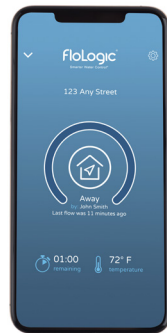
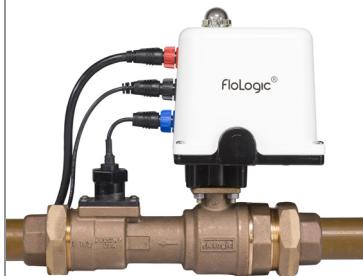


FloLogic®

SMARTER WATER CONTROL

FloLogic System with Gateway Connect



Directions for Use, Operation and Maintenance

Date of Purchase:

Installed By:

Scan to Register your purchase:



Please register your purchase online by visiting the “Product Registration” page at **www.flologic.com** or scanning the QR code below with your smartphone.

This manual provides basic local operational instructions for the FloLogic System via the Gateway Connect Module.

The FloLogic app (or a legacy Control Panel) is required to adjust settings and access advanced features.

**Scan for app-based
operating instructions:**



**Scan for Connect Module
setup instructions:**



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GENERAL INFORMATION

Congratulations on your purchase and installation of the FloLogic System®. The System is designed to reduce the risk of catastrophic plumbing leak damage and help decrease water waste by flagging suspected leaks based on System settings, and automatically shutting off the main water supply.

- The FloLogic Valve is installed in the main water pipe. The FloLogic EverWatch™ operating system constantly monitors the duration of continuous water flow events. When a leak is suspected, defined by continuous flow that violates user-determined Home or Away flow time allowances, the water is automatically shut off.
- The default settings allow 30 constant minutes of flow in the Home mode, and 30 seconds in the Away Mode. The default flow sensitivity is 2 ounces/minute. When the flow rate meets or exceeds the flow sensitivity setting, the timer begins. When flow drops below the sensitivity setting level for three seconds, the timer is reset. Typical water use, which is episodic, is allowed to occur.
- An Auto Away function will activate the Away mode when no flow is detected for a period that suggests the property is unoccupied. The Auto Away default is 18 hours.

Settings are adjustable in the FloLogic app (or by using a legacy Control Panel).

KEY SETTINGS CONSIDERATIONS

- Properties with high occupancy or significant water demand may require changing of default settings. The **Home** and **Away mode** flow time allowances can be adjusted to allow up to 3 hours of continuous flow events.
- Some evaporative humidification systems and other appliances require raising the flow sensitivity above the default setting. The **Flow Sensitivity** settings range is 0.5-48+ ounces/minute.
- While the System is monitoring for possible leaks in the **Home mode**, using the **Away mode** when the property is unoccupied (with a shorter flow time allowance) provides the utmost in protection.
- The **Auto Away** feature can be adjusted to require up to 30 days of no flow detection before Away mode is auto-activated. The Auto Away default setting is 18 hours.
- The **Bypass mode** temporarily pauses all flow monitoring to allow intentional continuous water use that exceeds Home or Away settings. When the Bypass time expires, the previous monitoring mode is resumed automatically. The default Bypass time is 2 hours and can be increased.
- The **Disable mode** suspends both flow monitoring and auto shutoff functionality indefinitely.

ON-PROPERTY OPERATION FROM LOCAL CONNECT MODULE

- The FloLogic Gateway Connect Module allows a user to change between Home, Away, Water Off, Bypass and Disable modes without using the FloLogic app. When water is turned off, the Home mode serves as the “Water On” function.
- Performing an auto-shutoff test (required upon installation and every 6 months) can be achieved by pressing the Away mode button and running water until the time expires. Ensure the water flow stops within a few minutes of auto shutoff before turning back on.
- When water is flowing AND the System is in an active monitoring mode, the “FLOW STATUS” light will slowly blink Blue for flow occurring below the sensitivity setting (not monitored), blinks fast Blue for monitored flow that is above the sensitivity setting (monitored) and below 48/oz min (low flow), and turns solid blue for flow above 48/oz/ min.(high flow).
- Users can change modes by pressing the respectively labeled button on the Connect Module. See page 27 for a full guide on button functionality and light notification indications.
- Settings adjustments can only be completed in the app by a user who has provisioned the Gateway Connect online, or by app users where invited to access a device. An optional legacy Control Panel also enables settings adjustments.

ROUTINE TESTING AND PERIODIC MAINTENANCE

FLOW DETECTION AND AUTO SHUTOFF TEST

To ensure your System functions as intended, perform the following flow detection and auto shutoff test upon installation and every six months.

