WaterCop

AUTOMATIC WATER SHUT-OFF SYSTEMS

Z-WAVE by DynaQuip®

Owner's Manual and Installation Guide

WaterCop Z-Wave

Emergency Water Shut-Off

SPEAKS **Z-WAVE®**

Products that speak Z-Wave
work together better.™

The proven leader in household leak protection: **WaterCop is there when you're not.**

Table of Contents

Introduction

WaterCop is a patented, wireless, water detection and automatic water shut-off system that works as an automatic valve for a home's main water supply line and can be easily installed by a certifi ed professional plumber.

WaterCop is a new professional grade, electrically operated water shut-off valve introduced by DynaQuip® Controls Inc. Every year nearly one million families have their homes ruined and their lives overturned by water damage and the subsequent repairs. The WaterCop used in a Z-Wave home automation network along with Z-Wave water alarm sensors, helps to reduce or eliminate water damage caused by leaky pipes or faulty appliances.

WaterCop operates in a Z-Wave enabled home network which uses the latest and most successful wireless home automation technology to provide protection 24/7, 365 days a year.

System Components

The Emergency Water Shut-Off Valve System has two basic components:

1. A motorized ball valve and housing containing a wireless Z-Wave radio transceiver which automatically turns off your water supply when any wireless water alarm sensor detects water or low, potentially freezing temperature through a properly configured Gateway Controller.

2. A number of wireless water alarm sensors, which detect water from a leak or overfl ow, or detect potentially freezing temperatures, and cause a wireless Z-Wave signal to be sent to the Gateway Controller then command WaterCop to close the valve.

Product Specifi cations

WaterCop uses a motorized ball valve (available in multiple sizes ½", ¾", 1" and 1 ¼"), that is used to automatically turn off the main water supply when unwanted water is detected due to a leak or overflow. * Up to 2" available.

Multiple WaterCop valves can be used and/or programmed into a Z-Wave Home Automation System.

Brass valve with commercial grade seats and seals.
• Ball valve: full port, lead-free brass
• Seats: RTFE
• Seals: Viton

Sizes/Flow (GPM@1 PSI pressure drop):

½"	19
¾"	34
1"	52
1 ¼"	77

General Usage Specifications:
• Maximum Working Pressure: 125 PSIG
• Ambient Temperature: 35° to 105° F
• For Cold Water Applications

Enclosure: Polycarbonate, NEMA 4x (weather resistant)

Voltage: 110 VAC converted to 12 VDC (Class 2 power converter with 20' cord), 0.85A full load.

Meets the approvals of state and municipal authorities.

Three indicator lights. If the red light is on, it means that the valve is closed. The green light means that the valve is open, allowing water to flow freely through the plumbing system. If the yellow light is on or flashing, it means an error or the valve is not programmed into a Z-Wave network.

Three panel-mount tactile switches to manually activate/program the valve.

A Z-Wave System, which includes the WaterCop in combination with sensors and a Z-Wave Gateway Controller (available in kits or sold separately), can automatically send you an email, text message, or phone call (based on your controller configuration) when a water leakage or overflow event occurs.

A Z-Wave System can be remotely operated (via Internet or phone) through a Z-Wave Gateway Controller.

When installed properly in a Z-Wave network, the WaterCop and a system of water sensors constantly monitor the home for water leakage. The water sensors are strategically placed throughout the home. If one of these sensors trip, a wireless Z-Wave radio signal is relayed through the Z-Wave home network causing the WaterCop to turn off the household water supply.

The Z-Wave System can also include many other devices from other companies that are Z-Wave certifi ed, such as light switches, thermostats, scene controllers and other useful Z-Wave devices.

STOP GENERAL SAFETY INFORMATION

Adherence to all local and municipal building, plumbing and electrical codes as they pertain to the installation of the WaterCop System is of utmost importance. Codes in some areas may require that a licensed plumber be employed to do the installation, or that the proper permits be obtained prior to installation. Even if local codes do not require a licensed plumber to do the installation, it is necessary that the installer has a professional level of competence in both plumbing and electrical skills to perform the installation. These instructions assume this level of knowledge and skill. If in doubt, use a licensed professional.

