

**USWater**<sup>™</sup>  
systems.com

# Matrixx DROP Commercial Smart Water Softener - 1.5"

080-MXCS-150-X-XX



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## Unpacking and Inspection

Be sure to check the entire unit for any shipping damage or lost parts. Also note damage to the shipping cartons. Contact US Water Systems at 1-800-608-8792 to report any shipping damage within **24 hours of delivery**. Claims made after 24 hours may not be honored. Small parts, needed to install the unit, will be in a parts bag. To avoid loss of the small parts, keep them in the parts bag until you are ready to use them.

## Safety Guide

*For your safety, the information in this manual must be followed to minimize the risk of electric shock, property damage or personal injury.*

- Check and comply with provincial / state and local codes. These codes must be followed.
- Use care when handling the system. Do not turn upside down, drop, drag or set on sharp protrusions.
- The water softening system works on 12 volt-60 Hz electrical power only. Be sure to use only the included transformer.
- Transformer must be plugged into an indoor 120 volt, grounded outlet only.
- Keep the salt lid in place on the brine tank unless servicing the unit or refilling with salt.
- **WARNING:** This system is not intended for treating water that is micro biologically unsafe or of unknown quality without adequate disinfection before or after the system. Contact US Water Systems for disinfection treatment equipment.

## Before Starting Installation

### Proper Installation

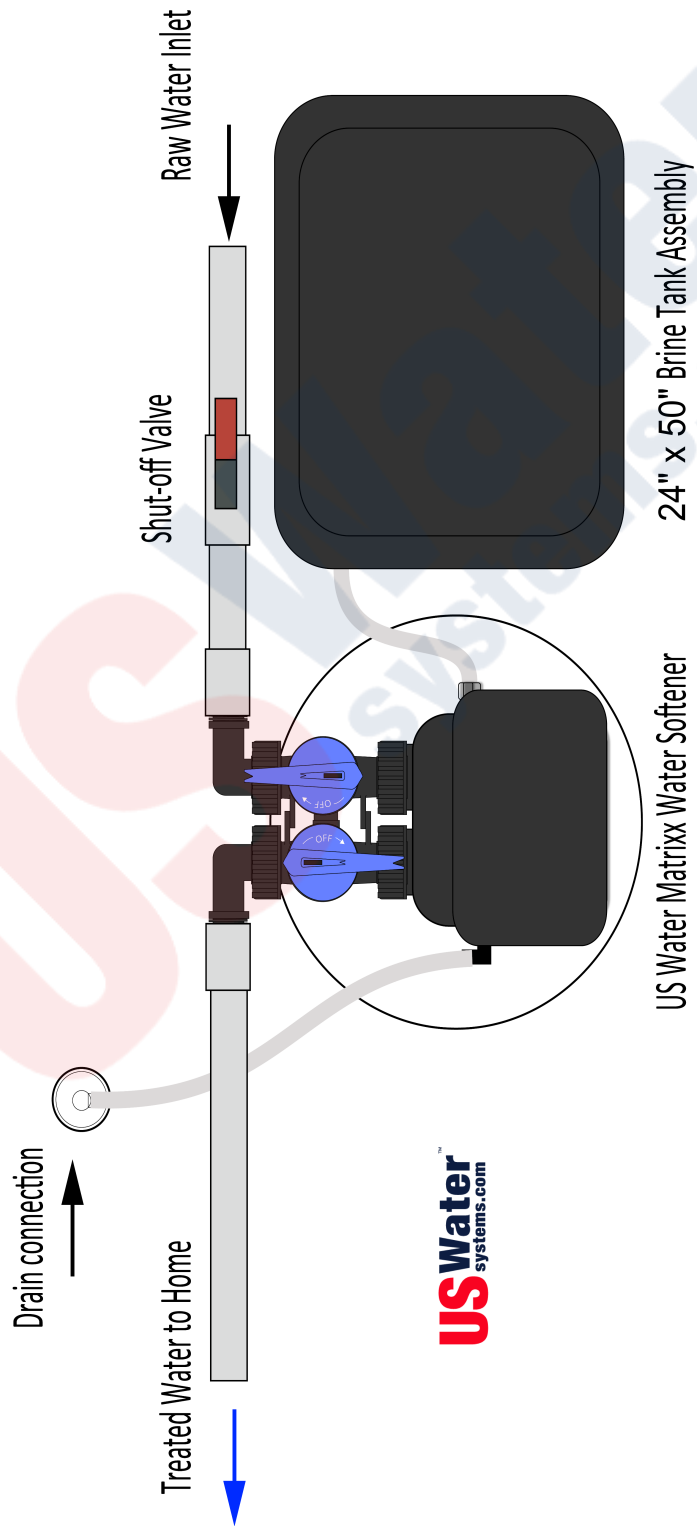
*This water softening system must be properly installed and located in accordance with the Installation Instructions before it is used or the warranty will be void.*

- **Do not** Install or store where it will be exposed to temperatures below freezing or exposed to any type of weather. Water freezing in the system will break it. Do not attempt to treat water over 100°F.
- **Do not** install in direct sunlight. Excessive sun or heat may cause distortion or other damage to non-metallic parts.
- Properly ground to conform with all governing codes and ordinances.
- Use only *lead-free solder and flux* for all sweat-solder connections as required by state and federal codes.
- Maximum allowable inlet water pressure is 100 psi. If daytime pressure is over 80 psi, night time pressure may exceed the maximum. Use a pressure reducing valve (PRV) to reduce the pressure.
- Softener resins may degrade in the presence of chlorine or chloramines above 2 ppm. If the feed water has chlorine or chloramines in excess of this amount, it could reduce the life of the resin. In these conditions, a whole house carbon filter system with a chlorine reducing media is recommended. Contact US Water Systems for chlorine and chloramine removal equipment.
- **Warning:** Discard all unused parts and packaging material after installation. Small parts remaining after the installation could be a choke hazard.

