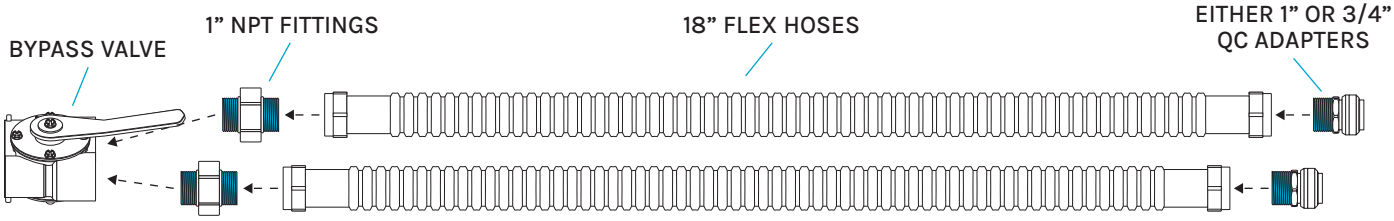


Installation using 1” or 3/4” quick connect adapters

Apply teflon to the quick connect fittings (included) and install to the bypass valve using an adjustable wrench.



Installation using 18” flex hoses

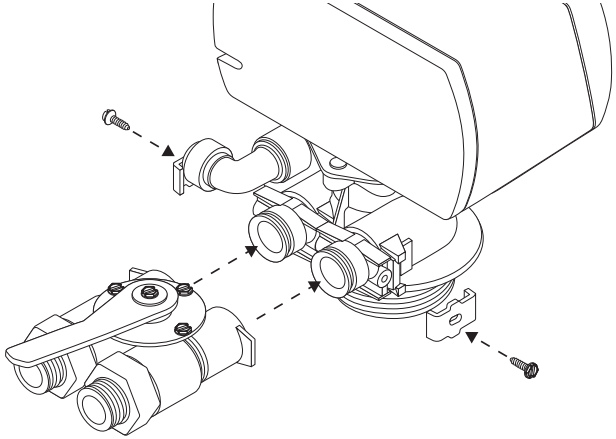


2

A: Lubricate the O-rings on the adapter couplings to avoid any leaks.

B: Attach the bypass valve onto the control head by pressing it onto the adapter couplings.

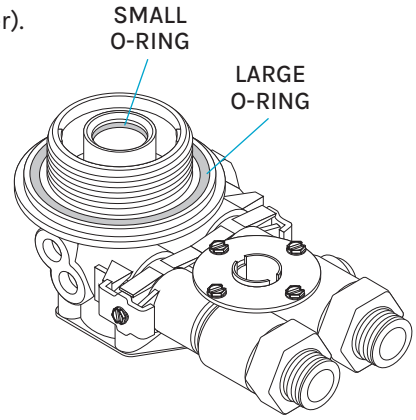
C: Secure the bypass to the valve using the screws and metal clips.



Valve Installation

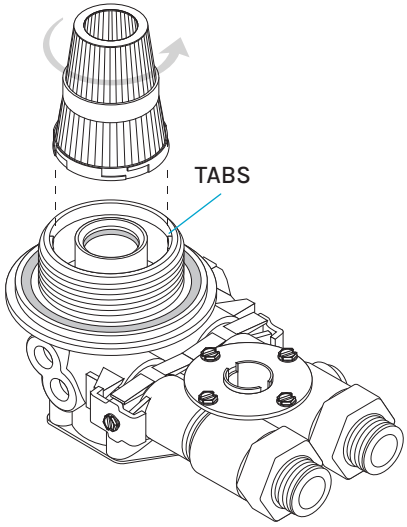
1

Lubricate both O-rings on the bottom of the control valve (inner and outer).



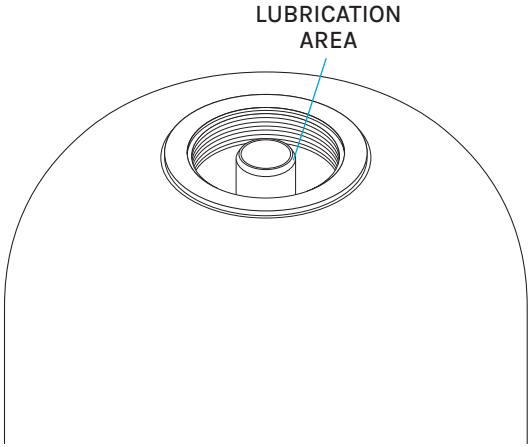
2

Install the upper basket on the bottom of the valve by lining up the tabs, pressing in, then turning the basket counterclockwise to lock it in place.



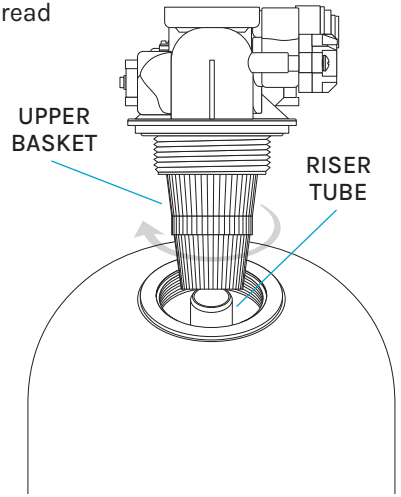
3

Lubricate the rim of the riser tube located on the opening of the tank.



