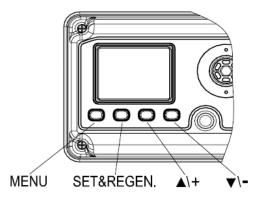
# System Start-Up

## **Start-up Instructions**

- 1. Plug the valve into an approved power source.
- 2. When power is supplied to the control, the screen will display "Advancing to Service Wait Please" while it finds the service position.
- 3. Start an Immediate Manual Regeneration. See instructions on page 11. The valve will immediately start moving to the BACKWASH position.
- 4. Open the inlet on the bypass valve slowly and allow water to enter the unit. Allow all air to escape from the unit before turning the water on fully then allow water to run to drain for 3-4 minutes or until all media fines are washed out of the softener indicated by clear water in the drain hose.
- 5. Press any button to advance to the RINSE position. Check the drain line flow. Allow the water to run for 3-4 minutes or until the water is clear.
- 6. The valve will automatically advance to the SERVICE position after the RINSE cycle is complete. Open the outlet valve on the bypass, then open the nearest treated water faucet and allow the water to run until clear, close the tap and replace the faucet screen.
- 7. Program time, date, and number of days between regenerations into controller using Programming Instructions

## **Programming Instructions**



## **Key Pad Configuration**

MENU Enter or exit the system menu. Press and hold the button for 3 seconds to

unlock the screen.

SET/REGEN Press this button to select a program or to save the settings. Press and hold

the button for 3 seconds to initiate a manual regeneration.

DOWN / UP Press these buttons to increase or decrease the value of the settings. Press the

buttons to enter the previous or the next menu.

## **Change Setting Procedure**

- 1. Press the MENU button to enter and exit the menu.
- 2. Press the UP or DOWN button to select the parameter.
- 3. Press the SET/REGEN button to enter or activate the parameter for editing.
- 4. Press the UP or DOWN button to change the value.
- 5. Press the SET / REGEN button to save the value.
- 6. Press the UP or DOWN button to select other parameters.
- 7. Follow the above steps to change other parameters.
- 8. Press the MENU button to save and exit settings.

You can only change flashing parameters.

### **Main Display**

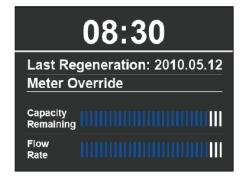
When power is first supplied, the valve may take up to two minutes to find the service position. During this time the valve will show:



Do not touch any buttons at this time. When the valve reaches the service position it will display:



Calendar Clock Mode



Meter Mode (Meter Immediate, Meter Delay, Meter Override)

This page shows the current time, last regeneration day, and the regeneration mode. The number of blue bars represent the capacity remaining and the flow rate.

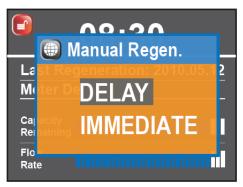
The screen will be locked after 3 minutes. To unlock the screen press and hold the MENU

key for 3 seconds.



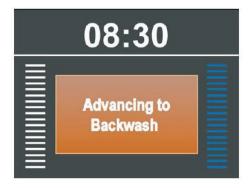
#### **MANUAL REGENERATION**

Press and hold the SET REGEN button for 3 seconds to enter the manual regeneration page. The screen will display:



- 1. If you choose DELAY, the valve will start a regeneration at the next regeneration time (default is 2:00 AM).
- 2. If you choose IMMEDIATE, the valve will start a regeneration immediately.

When a regeneration is started, the screen will display:



When the valve reaches the Back Wash position. The screen will display:



When Back Wash remaining time reaches zero or any button is pressed, the valve will advance to the Rinse position.

#### **Main Program**

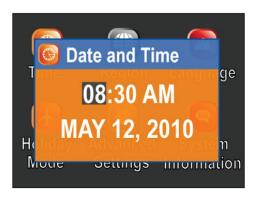
Press the MENU key to view the main page.



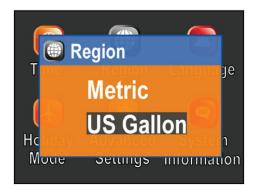
- 1. Press the MENU button to enter and exit the menu.
- 2. Press the UP or DOWN button to select the parameter.
- 3. Press the SET/REGEN button to enter or activate the parameter for editing.
- 4. Press the UP or DOWN button change the value.
- 5. Press the SET / REGEN button to save the value.
- 6. Press the UP or DOWN button to select other parameters.
- 7. Follow the above steps to change other parameters.
- 8. Press the MENU button to save and exit settings.