### Tools, Pipe, Fittings, and Other Materials

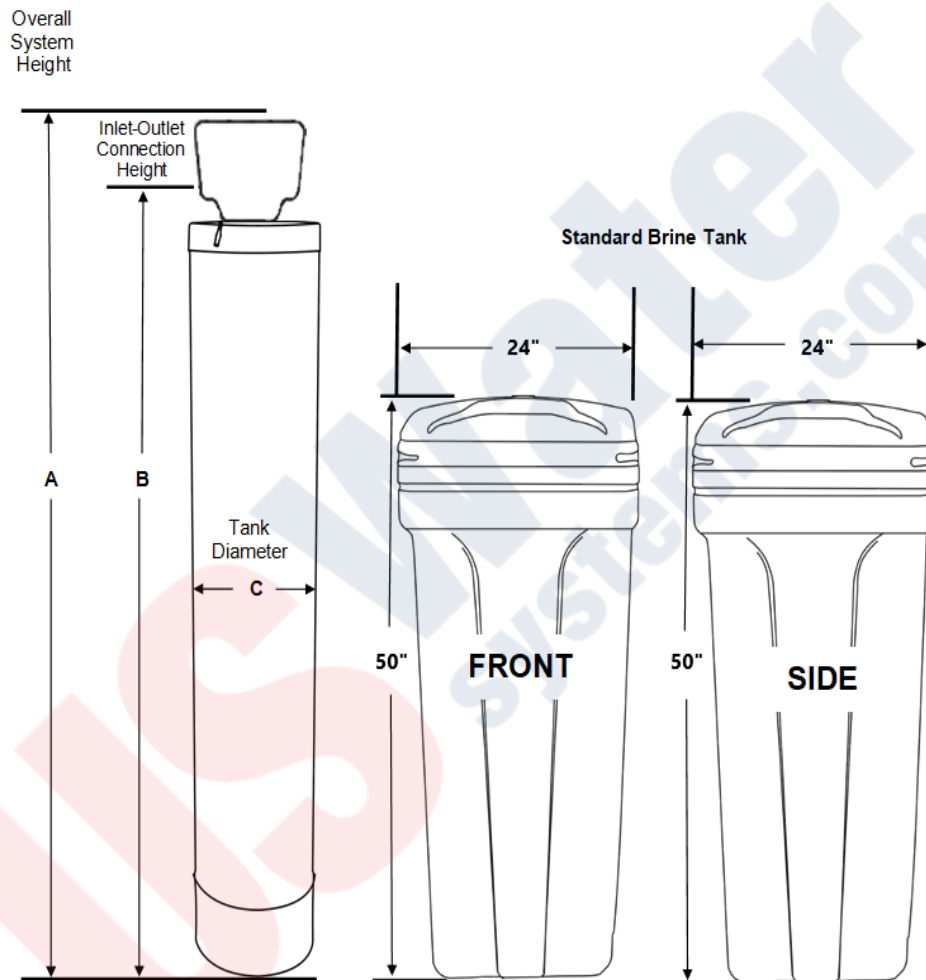
- Channel Locks
- Screwdriver
- Teflon Tape
- Razor Knife
- Two adjustable wrenches
- Additional tools may be required if modification to home plumbing is required.
- To maintain full valve flow, be sure the plumbing size matches the size of the valve. The outlet pipe should be the same size or larger than the water supply pipe.
- Use copper, brass, or PEX pipe and fittings. Some codes may also allow PVC Plastic pipe.
- **ALWAYS** install the included bypass valve or install a 3 shut-off valve hard piped bypass. Bypass valves allow the water to be turned off to the softener but can still provide water to the house for water use during repairs or service.
- Extra Course Grade or Crystal Solar Salt (99.8% pure) water softener salt is needed to fill the brine tank.

# System Overview



# System Dimensions

Model	Tank Size	A	B	C
MXCS-150-5	18" x 65"	74"	67"	18"
MXCS-150-7	21" x 62"	74"	67"	21"



## Specifications

Model Number	MXCS-150-5	MXCS-150-7
Tank Size	18" x 65"	21" x 62"
Capacity (cu/ft)	5	7
Maximum Capacity*	150,000 Grains	210,000 Grains
<b>Optimal Settings</b>	<b>125,000 Grains</b>	<b>175,000 Grains</b>
Salt Setting	50 lbs	70 lbs
Water Usage	482 Gallons	621 Gallons
Backwash	10 Minutes	10 Minutes
Brine/Rinse	60 Minutes	60 Minutes
Fast Rinse	10 Minutes	10 Minutes
Brine Refill	6 Minutes	8 Minutes
<b>Maximum Settings</b>	<b>150,000 Grains</b>	<b>210,000 Grains</b>
Salt Setting	75 lbs	105 lbs
Water Usage	560 Gallons	750 Gallons
Backwash	10 Minutes	10 Minutes
Brine/Rinse	60 Minutes	60 Minutes
Fast Rinse	10 Minutes	10 Minutes
Brine Refill	8 Minutes	12 Minutes
Backwash Flow Control (GPM)	10.0	15.0
Brine Flow Control (GPM)	3.0	
Service Flow Rates	35 GPM	
Max Flow GPM @ 15 PSI Pressure Drop	25 GPM	
Max Flow GPM @ 25 PSI Pressure Drop	20 GPM	
Water Pressure	20 PSI Min / 100 PSI Max	
Water Temperature	39°F Min / 100°F Max	
Plumbing Connections	1.5" MPT	
Electrical Requirements	100-240V, 50/60 Hz, 0.3 A / Output 12V, 500mA	
Brine Tank Size	24" x 50"	
Salt Storage Capacity	275 lbs	

- Continuous operation at flow rates greater than the service flow rate may affect capacity and efficiency performance.
- The manufacturer reserves the right to make product improvements which may deviate from the specifications and descriptions stated herein, without obligation to change previously manufactured products or to note the change.
- The above capacity and flow rate specifications have not been validated by the WQA.
- Specifications listed are on a per tank basis.

