



Intelligent Leak Control with EverWatch<sup>®</sup> Technology

**Local Control Panel Directions for Use** 

Please register your purchase online by visiting the "My FloLogic" page at www.flologic.com

Date of Purchase/Installation:

Installed By: \_\_\_\_\_

Attach receipt here:

This manual covers operation using the local Control Panel. When the optional CONNECT Module is installed, enabling app-based control, changes made through the app will be reflected on the Control Panel and vice versa.

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# **GENERAL INFORMATION**

Congratulations on your purchase and installation of the FloLogic System<sup>®</sup>. You can now relax knowing that your home or business is constantly protected against flooding due to leaks or failures in its plumbing system. In addition, FloLogic will give you early notice of water wastage due to leaks that, according to the EPA, account for 12% of domestic water use in the USA. The FloLogic System will monitor and control all water flowing through a residence or building's plumbing system.

The System works by detecting and timing the flow of water through the inlet water pipe. There are two basic operating modes for the System: Home and Away. The difference is the occupancy status of the building and thus the amount of water that is expected to be used.

FloLogic's EverWatch<sup>®</sup> flow sensing technology can detect leaks in real time beginning at 1/2 ounce per minute. The default flow rate sensitivity has been factory set at 2 ounces per minute. Once flow above 2 ounces per minute is detected, the System allows water to flow for whatever length of time the user has stipulated for each of the modes.

The default time for the Home mode is 30 minutes, and the Away mode is 30 seconds (0.5 minutes). Switching

from Home mode to Away mode, and conversely from Away mode to Home mode, is accomplished by simply pressing the corresponding key on the Control Panel.

When water flow exceeds the preset timer intervals, the water is turned off, an audible alarm is sounded and the Control Panel displays the message "**LEAK**". If connected to a security system or the FloLogic CONNECT Module, the System will communicate the leak event to your security system or through the CONNECT app to notify you of the problem.

The FloLogic System includes several convenience features and allows the user to change any of the default timer intervals if so desired.

Another feature that distinguishes FloLogic is a patented process where the software periodically "exercises" the ball valve to ensure the valve itself is operating correctly. No other automatic shut-off system can provide this unique and comforting feature.

# **ROUTINE TESTING AND MAINTENANCE**

To ensure your System functions as intended if a leak should occur, and to ensure you are protected by FloLogic's warranty, you should perform two simple tests every six months and replace the battery as needed.

#### **1. OPERATIONAL TEST**

Please confirm the FloLogic System is in the Home mode. Press the **HOME** key if necessary. Then press the **AWAY** key. The valve should cycle as it enters the Away mode. Press the **HOME** key to return to the Home mode. Enter the WATER OFF mode by pressing the **DISABLE** and **NEXT/BYPASS** keys at the same time. Turn on the highest faucet in the property and ensure the water shuts off. Note siphoning and thermal expansion tanks can cause flow for some time after a shutoff. Press the **HOME** key to turn the water back on.

#### 2. FLOW SENSOR TEST

In Home mode, turn on a cold water tap to confirm that the pinwheel flow indicator is displayed on the Control Panel. It may take a few seconds for it to display after you turn on the water. If there is no flow indication, your sensor will need to be replaced. If the System switches to **AUTOAWAY** when the home is occupied, this may be due to a failed flow sensor and the flow sensor test should be conducted as soon as possible. **Call FloLogic at (877) 356-5644** for a flow sensor replacement.

#### 3. BATTERY

The Battery, which provides the power for the System, needs to be replaced when it will no longer hold a charge. Batteries typically need to be replaced every three years, although the exact timing will vary based on your particular conditions of use.

Date	Operation Test	Flow Sensor Test	Battery Test

#### **Control Panel**



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# **BASIC OPERATION**

#### Home Mode

Upon system start-up the Control Panel will read "**HOME**" indicating that the Home timer is in effect. Unless previously changed, the time limit for the Home mode is **30 minutes**. When the display reads "**HOME**", this is the length of time that water will be allowed to run uninterrupted before the System turns off the water.

#### Away Mode

When you wish to change to Away mode, press the **AWAY** key. Unless previously changed, the time limit for the Away mode is **0.5 minutes**. When you switch from Home mode to Away mode, the display will read "**AWAY**" and the Valve will enter an exercise cycle that results in the Valve closing and then reopening. During this time you may hear the motor turning the Valve. To exit the Away mode, simply press the **HOME** key to return to the Home mode.