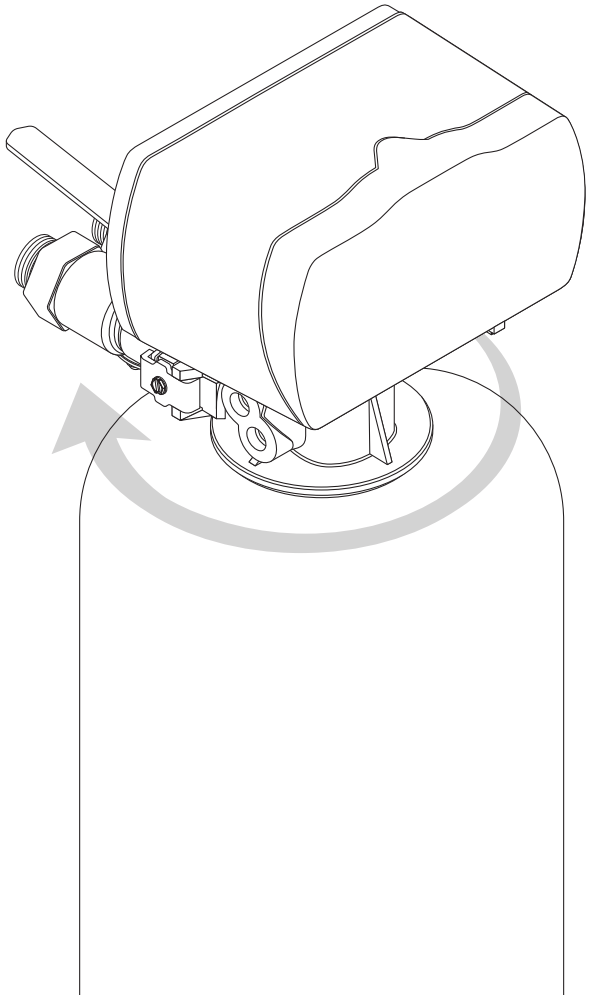
4

Place the upper basket on the riser tube and push the valve down to the tank and thread the valve on the tank by turning it clockwise. Be sure not to cross-thread the valve on the tank. The valve should thread easily in the tank. If not, it may be cross-threaded.



5

Hand-tighten the valve then snug it further by lightly tapping it with the palm of your hand. **DO NOT over-tighten or use tools to tighten the valve or damage could occur**.



System Installation

IMPORTANT!
DO NOT SOLDER WHILE SYSTEM IS CONNECTED. Any solder joints being soldered near the valve must be done before connecting any piping to the valve. Failure to do this could cause unrepairable damage to the valve.

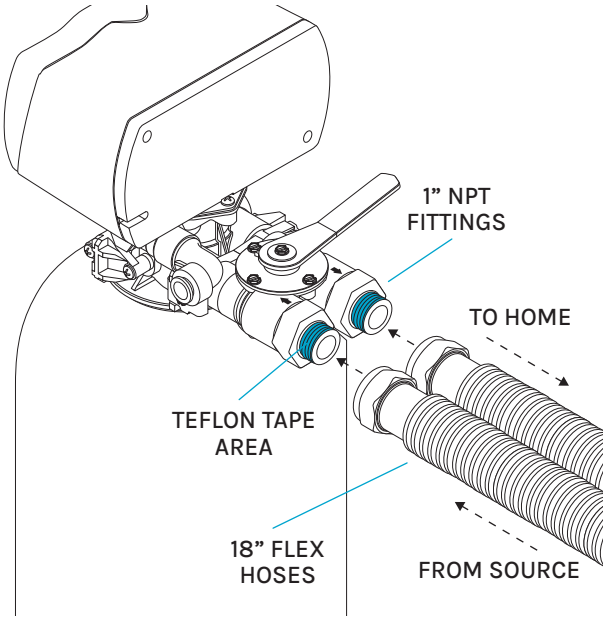
1 Connecting the System

This system includes both 1" & 3/4" quick connects, 1" & 3/4" male NPT, and 1" female NPT fittings, as well as 2 stainless steel flex lines 1" x 18" connection options. Determine the best options for your installation. It is recommended that these connections be made using teflon tape. Plumbers putty can be used to prevent leaks. The inlet and outlet can be identified on the bypass valve by looking at the arrow directions on top of the bypass valve. The arrow pointing toward the valve is the inlet and the arrow pointing away from the valve is the outlet.

A: Apply teflon tape onto the inlet and outlet fittings.

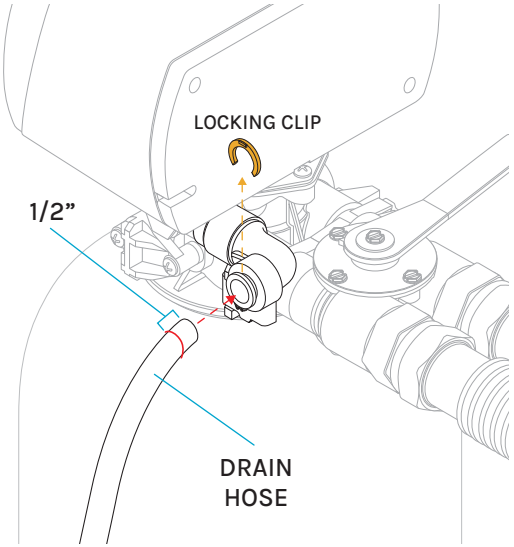
B: Connect the inlet and outlet of the system using included 18" flex hoses.

