



**HYDROCOM**  
CONSERVE AND CONTROL

# HYDROCOM WATER CONTROLLER OWNER'S MANUAL & INSTALLATION GUIDE



## INTRODUCTION

Thank you for purchasing your Water Controller™ by Hydrocom. The product comes with a 2 year limited warranty, and we encourage you to take a few minutes to thoroughly read this owner's manual, and to save it for future reference. We also recommend that you teach everyone in your house how to use the product.

If you have any questions about the operation or installation of your product, please call the company you purchased it from, or you can reach us at 1-888-502-1102 or at [www.hydrocom.us.com/support](http://www.hydrocom.us.com/support).

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## REGULATORY COMPLIANCE INFORMATION - US AND CANADA

**UL Statement:** All of the components of your product that require UL certification are UL certified.

**FCC-United States and Canada:** This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference, and
- 2) this device must accept any interference received, including interference that may cause undesired operation.

The limits as outlined in Part 15, are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: 1) reorient or relocate the receiving antenna. 2) Increase the separation between the equipment and receiver. 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. 4) Consult the dealer or an experienced radio/TV technician for help.

**Modifications to this product not authorized by Hydrocom could void your right to use or operate this product by the FCC. This device and its antenna must not be colocated or operated in conjunction with any other antenna or transmitter. To comply with FCC RF exposure requirements, only use the supplied antenna.**

**Canada (IC) Statements:** This Category II radio communication device complies with Industry Canada Standard RSS-310, section B. The term (IC) before the radio certification number only signifies that the Industry Canada technical specifications were met.


## LIMITED WARRANTY

***The Aspen Water Group, LLC, DBA Hydrocom, has carefully tested and inspected the Water Controller™ before shipment, and hereby warrants our products to be free of defects in material and workmanship for a period of 2 years from the date of the original purchase.***

***During the warranty period Hydrocom shall, at its sole and absolute discretion, either repair or replace free of charge any of our products that prove to be defective upon inspection by Hydrocom, or its authorized service locations. This warranty does not cover claims for damage due to abuse, neglect, alteration, or attempted repair by unauthorized personnel, and is limited to failures arising during normal use that are due to defects in material or workmanship in the product.***

***Use of this product does not eliminate a property owners need for property insurance. In no event will Hydrocom be liable for incidental, consequential or other damages from the breach of any express or implied warranty, including among other things, damage to property, damage based on in convenience, or on loss of the use of the product, and to extent permitted by law, damages for personal injury. The liability to Hydrocom shall be limited to the replacement of the defective component or the entire product.***

## SAFETY AND OPERATIONAL INFORMATION

Please read the following safety and operational instructions before using your Water Controller™ by Hydrocom. Please keep these instructions for your reference. Additional warnings may be present on the product, packaging, or in the user instructions. This symbol  identifies and alerts the user to the presence of important safety warnings.

### GENERAL

Operating and storage temperature -20°F to 130°F.

### BATTERY WARNINGS

To avoid risk of explosion, fire or leakage of toxic chemicals, please observe the following warnings:

- Do not dispose of the product or batteries in a fire. Batteries can explode.
- Do not open or mutilate the batteries. There may be corrosive materials which can cause damage to eyes or skin and may be toxic if swallowed.
- Always store batteries where children cannot reach them.
- Use only the battery type supplied by Hydrocom that came with your product. Observe the correct polarity when installing the battery. Remove the battery if it will not be used for an extended period: remove a spent battery promptly.
- **Recycling:** Your product and batteries must be recycled or disposed of properly. Contact your local recycling center for information on proper disposal.

### VALVE WARNINGS

**It is illegal, and against every building and safety code in North America, to install the automatic water shut off valve in any manner such that:**

- **By closing the automatic water shut off valve a fire sprinkler system would be unable to work correctly.**
- **By closing the automatic water shut off valve a fire sprinkler system would be unable to function at its fully designed capability.**
- **By closing the automatic water shut off valve, any life safety device is rendered ineffective or its operation is minimized, or compromised in any way.**

**Do not insert anything inside the valve while it is not connected to a water supply. Serious injury and or valve damage may occur.**

A licensed plumber must install the automatic water shut off valve and flow meter.

Install the automatic water shut off valve upstream of an irrigation supply line, or any other water supply line that could be adversely affected by a loss of its water supply.

## **ENCLOSURES**

The enclosure that houses the motor on top of the automatic water shut off valve has a NEMA 4 rating. This means that it is water resistant and splash proof. As such, although the enclosure can withstand moderate weather outside of a residence, Hydrocom recommends that the valve be installed indoors.

The flow meter has a similar rating, and Hydrocom also recommends that the flow meter be installed indoors. If installed outside, we recommend that silicone be applied to the flow meter cable where it engages the flow meter body.

The Control Panel is not NEMA 4 rated and must be installed indoors. The wireless transmitters are also not NEMA 4 rated and they must be installed indoors.