#### BASIC OPERATION (CONTINUED)



Pinwheel indicates water flow



No water flow detected

#### **Flow Indication**

When water is flowing (above the DripRate setting) anywhere in a building monitored by FloLogic, a rotating pinwheel will appear on the right side of the display. The left side of the display will continue to indicate the current operating mode of the System. The pinwheel is illuminated within a few seconds once the water begins running and will disappear within a few seconds after the water has stopped.

As an added security feature, the System will automatically place itself into the Away mode (**Auto Away**) after detecting no water flow for an extended period of time. The default for this function is **18 hours** and can be changed to a value **as low as 1 hour and as high as 99 hours**, or this feature can be completely disabled by the user (see **Programming Instructions** on **page 22**). When activated, the Control Panel will chirp every 20 seconds.



#### **Clearing Alarms**

When either the Home or Away time limits are exceeded, the System will turn off the water, display "**LEAK**" on the LCD and sound an audible alarm at the Control Panel. To turn off the audible alarm, press the **DISABLE** key.

Once the source of the alarm has been identified and corrective

action taken, press the **HOME** key to restore water service. During the first few minutes of water service restoration, the pinwheel may illuminate as any previously emptied pipes are refilled with water. This is normal and will stop as your plumbing system pipes and appliances refill and are purged of air.

#### BASIC OPERATION (CONTINUED)



#### Water Shutoff

If you wish to manually turn off the water to the building protected by FloLogic, you can accomplish this by pressing both the **NEXT/BYPASS** key and the **DISABLE** key at the Control Panel. When the Valve is closed by this keystroke command, the display will read "**WATER.OFF**".

**NOTE**: Pressing and holding the **DISABLE** key just prior to touching the **NEXT/BYPASS** key will ensure you don't accidentally place the System in Bypass Mode (see **Bypass Mode** description on **page 19**).

Restoration of water service is accomplished by simply pressing the **HOME** key.

# SYSTEM COMPONENTS

There are four major components to the FloLogic System:

#### 1. Ball Valve and Actuator

("Valve Assembly")

#### 2. Flow Sensor

("Sensor")

- 3. System Battery and AC Adapter ("Power Supply")
- **4. Keypad and Display** ("Control Panel")



#### SYSTEM COMPONENTS (CONTINUED)

#### 1. Ball Valve and Actuator ("Valve Assembly")

The Valve Assembly is normally mounted in the main water line; after the meter or well pressure tank, but prior to where the distribution lines are branched-off to the various floors, rooms and plumbing appliances. If desired, the Valve Assembly may be installed out-of-doors, above or below grade, provided that it is not subject to temperatures below 35 or above 115 degrees F.

The Valve Assembly is comprised of a full-port, lead-free cast bronze valve mated to an actuator enclosed in an IP68 certified water and dust-proof housing. There are three color-coded connectors on the actuator housing:

- Blue for the Flow Sensor
- Black for the Control Panel
- Red for the Power Supply

The Valve Assembly should be mounted to provide access to the manual override located under the clear dome on top of the actuator housing. In the unlikely event of a complete power loss or a general System failure, this override can be used to manually open or close the Valve (See **Manual Override Instructions** on **back cover**).

#### 2. Flow Sensor ("Sensor")

The Flow Sensor is directly connected to the blue color-coded receptacle on the Valve Assembly. The Flow Sensor is responsible for the detection of water running through the System. While the Flow Sensor is able to detect flow as low as 0.5 ounce per minute, the software controlling the Flow Sensor is factory pre-set with a sensitivity of 2 ounces of flow per minute as the point when the flow timer is initiated. Depending on your specific needs, you can adjust

the sensitivity of the Flow Sensor (see **Programming Instructions** beginning on **page 22**).

The Flow Sensor has been designed as a field-replaceable item, as the service life of this component is dependent on the water quality where the System is installed. Water hardness and debris, such as sand or silt, may shorten the expected life of the Flow Sensor. Water treatment regimens such as filtration and softening may lengthen the life of the Flow Sensor. Because the service life varies, FloLogic requires that you perform the flow sensor test described on **page 5** every six months. A replacement Flow Sensor can be ordered from FloLogic at www. flologic.com.