C: Connect the "IN" flex line to your incoming water line. Connect the "OUT" flex line to your "IN" line for your home. All piping should be secured to prevent stress on the bypass valve and connectors.



2

Locate the included drain hose. Using a sharpie, mark 1/2" from the end of the drain hose. Connect the marked end of the drain hose into the quick connect drain port on the valve until it reaches or passes the 1/2" mark **(remove locking clip before pushing hose in)**. Run the drain hose to the nearest laundry tub or drain. This can be ran up overhead or down along the floor. Drain hose should be a minimum of 1/2" in width. If running the drain line more than 20 ft linear, it is recommended to increase the hose size to 3/4" and be sure there are no sags in the hose all the way to the drain destination.



NOTE:
A direct connection into a waste drain is not recommended. A physical air gap of at least 1.5" Should be used to avoid bacteria and wastewater traveling back through the drain line into the system.

3

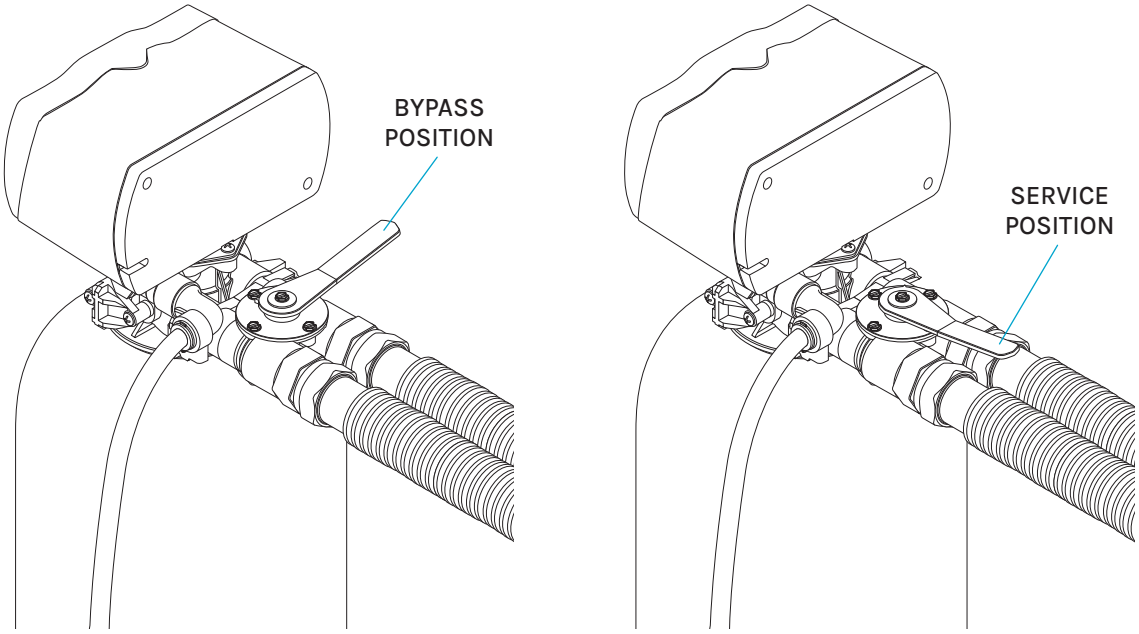
A: Place the unit in the bypass position.

B: Slowly turn on the main water supply to the system.

C: Locate and the nearest faucet to the system and remove the faucet screen or any fittings on the faucet spout.

D: Turn on the cold water for 10 minutes to flush air, loose media, and foreign material resulting from the plumbing work. It is normal to see black media in the water.

E: Make sure there are no leaks in the plumbing system before proceeding. Close the water tap when water runs clear.



IMPORTANT!
The system is not ready for service until you complete the **Valve Programing** section in the following pages.

Valve Programing

Overview:

Display Overview

A. Time of day

B. Status

C. Time remaining

D. Backwash mode timer

The back light on the screen will go off automatically after one minute if no buttons are pressed. To light it up again press any button on the touch pad.

Buttons Overview

Setting Button

1. Enter into setting menu.
2. Confirm the current setting, and enter into the next step.
3. When used simultaneously with up button, it will enter into master programming.

Up / Down Buttons

1. Adjust current settings.
2. Go one step forward or backward.

Cycle Button

1. Save the setting and return to service.
2. Enter into Queued Backwash mode.
3. A long press for 5 - 6 seconds will initiate an immediate regeneration.
4. Terminate the current backwash step and goes to the next step.

1 System Startup

A: Plug the power transformer into an approved power source. Connect the power cord to the valve. When power is supplied to the control, the screen will display the time of day, time remaining and the mode.

B: Press and hold the **CYCLE** button for 5-6 seconds. The valve will display “GOTO BW” and will continue to move until it reaches the backwash cycle.