⚠ WARNING!

Disconnect power source before working on or servicing the unit. Failure to do so could result in serious personal injury.

It is strongly recommended that eye protection be worn while servicing the system. Failure to do so could result in personal injury.

Pre-Installation Testing of Water Valve

Although each unit is pre-tested at the factory, it is recommended that the unit be tested prior to installation to ensure proper operation in your home. Operating the valve before connecting the water line will not damage it.

USE CAUTION! **The valve closes with enough force to cut off a finger. Be extremely careful to keep fingers and other items out of the valve.**

Manually Test the Valve

Check the position of the valve by looking in either threaded end. In the open position, you will be able to see through the valve; in the closed position only the shiny surface of the ball will be visible.

Place the base of the housing on a sturdy surface, as close as feasibly possible to the location where it will be permanently installed. Plug the WaterCop power adapter cord into a nearby 110 VAC outlet. Within 10 seconds, the status indicator light will start blinking. Grasp both sides of the housing (not the valve) with the valve pointing away from you. Being very careful not to have your fingers or other objects near the valve openings, press the colored circle just below the unlit indicator light of the opposite valve position.

You will hear the motor change the valve position. Again, look into the threaded end of the valve to verify that the valve has changed position. If it appears that the valve has not turned from one position to the other, DO NOT try to reposition the valve yourself by inserting any tool or fingers into the valve. Operate the valve several more times from open to close, checking each time for proper positioning. If you are experiencing difficulties getting the valve to open and close, call the installation help line listed on the back cover.

Operation
1. Front Panel Operation

A. Open and Close Buttons and their Indicator Lights
- The Open and Close Buttons allow the user to control the valve locally.
- The LED Indicator Lights will indicate the status of the valve, either open or closed.

B. Mode Button
- The Mode Button provides the means to include (add) the WaterCop into a Z-Wave network, exclude (remove) the WaterCop from a Z-Wave network, and to switch between modes.
- The operation of the Mode Button for these different functions is described on page 5.

C. Status Light
The Status Light gives an indication about the current mode or any error conditions. Generally, if the WaterCop is in a Z-Wave network, the Status Light is turned off. The Status Light displays the indications in a cyclic manner, so zero, one, or more of the mode or error indications may be displayed sequentially and repeatedly. The mode indications are fast blinks, while the indications for error conditions are slow blinks. The mode indications are described on page 5, the error conditions can be found under section "Fault Conditions/Troubleshooting" on page 8.

D. Power-On
- **At power-on,** the Mode LED should start blinking 4 times within 10 seconds indicating the actuator isn't in a network. The actuator is shipped in the closed position so the closed LED should be lit. Press "OPEN" to program.

CAUTION! **If the ball valve is not yet installed, keep fingers and foreign objects away from the ball valve while operating it (either by using the buttons or using wireless Z-Wave commands).**

NOTE: The WaterCop Z-Wave valve could perform the first two steps of the set up (shown above) automatically at power-on, but it was programmed not to do so, to avoid personal injury or damage to the valve due to foreign objects in its path.

A. Open and Close Buttons Indicator Lights
B. Brass Valve
C. Mode Button
D. Status Light
E. Manual Override

2. Mode Indications

Water Valve Mode	No. of Fast Blinks	Comments
Automatic Network Wide Inclusion (NWI) mode (Not available on some versions)	1	NWI mode is the default at initial power-on and is active for approximately 30 minutes or until manually exited
In-Network (WaterCop is in a Z-Wave network in either Water Alarm or Water Level mode)	2	Not repeated, only given at power-on or after inclusion
Out-of-Network (WaterCop is not in a Z-Wave network) / Water Level mode	3	
Out-of-Network (WaterCop is not in a Z-Wave network) / Water Alarm mode	4	Default mode at initial power-on

3. Automatic Network Wide Inclusion (NWI) Mode

At power-on, in some versions and before the WaterCop is included in a network, the NWI mode is active. This mode allows automatic inclusion into an existing home network that has a Z-Wave controller supporting NWI mode. Please refer to your controller's user manual to determine whether or not the NWI mode is supported.