#### SYSTEM COMPONENTS (CONTINUED)

#### 3. System Battery and AC Adapter ("Power Supply")

The Power Supply is comprised of a 12 volt, 4-6 amp hour rechargeable, sealed-lead-acid battery connected to an AC adapter, which provides a charge to the battery. The adapter is connected to the Valve Assembly with a 15-foot cable. **The battery and AC adapter must be located in a protected environment such as a crawl space, basement, or in a watertight outdoor enclosure.** The Power Supply plugs into a standard grounded AC outlet. The included battery powers the System, including in the event of an AC power failure. The Power Supply is directly connected to the red color-coded receptacle located on the Valve Assembly.

The length of time the battery will power the System is dependent on several variables, including air temperature and the age of the battery. When new, the standard battery should power the System for a minimum of **five days** provided the battery is located in an environment







A replacement battery can be purchased in many stores or ordered directly from FloLogic.

The replacement Sealed Lead Acid battery should be 12VDC and rated for a minimum of 4.0 Amp Hours (Ah).

#### 4. Keypad and Display ("Control Panel")

The Control Panel is comprised of a keypad with eight keys and a back-lit liquid crystal display (LCD). The Control Panel is the primary user interface for the FloLogic System. All status messages and programming functions are presented at the Control Panel. The Control Panel is connected to the black, color-coded receptacle on the Valve Assembly with the supplied 50-foot cable. Longer cabling and extension cables are available in the event that the Control Panel needs to be located further than 50 feet from the Valve.

Inserted into the top of the Control Panel is a Quick Reference card that provides information on the basic operation of the FloLogic System.



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# **OPERATIONS AND TERMINOLOGY**

#### **Drip Rate**

The Drip Rate allows the user to change flow detection sensitivity to ignore persistent low-use water demand from appliances such as humidifiers as well as known "nuisance leaks" such as leaky toilet valves. The System ships with a pre-set Drip Rate of **2 ounces per minute** and can be set anywhere from **0.5 to 32 ounces per minute**. Based on your plumbing system, you can modify the Drip Rate setting to a higher or lower sensitivity threshold. The System does not start the Home or Away timers until the Drip Rate is exceeded and flow timers are reset when the flow of water drops below the Drip Rate setting.

When flow exceeds the Drip Rate settings, the LCD will show a rotating pinwheel on the right side of the display. Other than that, this feature operates continuously in the background. To check or change the settings for this feature, refer to the **Programming Instructions** on **page 22**.

**NOTE:** Use caution when changing the Drip Rate value. Lowering the Drip Rate can result in frequent "false alarms." Raising the Drip Rate will allow significant volumes of water to flow uncontrolled into your home or business. See the **reference table** on **page 44** for Drip Rate water flow equivalents over daily, monthly, and annual periods.

HOME

**Activates Home Mode** 





**Activates Away Mode** 



#### **Home Mode**

The **Home** mode is designed to be used when the structure is occupied. The Home mode is pre-set to allow **30 minutes** of uninterrupted water flow before shutting off the water. If desired, this time can be changed to a value **as low as 1 minute and as high as 99 minutes** (see **Programming Instructions** on **page 22**). When in any state other than Home (Away, Bypass, Water Off), the Home mode may be activated by a single press of the **HOME** key on the keypad. When the System is in the Home mode, the LCD will read "**HOME**"

#### Away Mode

The **Away** mode is typically used when the structure is unoccupied. The Away mode is pre-set to allow **0.5 minutes** (30 seconds) of uninterrupted water flow before shutting off the water. If desired, this time can be changed to a value **as low as 0.1 minutes or as high as 99 minutes**. Away may also be set to turn off the water when they Away

mode is activated (see **Programming Instructions** on **page 22**). When in any state other than Away, the Away mode may be activated by a single press of the AWAY key on the keypad. When the Away mode is activated, the Valve will complete an exercise cycle, confirming operational readiness. Unless WaterOff has been set for the Away mode, when the System is in the Away mode, the LCD will read "**AWAY**". If the Delay Away feature has been enabled, activation of the Away mode will be postponed during the delay interval (see **DELAY AWAY** below).

#### **OPERATIONS AND TERMINOLOGY** (CONTINUED)



#### **Delay Away**

When activated through the programming menu, this feature delays the start of the Away mode for a preset time limit. This is useful for those who may wish to start a plumbing appliance such as a laundry machine or a dishwasher immediate prior to leaving the premises.

During the Delay Away interval, the System utilizes the Home timer (e.g. **30 minutes of flow**). At the end of the Delay Away interval, the System will

automatically place itself into the Away mode. The System is preprogrammed with Delay Away set to **OFF**. This delay time can be set to any value from **OFF up to 99 minutes**.