C: Once the valve is in the backwash (BW) cycle the display will show a time value (15). Slowly open the bypass valve to “service” position to allow water to enter the unit. Air from the tank will begin to push out of the control valve drain. Allow all air to escape from the unit before turning the bypass fully open. If there is a large “knocking” sound, the water is being fed too quickly and should be slowed. Once there is a steady stream of water coming from the system drain with no air coming out, allow water to run until the cycle completes.

2

A: When the backwash cycle is complete, the valve will advance to the brine draw (BD) position then to the (RR) position. The display will show the (Rapid Rinse) cycle, allow the water to run for the entire rinse cycle.

B: When the rinse cycle is complete, the valve will advance to the “BF” then the “SR” position.

C: When the cycles complete, the valve will automatically advance to the service position. Open the nearest treated water spigot or faucet (remove faucet screen to prevent clogging) and allow the water to run until clear, close the tap and replace the faucet screen.

3 Setting Time of Day

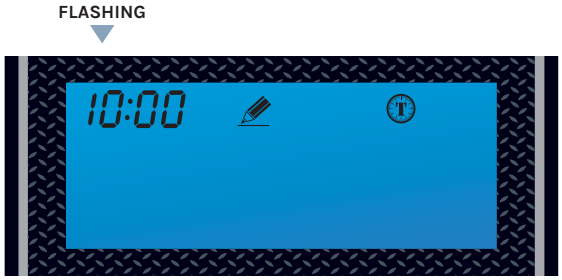
Default setting 12:00 (24 hours)

A: Press **SETTINGS** button and **UP** button simultaneously to enter into programing mode.

Press the **SETTINGS** button to accept and continue.

B: Press **UP** or **DOWN** buttons to change hours.

Press the **SETTINGS** button to accept and continue.

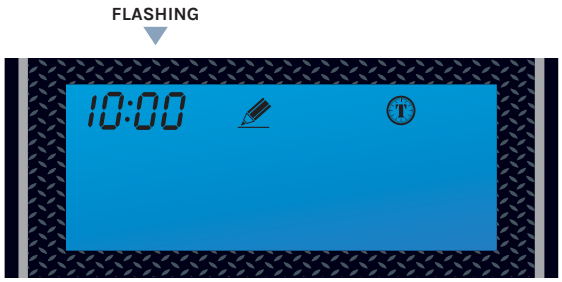


C: Press **UP** or **DOWN** buttons to change minutes.

Press the **CYCLE** button to accept and complete the setup.

– OR –

Press the **SETTINGS** button to accept and continue to Advanced Settings.



Congratulations!

Your system is ready for use. Please document the system installation date and maintain the system at its recommended interval.

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* In the following pages, you will find the **Advanced Settings** section. Continue to this section only if you require a special application or customization.

Advanced Settings

NOTE:
The following settings have been pre-set from the factory and are only meant for special application that requires customized settings. Continue only if you require customization of the following settings.

1 Setting the Valve Mode

Default setting is “Timer”. Press the **SETTINGS** button to enter sub menu.

FLASHING

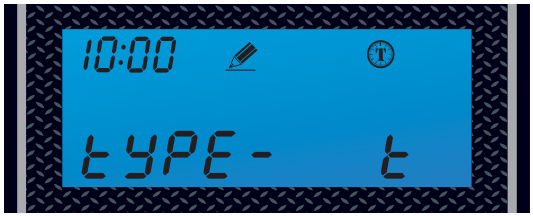
NOTE:
Meter and Meter Delay options are not used. There is no need to set them.

Set To Timer Mode (T)

A: Press **UP** or **DOWN** buttons to change mode.

B: Press the **SETTINGS** button to accept and continue.

Timer (default setting)
This mode counts down.



FLASHING

Meter (Not Used)
(Regenerate Immediately) This setting is not used.

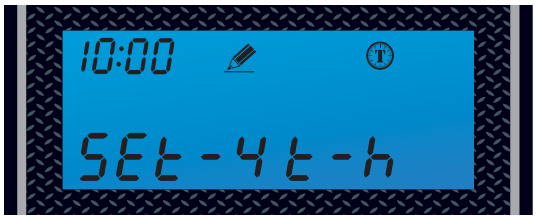
FLASHING

Meter Delay (Not Used)
(Regenerate at 2 am night of reaching capacity.) This setting is not used.

FLASHING

2 Backwash Time and Hours Override

(Change only if needed.)



FLASHING

Timer Mode

Default: 2:00 AM every 072 hours.

Hours Override range: 3, 4, 6, 8, 12 hours, then every 24 hours (24, 48, 76,...)

See below to adjust.

Press **SETTINGS** button to enter sub menu.

Adjust Timer Schedule

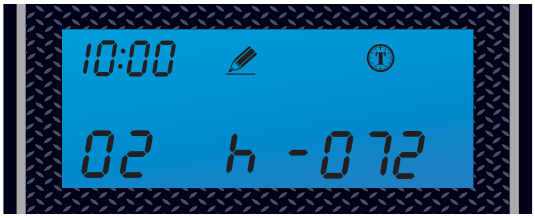
A: Press **UP** or **DOWN** buttons to change mode.

B: Press **SETTINGS** to go to hours.

C: Use **UP** and **DOWN** buttons to adjust hours.

D: Press **SETTINGS** to accept and continue.

