

HOMEheartbeat™



Water Shut-off Controller

User's Guide

EAT•N

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Introduction

The Home Heartbeat Water Shut-Off Controller is designed to help you manage the flow of water into your home.

You can use any Home Heartbeat sensor as a “controller” in combination with the Water Shut-Off Controller. For example, when used with Water Sensors, the system can be set to automatically shut off the water to your home in the event of a burst pipe or appliance leak. Or, you can add an Attention Sensor to shut off your main line with the press of a button. Your Home Key can be used to open and close the valve, or you can choose to operate the unit manually.

This Guide will introduce you to Water Shut-Off Controller and assist you with setup and use.

Water Shut-Off Controller Uses

To shut off water in response to leaks from home appliances and products connected to main water lines, such as:

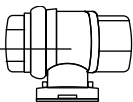
- Washing machines
- Toilets
- Refrigerator automatic ice-makers
- Kitchen, bath or laundry room sinks

Great for use in:

- Family Home
- Vacation Home
- Rental Properties

Water Shut-Off Controller Components

Home Heartbeat
brass ball valve
(not included)



Pegs & Clip

Use the clip to attach the ball valve to the pegs on the unit.



Slide Channel

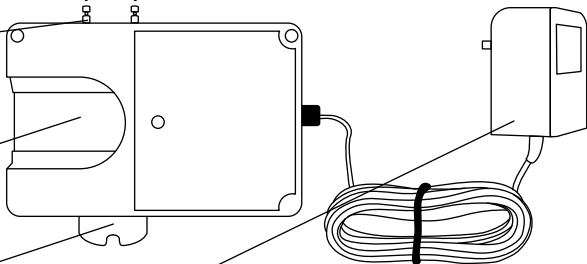
Slide the Home Key here to add the unit to the system

Valve Handle

Use the handle to open and close the ball valve when unit is unplugged.

Power Adapter

Plug the adapter into a wall outlet—do not use an extension cord.



WARNING: Do not remove the ferrite on the power supply cable.

Getting Started

Before installing the Water Shut-Off Controller, please note the following:

The product is for:

- Indoor use only.
- Use with cold water lines only.

The use of this product requires the installation of:

- The HomeHeartbeat Starter Pack.
- At least one Home Heartbeat Sensor, which acts as a 'controller' to trigger an alert and close the Water Shut-Off Controller (Eaton recommends Water Sensors and Attention Sensors).
- A Home Heartbeat brass ball valve (not included), through which the Water Shut-Off Controller is connected to the main water line. The ball valve must be pre-installed at least 18" downstream from a water meter and within 8 feet of a power outlet.

WARNING: Do not put fingers inside the ball valve, as it can close with a force strong enough to sever them.

Installing the Water Shut-Off Controller

Follow these steps to install the Water Shut-Off Controller:

1. Place the Water Shut-Off Controller by joining it to the brass ball valve that was installed on your main water line.
2. Set up the Water Shut-Off Controller using the Home Key.
3. Test that the system is working.
4. Choose sensor controllers that, on alert, will communicate with the Water Shut-Off Controller to shut off the water to your home.
5. Use the product—get alerts, and open and shut the valve.

1. Prepare

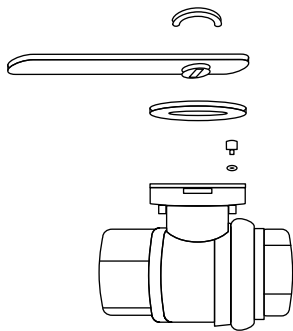
Prepare the ball valve by following these four steps:

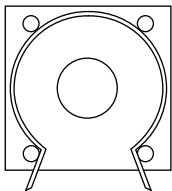
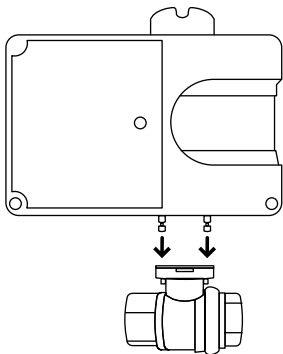
- **REMOVE** retaining ring
- **REMOVE** valve handle
- **REMOVE** plastic washer
- **REMOVE** screw and nut

NOTE

Valve handle may be difficult to slide off.

TIP: try sliding a flat head screwdriver between the handle and the valve to help pry it loose.





2. Place

JOIN the Water Shut-Off Controller to the ball valve by lining up the pegs on the Water Shut-Off Controller to the holes on the brass ball valve.

Make sure the Slide Channel is facing you. The long side of the Water Shut-Off Controller should be parallel to the water pipe.

ATTACH the horseshoe clip to hold the Water Shut-off Controller in place. When doing so, make sure that the clip rests on the inside of the pegs as shown in the bottom left hand corner of this page.