## How the Water Softener Works

Water hardness is derived from Calcium and Magnesium minerals that have been dissolved into the water under the earth's surface. These minerals are found in limestone deposits and are the source of hard water. The amount of hardness in a given water supply is dependent upon the quantity of Calcium and Magnesium present and the length of time water has been in contact with them. This can vary dramatically from source to source and, for this reason, a water analysis is imperative in order to determine the proper treatment method. The degree of hardness increases as the concentration of Calcium and Magnesium "ions" increases and is measured in **Grains Per Gallon (gpg)**.

The problem of hard water in the home/business comes to light in many facets of daily use. Water spots and scum left behind on bathtubs, fixtures, and showers; wear and tear on appliances; calcium build-up in hot water heaters and piping; and, greater amounts of soap and detergents being used are just a few examples.

The modern water softener is designed to reduce hardness ions and their unpleasant side effects. Special resin beads in the softener mineral tank are used to change hard water into soft water. The surfaces of these beads are covered with sodium ions. As hard water enters the mineral tank and comes into contact with the resin, an exchange of ions takes place as dissolved Calcium and Magnesium ions cling to the resin surface and sodium ions take their place, thus softening the water. This process is called **Ion Exchange**. Over time, the sodium ions used for the exchange process become depleted and must be replenished.

The water softener provides a Regeneration process whereby brine solution enters the mineral tank, driving-off the collected hardness ions and replenishes the surface of the resin beads with more sodium ions. This process is automatically initiated by the control valve on the mineral tank. The regeneration process has five basic cycles as follows:



1. **Backwash** - The control valve directs the water flow in a reverse direction through the mineral tank, separating the resin beads and flushing any accumulated particles to a waste drain.
2. **Brine & Rinse** - In the first part of this cycle, the control valve directs brine solution downward through the mineral tank, driving-off collected hardness ions and replenishing the resin beads with sodium ions. The second part of the cycle rinses hardness ions and excess brine from the mineral tank to the waste drain.
3. **Rapid Rinse** - The control valve directs the water flow downward, settling and re compacting the resin bed.
4. **Brine Refill** - The control valve directs fresh water into the salt compartment to create new brine solution for the next scheduled regeneration.
5. **Service** - This is the normal “operating” cycle where hard water enters the mineral tank, comes into contact with the resin beads, and exchanges hardness ions for sodium ions - the water then becomes “soft” and ready for use.

DROP valves have been designed to make managing multiple water treatment tanks as simple as possible. All DROP valves are controlled wirelessly by the Hub so that more than one valve is not regenerating at a time and the regeneration time set applies to all valves. The DROP Hub automatically knows how to setup the system for multiplexing and handles all coordination between DROP products.

DROP can manage up to four stages of water treatment and each stage can contain up to 12 parallel tanks. Additional tanks can be added anytime to the system so that a system can easily grow with the needs of a customer.

## Where to Install the Softener

- Place the softener as close as possible to the pressure tank (well system) or water meter (city water).
- Place the softener as close as possible to a floor drain or other acceptable drain point (laundry tub, sump, standpipe, etc)
- Connect the softener to the main water supply pipe BEFORE the water heater (10' or more). **DO NOT RUN HOT WATER THROUGH THE SOFTENER.** Temperature of water passing through the softener must be less than 100°F.
- **Outside faucets and irrigation systems should be supplied with hard water prior to the water softener.**
- Do not install the softener in a place where it could freeze. **Damage caused by freezing is not covered by the warranty.**
- Put the softener in a place where water damage is least likely to occur if a leak develops. **The manufacturer will not repair or pay for water damage.**
- A 120 volt electric outlet is needed within 6 ft of the softener. The transformer has an attached 6 foot power cable. **Be sure the electrical outlet and transformer are in an inside location so they are protected from wet weather.**
- If installing in an outside location, you must take the steps necessary to ensure the softener, installation plumbing, wiring, etc are protected from the elements and contamination sources.
- **Keep the softener out of direct sunlight.** The sun's heat may soften and distort plastic parts.

## Softener Preparation

### Softener Tank Preparation

**Water Pressure:** A minimum of 20 pounds of water pressure is required for the regeneration valves to operate effectively.

**Electrical Facilities:** An uninterrupted alternating current (AC) supply is required. *Note: Other voltages are available. Please make sure your voltage supply is compatible with your unit before installation.*

**Existing Plumbing:** Condition of existing plumbing should be free from lime and iron buildup. Piping that is built up heavily with lime and/or iron should be replaced.

**Location of Tank and Drain:** The resin tanks should be located close to a drain to prevent air breaks and back flow.

**Caution:** Water pressure is not to exceed 80 psi, water temperature is not to exceed 110°F (43°C), and the unit cannot be subjected to freezing conditions.

### Resin Installation

1. Remove the tank from the carton.
2. Tanks will be shipped with a "hub and lateral" distributor system.



Hub and lateral distributors may be assembled or have to be assembled onsite. This will depend on the tank size. The hub and lateral distributor is installed by inserting the hub and distributor tube in the tank. Then the laterals can be installed by reaching in the tank and screwing them clockwise in the hub. These should be installed hand tight and snugged further about 1/8" of turn using channel locks or an adjustable wrench. Once all the laterals are screwed into the hub, the entire hub and lateral distributor can be centered in the tank.

3. Place a piece of duct tape over the riser tube so no media enters the riser while filling.
4. Repeat steps 1 - 3 for each additional tank, as needed.