(DEFAULT)

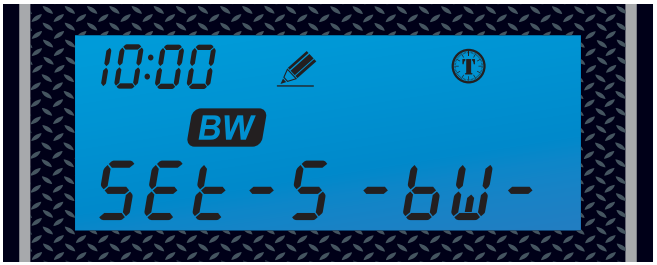


FLASHING

FLASHING

FLASHING

3 Setting the Backwash Time



FLASHING

Press **SETTINGS** button to enter sub menu.

Default setting is 015. See below to adjust.

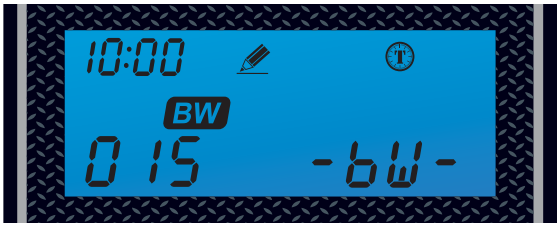
Set the Time

A: Press **UP** or **DOWN** buttons to change backwash time (Minutes).

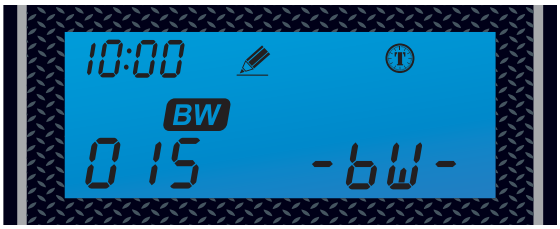
Range: 0 - 999

B: Press the **SETTINGS** button to accept and continue to next digit.

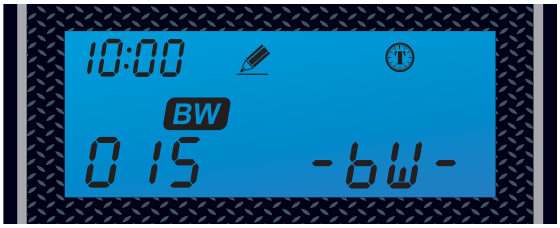
C: Press the **SETTINGS** button to accept and continue.



FLASHING



FLASHING



FLASHING

4 Setting the Brine Time
(SKIP – this setting is not used)

A: To skip, press the **UP** button to change to SET-7.

B: Press the **SETTINGS** button to accept and continue.

5 Setting the Rapid Rinse Time

Default setting is 010 Minutes.

A: Press **UP** or **DOWN** buttons to change the Rapid Rinse time. Range: 0 - 999

B: Press the **SETTINGS** button to accept and continue to next digit.

C: When the last 3rd digit is reached, press the **CYCLE** button to accept and complete the setup.

*SET-8 is not used. Press the **CYCLE** button to complete the setup.

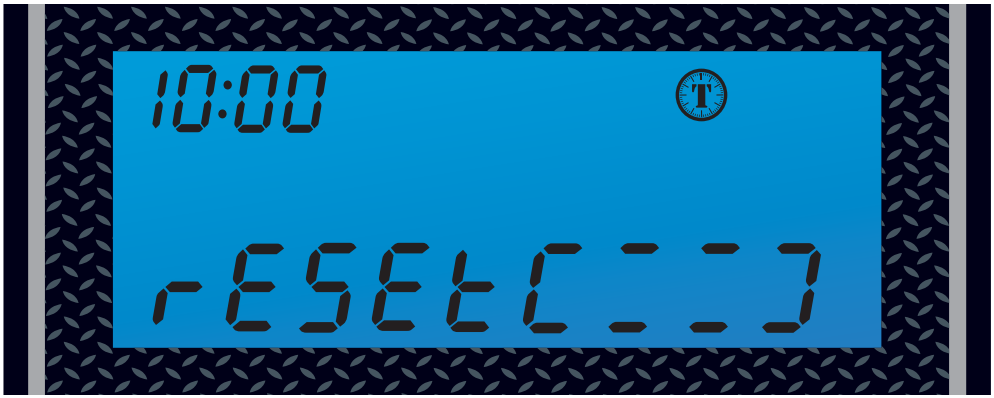
1 Memory During Power Failure

All program settings are stored in permanent memory. Current valve position, cycle step elapsed, and time of day are stored during the power failure. Resetting the current time is necessary when powering up.

If the valve stopped at a backwash stage during power failure, the valve will return to the prior position when it powers up. It takes 4 to 5 minutes to reset to the position.

The display shows a “reset” prompt

The system will show this status after a power failure while resetting the position.



2 Restore Factory Settings

A: Unplug the power.

B: Press and hold the **CYCLE** button while plugging in the power.

C: Release the **CYCLE** button. The system is now restored.

3 Manual Queued Backwash

A: When the valve is in service position press the **CYCLE** button to activate the queued backwash. The faucet Icon will blink.

B: Queued backwash means the system will initiate a backwash at the time set. If missed, it will initiate on the next day.

C: Press the **CYCLE** button once again to cancel the queued backwash. The faucet icon will blink.