WARNING

To reduce risk of electrical shock, fire or damage to property or device:

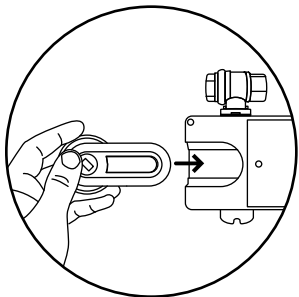
- DO NOT use extension cord.

CAUTION

To reduce the risk of pinching your fingers, keep your hands away from the water shut-off controller when you connect the power.

PLUG IN the Water Shut-Off Controller to a nearby outlet. DO NOT use an extension cord. You will hear the Water Shut-Off Controller rotate the ball valve 180 degrees. The green LED light will blink while the unit checks its position.* Wait for it to stop blinking before moving to Step 2.

*Each time the Water Shut-Off Controller is first turned on (for example, during installation or after a power outage), it rotates the ball valve 180 degrees to check its position.



*Slide the Home Key
into the Slide Channel*

3. Set up

CARRY the Water Shut-Off Controller, your Home Key, a spare water sensor and a small glass of tap water to where the brass ball valve is installed in your home. (If all of your water sensors are in place, use a nearby water sensor.)

CLICK the Home Key thumbwheel to wake the screen, and **SLIDE** the Home Key into the Slide Channel.



The Home Key should say:

Please wait...

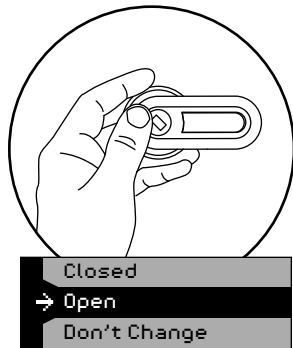
Device found

OK to remove key

If you slide the Home Key into the Slide Channel and the Home Key screen shows either of the following messages, the Home Key or Water Shut-Off Controller may be outside the range of the Base Station.

 → Remove Key...
Please try again
Sensor out of range? → Remove Key...
Can't set up now
Key out of range

If you see either of these messages, you should add a Home Heartbeat Range Extender between the Base Station and Water Shut-Off Controller. This addition will expand the transmission zone of the Base Station to the Controller. Then, you can repeat Step 2.



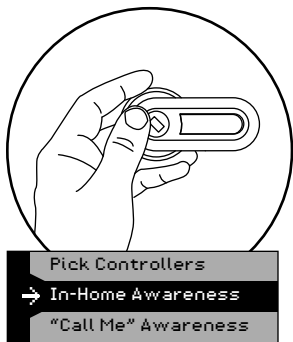
The Home Key will now bring you through a setup wizard to name it, choose sensor controllers, and set **In-Home Awareness** and **“CallMe” Awareness**:

1. First, you will **NAME** the Water Shut-Off Controller. **CLICK Choose Name** and roll the thumbwheel to highlight your selection. **CLICK** once to set the name.
2. **Change Valve State?** is the next step in the wizard. **CLICK** once to see the following choices: **Closed, Open, and Don't Change**. The current state will be highlighted. Though you do not need to make a choice at this time, try choosing the opposite state (open or closed) to see how it works. You should hear the unit changing the position of the ball valve. So that you can test the system later, set it to **Open** before moving to the next step in the wizard. You can always change it afterward.

3. **CLICK** on **Pick Controllers**. Highlight and **CLICK** on the name for the spare water sensor you brought with you or the nearby water sensor you are using for testing. The box next to the sensor name will show a check. You can pick multiple sensors to act as Controllers. To complete this step, highlight and **CLICK Done, Go back**.

If you cannot see the sensor controller you want in the list on Home Key, please see the Note below. *

4. Set **In-Home Awareness** to choose if you'd like to get alerts on the Home Key when you are at home and in range of the Base Station. So that you can test the system later, **CLICK** on **Alarm on Closed**. You can always change it afterward.

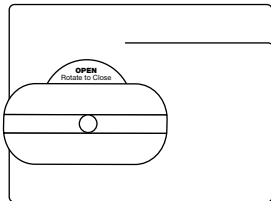
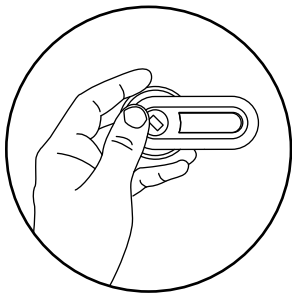