1. Place the FloLogic System in the Away mode by pressing the AWAY button on the Connect Module or selecting Away mode in the app. (Ensure your Away flow time setting is a short duration for testing.) The valve should cycle (auto-exercise) as it enters the Away mode. Turn on a faucet with at least a moderate flow of water and look for the FLOW STATUS light to turn solid blue or blink rapidly blue, or activation of the flow timer in the app.
2. After the Away timer expires, the water will automatically shut off and the SYSTEM MODE light will blink red. App users with notifications enabled will receive a shutoff notification. The app will display "Shut Off".
3. Confirm the faucet water has stopped running. NOTE: siphoning from overhead pipes and backflow from thermal expansion tanks can cause flow for some time after a shutoff. Press the "Home/Water-On" button, or in the app, touch the center shutoff icon and select Water On to restore water service.

4. Between tests, if the System switches to Away automatically (Auto Away) when the property is occupied and water is being used, this may be due to an undiagnosed issue, and the flow detection and shutoff test should be conducted as soon as possible.

If an auto shutoff test is not successful, ensure there are no piped bypass valves open. Call FloLogic at 877-356-5644 or email support@flologic.com for assistance with suspected device issues.

BATTERY MAINTENANCE

The Battery provides back-up power and should be replaced when it will no longer hold a charge or when the battery health indicates poor charge status in the app. Batteries typically need to be replaced every three years, although batteries that are subjected to extreme heat may need to be replaced more frequently.

The System's battery specification is a 12-volt, sealed lead acid, AGM battery rated between 4.0 and 6.0 amp hours with F1-type terminal connectors. This is a common battery used in security systems, available at many hardware stores.

Replacement batteries are sold at **www.flologic.com**.

TEST LOG

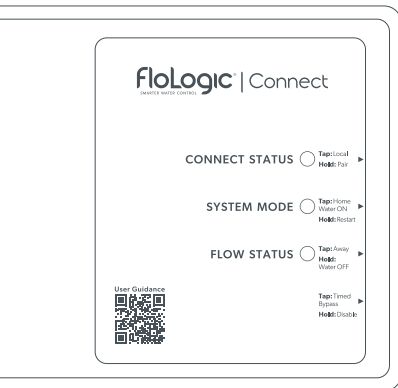
DATE	OPERATION TEST	FLOW SENSOR TEST	BATTERY TEST

MAINTENANCE NOTES

SYSTEM MODE OPERATION



HOME MODE



Tap for
Home Mode
or Water On

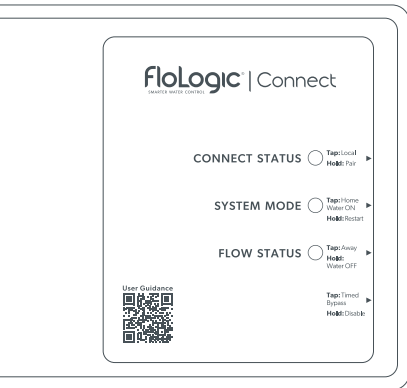
Upon System start-up the Connect Module “MODE” will turn green indicating that the Home timer is in effect. The Home time setting is the length of time that water will be allowed to run uninterrupted before the System turns off the water automatically.

Home mode is designed to be used when the structure is occupied. Home mode has a default setting allowing 30 minutes of uninterrupted water flow before shutting off the water. This time can be extended up to 3 hours through the settings in the app. To enter the Home mode, tap the “Home/Water on” button (or use the app). The Home mode also serves to turn water back on after water is turned off automatically or by a user command.

SYSTEM MODE OPERATION (CONTINUED)



AWAY MODE



Tap for Away Mode

To activate Away mode, press the Away button on the Connect Module (or do so in the app). To exit the Away mode, simply press the Home button to return to the Home mode. The default time limit for the Away mode is 30 seconds. When you switch from Home mode to Away mode, the SYSTEM MODE light will turn yellow and the Valve will enter an auto-exercise cycle that results in the Valve closing and then reopening. The Away flow time allowance is adjustable up to 3 hours. The Away mode can also be set to close the valve “Water Off” when Away mode is entered*.