## **ELECTRICAL**

The Water Controller™ must only use the power supply that was supplied with the product. The power supply is designed specifically for this product and use of a different power supply will effect performance. The power supply is a FFC, Class II, section B, UL approved device.

The Water Controller™ has 16 inputs on the back of the control panel. The inputs are numbered from looking at the back of the controller, from the left to right. Contacts 1-9 have a maximum rating of 32 VAC, and **a maximum rating of 48 VDC.**

**Do Not Under Any Circumstances Plug 110/115/120/220/ or 240 volt power into any of the electrical connections on the product!**



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## **PRODUCT CONTENTS**

Thank you for the purchase of your Water Controller™ by Hydrocom. The product comes with the following components:

Quantity	Description
1	1" Full Port Low Lead Ball Valve
1	1" flow meter kit and fittings
2	Sensors
2	Sensor detectors
2	packs of 4 each AA batteries
1	Controller
1	Antenna
1	Instruction Manual
1	Power Supply
1	Hardware mounting kit for the control panel and sensors
1	Mounting Bracket

**[www.hydrocom.us.com](http://www.hydrocom.us.com)**

## INSTALLING THE VALVE AND FLOW SENSOR

### VALVE WARNINGS

It is illegal, and against every building and safety code in North America, to install the automatic water shut off valve in any manner such that:

- **By closing the automatic water shut off valve a fire sprinkler system would be unable to work correctly.**
- **By closing the automatic water shut off valve a fire sprinkler system would be unable to function at its fully designed capability.**
- **By closing the automatic water shut off valve, any life safety device is rendered ineffective or its operation is minimized, or compromised in any way.**

Do not insert anything inside the valve while it is not connected to a water supply. Serious injury and or valve damage may occur.


A licensed plumber must install the valve and flow sensor.

Install the automatic water shut off valve upstream of an irrigation supply line, or any other water supply line that could be adversely affected by a loss of its water supply.

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Please follow the attached diagram for the recommended installation of the Water Controller™. Please note the following:

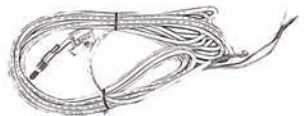
The ball valve is bi-directional, and it does not matter which side of the valve is the input or output.

The flow meter is directional, and look for the  arrow on the flow meter. Make sure the water flow corresponds to the arrows direction.

Please insert the flow meter unions over the pipe before you solder the flanges into the water supply line! Also, we recommend that the unions be slid at least 18 inches from the solder area, as during the soldering process the heat can damage the unions.

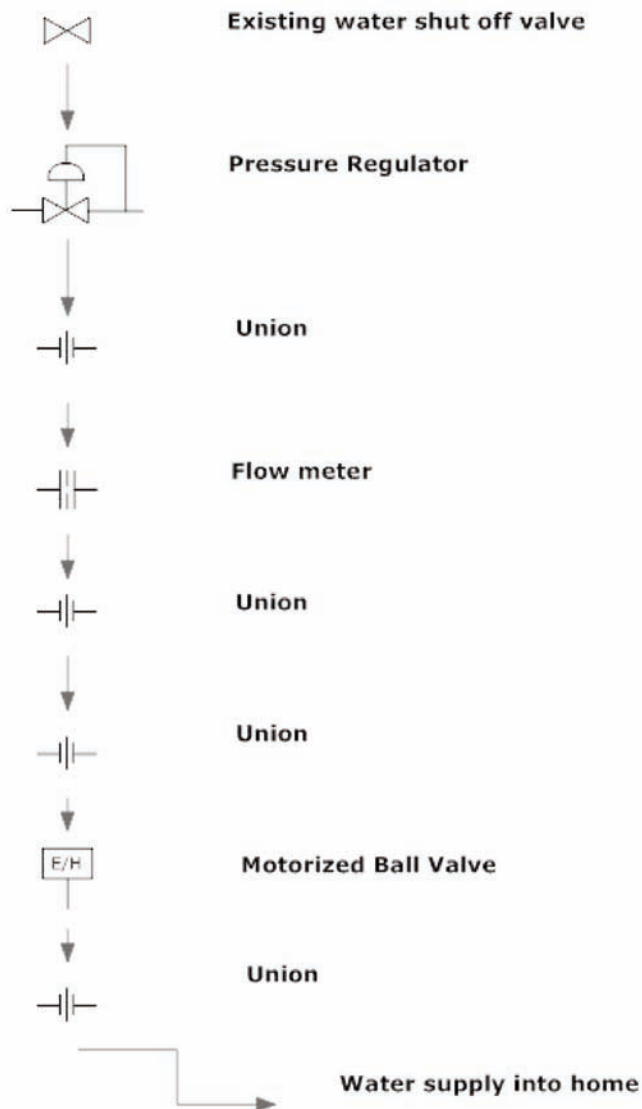


Once the installation is complete, you will need to insert the flow meter cable clip through the top of the flow meter body. The cable clip will engage the clip receptacle on the flow meter. You can use silicone to weather proof this connection, but do not use super glue.