5. Set **"CallMe" Awareness** to choose if you'd like to receive alerts about the Water Shut-Off Controller through your cell phone or email.** **CLICK** to select one of the following options: "Don't call me", "Call me on Closed", "Call me on Open", or "Call me on Changing".
 6. After all of these options are set, the screen will automatically highlight "Done, go back?" **CLICK** once to finish setting up the Water Shut-Off Controller.
- * **Note:** If you cannot see the sensor controller you want on your Home Key, it means that the sensor is not set for in-home alerts or **"CallMe" Awareness**. You can check the setting for that sensor after moving through the setup wizard. For now, choose one and allow the Home Key to bring you through the next options, **In-Home Awareness** and **"CallMe" Awareness**. After you've completed setup, use your Home Key, highlight the icon you'd like to use as a controller, and **DOUBLE-CLICK**. Make sure that:

1. The controller is in range of the Base Station.
2. It is set to “Alarm on ____” under the In-Home Awareness setting, and/or is set to “Call me on ____” under the “CallMe” Awareness setting.

If you choose a sensor as a controller and later change its In-Home Awareness setting to “Don’t alert” and/or its “CallMe” Awareness setting to “Don’t call me”, it will be automatically removed as a sensor controller under the Water Shut-Off Controller menu called “Pick controllers?”

****** In addition to setting sensor and Global “CallMe” options on the Home Key, you must register with Home Heartbeat Support (1-800-813-2199 or www.homeheartbeat.com) to get remote alerts.



4. Test

To test general operation:

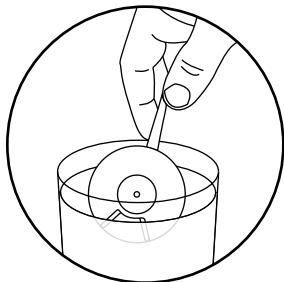
1. Using the Home Key, **ROLLOVER** and highlight the Water Shut-Off Controller icon.



2. **DOUBLE CLICK** the thumbwheel, highlight and **CLICK Change Valve State**, and highlight and **CLICK Closed**. If it was open, you should hear the motor close the ball valve and see the Valve Handle rotate 90 degrees.
3. Once again, **ROLLOVER** and highlight the Water Shut-Off Controller icon On the Home Key. **DOUBLE CLICK** the thumbwheel, highlight and **CLICK Change Valve State**, and highlight and **CLICK Open**. The ball valve will open.

To test the automatic shutoff feature:

1. Dip the Controller's water disc into the tap water. You should hear the valve close and see the Valve Handle rotate 90 degrees to shut off the water.* Check the Home Key screen for feedback.
3. Once again, **ROLLOVER** and highlight the Water Shut-Off Controller icon On the Home Key. **DOUBLE CLICK** the thumbwheel, highlight and **CLICK Change Valve State**, and highlight and **CLICK Open**. The ball valve will open.
3. **ROLL OVER** and highlight the Water Shutoff Valve Controller icon on the Home Key.
4. **DOUBLE CLICK** the thumbwheel, highlight and **CLICK Change Valve State**, and highlight and **CLICK Open**.



* Water that is free of minerals or sediment, such as bottled or distilled water, will not activate the water sensor.

5. Choose sensor controllers

Now that you've installed and tested the Water Shut-Off Controller, you can consider the types of situations when you'd want it to close its valve and shut off the water to your home. During this step, you can choose one or several Home Heartbeat Sensors to use as controllers.

The Water Sensor works well as a controller because it can sense the presence of water and, when set to "Alarm on Wet", will communicate back to the Water Shut-Off Controller to shut its valve. It can be placed below washing machine, toilet, or sink hookups to help reduce damage if they burst from aged or faulty pipes or seals.

In addition to your Home Key, the Attention Sensor can be used as a controller to shut the Water Shut-Off Controller valve from a convenient location, such as your kitchen. For example, you may want to shut off the main water to your vacation home before leaving. If you set the Attention sensor to alarm in the In-Home Awareness setting and press the front of it, it will shut the valve. The LED on the

front of the Attention Sensor will light up when the alert is sent, and will continue to blink to remind you that you shut off the valve. To open the valve again, please see “Opening and closing the ball valve” in Part 6, Use.

Once you have decided on the sensors you want to use as controllers, follow these steps to set them up:

1. **REVIEW** each sensor that you want to be a controller. Make sure they are all set to alarm. Sensors that are not set to alarm will not appear on your Home Key and cannot be used.
2. **ROLL OVER** the Water Shut-Off Controller icon on your Home Key.
3. **DOUBLE CLICK** the thumbwheel, highlight and **CLICK** on **Pick Controllers**.