***Note that if you have external Override or external Bypass mode integration automation in place, these externally-prompted mode changes will temporarily turn the water on when Away mode is set to turn water off. Integrations that may prompt water to turn back on for their cycles may be from irrigation systems, pool fillers or water softeners. This does not occur when the System is set to the Water Off mode or while in an Automatic Shutoff mode.**

AUTO AWAY

As an added security feature, the System will automatically place itself into the Away mode (Auto Away) after not detecting flow for a period of time that suggests the property is not occupied. The default Auto Away time is 18 hours. Auto Away trigger times can be adjusted in the app from 1 hour and as long as 30 days of no flow, or this feature can be turned off. Auto Away can also indicate if flow detection is compromised for any reason, so it is never recommended to deactivate it completely. Setting Auto Away to multiple days, such as 14 days, would prevent Auto Away activation for most properties, but keep it in place to help ensure flow monitoring is functional between auto shutoff function tests.

DELAY AWAY

The Delay Away feature in the app delays the activation of the Away mode whenever the System is set from Home to Away. For example, a 1 hour Delay Away allows users to turn on a dishwasher and activate the Away mode at the same time as they leave a property. In the app, the Delay Away mode can be turned on and the countdown timer setting can be adjusted up to 2 hours.



BYPASS MODE

The Bypass mode temporarily disables flow monitoring. When the Bypass mode time expires, monitoring automatically ensues. To enter the Bypass mode from the Connect Module, tap the “Timed Bypass” button. The SYSTEM MODE light will blink green or yellow, indicating if Home or Away mode will resume upon Bypass time expiration. To exit the Bypass mode before it expires, press Home or Away mode. The Bypass setting default is 2 hours and it can be adjusted up to 23 hours in the app.

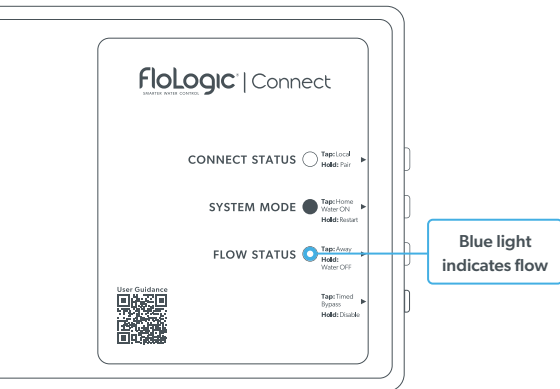
Bypass mode activation can also be automated through an external device integration, such as a water softener connection into a legacy Control Panel or Remote Input/Output.

DISABLE MODE

The Disable mode indefinitely deactivates the flow timer and any external commands to shut off the water, such as from integrated environmental sensors. The Disable mode can be prompted by holding the “Disable” button on the Connect Module, or on the app in >Settings >Connect Info >Disable Device. The SYSTEM MODE light and FLOW STATUS light on the Connect Module will go blank in Disable Mode and the System will allow constant flow of water without interruption. To exit the Disable Mode, enter the Home or Away mode and resume monitoring.

SYSTEM FLOW DETECTION INDICATION

FLOW INDICATION



When water is flowing above the flow sensitivity setting anywhere in a plumbing system monitored by FloLogic, a blue light will appear on the FLOW STATUS of the Connect Module. A slow blinking blue light indicates flow below the sensitivity setting (not monitored), a fast blue blink indicates monitored flow that is below 48 oz./min and a solid blue light indicates monitored flow above 48 oz./min (high flow).

The blue light will illuminate within a few seconds after the water begins running and will disappear within a few seconds after the water has stopped.

Flow indication and duration of continuous flow events can be viewed in the app.

AUTO SHUTOFF MANAGEMENT

CLEARING AUTO SHUTOFFS

When the Home or Away uninterrupted flow time limit is exceeded, the System will automatically turn off the water and the MODE light will blink red. Once the source of the auto shutoff has been identified and corrective action taken, press the Home/Water On button to restore water service. During the first few minutes of water service restoration, the blue flow light 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.

DETERMINING THE CAUSE OF AUTO SHUTOFFS

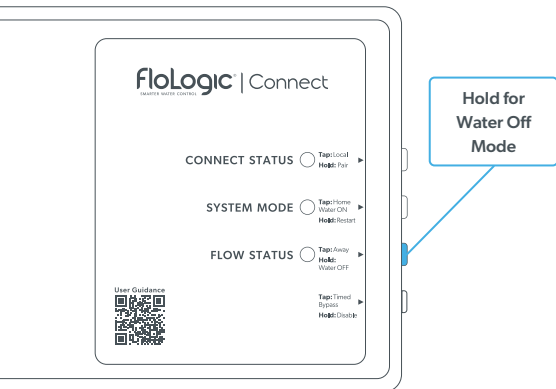
If the source of an auto shutoff isn't apparent, wasteful, non-damaging leaks, such as stealthy-running toilets or dripping indoor and outdoor faucets could be the culprit. With water on and real time flow indicated, turning off each toilet and seeing if unexpected flow stops can help determine if a toilet is a cause. Scan to watch this video for assistance on determining the source of an Auto Shutoff.