NWI mode is stopped after one of the following conditions occur:

• The WaterCop valve is automatically included,
• 30-minute timeout, or
• The Mode Button is pressed

By pressing the Mode Button, the user can perform a manual inclusion into the network (see below).

NWI mode is entered every time power is applied to the WaterCop, if it is not already a part of a Z-Wave network (included).

4. Inclusion (Manual) in a Z-Wave Network

To manually add (include) the WaterCop to a Z-Wave network, you must also have a Z-Wave Controller. Follow your Z-Wave Controller User Manual to configure the Controller for Inclusion Mode.

Once the Controller is in Inclusion Mode, ensure that the Status Light is flashing periodically (3 or 4 times).

Press the Mode Button once. The Controller will indicate when the WaterCop is included and the Status Light will stop flashing.

NOTE: Inclusion and Exclusion are always done at Normal Transit Power Mode.

5. Exclusion from a Z-Wave Network

To manually remove (exclude) the WaterCop from a Z-Wave network, follow your Z-Wave Controller User Manual to configure the controller for Exclusion Mode.

Once the Controller is in Exclusion Mode, press the Mode Button once. The Controller will indicate when the WaterCop is excluded and the Status Light will start fl ashing periodically (3 or 4 times).

NOTE: Inclusion and Exclusion are always done at Normal Transit Power Mode.

6. Association with One or More Water Sensors

Once in a network, a smart Controller can be used to associate water sensors with the WaterCop Association allows a sensor to control the WaterCop valve directly without going through a Controller. Refer to your Controller's documentation on how to associate devices.

Typically, when associated, the WaterCop receives a Basic Set command (value = 0xFF) to close the ball valve (when a Water Alarm is active).

If a water sensor is not associated with the WaterCop valve, then a Controller receives the message from the water sensors and, in turn, sends a Binary Switch command (value = 0xFF) to the WaterCop actuator to close the ball valve.

7. Emergency (Power Outage) Manual Operation

The WaterCop system will not operate when power is not present. In this situation, the handle at the side of the WaterCop actuator can be turned in the direction indicated to turn off the water in an emergency. You must turn the handle a full 90 degrees to reach the end of travel and fully open or close the valve. Failure to do so could result in miscommunication within the Z-Wave environment.

8. Z-Wave Operation (Advanced)

The following sub-sections provide specific Z-Wave information for the command classes implemented by the Water Valve:

A. Basic Command Class, Version 1

Water Valve will respond to a Basic Get with a Basic Report indicating the last known position of the ball valve (value = 0xFF indicates closed, and 0x00 indicated open).

NOTE: If the position is not known due to not confi guring the WaterCop or because the valve is changing position, or because of a fault condition, the Basic Get command will be ignored. The WaterCop will instead respond with a Z-Wave "Application Busy. Try Again Later" transmission.

B. Binary Switch Command Class, Version 1

The Binary Switch Command Class is fully implemented. The Binary Switch Set Command causes the ball valve to close with value = 0xFF and causes the ball valve to open with value = 0x00. A Binary Switch Report will be sent upon completion of the open or close operation. The WaterCop valve will respond to a Binary Switch Get with a Binary Switch Report indicating the last known position of the ball valve (value = 0xFF indicates closed and 0x00 indicates open).

NOTE: If the position is not known due to not configuring the WaterCop system at power-on, or because the valve is changing position, or because of a fault condition, the Binary Switch Get will be ignored. The WaterCop valve will instead respond with a Z-Wave "Application Busy. Try Again Later" transmission. To ensure that the position is known, the WaterCop valve must be configured by using the buttons to do an Open/Close cycle after power has been applied or re-applied after a dropout.

C. Manufacturer Specifi c Command Class, Version 1

The Manufacturer Specifi c Command Class is fully implemented. The Manufacturer Specifi c Get returns the following information:

Manufacturer ID: 0x0084

Product Type ID: 0x0213

Product ID: (Version and Revision may vary)

D. Version Command Class, Version

The Version Command Class is fully implemented. The Version Get and Version Command Class Get return the Version Report and the Version Command Class Report, respectively.

