























# System Programming & Adjustments

The Hydropro Water Conditioning System incorporates a highly sophisticated microprocessor control system, making it as efficient and reliable as possible. All system settings are pre-programmed at the factory and then carefully calibrated by your installer for your exact water chemistry.

Your Hydropro Water Conditioner Control incorporates EEPROM memory and a 24-hour power backup system, which means that your system programming never has to be reset, even in the event of an extended power outage.

End-user programming is generally not necessary. If you need to change programming, the following procedure should be used:-

1. Press the FOUNTAIN button to **enter programming mode**.
  - Use the UP & DOWN buttons to set the **current time of day**.  
The time of day is very important to the correct operation of the system.
  
2. Press the FOUNTAIN button.
  - Use the UP & DOWN buttons to set the **current water hardness level**.  
The water hardness level should only be changed after a complete water analysis has been performed.
  
3. Press the FOUNTAIN button.
  - Use the UP & DOWN buttons to set **day override**.  
The day override setting is designed to help protect your system from potential bacterial growth. This setting allows you to choose how often a mandatory regeneration is performed to ensure that the water is not allowed to stagnate. 7 Days is the factory recommended setting.

4. Press the FOUNTAIN button.
  - Use the UP & DOWN buttons to set the **regeneration time**.

When the system determines that regeneration is necessary, it will clean itself at the designated regeneration time. During regeneration, the system bypasses itself automatically from the house water to protect you from the salt and hydroclear used during the cleaning process. The regeneration time should be scheduled during a period of no water usage activity, such as 2am in the morning.

5. Press the FOUNTAIN button.
  - Within 10 Seconds, system will start a **manual regeneration cycle**. This will clean the system and reset the capacity counter. During a cycle, the individual steps can be interrupted and advanced to the next step by pressing the STAR button. Interrupting a regeneration cycle is not recommended.

6. Press the FOUNTAIN button one more time to exit programming.

# System Diagnostics Mode

System Diagnostic Mode is designed to help you or your Authorized Intermountain Water Repair Agent understand the dynamics of the operation of your system.

To enter diagnostics mode, press the **UP ARROW** for 5 seconds

The system will display various program statistics and settings as follows: -

Press the **STAR** button to view the next setting/statistic

**Clean XXX Days ago**

The number of days since the system last regenerated.

If 0 (zero) is displayed, then the system cleaned today

**In Service XXXX Days**

The number of days since the system was originally installed

**Number of Clean XXXX**

The number of regenerations since the system was installed

**Total volume XXXX GAL**

The total gallons of water that have passed through the system since original installation

**Last Clean XXXX GAL**

The number of gallons remaining at the last cleaning time

**Peak Flow xx gpm**

The peak rate at which you have ever used water in your home since installation of the system.

**Average Volume XX GL/Day**

The average consumption of water per day in your home.

**System XXXXX Grain**

The compensated hardness removal capacity of the system based on local water chemistry conditions.

**Hardness XX Grn**

The tested water hardness, measured in grains per gallon

**Reserve Variable**

The system is programmed to use fuzzy logic technology to learn your water usage lifestyle and adjust itself as necessary.

**Regen @ 11:00pm**

The time at which the system begins the cleaning process. Your home still has filtered water for three hours of the cleaning process

### **Override XX Days**

An anti-bacterial cleaning cycle, designed to help protect your system from bacteria and keep the water tasting and feeling fresh. The default setting is 7 days.

### **Tank Fill**

The base programmed time setting for the amount of water to fill the tank with. The system will use fuzzy logic to determine exactly how much of the base amount it will use. The system uses filtered water to fill the tank, ensuring your tank stays cleaner longer.

### **Percolation**

The salt, water and hydroclear are allowed to percolate together to create the precise concentration of regenerant to clean the system as efficiently as possible.

### **Cleaning**

The system injects a precise amount of the regenerant into itself to begin the cleaning process.

### **2<sup>nd</sup> Cleaning**

After a designated rest period, the system begins cleaning again, purging the system of trapped contaminants and preparing itself for the backwash cycle.