Please follow the flow chart to ensure proper installation occurs. Although many installations may vary, please rely on the expertise of a certified plumber for the correct installation for your home.

### Ball valve and Flow Meter installation



## INSTALLING THE WATER CONTROLLER™ CONTROL PANEL

Your Water Controller™ has a number of electrical connections that need to be performed in order for the product to work correctly.

**Battery Backup:** Your controller comes with 4 AA batteries which provide backup power for the Water Controller™ in case of power outages. Please insert the batteries with the negative (-) or flat end of the battery touching the spring on the battery pack. In the event that the controller runs on battery power, the controller has plenty of power to open and close the valve several hundred times. Also, when in battery power, the controller turns off the graphic display to save power, however, the display will operate for 30 seconds after you touch any button when you are in battery power mode. The battery mode is a backup safety feature, we recommend that you run the controller with the electrical power supply.

**Power Supply:** Your Water Controller™ runs on 5 volts, and as such it is a low voltage product. However, the power converter is a UL approved class II section B FCC approved device. Please insert the power connection plug into the bottom of the controller to run on AC power.

### Connecting to an alarm panel:

The back of the controller has 16 screw terminal connectors, they are as from left to right while looking at the back of the controller, as follows.

- 1- R1A Normally Open dry contact
- 2- R1A Normally Closed Dry Contact
- 3- R1A Common Contact
- 4- R1B Normally Open dry contact
- 5- R1B Normally Closed Dry Contact
- 6- R1B Common Contact
- 7- R2A Normally Open dry contact
- 8- R2A Normally Closed Dry Contact
- 9- R2A Common Contact

Terminals 1-6 both report on Level One events: A leak alarm, and flow exceeded alarm, and a temperature alarm, and these terminals are used to send a signal to other equipment such as a home alarm.

Terminals 7-9 are used to report on level Two events: Low battery alarm on a transmitter, low battery alarm on the Control Panel, a service reminder, and also a communication failure from a transmitter.

Since these alarms can be less important, the controller has been design such that these two levels of alarms can be distinct.

### Connecting the Valve:

10- Valve (-) black wire

11- Valve (+) red wire

### Connecting the flow sensor:

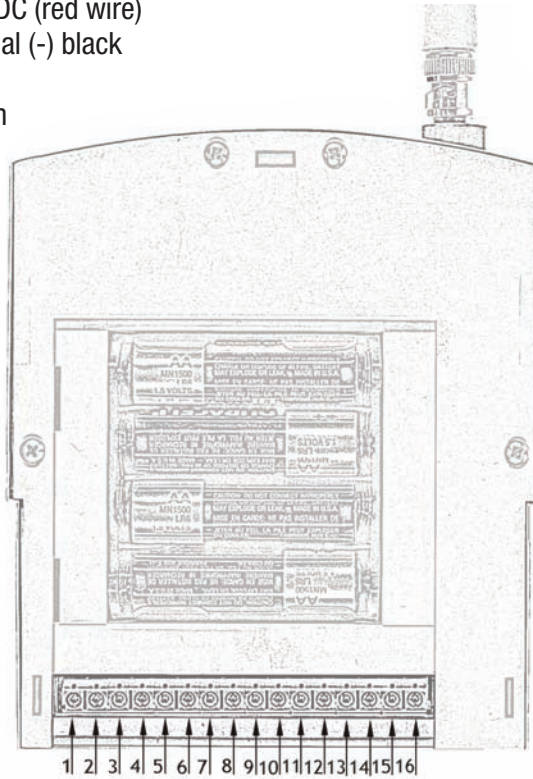
12-Flow meter +5VDC (red wire)

13- Flow meter signal (-) black

14- shielded ground

15- unshielded drain

16- UNUSED



Once the wiring has been completed, install the mounting bracket to the wall using 3 screws and anchors ( provided). Once the mounting bracket has been installed, simply insert the 3 mounting holes on the back of the controller into the three mounting tabs on the mounting bracket. Gently push down on the top of the controller to have the top bracket pin engage.

In the event that you have the ability to hide the valve and the flow sensor wires, a access hole through the mounting bracket and control has been provided, thus allowing the wiring to enter through the back and unnoticed. Of course, pull the wires through prior to connecting them to the controller!

We have provided a few tie wraps and wire mounts for your convenience, as they will help the installation look professional.

**Electrical:** 

The Water Controller™ must only use the power supply that was supplied with the product. The power supply is designed specifically for this product and use of a different power supply will effect performance. The power supply is a FFC, Class II, section B, UL approved device.