You can only change flashing parameters.

Choose Time icon to adjust the current date and time.



Choose Region icon to change the display unit of measures. Choose Language icon to change the display language. Note English may be only option depending on version of software.





Choose Holiday Mode icon to activate it. The system will perform a brief back wash and rinse every 7 days. When turning Holiday Mode ON, remember to add the end date. This will insure the valve will return to normal operation on that date.



Advance settings has two options. Choose manual settings.



In Regen Mode you can select four different regeneration modes.



**Calendar Clock:** the unit will initiate regeneration at the next pre-set regeneration time based on the interval of days between regeneration days.

**Meter Immediate:** the unit will initiate regeneration immediately after the volume remaining reaches zero.

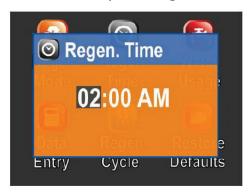
**Meter Delayed:** this is the most common setting. When the volume remaining reaches zero, the system will initiate regeneration at the next preset regeneration time.

**Meter Override:** when the volume remaining reaches zero, the system will initiate regeneration at the next pre-set regeneration time. If the days between regeneration are reached before the volume remaining reaches zero, the system will override the meter setting and initiate regeneration.

The menu options will depend on the type of regeneration mode selected.



Choose Regen Time to adjust the time of day for a regeneration to occur.



Choose Regen. Days to adjust the interval (days) between regenerations.



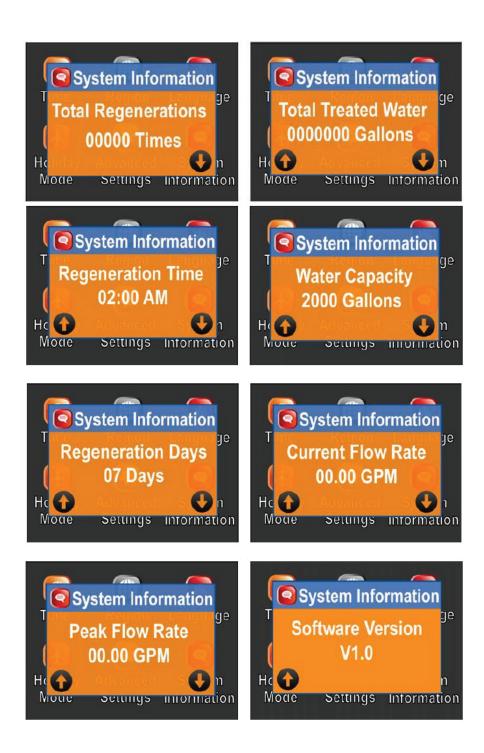
Choose Regen. Cycle to adjust the length of time for each cycle. Note that filter valve mode only has two cycles: Backwash and Rinse.



Restore Defaults will erase all the current settings. Be careful when choosing this since you will lose all the current settings and the default settings loaded back in may not be the correct settings for your system.



System Information will provide diagnostic information about your system. Hold the SET/REGEN button for 3 seconds to reset values to zero.



# **About The System**

## **Control Operation During A Power Failure**

In the event of a power failure, the valve will keep track of the time and day for 48 hours. The programmed settings are stored in a non-volatile memory and will not be lost during a power failure. If power fails while the unit is in regeneration, the valve will finish regeneration from the point it is at once power is restored. If the valve misses a scheduled regeneration due to a power failure, it will queue a regeneration at the next regeneration time once power is restored.

## **Automatic Hard Water Bypass During Regeneration**

The regeneration cycle can last 30 minutes after which filtered water service will be restored. During regeneration, un-filtered water is automatically bypassed for use in the household. Hot water should be used as little as possible during this time to prevent unfiltered water from filling the water heater. This is why automatic regeneration is set for sometime during the night and manual regenerations should be performed when little or no water will be used in the household.

Normal regeneration time is 12:00 AM.

#### **New Sounds**

You may notice new sounds as your filter operates. The regeneration cycle lasts up to 30 minutes. During this time, you may hear water running intermittently to the drain.

## **Regeneration Process**

Periodically the filter will require a back wash to clean the trapped particles and unpack the filter bed to restore the system flow rates. The table below explains the regeneration steps.

Step	Name	Description
#1		Fresh water is introduced to the bottom of the tank flowing upwards expanding
		the filter media to rinse out any dirt or small particles to the drain and to un-
		compact the bed to restore full service flow rates.
#2	l Rinse	Fresh water is introduced from the top of the tank flowing down through the
		filter bed rinsing any unfiltered water to the drain.