Hidden, potentially damaging leaks should not be ruled out until the cause of constant flow is determined.

Video Guidance:
Managing Shutoffs



USER PROMPTED WATER SHUTOFF



If you wish to turn off the water from the Connect Module, press and briefly hold the button next to “Water OFF.” When the valve responds, the MODE light will turn solid red.

In the app, you can touch the center mode icon and then select Shutoff” to turn off the water remotely.

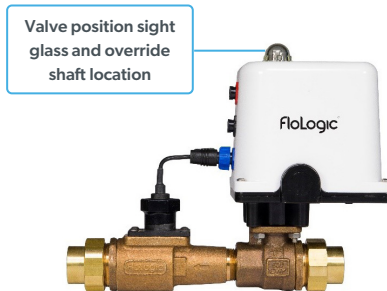
To restore water service, press the “Home/ Water ON” button, or turn water on in the app.

MANUAL VALVE OPEN/CLOSE OVERRIDE

In the event of total loss of powered operation to the System, the valve can be overridden to the closed or open (water off or on) position using the Manual Override Wrench that comes with the System, or an 8 mm socket wrench.

STEPS FOR MANUAL OVERRIDE:

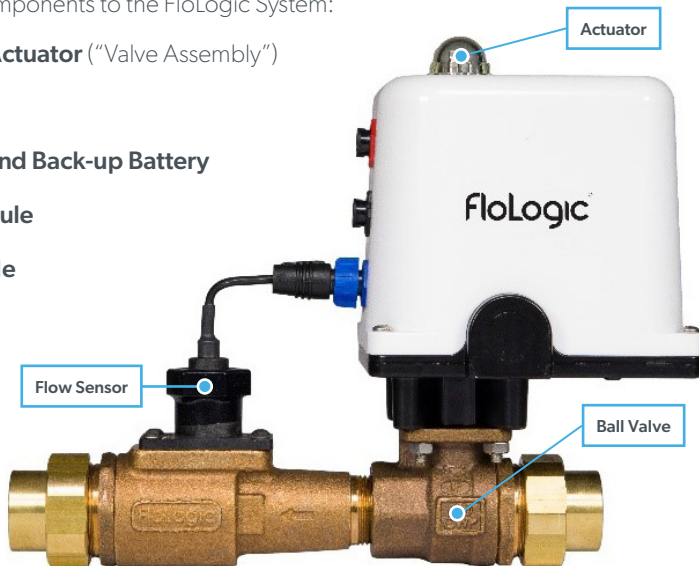
1. Remove the sight glass covering the override shaft located at the top of the actuator assembly
2. Apply the provided wrench or an 8 mm socket to the top of the override shaft
3. Press in on the override shaft until it compresses inward (slight rocking as you press down may be necessary)
4. Once compressed, the override shaft will rotate to open or close the valve based on the position diagram found on top of the actuator assembly



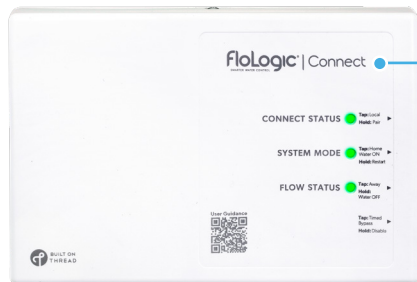
SYSTEM COMPONENTS

There are five major components to the FloLogic System:

1. **Ball Valve and Actuator** ("Valve Assembly")
2. **Flow Sensor**
3. **Power Supply and Back-up Battery**
4. **CONNECT Module**
5. **Gateway Module**



SYSTEM COMPONENTS (CONTINUED)



CONNECT Module



Gateway Module

Power Supply



Back-up Battery



1. BALL VALVE AND ACTUATOR (“VALVE ASSEMBLY”)

The Valve Assembly is mounted on the incoming 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 necessary, the Valve Assembly may be installed out-of-doors, above grade, provided that it is not subjected to freezing temperatures and has a valve cover. The Valve Assembly must not be submerged at any time or subjected to prolonged rain exposure.