When programmed with any value other than OFF, the Delay Away interval will be activated every time the user activates AWAY mode. To deactivate this feature, change the Delay Away setting to OFF. When the System is in the Delay Away mode, the display will read "D. AWAY XX", with XX representing the time remaining in the delay interval. To change this feature, refer to Programming Instructions on page 22.



#### **Bypass**

The Bypass function provides a simple way to temporarily disable the flow timers. Bypass permits an extended use of water without changing the Home or Away settings. Upon expiration of the Bypass time, the System will revert to Home or Away mode. During the Bypass period, the user can end the Bypass function by pressing either the Home or Away key. Factory pre-set at **120 minutes**, the Bypass timer has a range of **1 to 999 minutes** (16 hrs. 39 mins). When the System is in Home or Away mode, this feature is activated by pressing the **NEXT/** 

**BYPASS** key on the keypad. When in Bypass mode, the display will read "**BYPASS**" alternating with "**HOME**" or "**AWAY**", indicating the mode that will be active after completion of the Bypass time. To change the time limit for this feature refer to **Programming Instructions** on **page 22**.

#### **OPERATIONS AND TERMINOLOGY** (CONTINUED)



#### **Automatic Away**

Automatic Away places the System into Away mode after no significant water flow has been detected for an extended period of time. Factory pre-set at **18 hours**, this can be changed to activate the Away mode **as soon as 1** 

hour or as long as 99 hours after the System last detects water flow above the Drip Rate. Auto Away may also be deactivated (OFF). This feature operates continuously in the background. If the System reverts to Auto Away even though water has been running, a flow sensor replacement may be needed. When in Auto Away, the Control Panel will chirp every 20 seconds. Press the **DISABLE** key to silence. To change the settings for this feature, refer to **Programming Instructions** on **page 22**.

#### **Control Panel Sounds**

The Control Panel uses audible beeps to notify users about the presence of certain conditions such as Leak Alarms and System Troubles. User interaction is normally required to turn off the beeper for any given event. Without the user intervention, the beeper can run for extended periods of time. While this does not damage the System, it may cause issues with nearby neighbors. For persons who do not want these beeps, they may be disabled. See the **Programming Instructions** on **page 22** for details on changing this setting.

#### **Powering Options**

While the System is designed to operate with a Battery that is charged with AC power, you can power the System solely from a standard 12-volt battery, provided the battery is regularly charged with a solar battery tender. When the Battery Only mode is selected, the AC Lost error message will be disabled. See the **Programming Instructions** on **page 22** for details on changing this setting.

# PROGRAMMING INSTRUCTIONS

The System is designed to accommodate virtually all user needs by allowing the user to change any of the default settings. The following table shows the default settings as well as valid ranges for all of the programmable System features:

Programmable Feature	Default Setting	Programmable Range
Drip Rate flow sensitivity	2 ounces per minute	0.5 to 32 ounces per minute
Home mode limit	30 minutes	1 to 99 minutes
Away mode limit	0.5 minutes (30 seconds)	W.OFF to 99 minutes
Delay Away time	0 minutes (OFF)	0 (OFF) to 99 minutes
Bypass time	120 minutes	1 to 999 minutes
Auto Away time	18 hours	1 to 99 hours, OFF
Sounds	On	On - Off
Power mode	AC Power	AC Power - Battery Only

Any changes you make in the default settings should be noted in the My Settings section of this book on page 43.

The programming menu can be accessed when the display reads "**HOME**". To enter the Program mode, simultaneously press the **ACCEPT/EXIT** key and the **PROG** key on the Control Panel. The display will read "**PROGRAM**". Pressing the **NEXT/BYPASS** key will scroll through the programming menu as follows:

- 1. **DRIP.RATE** alternates with **X.X OZ/MIN**
- **2. HOME XX XX** represents minutes
- **3. AWAY XX XX** represents minutes
- **4. D.AWAY XX XX** represents minutes

- 5. **BYPASXXX XXX** represents minutes
- **6. A.AWAY XX XX** represents hours
- 7. SOUND.XXX XXX represents ON or OFF
- 8. AC.POWERD alternates with BATT.ONLY

# When in the Program mode, pressing the NEXT/BYPASS key will advance you to the next programmable feature without changing the value for the current feature. <u>You must press the ACCEPT/EXIT key to save any changes</u>.