The display shows the Queued Backwash

4 Manual Immediate Backwash

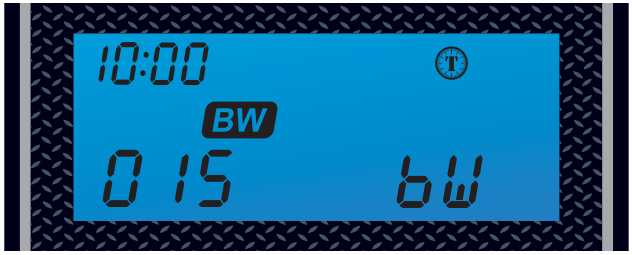
Immediate Backwash

When the valve is in service position, press and hold the **CYCLE** button for 5-6 seconds. An immediate backwash will be initiated.

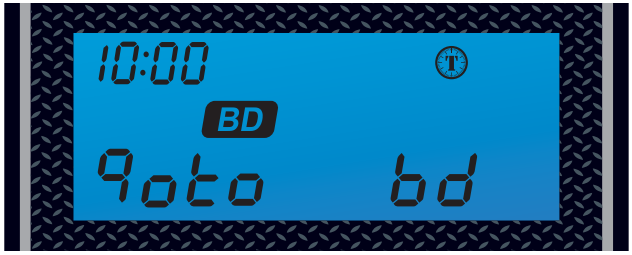
Examples:

"BW" flashing (ready to backwash). The piston is moving to position.

The piston is in "BW" position and the timer starts to count down. Press the **CYCLE** button to force skip to next cycle.



"BD" flashes, moving piston to "BD" position, then skips to "RR" position.



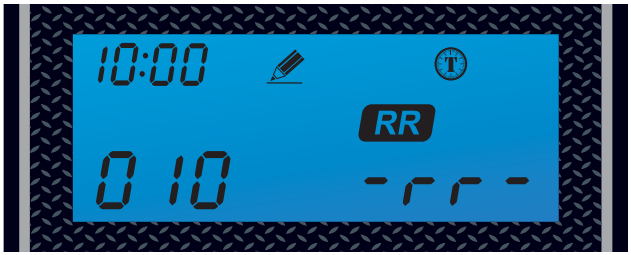
Continued on next page

Examples (continued):

The piston is in “RR” position and the timer starts to count down.

Press the **CYCLE** button to force-skip to next cycle.

The “BF” cycle will skip back to “SR” (service) position.