5. Use the funnel provided to pour the gravel into the tank. Pour it evenly around the hole to ensure it is well distributed in the tank and pour slow enough to keep from plugging the hole. Then proceed to pouring the softening resin into the tank. A helper may be needed to hold the funnel during the filling process.

If multiple tanks are being used, evenly split the gravel and softening resin between each tank in the system.

**CAUTION:** Fill the tank with water about 10" - 12" above the hub and lateral. This will prevent the gravel and media from breaking the laterals when it is poured in the tank.

**NOTE:** It is recommended that a dust mask and safety goggles be worn to prevent possible injury.

6. When the media is installed, move the tanks side to side to settle the media. Remove the funnel and tape from the distributor tubes.



7. Lubricate the distributor O-ring and the outer tank O-ring for each valve. .



8. Align the distributor tube with the center port on the bottom of the valve and push the valve onto it and the tank. Thread the valve on the tank by turning it clockwise. Be sure not to cross thread the valve on the tank. Repeat this process for each valve in the system.

Tighten the valve hand tight then snug it further by tapping it with the palm of the hand. **DO NOT** use tools to tighten the valve or damage could occur.



9. Repeat this process for each valve in the system.

## Installation Instructions

1. If your hot water tank is electric, turn off the power to it to avoid damage to the element in the tank.
2. If you have a private well, turn the power off to the pump and then shut off the main water shut off valve. If you have municipal water, simply shut off the main valve. Go to a faucet or spigot (preferably on the lowest floor of the house) and turn on the cold water until all pressure is relieved and the flow of water stops.
3. Locate the softener tanks and brine tank close to a drain where the system will be installed. The surface should be clean and level.

**NOTE:** Any solder joints being soldered near the valve must be done before connecting any piping to the valve. Always leave at least 6" (152 mm) between the control valve and joints being soldered when soldering pipes that are connected to the valve. Failure to do this could cause damage to the valve.

4. Insert the provided plumbing fittings into the valve. Tighten the retaining nuts hand tight, ensuring that the fittings are not cross threaded.



5. A three valve bypass should be installed in the plumbing for service purposes.



**NOTE: All piping should be secured to prevent stress.**

6. Connect plumbing to the 1" MPT drain line connection and run it to the nearest laundry tub, floor drain or approved air gap fitting.

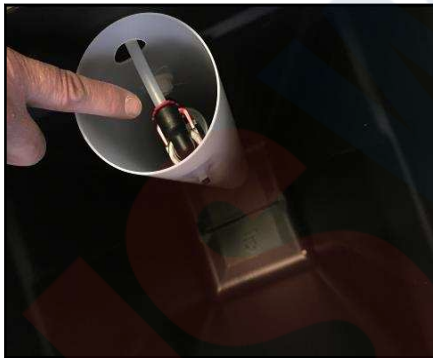
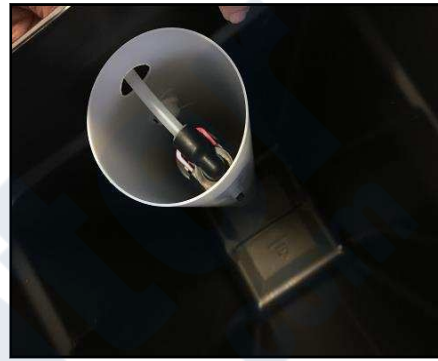
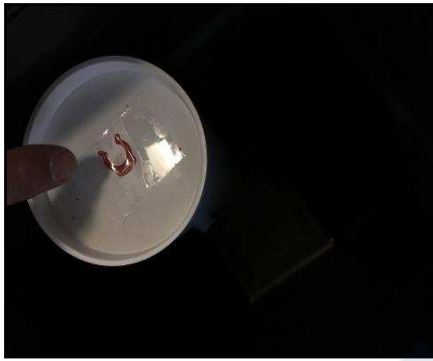
**NOTE: A direct connection into a waste drain is not recommended. A physical air gap of at least 1.5" should be used to avoid bacteria and wastewater traveling back through the drain line into the softener.**

7. Connect the brine line to the control valve by removing the red clip from the brine port connection and pushing the brine line into the QC connection. Insert it fully and tug on the line lightly. If installed properly, it should not pull out.





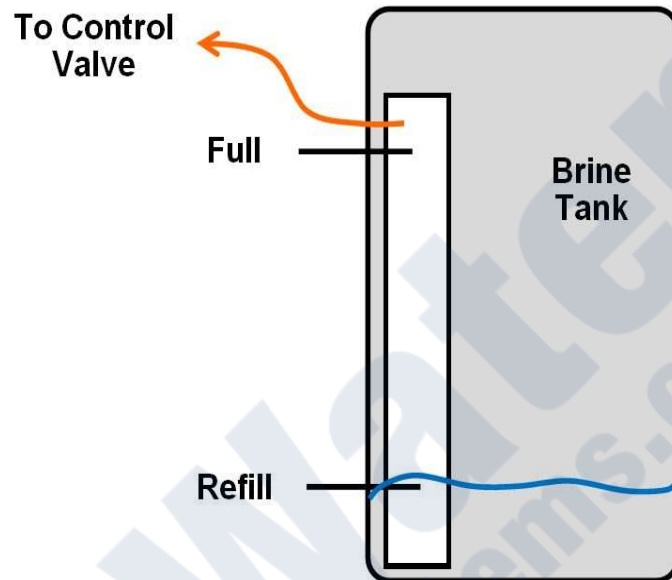
- Now connect the brine line to the brine tank safety float assembly. Remove the brine tank lid and the brine well cap. There is a red clip on the cap that will be used to hold the brine line in place. Remove it, and the tape holding it, and put it to the side. Then push the brine line through the brine tank and brine well. REMOVE the brass insert for this connection. Push the brine line into the brine safety valve. Make sure it is completely pushed in. Then install the red locking clip around the brine fitting between the grey collar and the brine elbow. Install the white cap on the tube.