After making changes, the new value will flash on and off, indicating it has not been saved. Pressing the **ACCEPT/ EXIT** key will update the program with the new value. "**ACCEPTED**" will briefly appear on the display and the new value will stop flashing, indicating it has been saved. To change more than one item, press the **NEXT/BYPASS** key to advance to the next setting. To exit programming, press the **ACCEPT/EXIT** key until "**HOME**" appears on the display. The following pages explain the steps required to change the various program settings.

#### **PROGRAMMING INSTRUCTIONS** (CONTINUED)



#### **Drip Rate Setting**

#### WHEN SHOULD YOU CHANGE THE DRIP RATE?

If you have a known, low-flow water use by an appliance such as a humidifier or RO system or a nuisance leak such as a dripping faucet, you may wish to decrease the flow sensitivity of the System by increasing the **DripRate** to avoid unnecessary shutoffs.



#### WARNINGS:

The System has a pre-set Drip Rate of **2 ounces per minute**. Increasing the flow sensitivity by changing this Drip Rate to a lower number can result in a higher incidence of "false alarms". Decreasing the sensitivity by raising this

to a higher number can result in prolonged, chronic water use that is either running down the sewer or leaking somewhere out of sight.

#### HOW TO CHANGE THE DRIP RATE:

1. Prior to changing the Drip Rate, check that all faucets are off and no toilets are running. Follow the steps on **page 23** to get into the Program mode and scroll to the Drip Rate screen using the **NEXT/BYPASS** key.

 When the display reads "DRIP.RATE" and alternates with "X.X OZ/M", you can either A. Query the System to show how much water is flowing or B. Adjust the Drip Rate value manually. (The table found on page 44 shows how much each Drip Rate value equates to in water usage over time).



**A.** Automatic Drip Rate (Query the System): When on the Drip Rate screen, to sample the water flow currently running in the building, press the **PROG** key. The display will change to show the volume of water flowing through the sensor in ounces per minute. If the detected flow exceeds 32 ounces per minute, the display will read "INVALID".

• To **change** the Drip Rate to accommodate the expressed value, press the **ACCEPT/EXIT** key.

• To **exit** the Drip Rate programming menu **without making changes** and move to the next programmable feature (Home timer), press the **NEXT/BYPASS** key and then the **ACCEPT/EXIT** key (see the following page for instructions on changing the Drip Rate manually).

#### **PROGRAMMING INSTRUCTIONS** (CONTINUED)





- **B.** Manually programming the Drip Rate: As a second option, you can manually raise or lower the Drip Rate threshold by pressing **UP** or **DN** keys on the keypad.
- <u>To accept changes, press the ACCEPT/EXIT key.</u> This will store the new Drip Rate value in the program.
- To **exit** the Drip Rate programming menu **without making changes** and move to the next programmable feature (Home timer), press the **NEXT/BYPASS** key.



#### **Home Setting**

**1.** After you have entered the Program menu, press the **NEXT/BYPASS** key to scroll to the "**HOME XX**" screen.

2. The XX will be a number between 1 and 99 (minutes) with the default setting at 30 (minutes), representing 30 minutes of allowed uninterrupted flow in the Home mode. To increase or decrease this value, press the UP or DN key to scroll to the desired number of minutes.

• <u>To accept this change, press the ACCEPT/EXIT key.</u> This will store the new Home timer value in the program.

• To **exit** the Home timer programming menu **without making changes** and move to the next programmable feature (Away timer), press the **NEXT/BYPASS** key.

#### **PROGRAMMING INSTRUCTIONS** (CONTINUED)



# Accept Changes



#### **Away Setting**

1. After you have entered the Program menu, press the **NEXT/BYPASS** key to scroll to the "**AWAY XX**" screen.

2. The XX will either be a number between 0.1 and 99 (minutes) or the display will read AWY W.OFF meaning the water will be turned off when the Away mode is active. The default setting is 0.5 (minutes), representing 30 seconds of allowable flow in the Away mode. To increase or decrease this value, press the UP or DN key to scroll to the desired number.

• <u>To accept this change, press the ACCEPT/EXIT key</u>. This will store the new Away timer value in the program.

• To **exit** programming **without making changes** and move to the next programmable feature (Delay Away timer), press the **NEXT/BYPASS** key.