The Water Controller has 16 inputs on the back of the control panel. The inputs are numbered from looking at the back of the controller, from the left to right. Contacts 1-9 have a **maximum rating of 32 VAC, and a maximum rating of 48 VDC.**

**Do Not Under Any Circumstances Plug 110/115/120/220/ or 240 volt power into any of the electrical connections on the product!**

**Connecting the antenna:**

In order for the wireless transmitters within the sensor to communicate with the Controller, you will need to gently thread the antenna onto the antenna jack located on the upper left corner of the Controller.



## INSTALLATION AND OPERATION OF THE SENSORS

**General:** Your Water Controller™ comes with two sensors, and your controller can be expanded to operate up to 32 sensors. Additional sensors can be ordered from your service provider.

- The sensors are powered by 2 AA batteries ( included) and should have a life expectancy of 3-5 years.
- The sensors cannot be activated by high humidity.
- The sensor can detect moisture down to 2ppm.
- The sensors also detect low temperature. In the event that your home obtains an inside temperature of 40 degrees for over 10 minutes, the low temperature will be communicated to the controller. If you want to turn the temperature feature off, simply open up the sensor, and install the Hydrocom SBJ on the circuit board locator J2 in the bottom right corner.
- The sensors have a line of sight range of 600 feet, internal range is dictated by numerous factors, such as metal, glass, and other radio transmission inhibiting material. As a result, we display RSSI ( receiver signal strength indicators in the main menu/sensor/display program/ down cursor menu.
- The sensors are always active, and they check in with the controller at least 62 times per day. When they check in, the sensors inform the controller of their signal strength, their power availability, their serial number. In the event that an alarm condition exists, the sensor will transmit this information immediately.

### **Programming:**

In order for your controller to recognize each sensor, they need to be programmed into the controller. This is explained in the owner's manual, and even on screen. You do not have to program the sensors now, the Controller will prompt you to do this later on.

When you add a sensor to your controller, a unique ID number is uploaded into the controller. This allows your controller to operate solely on the sensors in your home, and your neighbors will not be affected.

### **Connections and placement:**

In order for your sensor to work correctly, the sensor detector needs to be installed into the 2 terminal screw connector in the back of the sensor. IT DOES **NOT** MATTER WHICH COLOR WIRE is inserted into either connector. Simply insert the stripped wire into the connection, and tighten the screw terminal, check to make sure the wire is securing by giving it a slight pull test.

## Connections and placement (cont'd):

The detector is light weight and we recommend that you use the enclosed sensor probe tie wrap anchors to adhere the probe to the floor.

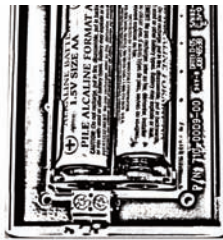
Since your controller uses a flow meter as additional protection against water damage, we suggest the sensors be used in areas where even a small leak can cause a lot of damage. So if you have a hardwood floor, or your laundry room is above another living area, we suggest that these are the best areas to locate your wireless sensors. This would include the dishwasher, refrigerator/icemaker laundry room, and water heater.



Sensor Detector ↑



Sensors ↑



Sensor detector connection

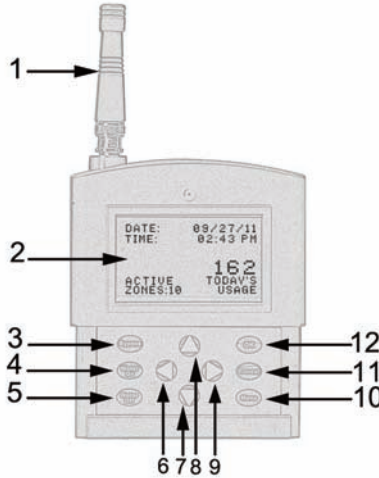
## Testing and Troubleshooting:

To test whether your sensor is working you can simply wet your thumb and bridge both probes on the detector for no longer than 60 seconds until the LED lights green. This will simulate a leak, and you can then go to the control panel and see the following message : "Leak Detected, \_\_\_name of sensor" valve off". Follow the on screen instructions to rearm the system. You will also have to make sure the probes on the detector have been dried.

## Testing and Troubleshooting (cont'd):

The other method to test is this: press menu/ sensors/ then display. Follow the on screen instructions to select the sensor you want to test. After you have selected this sensor, it should show you the number of checkins for the day, remember this number. Now, simply go to the sensor you want to test and push the black test button as many times as you'd like. Return to the Control panel and press menu/ sensors/ display/ down cursor and all of the information will be displayed.