### **Backwash**

After a specific delay, the system backwashes itself to agitate the cleaning media, and physically clean itself.

### **Recovery**

After another rest period, the system recovers itself to ensure uniform water taste and feel.

### **Units English**

The system is programmed to operate using US English measurements

### **Std Meter**

The system is programmed to use a standard Intermountain Water metering device.

### **Capacity: Hardness**

The system is programmed to use hardness as the calibration method

### **Regen Delayed**

The system will wait until the designated cleaning time before cleaning itself, ensuring that your supply of good filtered water is uninterrupted during the day.

**Valve Type : 4**

Factory Setting

**Power Outage XX**

The number of power outages sensed by the system since original installation.

**Power Surge/Sage XX**

The number of power surges and/or sags since original system installation.

**WFXX WaterF2.X**

The system software revision & default program setting code

**EXIT**

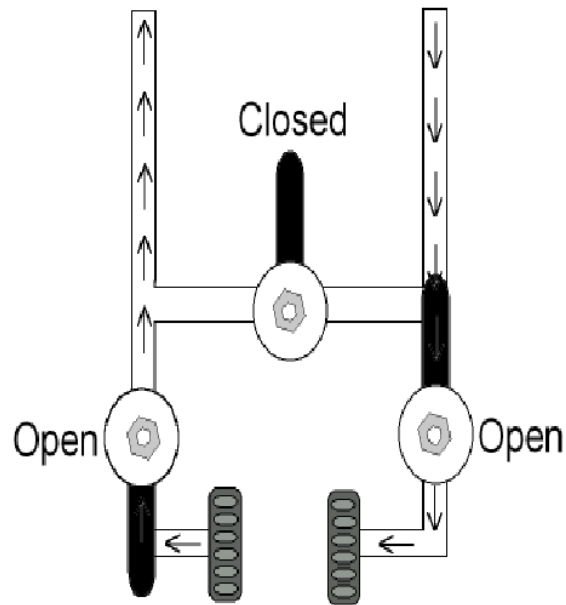
Press the UP arrow to exit diagnostics mode or scroll though the settings again with the FOUNTAIN button

## When and How to Bypass your Water Fountain System

Your Hydropro Water Conditioning System is supplied with a code compliant bypass device. This bypass allows the Hydropro to be completely isolated from the household plumbing.

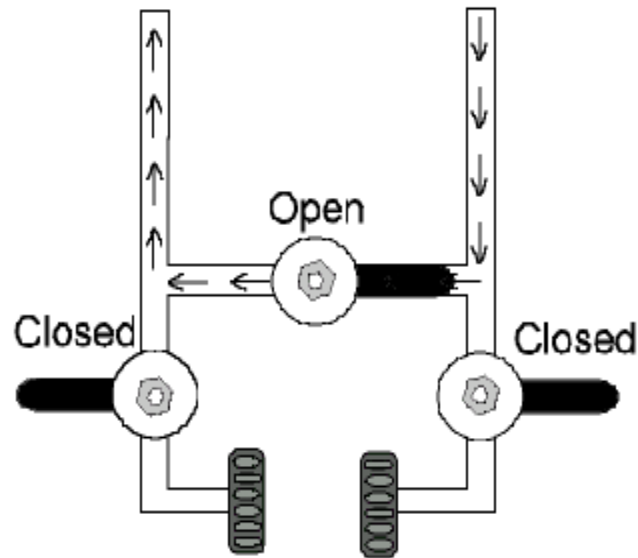
### Normal System Operating Mode

Turn the left and right handles so they are parallel with the pipe; and turn the top handle so it is perpendicular to the pipe as shown below. Water enters the system on the right side, and exits the system on the left side.



### System Bypass Mode

Turn the left and right handles so they are perpendicular to the pipe; and turn the top handle so it is parallel to the pipe as shown below. Water enters the bypass on the right side, and exits the bypass on the left side. Water does not pass through the system at any time.