E. Alarm Command Class, Version 2

The Alarm Command Class, Version 2, is fully implemented to signal that the main power has dropped out or has been applied.

If the main power is reapplied, the WaterCop will send a Power Reapplied Alarm Event within 10 seconds.

When main power has dropped out, the WaterCop will attempt to send a Voltage Drop/Drift message using residual power in the circuit.

The Alarm Command Class uses the following command class alarms and events:

Z-Wave Alarm Type:
Power Management Alarm (0x08)

Z-Wave Alarm Events:
Voltage Drop/Drift (0x05) Power has been applied (0x01, only sent after Voltage Drop/Drift event)

Z-Wave Alarm Status:
0xFF, Enabled (Factory Default State) 0x00, Disabled

NOTE: The WaterCop will only send the Alarm Report Command unsolicited if it has previously received the Alarm Set Command. In this case, the Alarm Report will only be sent to the last node from which it received the Alarm Set Command (i.e. it will not be "broadcast" to the Z-Wave network.)

F. Application Status Command Class, Version 1

The Application Status Command Class is implemented to allow the WaterCop system to signal other devices that the WaterCop valve is busy or has rejected a request because of its current state. These responses are described above in sections 8A and 8B on page 6.

Z-Wave Command Class	Comments	Ref. Section
COMMAND_CLASS_BASIC	Get command returns last known position of ball valve (open/closed), Set command (value = 0xFF) from associated sensor will close the ball valve.	8.A
COMMAND_CLASS_SWITCH_BINARY	The Binary Switch Set Command causes the ball valve to close (value = 0xFF) and causes the valve to open (value = 0x00).	8.B
COMMAND_CLASS_MANUFACTURER_SPECIFIC	Get Manufacturer ID and Product ID.	8.C
COMMAND_CLASS_VERSION	Get version of product and command classes.	8.D
COMMAND_CLASS_ALARM	TYPE: Power Management Alarm (0x09); EVENTS: Voltage Drop/Drift (0x05); Power has been applied (0x01, only sent after Voltage Drop/Drift event); STATUS: (value = 0xFF) Enabled (Factory Default State), (value = 0x00), Disabled.	8.E
COMMAND_CLASS_APPLICATION_STATUS	Allows valve to signal other devices that the device is busy or has rejected a request because of its current state. ("Application Busy. Try Again Later").	8.F

9. Fault Conditions/Troubleshooting

The Status LED provides the following fault indications represented by 2 or more slow, periodic blinks. Generally, these should never occur. The presence of one of these status indications may indicate that the WaterCop system requires attention to maintain proper function.

Fault Indication	No. of Slow Blinks	Comments
Main Power Dropout	2	Check main AC power to WaterCop system
Motor Jammed/Timeout Error	3	Ensure that nothing is blocking the ball valve; cycle power to the WaterCop system
Communication (I2C) Error	4	Cycle power to the WaterCop system
ADC Error	5	Cycle power to the WaterCop system
Time Error	6	Cycle power to the WaterCop system
State Error	7	Cycle power to the WaterCop system
Unknown Error	8	Cycle power to the WaterCop system

Compliance

USA

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 those that may cause undesired operation.

Contains Transmitter Module FCC ID: XCT-Z3US

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, 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 equipment and receiver;
- connect the equipment into an outlet on a circuit different from that to which the receiver is connected;
- consult the dealer or an experienced radio/TV technician for help.

RF Exposure

All transmitters regulated by FCC must comply with RF Exposure requirements. OET Bulletin 65 "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" provides assistance in determining whether proposed or existing transmitting facilities, operations or devices comply with limits for human exposure to Radio Frequency (RF) fields adopted by the Federal Communications Commission (FCC). The bulletin offers guidelines and suggestions for evaluating compliance.

CAUTION! To satisfy FCC RF Exposure requirements for mobile and base station transmission devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation at closer than this distance is not recommended.