#### **Delay Away Setting**

1. After you have entered the Program menu, press the **NEXT/BYPASS** key to scroll to the "**D.AWAY XX**" screen.

- 2. The XX will be a value between OFF and 99 minutes with the default setting at OFF. Setting a value above OFF will delay the switch to the Away mode each time the Away mode is activated. If you wish to raise or lower this value, press the UP or DN key to scroll to the desired number of minutes.
- <u>To accept this change, press the ACCEPT/EXIT key</u>. This will store the new Delay Away timer value.
- To **exit** the Delay Away timer menu **without making changes** and move to the next programmable feature (Bypass timer), press the **NEXT/BYPASS** key.

**NOTE:** During the Delay Away interval, the Home flow timer will be in effect. After the Delay Away interval has expired, the Away timer will be in effect. The Delay Away timer will be active when the System is placed in Away mode.

#### **PROGRAMMING INSTRUCTIONS** (CONTINUED)





# UP

#### **Bypass Setting**

1. After you have entered the Program menu, press the **NEXT/BYPASS** key to scroll to the "**BYPASXXX**" screen.

2. The XXX will be a number between 1 and 999 (minutes) with the default setting at 120 (minutes). If you wish to raise or lower this value, press the UP or DN key to scroll to the desired number of minutes.

• <u>To **accept** this change, press the **ACCEPT/EXIT** key. This will store the new Bypass timer value.</u>

• To **exit** the Bypass timer menu **without making changes** and move to the next programmable feature (Auto Away timer), press the **NEXT/BYPASS** key.



#### **Auto Away Setting**

1. After you have entered the Program menu, press the **NEXT/BYPASS** key to scroll to the "**A.AWAY XX**" screen.

- 2. The XX will be a value between 1 and 99 (hours) or OFF with the default setting at 18 (hours). If you wish to raise or lower this value, press the UP or DN key to scroll to the desired number of hours.
- <u>To accept this change, press the **ACCEPT/EXIT** key</u>. This will store the new Auto Away value in the program.
- To **exit** the Auto Away menu **without making changes** and move to the next screen (Sound), press the **NEXT/BYPASS** key.

**NOTE**: With Auto Away set to **OFF**, the System never automatically switches itself into the Away mode and detection of a failed flow sensor will be diminished.

#### **PROGRAMMING INSTRUCTIONS** (CONTINUED)



#### **Sound Setting**

**1.** After you have entered the Program menu, press the **NEXT/BYPASS** key to scroll to the **"SOUND.XXX"** screen.

2. The XXX will be a value of **ON** or **OFF** with the default setting at **ON**. If you wish change this setting, press the **UP** or **DN** key to the desired value.

- <u>To accept this change, press the ACCEPT/EXIT key</u>. This will store the new Sound value in the program.
- To **exit** the Auto Away menu **without making changes** and move to the next screen (Power), press the **NEXT/BYPASS** key.

**NOTE:** With Sound set to **OFF**, no audible alarms will be generated. All alarms and System status alerts will be visual only.



#### **Power Source Setting**

1. After you have entered the Program menu, press the **NEXT/BYPASS** key to scroll to the "AC.POWERD" or "BATT.ONLY" screen.

2. If you wish to change this setting, press the  ${\bf UP}$  or  ${\bf DN}$  key to the desired value.

- <u>To accept this change, press the ACCEPT/EXIT key</u>. This will store the new Power Source value in the program.
- To **exit** the Auto Away menu without making changes and move to the next screen (EXIT?), press the **NEXT/BYPASS** key.

**NOTE:** Battery Only mode disables any alarms associated with the loss of AC power. The user will be responsible for ensuring the power source is always available and charged up regularly. The System will not operate if the Battery is missing or discharged.

#### **PROGRAMMING INSTRUCTIONS** (CONTINUED)

#### **Exit Programming**

To exit the programming mode when the LCD indicates "**EXIT**?", press the **ACCEPT/EXIT** key. This will exit programming without making any changes and return the System to Home mode.

To scroll back to the top of the programming menu, press the **NEXT/BYPASS** key.







# **DISABLING / RE-ENABLING SYSTEM**

To disable the System so it is not actively monitoring leaks, simultaneously press the **PROG** and **DISABLE** keys. The screen will read **DISABLE?**. Press the **ACCEPT/EXIT** key within three seconds to disable. The screen will read **DISABLED**.

To re-enable the System when the display reads **DISABLED**, simultaneously press the **PROG** and **DISABLE** keys. The screen will read **ENABLE?**. Press the **ACCEPT/EXIT** key within three seconds. The display will read **HOME**.