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

- Blue for the Flow Sensor
- Black for the CONNECT Module and optional Control Panel
- Red for the Power Supply

The Valve Assembly must be mounted with enough clearance above the override shaft to allow access. Using the included 8mm socket tool or your own socket wrench, this override can be used to manually open or close the Valve after power has been disconnected from the unit

2. FLOW SENSOR

The Flow Sensor is connected into the flow path of the valve and can quantify water flow in a range beginning from 0.5 to 48 ounces per minute. Flow above 48 oz./min. is seen as high flow. The default Flow Sensitivity is 2 ounces of flow per minute. Based on your specific needs, you can adjust the sensitivity from 0.5 – 48+ oz./min. in the app.

The Flow Sensor has been designed as a field-replaceable item, as its service life is dependent on the water quality where the System is installed. Water hardness, dissolved solids and debris, such as sand or silt, may impact the life of the Flow Sensor. Water filters and treatment systems installed before FloLogic can lengthen the life of the Flow Sensor.

Because service life varies due to your local water chemistry, FloLogic requires that you perform the flow detection and water shutoff test described on page 4 a minimum of every six months.

If ever needed, a replacement Flow Sensor can be ordered from FloLogic at www.flologic.com.



3. POWER SUPPLY AND BACK-UP BATTERY

The Power Supply serves as the primary power source for the System, while also monitoring for the loss of AC power and maintaining a charge on the battery. The Power Supply is connected to the Actuator with a 15-foot cable. The Power Supply (and Battery) must be located inside or in a weather-protected environment such as a crawl space, basement, or watertight outdoor enclosure. The Power Supply plugs into a standard grounded AC outlet. The included Battery powers the entire System, including the CONNECT module in the event of an AC power failure.

The duration of backup battery operation depends on the age of the battery and the environmental conditions where it is installed. When AC power is restored, the battery will be recharged. A complete battery discharge due to prolonged power loss will substantially shorten battery life and may necessitate a replacement. Battery replacements are recommended every 3 years. A replacement battery can be purchased from many retailers, or ordered directly from FloLogic.

SYSTEM COMPONENTS (CONTINUED)

While the System is designed to operate with a Back-up 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.

BATTERY SPECS

12-Volt, Sealed Lead-Acid, AGM battery Rated between 4.0 and 6.0 Amp Hours(Ah) Configured with F1 (3/16") terminals.



4. CONNECT MODULE

The Connect Module provides local device controls, indicates System mode and flow status and communicates online to the app through a wireless Thread connection to the FloLogic Gateway Module. Changes made on the Connect Module are reflected on the app and vice versa. If a System is not yet provisioned online, or if internet connection is not available, the System will operate and receive local commands from the Connect Module.



5. GATEWAY MODULE

The FloLogic Gateway Module serves as the master communication interface between all wireless FloLogic devices. When provisioned to app users, full System operation, including settings adjustments, are enabled. App users also have access to remote operation, push notifications and text alert. The Gateway must plug into a router LAN or the LAN port of a WiFi extender that is online. It is powered by a USB plug into a 120 volt outlet using the provided components.



PROVISION A DEVICE TO AN APP USER & GET ONLINE

- 1.** Download FloLogic app, create user account and click confirmation email.
- 2.** Plug comm cable from valve into right-hand port of Connect Module. Plug the Gateway Module into the LAN port of your router (or a WiFi extender LAN) and plug in Gateway Module power.
- 3.** Tap the Gateway Module Sync button. The light blinks purple indicating the provisioning mode.
- 4.** Ensure the Connect Module “CONNECTION” light blinks red (else hold top button to initiate).
- 5.** Both Module’s blinking lights will turn solid blue or green, indicating they’re ready to be claimed by a user.
- 6.** Log into the app, tap “+” to add a device, and follow the instructions in the app for setup.

TROUBLESHOOTING

PROBLEM	RESOLUTION
Can't determine why water is automatically shutting off, unsure where water was flowing.	There may be a hidden wasteful leak, such as running toilet or dripping faucet. Note that potentially damaging leaks can also be hidden. See page 13 for guidance on finding hidden causes of abnormal flow, and a link to a video
Connect Module lights are not illuminated, System not responding.	Check cables for secure connection and signs of damage. Check AC power outlet for voltage. Disconnect red power cable, then re-attach.
SYSTEM MODE light is blinking blue, indicating Communications Error	Check all cables for secure connections and signs of damage. Disconnect red power cable, then re-attach. Hold the "Home/Restart" button to reboot System. Check battery and change if necessary.
SYSTEM MODE light is solid orange, indicating System is down.	Hold the "Home/Restart" button to reboot System. Restarting a few times may be needed if valve has been manually turned, as this ensures it re-establishes its open/close orientation status. If still not resolved, disconnect red power cable, then re-attach.
Difficulty getting device connected online or questions about operating System via the app.	Scan the QR code located on the Connect Module or simply visit www.flologic.com/gateway for guidance

Find more on the support page at **www.flologic.com**.