If you cannot see a controller in the list, scroll to **Done, Go back** and **CLICK** once to exit from the Water Shut-Off Controller menu. Now, highlight and

DOUBLE-CLICK on the icon you would like to use as a controller. Make sure that:

- a. The controller is in range of the Base Station.
 - b. It is set to **Alarm on ___** under the In-Home Awareness setting, and/or is set to **Call me on ___** under the "CallMe" Awareness setting
4. Highlight the name and **CLICK** the thumb wheel to select each device you want to use as a controller. When you have finished, highlight and **CLICK** on **Done, go back?**

Note: If you choose a sensor as a controller and later change its In-Home Awareness setting to **Don't alert** and/or its "CallMe" Awareness setting to **Don't call me**, it will be automatically removed as a sensor controller under the Water Shut-Off Controller menu called **Pick controllers?**

6. Use

Getting alerts

After correct setup, the Water Shut-Off Controller will shut off the main water to your home if any or all of the controllers send an alert. If a controller alerts, you will see a full-screen alert flashing red on the Home Key or receive an alert on your cell phone or through email, depending on how you've set up the system.

If the system fails to send an alert

There are two cases when the Home Heartbeat system might fail to send an alert to your Home Key, cell phone, or email. In these cases, the Water Shut-Off Controller ball valve will not close, and you should check it as soon as possible.

When an alert is triggered by a sensor controller but does not reach the Base Station

The ball valve will not close. The sensor will keep trying to send the message to the Base Station. If the message does not reach the Base Station after an hour, the icon for the sensor controller on the Home Key will display a question mark and amber background.

When an alert triggered by a sensor controller reaches the Base Station, but the Base Station fails to send it to the Water Shut-Off Controller

The ball valve will not close. The Home Key will notify you and the Base Station will keep trying to send notice of the alert to the valve. If you have “CallMe” Awareness set, the system will send you a text message about the issue to your cell phone or email.

After addressing the cause of the alert

After the issue that caused the alert has been addressed, you can re-open the Water Shut-Off Controller ball valve either using the Home Key or manually by following the steps in the next section, Opening and closing the ball valve.

Opening and closing the ball valve

Using the Home Key when sensor controllers are not in an alarm state

ROLL OVER and highlight the Water Shutoff icon on the Home Key.

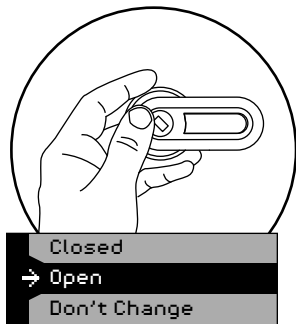
DOUBLE CLICK the thumbwheel and then select **Change Valve State**. Select **Open**.

Using the Home Key when sensor controllers are alarming

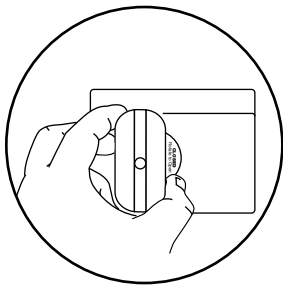
ROLL OVER and highlight the Water Shutoff icon on the Home Key.

DOUBLE CLICK the thumbwheel, and highlight and **CLICK** **Change Valve State**. **CLICK Open**.

The Home Key will ask if you want to override alerts. Highlight and **CLICK Yes, Override Alert**.



Note: When you override a controller, it cannot shut off the water again until it is first dry, then wet again. It will not shut off the water while it is alarming. After it stops alarming, it will shut off the water again if a new alarm is triggered.



Manually operating the valve

CAUTION To reduce the risk of pinching your fingers: Power must be disconnected before manually operating the valve. The motor will resist manual operation while the power is on.

UNPLUG the unit.

ROTATE the Water Shut-Off Controller manually by turning the Valve Handle to the correct position.

Note: Once power is restored, the Water Shut-Off Controller will return to the position it was in when power was removed

Compliance Information

(Compliance Statement, Part 15.19): This device complies with 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.

WARNING (Part 15.21): Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

To comply with FCC's RF exposure limits for general population/uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada Statement

The term "IC" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

Interference

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. These limits 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, then the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into a power source on different circuit than the receiver.

Sensor Maintenance

No serviceable parts. Clean with a soft, dry cloth.

Specifications

- Max. Working Pressure 125 PSIG
- Ambient Temperature 35° to 105° F
- Enclosure Polycarbonate
- Valve Full-Port, Brass, NPT
- Valve Seals RTFE

Flow Data

Valve Size CV = Gpm flow @ 1 PSI pressure drop

- Model: 70D5030G01, (CAT #: HHBVALVE50) 1/2" NPT 19
- Model: 70D5030G02, (CAT #: HHBVALVE75) 3/4" NPT 34
- Model: 70D5030G03, (CAT #: HHBVALVE100) 1" NPT 52
- For cold water applications only

Notes:

Notes:

Notes:

Need help?

Call Home Heartbeat Support
(1-800-813-2199 or www.homeheartbeat.com) to get information
and instructions for service.

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