- Repeat steps 7 and 8 for each additional valve in the system using the supplied tubing. Once the brine tubing is inserted into each additional valve, splice the individual lines into the brine line running from the 1st valve to the brine tank using the supplied tees.
- Make sure there are no leaks in the plumbing system before proceeding. Close the water tap when water runs clean. Check for leaks again.

11. Open the brine tank lid and add 5 gallons of water to the brine tank. Add a minimum of 80 lbs of salt to the brine tank.

**NOTE:** Salt should be filled, used completely and refilled. Salt should not be "topped off" each month. It is better to completely fill the tank with salt (full is 2" below the top of the white safety float tube in the tank) then use the salt until water can be seen on top of the salt. Then refill the salt



12. Proceed to start up instructions

**NOTE:** The unit is not ready for service until you complete the start up instructions

## Valve Operation

### Valve Overview

All DROP treatment valves use the same DROP valve control board. They are used to control the various DROP water treatment valves. All DROP treatment valves have one or more motors, have a water meter to monitor flow of treated water and have four lights used to communicate general status of the unit. During normal use, the DROP valves direct water through the treatment media. This normal flow state is referred to as the service position. All DROP treatment valves have the capability to shut off water to the house and to bypass water around the treatment tank.

### Valve Settings

ATTENTION! Softener systems come paired with the hub from the factory. The softener valve is programmed as well, but hardness and reserve capacity will need reviewed based on the parameters of the install location.

### System Settings

The first settings that need to be reviewed are in the System settings. Choose “System” on the left navigation menu and then “Settings” at the top of the page. The items in the “System Settings” section need to be reviewed; these are Regeneration Time and System Water Source.

## Regeneration Time

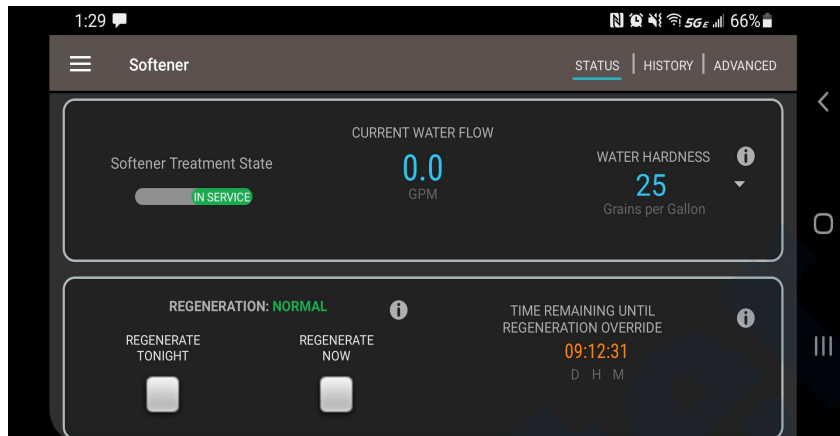
The Regeneration Time applies to valve devices that contain treatment media that requires regeneration and/or backwashing. This includes softeners and all various forms of backwashing filters. This setting controls the time of day when the system will begin to regenerate those devices. While a device is in its regeneration cycles, any water used in the house or system will not be treated. Therefore, it is important to choose a time of day where water use is least likely. Some DROP installations will require multiple stages of treatment (for example, a backwashing filter and a softener may be installed). These stages can require regeneration on the same day and would occur one after the other starting at the regeneration time. You should select a regeneration start time that would take these times into consideration along with your water usage schedule.

## System Water Source

The system water source setting is used by the DROP system to know how to respond to power outages. It can be set to Private Well or Municipal Supply. If the water supply is not one of these choices and is dependent on power to be available (i.e. it is supplied by an electric pump) set it to Private Well, Otherwise, set it to Municipal Supply.



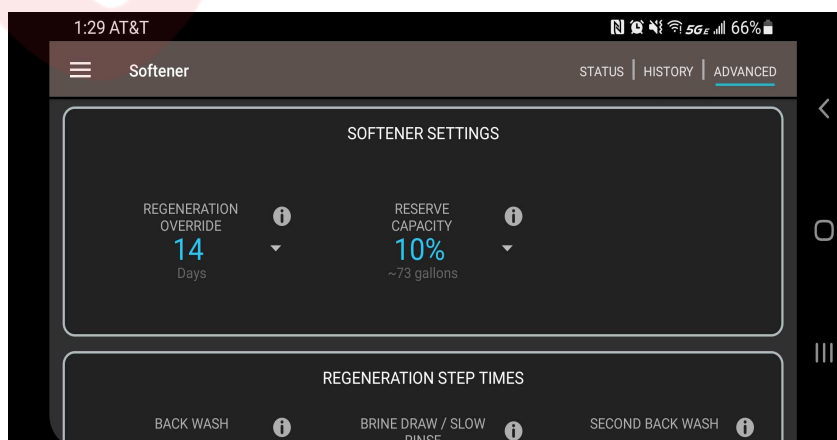
## Valve Programming



To begin programming the valves themselves, navigate to Devices and select the softener system to be programmed. On the main Status screen, confirm the selection is on the first valve and tap on the "Water Hardness" box. Input the water hardness of the water being treated. This info can be found by performing a water test or by contacting the municipality. If the water hardness is expressed as ppm or mg/L, it should be converted to GPG (grains per gallon). This can be done by dividing the value given in ppm or mg/L by 17.1. This will give GPG. Once the GPG is known, add 5 GPG to the value and input that as the water hardness. Input the same hardness into each valve in the system by tapping the individual unit at the top of the screen.

While the device is selected, select the Advanced option in the top right of the app. The following values will need to be adjusted.