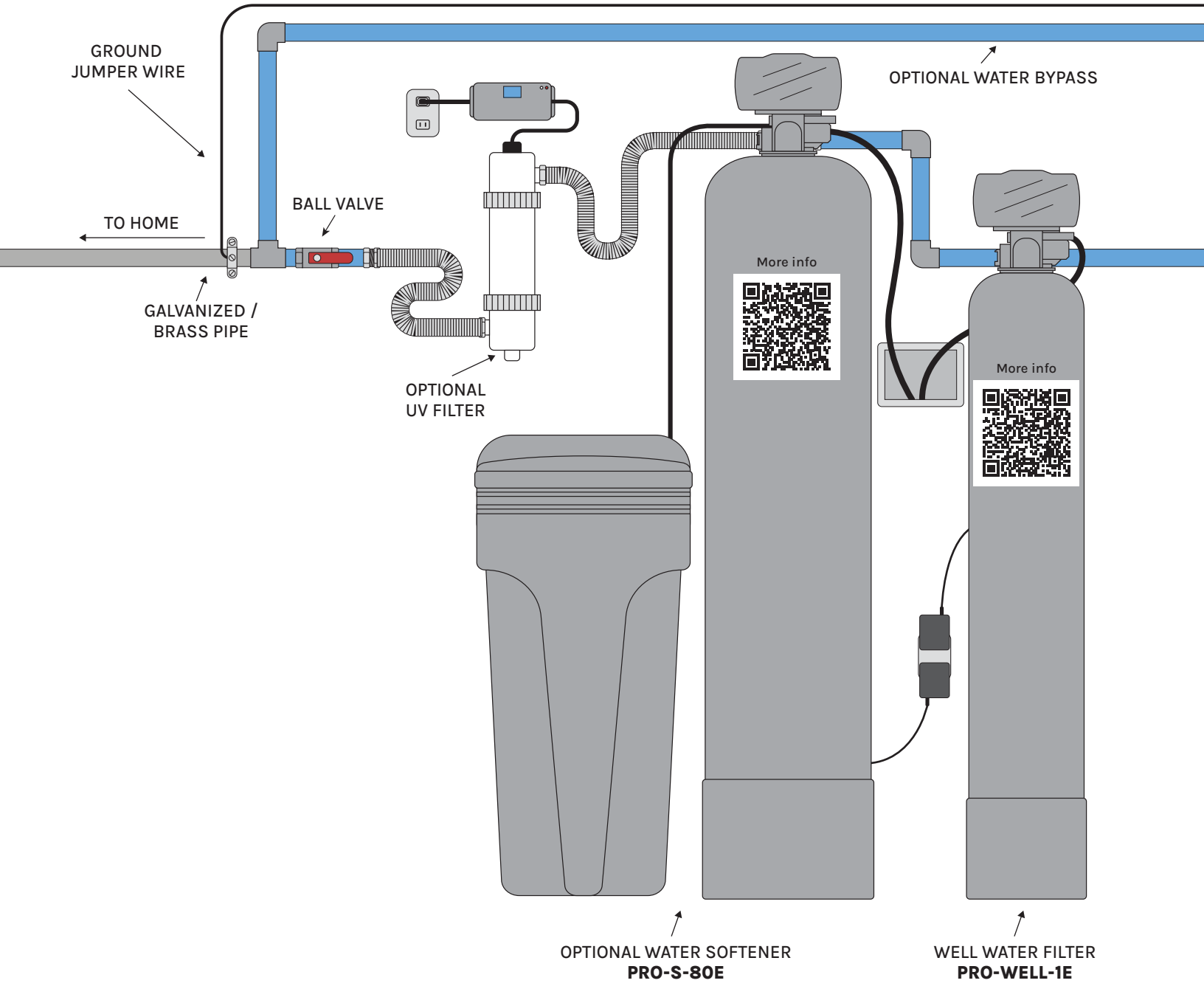


5 Stop Backwash

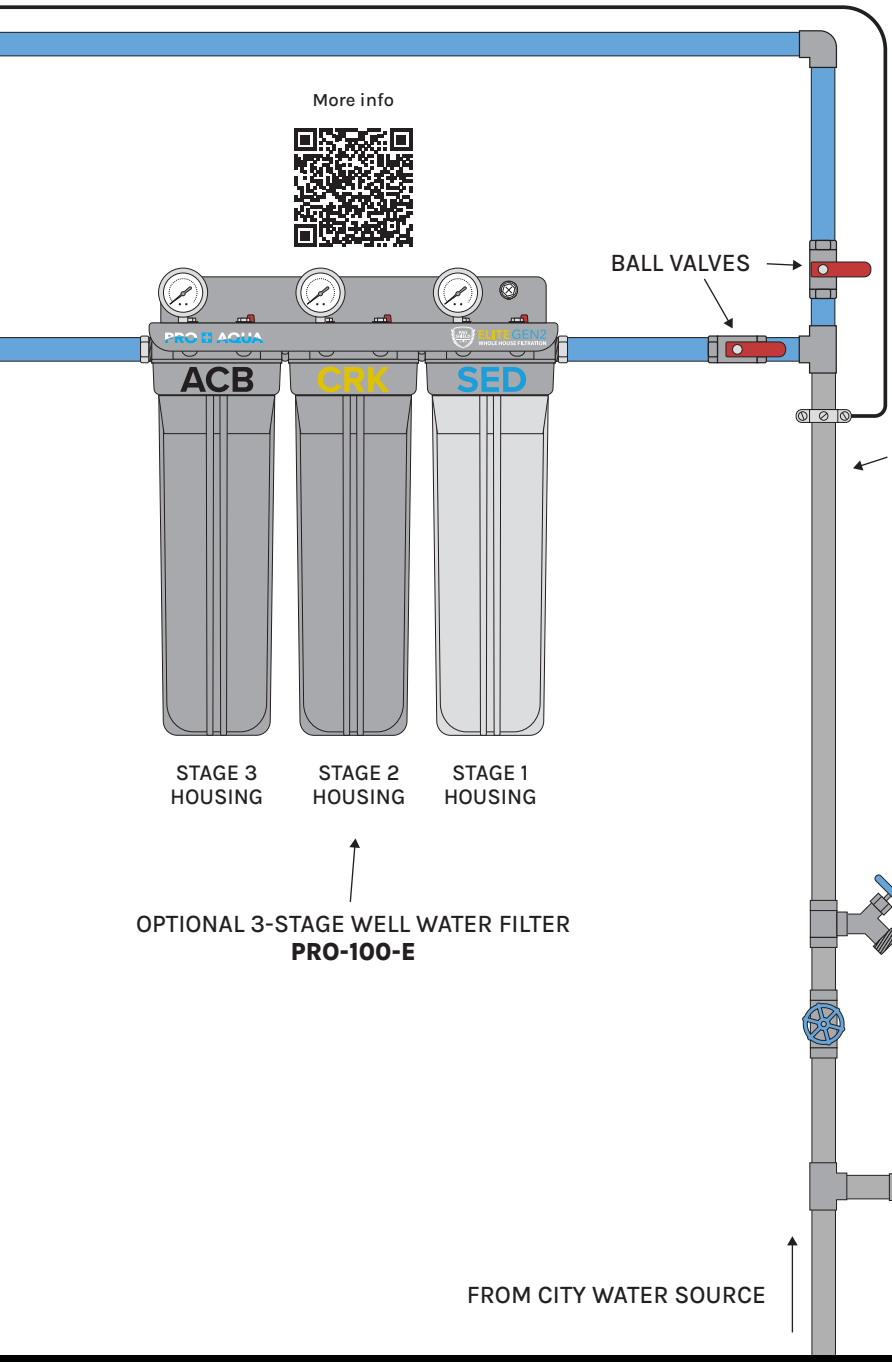
When backwashing, press the **UP** and **DOWN** buttons simultaneously to stop. The display will return to the service position.

Service position display

Installation Diagram



Installation Diagram



Additional Info

Optional Add Ons:
Ball Valves, Bypass, Ground Jumper Wire, Well Water System, 3-Stage Filter System, Water Softener, and UV Filter are not included.