## PROGRAMMING AND OPERATION OF THE WATER CONTROLLER™



- |                    |                     |                     |
|--------------------|---------------------|---------------------|
| 1- Antenna         | 5) Water Off Button | 9) Right Cursor     |
| 2- Graphic Display | 6) Left Cursor      | 10) Menu Button     |
| 3- Bypass Button   | 7) Down Cursor      | 11) Cancel Button   |
| 4- Water On Button | 8) Up Cursor        | 12) OK/Enter Button |

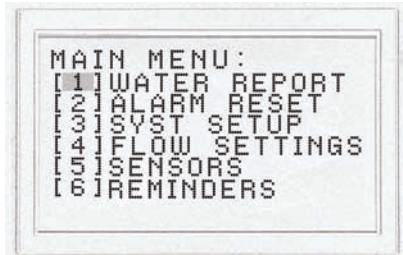
**Initialization:** Prior to programming your Controller we recommend that you have completed all of the other steps outlined in this manual.

Once the batteries have been installed the controller will power up, but please wait until you have connected the power supply before continuing. Please have your sensors fully assembled as outlined in the previous chapter.

The Controller will display Initial system set up, press ok to continue. Follow the on screen prompts to enter the time, date, the company provider ( if you don't want to display this information, press Ok). The last step of the initial system set up is to program the sensors. You can do this now, or later, and refer to main menu section 5- adding sensors.

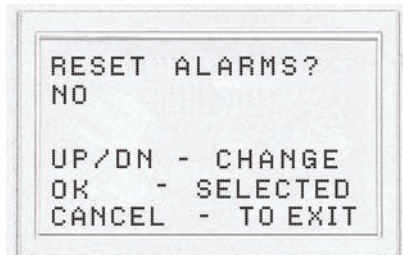
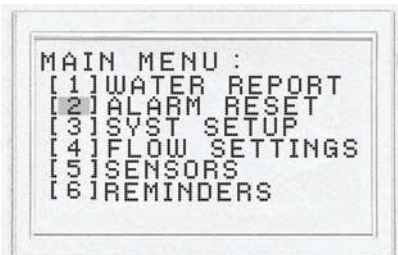
### MAIN MENU OPTION #1:

**Water Report:** Press the menu button (#10) and then select Option 1 "Water Report" by pressing the OK Button (#12). The Controller generates a water report that shows you a) your average water usage per day, b) water usage for the month, and also the water usage for the year.



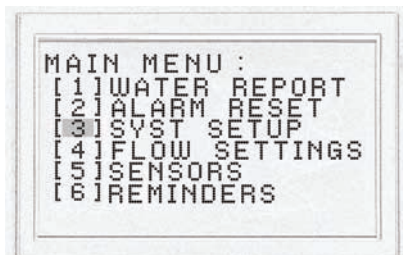
### MAIN MENU OPTION #2:

**Alarm Reset:** In the event that your Controller detects an alarm, the cause of the alarm will be displayed on the Graphic Display (#2). In order to reset the Controller to normal operation, press the Menu Button (#10), then push Cursor Down Button (#7) until option 2-"alarm reset" is highlighted, then push OK Button (#12) to enter the alarm reset menu.



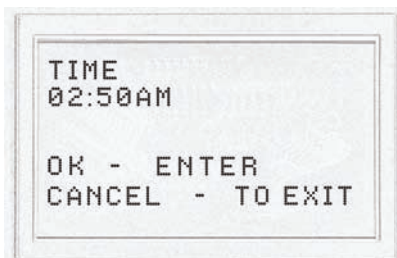
### MAIN MENU OPTION #3:

**System Set-Up:** Your Water Controller needs to be programmed in order for it to work correctly. In order to program the Controller, press the Menu Button (#10) by pushing Cursor Down Button (#7) until select option 3 "system set up" is highlighted, then push OK Button (#12) to enter the System Set Up Menu.



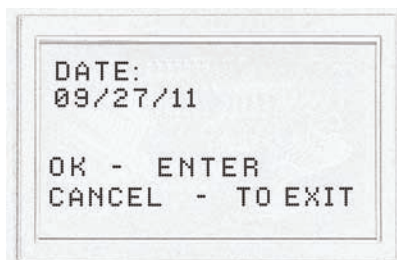
### **System Set-Up – Entering the Time:**

Option #1 Time will automatically be highlighted. Press OK Button (#12) and follow the on screen instructions to set the time.



### **System Set-Up – Entering the Date:**

After programming the time, the Controller will automatically return you to the "System Set Up" menu screen. Please push the down cursor (#7) until option #2 "Date" is highlighted. Follow the on screens instructions to set the date.



### **System Set-Up – Entering the Service Providers name and phone number:**

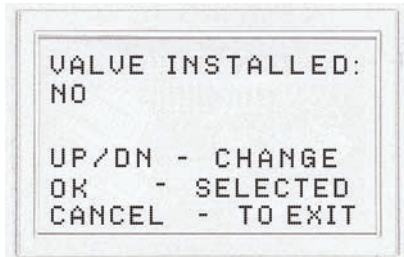
After programming the date, the Controller will automatically return you to the "System Set Up" menu screen. Please push the down cursor (#7) until option #3 "Provider" is highlighted. Follow the on screens instructions to set the providers name and phone number.