1. **Regeneration Override:** Adjust this parameter to every 14 days. If the system will be down more than two weeks at times, set the unit to 10 days.
2. **Reserve Capacity:** Adjust the reserve capacity to 10% for 1 - 3 people in the home. Set to 25% for 4+ people in the home.



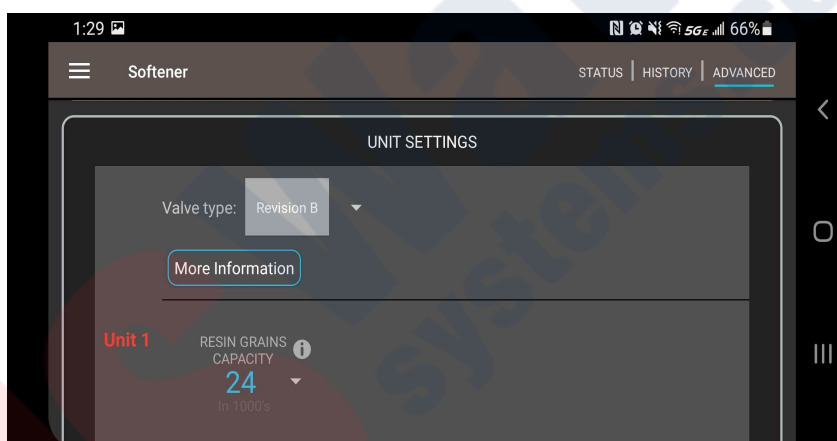
- Progressive Flow:** This determines when each valve will come online based on water flow. It is set in multiples IE. if set to 5 GPM, the first valve will be active but when required flow is in excess of that, the second valve will come online. If the system contains three valves, the third will come online when required flow is in excess of 10 GPM.

If all valves are desired to be online at all times, set this value to 0 GPM and each valve will move to the service position.

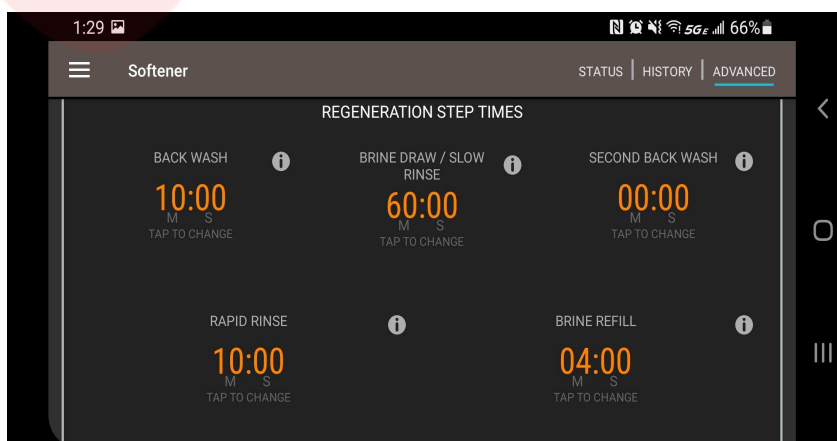
**NOTE: This setting only applies to systems that have multiple valves added to the DROP system. Simplex valves are exempt from this.**

- Resin Grains Capacity:** Adjust this as follows:

Model	Grains Cap	Brine Fill
080-MXCS-150-5	125,000	6 Mins.
080-MXCS-150-7	175,000	8 Mins.



- Backwash:** This should be set to "10" mins and should not be changed.
- Brine Draw/Slow Rinse:** This should be set to "60" mins and should not be changed.
- Second Backwash:** This should be set to "0" mins and should not be changed.
- Rapid Rinse:** This should be set to "10" mins and should not be changed.
- Brine Refill:** See table above for proper brine refill mins.



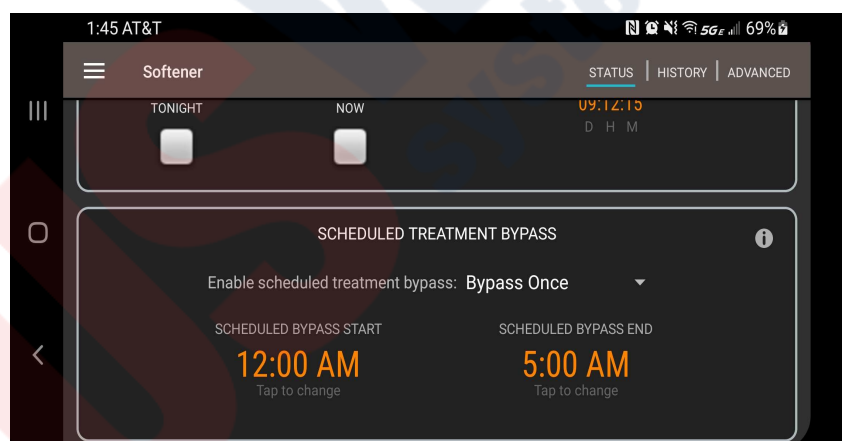
The following settings should not be modified without consulting a service technician:

- **Brine Tank Fill** - Determines when to create the brine solution needed for the regeneration process. This setting can be set to before or after regeneration. If set to before, a designated time before regeneration will need to be set to allow enough time to create the brine solution

**NOTE: It is not recommended to set this to before regen. The factory default is set to "After Regen" and should be left as such unless a service technician is consulted.**

- **Valve Type** - In order for the valve to meter water accurately, this setting must match the valve body revision in use. The factory default is Revision B and this is the valve type in use by US Water Systems. To verify, the "More Information" button can be pressed and a visual will appear on screen to guide the user through identifying the valve.