CANADA

Industry Canada Statement per Section 4.0 of RSP-100

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

Section 7.1.5 of RSS-GEN

Operation is subject to the following conditions:

1. This device may not cause harmful interference, and

2. This device must accept any interference received, including those that may cause undesired operation.

   From Section 7.1.1 of RSS-GEN, Issue 2, June 2007.

   a) The host device, as a stand-alone unit without any separately certified modules, complies with all applicable Radio Standards Specifications.

   b) The host device and all separately certified modules it contains jointly meet the RF exposure compliance requirements of RSS-102, if applicable.

   c) The host device complies with the certification labeling requirements of each of the modules it contains. From Section 5.2 of RSS-GEN, Issue 2, June 2007.

Equipment Labels: Contains IC: 8156A-Z3X.

From Section 7.1.6 of RSS-GEN, Issue 2, June 2007.

Digital Circuits: If the device contains digital circuitry that is not directly associated with the radio transmitter, the device shall also comply with ICES-003 Class A or B as appropriate, except for ICES-003 labeling requirements. The test data obtained (for the ICES-003 tests) shall be kept by the manufacturer or importer whose name appears on the equipment label, and made available to Industry Canada upon request, for as long as the model is being marketed in Canada.

How the System Works

Water Sensors constantly monitor their selected areas for accumulating moisture. When a leak is detected, a sensor will send a Z-Wave command to the Gateway Controller, instructing WaterCop to shut off the water supply to the home. The WaterCop will remain closed until it's manually reset (Water Alarm Mode).

The Water Alarm Sensors are battery powered devices which enable them to be located anywhere a leak is likely to occur, or where water might cause damage. The WaterCop requires household electrical power 110 VAC, and will not operate during a power outage unless receiving auxiliary power from a backup device such as an uninterruptible power supply unit (UPS). Additionally, the use of a certifi ed surge protection device is highly recommended.
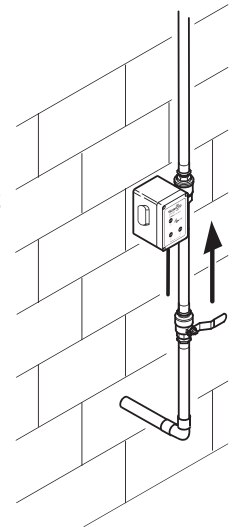
Installation

Review Location and Type of Main Supply Line

The main supply line should enter the house in either the basement or crawl space beneath the first floor. The water main shut-off valve is usually located near where the line comes through the basement wall or just after the water line enters the living area from the crawl space. In apartments, townhouses, and manufactured homes the water main shut-off valve can usually be found in close proximity to the water heater installation. The WaterCop should be installed in the main water line just downstream from the main shut-off valve in your home.

The WaterCop must be installed indoors:

- in the main water line;
- just downstream from the main water shut-off valve;
- in a dry location;
- where it is accessible for checking and resetting the valve;
- where the case is protected from use as a step or from excessive loads.

CAUTION! Local electrical and plumbing codes should be consulted to ensure that the installation is in complete compliance!

CAUTION! Never use the housing for leverage when mounting this unit or tightening fittings. Use a wrench on the valve flats provided.

CAUTION! High heat from soldering or brazing can damage valve seats or motor housing. Proper precautions should be taken to prevent damage from heat when installing the unit. Remove plastic housing before soldering valve in place.

Additional Parts Requirements

Installation of WaterCop will require additional parts. When the main supply line is cut to accommodate the WaterCop new fittings will be needed to connect the ends of the piping to the WaterCop

The type of connecting fittings to use will be determined by the type of existing piping, local plumbing codes, and "industry standard practices".

The most common material for water supply lines is copper. If the WaterCop is to be installed in a copper line, you may have multiple choices of fittings and methods of installation.

Compression Fittings

The unit can be installed with compression fittings using common household tools and basic mechanical ability. You will need:

- two fittings (male pipe thread x compression) available at most local hardware or plumbing supply stores;
- Teflon® tape or thread sealant;
- tubing cutter;
- ruler;
- pencil or marker;
- two large adjustable wrenches.

Measure the outside diameter of the copper tube and note the valve size to be sure the proper size fittings are purchased.