Warning:
The plastic components of the system will interrupt the continuity of the grounded (conductive) plumbing system. A grounded "jumper wire" bridging the equipment to the plumbing system must be installed prior to systems use. Consulting a Licensed Plumber is highly recommended (see Installation Diagram).

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. It is highly recommended to test your well at least once a year.

Caution:
Filtration System must be protected against freezing and extreme heat, which can cause the housing(s) to crack and the components to fail and may cause water leakage. Systems should not be installed in direct sunlight since UV rays make housings and other components brittle.

It is important that the O-ring be properly seated or a water leak could occur as the O-ring provides the water-tight seal between the cap and the housing.

To prevent possible water damage, housings should be replaced every 4 years (5 years for clear housing).

System Maintenance
The PRO-WELL-1E systems require little maintenance. The digital valve automatically flushes the system every few days, there is no input needed from the user. The media may be replaced after it has been exhausted when you notice the same water issues return. The lifespan of the media is determined by your water quality and water usage.

Operational Parameters
Installation needs to comply with state and local plumbing regulations. These systems are intended to be used with cold water only.

	Maximum	Minimum
Operational Temperature	100 °F (37.8 °C)	40 °F (4.4 °C)
Operating Pressure	80 psi (5.98 kg/cm^2)	20 psi (1.406 kg/cm^2)
pH Parameters	10	5

More than filtration – it's peace of mind.

PRO+AQUA: Redefining Water Filtration. Unmatched Performance. Uncompromising Quality.

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System Troubleshooting

Problem	Cause	Correction
1) The control fails to Backwash automatically	A) Transformer damaged	A) Replace the transformer
	B) Electronic controller or sensor damaged	B) Replace or repair
2) Backwash at wrong time	A) Timer improperly set, due to power failure	A) Reset timer
3) loss of capacity	A) Rinse fouling	A) Consolidate the rinse tank, clean the rinse and prevent future fouling
	B) Poor distribution, channeling (Uneven bed service)	B) Check distributors and backwash flow
	C) Internal control leak	C) Replace the spacer, seal or piston
	D) Loss of rinse	D) Check for correct bed depth. Broken distributors. Air or gas in bed
4) Poor water quality	A) Check items listed in Problem # 3	A) Check items listed in Correction # 3
	B) Bypass is open	B) Close the bypass
	C) Channeling	C) Check for too slow or high service flow
5) Loss of water pressure	A) Fouling of inlet pipe	A) Clean or replace the pipeline
	B) Fouled Media	B) Clean the Media. Pre-treat to prevent
	C) Improper backwash	C) Too many media fines. Reset the flow rate and time of backwash
6) Control cycles continuously	A) Faulty timer	A) Replace timer
7) Continuous flow to drain	A) Foreign material in the control	A) Call a service tech. Clean valve, rebuild unit
	B) Internal control leak	B) Same as above
	C) Piston jammed in backwash position	C) Same as above

Limited Product Warranty

PRO+AQUA warrants that your new Well Water Filtration System is built of quality material and workmanship. When properly installed and maintained, it will give years of trouble free service.

PRO+AQUA will replace any part on the valve or electronics which fails or the media within (2) two years (4 years with extended warranty) from date of manufacture, as indicated by the serial number, provided the failure is due to a defect in material or workmanship. The only exception shall be when proof of purchase or installation is provided. The warranty period shall be from the date of purchase. Media and internal control valve parts will not be covered for systems with excessive iron, manganese or with very high chlorine concentrated feed waters. We highly recommend having a pre-treatment system placed before the water system to further protect your investment.

PRO+AQUA will provide a replacement tank to any original equipment purchaser in possession of the **PRO+AQUA** Well Water Filtration System that fails within (2) two years (4 years with extended warranty) after the date of purchase, provided that it is at all times operated in accordance with specifications and not subject to freezing, sunlight or installed outdoors without proper covering.

General Provisions

PRO+AQUA assumes no responsibility for consequential damage, labor or expense incurred as a result of a defect or for failure to meet the terms of these guarantees because of circumstances beyond our control. Installation workmanship failure is not covered under warranty. Damage caused by environmental conditions such as, lightening strikes, humidity or heat will not be covered under warranty. External uncovered installations are not covered by this warranty. System must be installed in a fully covered, insulated area.

These warranties are in lieu of all other warranties expressed or implied, and we do not authorize any person to assume for us any other obligation on the sale of this water filtration system. No responsibility is assumed for delays or failure to meet these warranties caused by strike, government regulations or other circumstances beyond the control of **PRO+AQUA**.

Obtaining Warranty Coverage or General Inquiries

If coverage is available, you may obtain coverage under this Limited Product Warranty by providing **PRO+AQUA** with proof of original purchase, and that you are the original purchaser. In making the claim, please provide the order number, your name, address, phone number, a description of the product involved, an explanation of the defect and photos/video.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. THIS WARRANTY MAY BE TRANSFERRED TO A SUBSEQUENT OWNER WITH WRITTEN APPROVAL FROM **PRO+AQUA** AND PAYMENT OF STANDARD TRANSFER FEE.

PRO+AQUA

PURE WATER. NOTHING ELSE.

For assistance, please feel free to reach
out to us Mon - Fri 9am - 5pm PT
(800) 980-3335 or via email at
hi@proaquawater.com

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