# FLOW SENSOR TEST (PERFORM EVERY 6 MONTHS)



#### No Flow Detected



**Flow Detected** 

In order to ensure proper operation of the System, the Flow Sensor must be tested every six months. If the System switches to **AUTOAWAY** when the home is occupied, this may be due to a non-working sensor and the following test should be conducted as soon as possible.

While in the Home mode, turn on a faucet or flush a toilet. Look for the flow indicator (pinwheel) on the display. If there is no flow indication, your sensor will need to be replaced. **Call FloLogic** at **(877) 356-5644** for a replacement.

#### **ADDENDUM**

Normal Messages	
Fault Messages	
Programming Messages	
External Contact Closure Messages	
My Settings	
Drip Rate Table	

#### **OPERATIONAL MODE MESSAGES – DISPLAYED DURING NORMAL OPERATION**

HOME	Home setting in effect	Press AWAY to activate Away mode
AWAY	Away setting in effect	Press HOME to activate Home mode
AWY W.OFF	Away mode selected, water is off	Press <b>HOME</b> to to exit Away mode and restore water service
D.AWAY XX	Home setting in effect. System will automatically switch to Away after XX minutes	Press <b>HOME</b> to exit Delay Away
BYPASS or EXT. BYPASS	Bypass mode is active and the Home and Away timers are temporarily disabled	System will revert to Home or Away mode after Bypass interval expires. Press <b>HOME</b> to manually exit Bypass mode
OVERRIDE	System is overridden by external device such as an irrigation system	Wait for external device to finish cycle
WATER.OFF	Water has been turned off at Control Panel	Press <b>HOME</b> to restore water.
DISABLED	System is disabled	Press PROG+DISABLE then ACCEPT to re-enable system
LEAK	HOME or AWAY time limit exceeded. Water turned off	Press <b>DISABLE</b> to silence the audible alarm then <b>HOME</b> to restore water service
EXT. LEAK	External device instructed FloLogic to turn off water. Water turned off	Clear condition on external device. Press <b>DISABLE</b> to silence alarm and <b>HOME</b> to restore water service
AUTO.AWAY	Away mode auto-activated. No water flow above Drip Rate for Auto Away interval.	Press <b>DISABLE</b> to silence chirp or <b>HOME</b> to exit Away mode. IF NEEDED,CHECK FLOW SENSOR (see page 34)

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#### ATTENTION REQUIRED - ERROR NOTIFICATION MESSAGES

AC LOST	AC power not detected, System operating solely on Battery power. Alarm output is delayed one hour to prevent alarm cycling during intermittent power outages.	Check to make sure Power Supply is plugged in and there is power at the electrical outlet used by the System. Error message will automatically clear when AC power is restored.
SYS.DOWN / CHG BATT	Valve inoperable typically due to missing or discharged battery	Check / Replace battery. Press <b>DN</b> key till beeping stops. Valve will cycle after a few seconds and error will clear if battery good.
VAL.FAIL	Valve unable to execute software command to open or close. May be due to a relay or motor failure or misaligned position sensor or override shaft in depressed position.	Press and hold DN on Control Panel until beeping stops. Release button. Valve will cycle (within 15 seconds) and error will clear if Valve rotation is detected
COMM ERR	Keypad and valve not communicating	Call 877-356-5644 for assistance
STND DN	Valve inoperable due to discharged or missing Battery. The Valve is inoperable without a Battery. Battery must be present at all times.	Check Battery connections. Observe (+ / -) polarity. Press and hold DN key on Control Panel until beeping stops. Release button. Valve will cycle (within 15 seconds) and System will reset.
LO BATT	Battery unable to hold charge and needs replacement	Connect new battery. Press <b>DN</b> key till beeping stops. Valve will cycle after a few seconds.

#### **PROGRAMMING MESSAGES – DISPLAYED ONLY WHEN IN PROGRAM MODE**

PROGRAM	Initial screen in Programming mode	Press <b>NEXT/BYPASS</b> to advance to Drip Rate or <b>ACCEPT/EXIT</b> to exit
<b>DRIP.RATE</b> alternates with	XX is current Drip Rate setting (in ounces per minute)	Press <b>PROG</b> to sample current flow rate or <b>UP/DN</b> keys to manually change setting, then press <b>ACCEPT/EXIT</b> to change or <b>NEXT/BYPASS</b> to advance to Home setting
XX OZ/MN		
HOME XX	XX is current Home mode timer setting (in minutes)	Press UP/DN, then press ACCEPT/EXIT to change or NEXT/ BYPASS to advance to Away setting
AWAY XX or AWY W.OFF	XX is current Away mode timer setting (in minutes). W.OFF means water will be turned off when in Away mode	Press <b>UP/DN</b> , then press <b>ACCEPT/EXIT</b> to change or <b>NEXT/</b> <b>BYPASS</b> to advance to Delay Away setting
D.AWAY XX or D.AWAY.OFF	XX or OFF is current Delay Away timer setting (in minutes)	Press UP/DN, then press ACCEPT/EXIT to change or NEXT/ BYPASS to advance to Bypass setting