### When should I bypass my system ?

Your system should be bypassed if any of the following occurs:-

- System leaks
- Unusual noises from system

# System Installation & Startup Procedures

1. Clear the installation area and sweep the area where the brine tank will be placed.
2. Test home water pressure and make sure it is 75psi static or below.
3. Check to confirm that the water heater has adequate heat expansion protection to protect the Conditioner from hot water damage.
4. Connect to house plumbing using code approved methods & materials and ensure that a bypass device is installed.
5. Install surge protector or UPS for Conditioner.
6. Plug Conditioner in to power.
7. Install 3/8" ID PEX pipe or equivalent to the Conditioner drain fitting and terminate to drain in a code-approved manner.
8. Connect brine tank to Conditioner using 3/8" OD polytube supplied with brine tank
9. Bypass Conditioner.
10. Run bathtub cold to purge piping of debris and chemical residue from installation, this will take approx. 5 minutes at 3gpm.
11. Leave bathtub running and slowly open the inlet valve to the water Conditioner.
12. Slowly open the outlet valve from the water Conditioner.
13. Observe flow of water from the bathtub. Water will become a dark amber color. This color is caused by the system disinfectant/preservative. Allow water to run until clear. Observe water for resin particles. If resin particles are found in the water, immediately bypass the system and call tech-support.
14. Turn off bathtub cold
15. Press the star button to enter programming mode
  - a. Set the clock with the up & down arrows, then press star
  - b. Enter the measured water hardness at the installation location, then press star
  - c. Enter the anti-bacterial override interval ( 7 is the default), then press star
  - d. Set the time of regeneration, then press star
  - e. The system will countdown for 10 seconds before it begins a regeneration.  
Press star to cancel, or let it begin regeneration.
16. Observe the system during each cycle and advance to the next cycle by pressing the star button
17. Leave the system in the Refill cycle to fill the brine tank with water.

## **Intermountain Water** **Limited Lifetime Warranty**

### ***1<sup>st</sup> year of ownership***

This residential water system is warranted as to workmanship and material for a period of one year from date of original installation at the original installation site, if properly installed by an Intermountain Water Certified Installer. Should any component in your system prove defective in the first year, it will be repaired, rebuilt or replaced at our option, provided it is returned directly to us.

***After the 1<sup>st</sup> year of ownership***, should any component in your system prove defective after the first year, it will be repaired, rebuilt or replaced at our option for a maximum charge of \$50.00, provided it is returned directly to us. Labor, transportation, shipping or other charges incurred in the diagnosis, replacement or repair of defective components are not covered by this warranty.

If you choose not to send a defective component back to us, repairs to your system can be conducted in your home by a factory authorized service technician if your home is within the operating radius of an Intermountain authorized repair center. This warranty does not cover transportation, shipping, diagnosis, replacement and repair charges resulting from your in-home repair request.

**Intermountain Water or its subsidiaries will not be held responsible for loss or damage caused by any defective component.**

**This warranty must be presented at time of claim and all claims must be presented within 30 days of occurrence.**

This warranty is void if your water system is not installed in compliance with prevailing plumbing codes, or if the influent water temperature is hotter than 90°F or where the static water pressure is less than 25psi, or more than 90psi. Intentional/malicious damage, misuse, neglect, unauthorized modifications or accidental damage to the system are not covered by this warranty. This warranty does not cover damage caused by pressure surges, water hammer, power surges or sags, lightning, fire, flood, freezing, earthquake, acts of God or other casualty.

Your water system is subject to normal wear and tear during its usable service life.

Wear and tear is not regarded as a product defect and is not covered by this warranty.

Your water system includes a Hydroclear performance-enhancing injection system in the salt tank. The Hydroclear performance-enhancing additive is essential to proper functioning of your system. If Hydroclear is not added to the injection system at the prescribed interval in your owner's manual, this warranty will be void.

**This limited lifetime warranty is only valid if registered within 10 days of initial installation.**

**If unregistered, this warranty is only valid for 1 year from the date of original manufacture.**