Steps of Installation using Compression Fittings

1. Remove nuts and sleeves from compression fittings and install fittings into each end of the valve using Teflon tape or thread sealant to ensure a watertight seal. Hold wrench on flats of valve body and use the other to tighten fittings.

2. Measure the distance from end to end of valve assembly. For ½" tube ($^5/_8$" outside diameter) subtract ½", for ¾" tube ($^7/_8$" outside diameter) subtract ¾" from your measurement. This is the length of the section of tubing to be cut out of the existing line. The piece of existing tubing to be cut out is shorter than the measured length of the valve assembly so that the tube extends into the compression fittings.

3. Select the location for the WaterCop Be sure to consider that you will need access to the front panel of the WaterCop and that a power outlet is in close proximity. After cutting the section of tube out of the line, you will need to shift the tube ends to be able to fit the unit in place. Make sure you have access and room to adjust before cutting the tube.

4. Mark the tube in the location you have selected. Double check the length and location you marked.

5. Turn water off and drain the system.

6. Use tube cutter to cut copper tube at the marks. Careful, may still be water in the line.

7. Remove any burrs from tube ends and clean ends.

8. Install compression nuts and sleeves to each tube end.

9. Shift tube ends to install WaterCop in the line.

10. Position the unit and tighten compression nuts. Hold the fitting with one wrench while tightening the nut with the other. Tighten both nuts.

11. Plug unit into a proper power source and turn valve to open position (open button/green light).

12. Unplug unit, turn water back on and carefully check for leaks.

13. Plug unit back into power source. Installation is complete.

Solder Fittings

An alternative method is to solder the unit into the water line. This method requires a considerably higher skill level to accomplish the installation properly and safely. If you are not skilled in this area, it is strongly recommended that you contact a professional plumber to do this type of installation.

Placement of Sensors

Each Z-Wave gateway controller can support multiple Water Alarm Sensors. A Z-Wave network can have up to 232 nodes. Additional sensors may be added at any time. The Water Alarm Sensors should be placed in locations where leaks are most likely to occur.

Suggested Locations

- Washing Machines
- Sump Pumps
- Bathroom Sinks
- Automatic Humidifiers
- Water Heaters
- Toilets
- Dishwashers
- Kitchen Sinks
- Ice Makers/Refrigerators
- Pipes that are prone to freezing
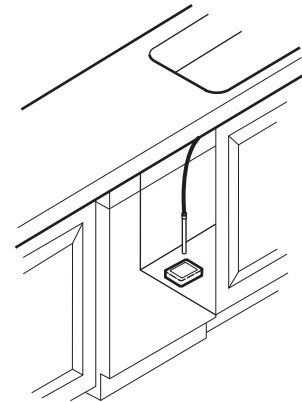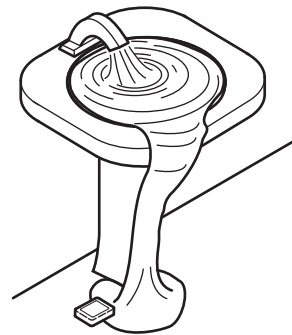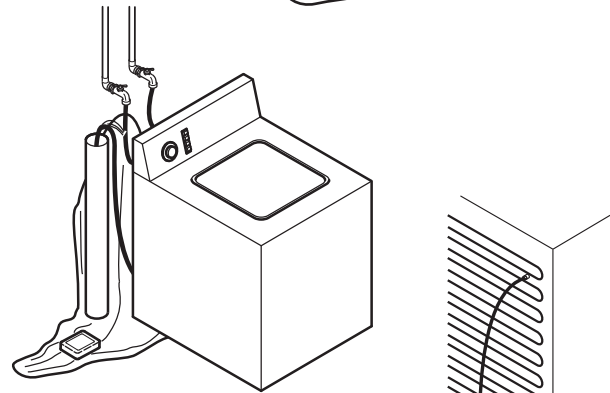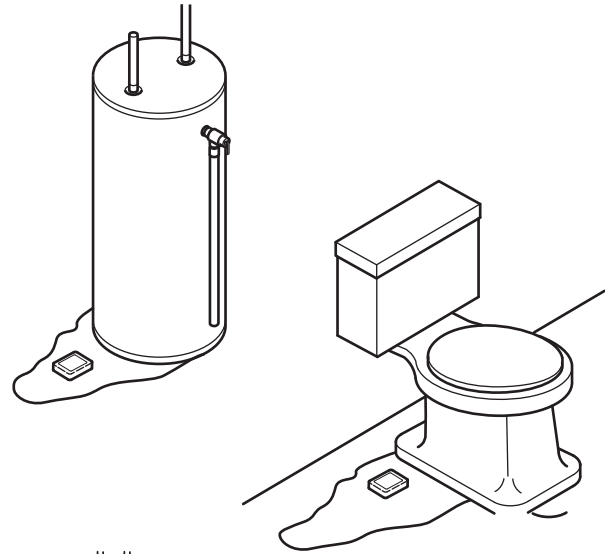
Operating the WaterCop Z-Wave System