An additional value can be found on the main "Status" screen of the system as well. The "Scheduled Treatment Bypass" option allows the user to bypass the system at a designated time. This can be set to "Bypass Once" or "Bypass Every Day". Once an option is chosen, the user can designate the time range at which point the valve will automatically move to the bypass position.



**NOTE: If "Bypass Once" is chosen, the schedule will automatically be disabled after one use.**

## DROP Lights - Normal Operation

The softener and / or filter will normally be in the service position. This is the normal position that treats the incoming water supply. The different treatment valve types have different colors when they are in their service position, so they can easily be identified by the color of their lights.



While observing the device, there will be periodic purple flashes on the back lights. These indicate that it is wirelessly communicating to the Hub during that time. Also, when the water meter on the unit senses water flow, the front lights on the device will alternate. The rate of alternation of the lights will give a general idea of the current flow rate. The highest frequency of the lights alternating is determined based on the highest flow seen by the system.

The lights will change color when the device or devices are put into Bypass mode or Water Off. If the water is off, the lights on the valves will be orange. The water can be turned back on using the app or by shortly pressing the button on the Hub. If one of the valves is bypassed, its lights will be bright yellow.

## DROP Lights - During Regeneration

When a treatment valve is in regeneration, the lights will change color for each step in the regeneration process. While the valve is sitting in a step of the regeneration process, the lights will be slowly fading from side to side. If the valve is moving to a position, the light will rotate according to the direction of the motor movement to get to that position.

### Softener

Position	Color
Backwash	Purple
Brine Draw	Light Pink
Rapid Rinse	Light Blue
Brine Fill	Spring Green

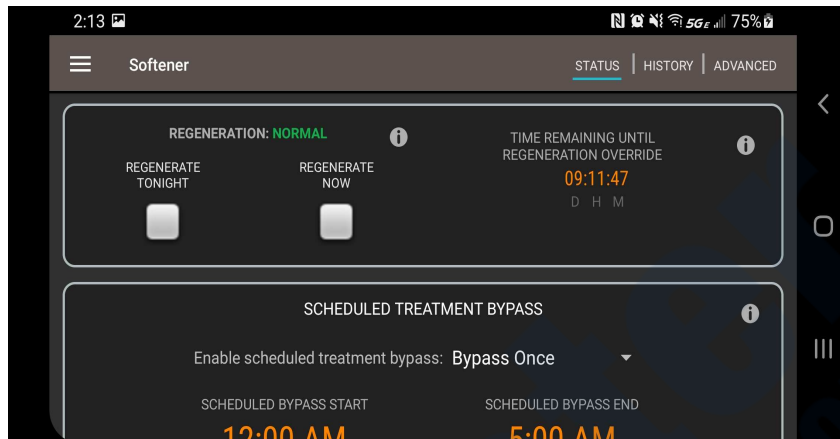
### Backwashing Filter

Position	Color
Backwash	Purple
Rest	Light Yellow
Rapid Rinse	Light Blue



## System Regeneration

### Starting a Regeneration Cycle



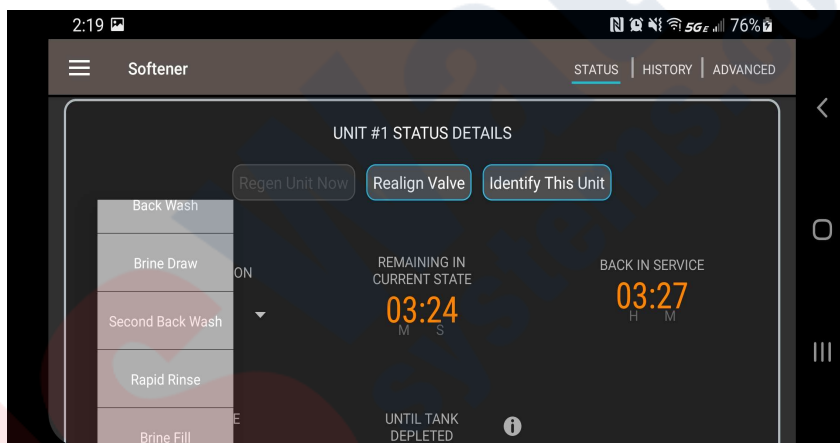
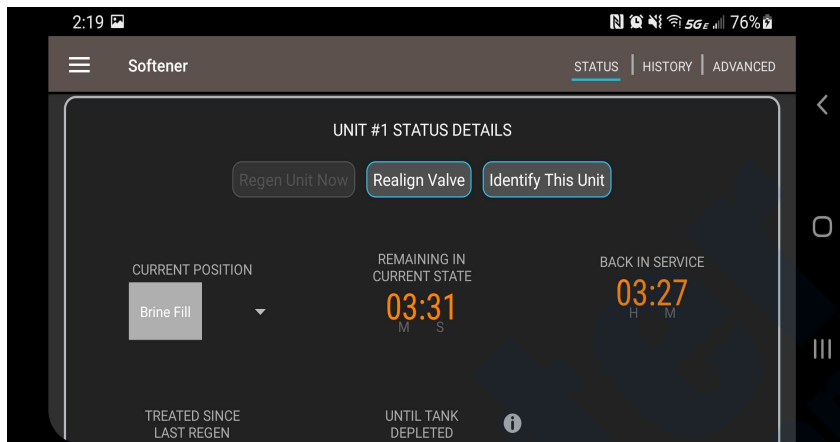
#### 1. To Start **Delayed Extra Cycle**

- Go to the Navigation menu in the DROP app and select the Devices tab. From there, select the system to be regenerated.
- Select the checkbox with "Regenerate Tonight" above it. Regeneration cycle will initiate at the next designated regeneration time.

#### 2. To start **Immediate Extra Cycle**

- Go to the Navigation menu in the DROP app and select the Devices tab. From there, select the system to be regenerated.
- Select the checkbox with "Regenerate Now" above it. Regeneration cycle will initiate immediately.