BYPASXXX	XXX is current Bypass timer setting (in minutes)	Press UP/DN, then press ACCEPT/EXIT to change or NEXT/ BYPASS to advance to Auto Away setting
A.AWAY XX	XX is current Auto Away timer setting (in hours)	Press UP/DN, then press ACCEPT/EXIT to change or NEXT/ BYPASS to advance to SOUND setting
SOUND.XXX	XXX is the current Sound setting (ON or OFF)	Press UP/DN, then ACCEPT/EXIT to exit programming or NEXT/ BYPASS to advance to Power mode setting
AC.POWERD or BATT.ONLY	AC powered normally. Battery powered when an external battery charging source is used such as solar	Press UP/DN, then ACCEPT/EXIT to exit programming or NEXT/ BYPASS to advance to Exit program
EXIT?	End of Program menu	Press ACCEPT/EXIT to exit programming or NEXT/BYPASS to return to initial screen in program menu

#### **EXTERNAL CONTACT CLOSURE MESSAGES**

(Resulting from external devices connected to FloLogic keypad via dry contacts on TB2 or TB3)

EXT AWAY	Away timer activated by external device such as a home security system	Deactivate external system to return to Home mode
EXT LEAK	External system or device requested water shutoff. Water is turned off at Valve	After clearing external alarm condition, press DISABLE to silence alarm then HOME to restore water service
EX.BYPASS	External device such as a water system has initiated Bypass mode. Home and Away timers are temporar- ily disabled	System automatically reverts to Home or Away mode after Bypass interval expires. Press and hold HOME key to force exit from Bypass mode
OVERRIDE	External device such as an irrigation system has disabled the Home and Away timers	System automatically reverts to Home or Away mode when external system opens contacts

#### **MY SETTINGS**

Programmable Feature	Default Setting	Enter Your Settings Here.
Drip Rate flow sensitivity	2.0 oz. per minute	
Home mode limit	30 minutes	
Away mode limit	0.5 minutes (30 seconds)	
Delay Away time	0 minutes (OFF)	
Bypass time	120 minutes	
Auto Away time	18 hours	
Sounds	ON	
Power mode	AC Powered	

This table gives you a perspective of how each Drip Rate value equates to gallons of water over time.

OZ / MINUTE	GAL / DAY	GAL / MONTH	GAL / YEAR
1.0	11.25	337	4,106
2.0	22.5	675	8,212
4.0	45	1,350	16,425
6.0	67.5	2,025	24,637
8.0	90	2,700	32,850
12.0	135	4,050	49,274
16.0	180	5,400	65,700
20.0	225	6,750	82,120
24.0	270	8,100	98,548
28.0	315	9,450	113,400
32.0	360	10,800	129,600

Based on EPA statistics, the average home in the USA has plumbing leakage averaging 2.5 oz / minute. This is equivalent to 10,000 gallons annually per home or over 1 Trillion gallons nationally.

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# **MAINTENANCE NOTES PAGE**

# **QUICK REFERENCE**

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HOME key - places system in Home mode

AWAY key - places system in Away mode

BYPASS / NEXT key - temporarily disables Home and Away timers

DISABLE key + BYPASS / NEXT key - turns the water off

Restore Water Service After a Leak - Press DISABLE to silence alarm (if needed) then HOME to turn on water

Test Flow Sensor (Perform every six months) - While in Home mode, turn on faucet or flush toilet. Confirm flow indicator (pinwheel) illuminates on LCD

Disable System / Reactivate System - Press both PROG+DISABLE then ACCEPT to disable / enable the FloLogic System

Manual Override of Valve (use only in emergency) - Disconnect RED (power) connector from actuator, Unscrew clear dome from top of actuator Using 8mm or 5/16" socket on the exposed valve shaft, push down and rotate the Valve to the desired position

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