### **System Set-Up – Valve:**

After programming the Provider information, the Controller will automatically return you to the "System Set Up" menu screen. Please push the down cursor (#7) until option #4 "Valve" is highlighted.

As a safety feature, your Controller knows if you have a valve installed or, if you do not have a valve installed. In the event that your valve is disconnected, the controller will display the valve status. ***Please Note: Unless you are installing a system without a valve, you do not have to program this feature.***



### **System Set-Up – Defaults:**

After viewing the Valve Menu, the Controller will automatically return you to the "System Set Up" menu screen. Please push the down cursor (#7) until option #5 "Defaults" is highlighted. ***Please Note: Unless you want to clear all of the information you have programmed into the Water Controller, push cancel to exit.***

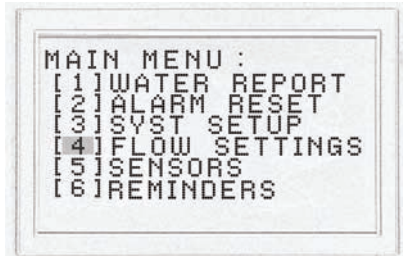
### **System Set-Up – SW Version:**

After viewing the Defaults Menu, the Controller will automatically return you to the "System Set Up" menu screen. Please push the down cursor (#7) until option #6 " SW Version" is highlighted. In the event that you need to view what software version is installed on your Water Controller, this feature will allow you to do so.

**Congratulations!! This Completes the System Set Up.**

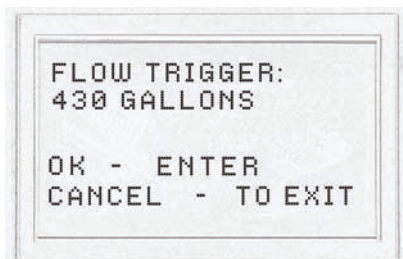
## MAIN MENU OPTION #4: FLOW SETTINGS

Press the menu button (#10) and then select Option 4" Flow Settings" by pressing the OK Button ( #12). The Controller will display two selections: 1) the home mode, and 2) the away mode.



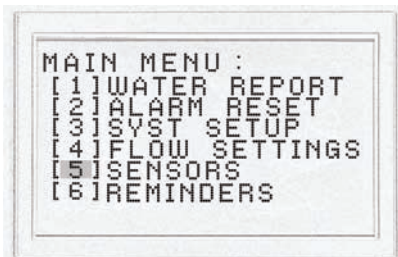
Select the home mode to Set the maximum continuous flow: The factory default setting ( flow trigger) for the maximum continuous flow that you allow to occur before the valve shuts off the water supply is preset to 30 gallons. This number can be changed by pressing the Menu button, then selecting option #2 by pressing the OK button, and then using the cursor button to move the number of gallons up or down. The controller will automatically return you to the flow screen, and then please select option #2) the Away mode.

The factory default setting ( flow trigger) for the maximum continuous flow that you allow to occur before the valve shuts off the water supply is preset to 5 gallons. This number can be changed by pressing the Menu button, then selecting option #2 by pressing the OK button, and then using the cursor button to move the number of gallons up or down.

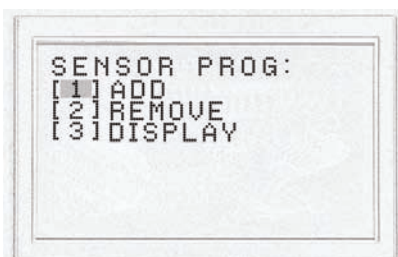


## MAIN MENU OPTION #5: SENSORS

Press the menu button (#10) and then push the Down Cursor Button (# 7) until "Option 5 Sensors" is highlighted, then press the "OK" button ( # 12).



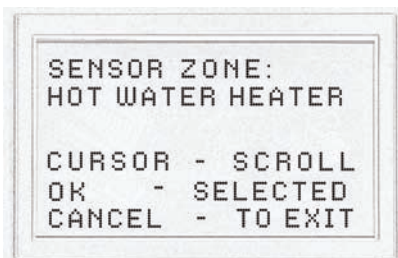
The Following Screen will appear:



### **Adding Sensors:**

Your Controller comes with 2 battery powered sensors. Take a moment to install the batteries and detector into the back of the transmitters. The sensor detector wire can be connected to either terminal, this will not harm the product.