3. To **Fast Cycle** thru regeneration, complete step 2 and do the following
- Move up to the "Status Details" portion of the screen and select the "Current Position" drop down selection. Choose a step in the regeneration process to immediately move to that step.



## System Start-Up

1. With the bypass in the bypass position, initiate an immediate regeneration on the 1st valve in the system. This will advance the valve to the backwash position.
2. Once the valve has stopped moving and is in the backwash position, change the bypass state to allow water to flow through. Water should slowly enter the tank.
3. Allow the system to backwash and push all the air out through the drain.
4. The valve will automatically move to the Brine Draw cycle when the backwash cycle is complete. Skip this cycle by selecting the "Rapid Rinse" option from the "Current Position" drop down menu in the DROP app.
5. This will move the valve to Rapid Rinse. Allow the unit to rinse for the entire cycle. The water in the drain should be running clear by the end of the Rapid Rinse cycle.
6. The valve will then advance to the Refill cycle. Allow the system to refill for the entire cycle. This will ensure there is no air in the brine line and that it is primed for the system's first regeneration.
7. Once the system has returned to the Service position after the Refill cycle, the 1st valve is installed and ready for use. Repeat this process for each valve in the system.

## About The System

### Safety Float

The brine tank is equipped with a safety float which prevents your brine tank from overflowing as a result of a malfunction such as a power failure.

### New Sounds

You may notice new sounds as your water softener operates. The regeneration cycle lasts up to 120 minutes. During this time, you may hear water running intermittently to the drain.

### Automatic Hard Water Bypass During Regeneration

The regeneration cycle can last 30 to 180 minutes, after which soft water service will be restored. During regeneration, hard water is automatically bypassed for use in the household. Hot water should be used as little as possible during this time to prevent hard water from filling the water heater. This is why automatic regeneration is set for sometime during the night and manual regeneration's should be performed when little or no water will be used in the household. Normal regeneration time is 2:00 AM. If a No Hard Water Bypass valve was purchased instead, water flow will stop while the valve is in regeneration so no hard water will run through the pipes.

## **Maintenance**

### **Adding Salt**

Use only Extra Course Grade or Crystal Solar Salt (99.8% Pure) water softener salt. Check the salt level monthly. It is important to maintain the salt level above the water level. Salt should be filled, used completely, and refilled. Salt should not be “topped off” each month. It is better to completely fill the tank with salt (full is 2” below the top of the white safety float tube in the tank”) then use the salt until water can be seen on top of the salt. Then refill the salt.

### **Salt Bridging**

Humidity or wrong type of salt may create a cavity between the water and the salt. This action, known as “bridging”, prevents the brine solution from being made, leading to the water supply being hard.

If salt bridging is suspected, carefully pound on the outside of the brine tank or pour some warm water over the salt to break up the bridge. This should always be followed up by allowing the unit to use up any remaining salt and then thoroughly cleaning out the brine tank. Allow two hours to produce a brine solution, then manually regenerate the softener.

### **Running Out of Salt**

In the event that the system runs out of salt, refill the system with salt and remove the lid on the white brine safety tube in the salt tank. Then pour 5 gallons of warm water in the white brine safety tube and put the lid back in place. Allow the water to sit in the tank for about 4 hours. Then manually regenerate the system. Once the system is done regenerating, repeat the process allowing 4 hours between manual regenerations. This will bring the resin back to full charge and ready to work automatically again.

## Sanitizing Procedure

Care is taken at the factory to keep your water softener clean and sanitary. Materials used to make the softener will not infect or contaminate your water supply and will not cause bacteria to form or grow. However, during shipping, storage, installing and operating, bacteria could get into the softener. For this reason, sanitizing as follows is suggested when installing.

### Sani-System Liquid Sanitizer Concentrate



*Item# 710-SS-96WS—Softener Sanitizer 0.25 fl.oz*

**Be sure to complete all installation steps including programming.**

1. For effective and complete sanitization, Sani-System Liquid Sanitizer Concentrate is recommended. Pour one 0.25 fl. Oz. package into the brine well located in the cabinet or brine tank.
2. Start an immediate regeneration.
3. The Softener Sanitizer Solution is drawn into and through the water softener to sanitize it. This sanitizing regeneration is over in about two hours. Then, **soft water** is available for your use.

**NOTE:** Sanitizing is recommended by the Water Quality Association for disinfecting. On some water supplies, they suggest periodic sanitizing.

## Warranty

**US Water Systems** warrants that your new water conditioner is built of quality material and workmanship. When properly installed and maintained, it will give years of trouble free service.

**Seven Year Valve and Electronics Guarantee** - US Water Systems will replace any part on the valve or electronics which fails within seven years 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 and then the warranty period shall be from the date thereof.

**10 Year Warranty on Resin, Mineral Tanks and Brine Tanks** - US Water Systems will provide a replacement resin, mineral tank or brine tank to any original equipment purchaser in possession of the Matrixx softener that fails provided that the it is at all times operated in accordance with specifications and not subject to freezing.

**General Provisions** - US Water Systems 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, lightning strikes, humidity or heat will not be covered under warranty.

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 conditioner. No responsibility is assumed for delays or failure to meet these warranties caused by strike, government regulations or other circumstances beyond the control of US WATER SYSTEMS, INC..

To obtain warranty service, call or write: US WATER SYSTEMS, INC. 1209 Country Club Road Indianapolis, IN 46234 (317) 271-8600. ANY IMPLIED WARRANTIES OF FITNESS OR MERCHANTABILITY ARE LIMITED TO THE TERMS OF THIS EXPRESSED WARRANTY AND THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THOSE HEREIN. US WATER SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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 OF US WATER AND PAYMENT OF STANDARD TRANSFER FEE.

**Matrixx** is a product of US Water Systems.