SETTINGS DEFAULTS, RANGES, & YOUR SETTINGS

PROGRAMMABLE FEATURE	DEFAULT SETTING	ENTER YOUR SETTINGS HERE
Flow Sensitivity <i>0.5 – 48+ ounces per minute</i>	2.0 oz. per minute	
Home mode flow time limit <i>1 min – 3 hours</i>	30 minutes	
Away mode flow time limit <i>Range: Water Off – 3 hours</i>	30 seconds	
Delay Away time <i>Range: 1 min – 2 hours</i>	Off	
Bypass mode time <i>Range: 15 min – 23 hours</i>	2 hours	
Auto Away time <i>Range: 1 hour – 30 days</i>	23 hours	
Power mode	AC + Battery	

This table provides perspective on how flow rates equate to volume of water over time.

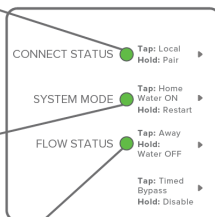
OZ / MINUTE	GAL / DAY	GAL / MONTH	GAL / YEAR
1.0	11.25	337	4,106
2.0	22.5	675	8,212
4.0	45	1,350	16,425
6.0	67.5	2,025	24,637
8.0	90	2,700	32,850
12.0	135	4,050	49,274
16.0	180	5,400	65,700
20.0	225	6,750	82,120
24.0	270	8,100	98,548
28.0	315	9,450	113,400
32.0	360	10,800	129,600
40.0	450	13,500	162,000
48.0	540	16,200	194,400

CONNECT MODULE LIGHTS AND BUTTONS

Basic local operation is available through the Connect Module. Settings changes and advance features such as scheduling are only accessed by a device user on the FloLogic app.

Light Functions

- Solid Green – Connected to through Gateway to Internet
 - Solid Blue – Establishing secure cloud connection
 - Blinking Red – Sync mode; ready to pair with Gateway
 - Solid Red – Attempting to connect to Gateway
 - Solid White – Confirming internet connection
 - Blinking Yellow - Not paired to Gateway or online
-
- Solid Green – Home mode
 - Solid Yellow – Away mode
 - Blinking Red – Automatic shutoff (due to Home or Away flow time violation or external input)
 - Solid Red – Manual water shutoff by app user or Connect Module
 - Fast Blinking Green or Yellow – Override mode, revert to Home/Away
 - Slow Blinking Green or Yellow – Bypass mode revert to Home/Away
 - Blinking Blue – Communication error
 - Orange - System down, not reporting mode status
 - OFF (no light) – Disable mode (no monitoring)
-
- Solid Green – No flow detected
 - Slow Blinking Blue – Flow detected below flow sensitivity setting (not time monitored)
 - Fast Blinking Blue - Flow detected above flow sensitivity setting, but below 48 oz/min (monitored)
 - Solid Blue – Flow high flow above 48 oz/min (monitored)
 - OFF (no light) – System Disabled



Button Functions

Tap = push button quickly
Hold = push/hold 2 seconds

- Tap for local Bluetooth access (future feature)
 - Hold to provision online via Gateway Module
-
- Tap for Home Mode flow time allowance and to turn water on
 - Hold to restart the FloLogic Valve/System
-
- Tap for Away Mode flow time allowance
 - Hold for Water Off Mode
-
- Tap for Bypass Mode, suspending flow monitoring for a timed period
 - Hold for Disable Mode to indefinitely ignore flow monitoring

QUICK REFERENCE

SYSTEM OPERATION MODES

Home: Activates Home flow timer. Turns water back on if turned off.

Away: Activates Away flow timer for quicker automatic shutoffs per settings.

Water Off: Turns off water until user turns back on.

Bypass: Temporarily ignores flow monitoring, reverts to previous mode when times out.

Disable: Indefinitely suspends monitoring and auto shutoff.

SYSTEM MAINTENANCE AND OVERRIDE

- Test flow sensor and shutoff every 6 months. See instructions on page 4.
- Replace backup battery every 3 years or when necessary
- To manually override and open or close the valve, use provided wrench or 8mm socket on exposed valve shaft, push down and rotate to desired position.

FloLogic, Inc.

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