Now, with the Controller in the Main Menu/ Sensors/ Sensors Program Add mode, press OK Button (#12) to add a wireless sensor. Press the black transmit button on the transmitter, and the following screen will appear:

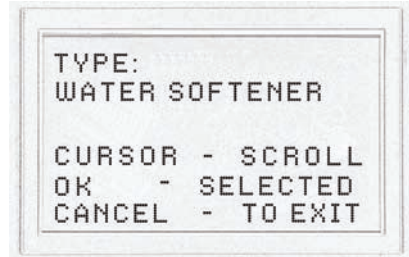
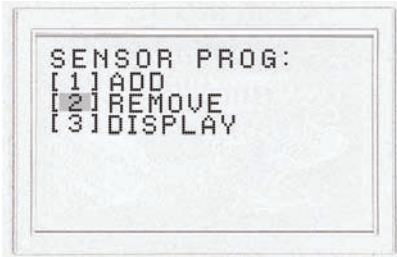


By pressing the Down Cursor button (#7) you can address the sensor location. Once the sensor address has been found, press the "Ok Button" to add the sensor to the controller. The Controller will display " Programming Successful".

Follow the on screens instructions to either exit to the main menu, add another sensor, or to delete a sensor.

### **Removing Sensors:**

Now, with the Controller in the Main Menu/ Sensors/ Sensors Program mode, press the Down Cursor Button ( #7) until the "remove" option #2 is highlighted, then press OK.



The Controller will display a list of all of the sensors you have programmed into the controller. By pushing Down Cursor ( # 7), simply find the address of the sensor, press the OK Button ( #12), and then follow the on screens instructions to remove this sensor from the system.

### **Displaying Sensors:**

The Controller can display all of the sensors that have been programmed into the controller. Since the controller can operate up to 32 sensors, this feature allows you to see all of the addressed locations.

Now, with the Controller in the Main Menu/ Sensors/ Sensors Program mode, press the Down Cursor Button ( #7) until the "display" option #3 is highlighted, then press OK.



The Controller will display the first sensor location, and by pressing the Down Cursor Button ( #7), you can see the location of all installed sensors.

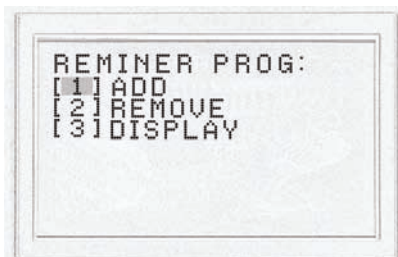
## MAIN MENU OPTION #6: SERVICE REMINDERS

### Adding a Service Reminder:

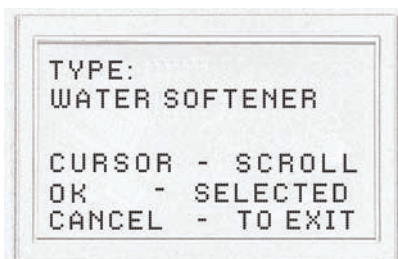
You can program your controller to alert you when certain items in your home need servicing:

Press the Menu Button ( #10 ) , then the Down Cursor Button ( #7) until Option 6 " Reminders" is highlighted.

The following Screen will appear:



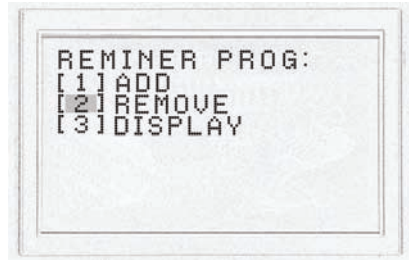
Press the OK Button ( #12) to add a service reminder. A list of service items will appear, and by pressing the Down Cursor button (#7) you can address the service reminder. Once the service reminder address has been found, press the "Ok Button" to add the service reminder to the controller. Follow to on screen instructions to set the service interval.



Follow the on screens instructions to either exit to the main menu, add another sensor, or to delete a sensor.

### **Removing a Service Reminder:**

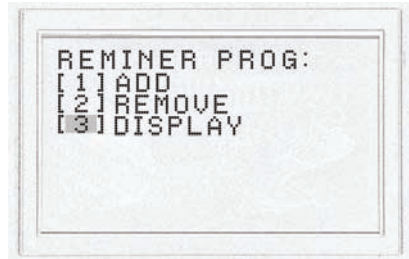
Now, with the Controller in the Main Menu/ Reminder mode, press the Down Cursor Button ( #7) until the "remove" option #2 is highlighted, then press OK.



The Controller will display a list of all of the reminders you have programmed into the controller. By pushing Down Cursor ( # 7), simply find the address of the reminder, press the OK Button ( #12), and then follow the on screens instructions to remove this reminder from the system.

### **Displaying the Reminders:**

The Controller can display all of the reminders that have been programmed into the controller.



Now, with the Controller in the Main Menu/ Reminders mode, press the Down Cursor Button ( #7) until the "display" option #3 is highlighted, then press OK. The Controller will display the first reminder location, and by pressing the Down Cursor Button ( #7), you can see the location of all scheduled reminders.

## MAINTENANCE OF THE WATER CONTROLLER™

The Water Controller™ by Hydrocom requires very little maintenance, and even performs a daily maintenance automatically. Also, we have designed into the product a Service Reminder function that allows you to schedule service reminders on other products within your home such as : Changing your furnace air filter, the air conditioner filter, water filters and other items in your home.

**Wireless sensors:** The only maintenance required here is the changing of the batteries. When the voltage drops below a certain level, the sensor will transmit this information to the controller where an alarm message " low batteries - ice-maker" e.g. is displayed Please use 2 AA alkaline batteries when you replace your batteries.

**Low Lead Valve:** The valve requires no maintenance, as everyday at 2:00 AM the controller exercises the valve a 1/4 turn to wipe any deposits that may have accumulated on the valve.

**Flow Meter:** The flow meter requires no maintenance, however, it has a large diameter screen, and there is a very remote chance that a large object could affect the flow meters performance. The flow meter comes with two unions which allows for easy cleaning or replacing if necessary.

**Controller:** The Controller comes with 4 AA back up batteries. In the event that the batteries voltage drops below a certain level, the Controller will display " low batteries- control panel". Simply unhook the Controller from the mounting bracket, and remove the battery door, and insert new batteries.

**Actuator:** The actuator does not require any maintenance either, and do not, remove the actuator from the valve mounting bracket. In the event that you ever need to manually open the valve, simply remove the three actuator screws, rotate the actuator 90 degrees, and reinstall the mounting screws.

## TROUBLESHOOTING

### **PROBLEM: NO WATER**

The actuator does not require any maintenance either, and do not, remove

**Causes:** The water can be off due to the following issues:

- a) The flow was exceeded in the Home or Away mode.
- b) The sensors detected low temperature  
( 40 degrees for 10 minutes).
- c) The sensors detected a leak.
- d) The water off button has been pushed.
- e) Valve failure.
- f) Flow meter is plugged with debris.
- g) The existing water main valve is off.

Make sure the Controller has power, and that the water main is on, and that the valve wires have been installed on terminal 10 ( - black) and 11 ( +)on the back of the controller. Press the "green" water on button. If this does not solve the problem, press menu, then option #2 alarm reset/ up cursor to select yes/ press OK.

It is very unlikely that the valve or flow meter are the cause. However, to manually open the valve, DO NOT REMOVE THE ACTUATOR from the valve mounting bracket, but, unscrew the three mounting screws from the black actuator, and while keeping it in contact with the valve mounting bracket, rotate it 90 degrees, and reinstall the 3 screws.

If you still do not have water, close the valves before and after the flow meter, slowly loosen the unions to release the water pressure, and inspect or clean the flow sensor. Replace the flow sensor before turning the valves back on.

## **PROBLEM: NO COMMUNICATION WITH FLOW METER, SENSOR**

### **Causes: Flow sensor:**

Make sure that the flow meter cable has been installed in the back of the controller on terminals 12 ( red wire) 13 ( black wire) 14 ( shielded ground wire ) 15 ( unshielded ground drain). Also, the end of the flow meter cable must be inserted into the top of the flow meter, and onto the retaining edge of the flow meter.

### **Causes: Sensor:**

Make sure that the sensor has been programmed into the controller, the batteries are fresh, and the sensor detector has been attached. To test this, simply hold the black button down on the sensor while you are looking at the controller. Then press the menu button/ sensors/ display, and locate your sensors name on the menu. It will display the number of check-ins and the signal strength. Repeat this to insure that your signal is getting through, you can verify this by revisiting the check-in total.

Many factors can cause RF transmissions from the sensors from reaching the control panel. This includes distance, radio interference, metal, glass, internal building framing, and other dense objects such as cement and rebar. You can splice wire onto your sensor detector wire ( up to 500 feet), and relocate the sensor itself to increase your transmission range.

## **PROBLEM: NO POWER**

**Causes:** The sensors are battery operated by 2 AA alkaline batteries. By pressing the black test button on the sensor the green LED light will flash. If it doesn't replace the batteries.

**Causes:** The Controller has a power supply, and back up batteries. Please make sure you are running the Controller with the HDP power supply that was provided with the product. It needs to be inserted into the bottom of the controller, and plugged into a regular wall outlet. Also, the Controller can be run in reserve by the 4 AA batteries that are installed in the back of the Controller. To see if the batteries are working, simply remove the power supply and see if the display screen stays on after you touch any button. Please remember in the backup power mode, the Controller turns the display screen off, unless a button is pushed.

**Causes:** Also, if the Controller is plugged into a GFI switch, make sure the GFI has been reset.

## **PROBLEM: THE VALVE WON'T SHUT OFF THE WATER**

**Causes:** The likeliest cause is that the Controller has been told to disregard the valve. Press Menu/ System set up/ valve and then follow the on screen instructions to select "yes" and then press OK.

Also, make sure the valve wires have been installed on terminal 10 (- black) and 11 (+) on the back of the controller. Press the "red" water off button to test.

## **NEED HELP?**

**Please call the company you bought the product from, or visit the website at [www.hydrocom.us.com/support](http://www.hydrocom.us.com/support).**