NOTE: If major repairs are needed to correct the plumbing system, it is recommended that the manual shut-off valve upstream of the WaterCop also be closed during the repairs. Close the main water shut-off valve and unplug the WaterCop before making repairs on the plumbing system.

In case of a power failure and without a backup battery, the WaterCop cannot operate. If the power is out, you will need to use the manual shut-off valve to turn the water off in case of an emergency. When power is restored, the WaterCop must be cycled via the Open/Close Buttons or Z-Wave Binary Switch Command to ensure that the current ball valve position is known. It is recommended to manually cycle (open-close-open) your WaterCop once every 3-4 months.

Test Procedure

After the WaterCop system has been installed and included in a network, and the controller/water sensor(s) have been included and configured, perform the following steps to test the system:

1. Following all safety precautions, make sure that the WaterCop is plugged in and the valve is in the open position. If the valve is not installed, it is important that anyone who will be near the valve is aware of the safety precautions, and does not insert any object into the valve, or handle the valve during the test.

2. At one of the locations you have chosen to monitor, set the sensor probes onto a wet sponge. Hold until the sensor transmits a signal to the Gateway Controller (approx. 5 seconds). This test simulates a leak and lets you check for interference between the sensor, Gateway and WaterCop valve.

3. Remove the sponge and dry the sensor probes. Follow sensor instructions to reset the sensor.

4. Go back to your WaterCop and verify that the valve is closed (the red indicator light will be lit).

5. Keeping all objects away from the valve; reset the WaterCop by pressing the green circle next to "Open" text.

6. Repeat steps 2 through 5 until you have tested each sensor at the locations you wish to monitor.

General Safety Information

Warnings and Precautions

STOP WARNING!

The motorized drive unit case is not capable of supporting loads. Do not attempt to use the unit as a step. This will cause damage to the unit and could cause personal injury. Do not store highly flammable items such as oily rags or other combustibles near the valve.

STOP WARNING!

Do not apply electrical power to the unit unless the unit is fully assembled (as it was shipped). Failure to do so could result in personal injury and/or damage to the unit.

STOP WARNING!

Disconnect power source before working on or servicing the unit. Failure to do so could result in personal injury.

⚠ CAUTION!

It is recommended that eye protection be worn while installing or servicing the system. Failure to do so could result in personal injury.

Do not use the case as leverage when mounting this unit or tightening fittings. Apply wrench to flats on the valve body to tighten fittings.

Emergency Procedures

In the unlikely event that the WaterCop System should shut off the main water supply and then become inoperable due to power outage or damage, it is possible to manually operate it to return water service. Unplug the WaterCop from its power source. The valve may be manually turned with the handle at the side. You must turn a full 90 degrees to reach the end of travel and fully open or close the valve. Failure to do so could result in miscommunication within the Z-Wave environment. This procedure should only be necessary in emergencies. Similarly, the handle can be used to turn off the water supply in an emergency.

Emergency Manual Shut-Off

Limited Warranty

DynaQuip® Controls Corporation warrants the electrical components of the WaterCop Z-Wave System to be free from defects in material and workmanship under normal use and if properly installed for a period of two years from the date of purchase. If found to be defective as mentioned above, it will be replaced or repaired if returned prepaid along with proof of date of purchase. This shall constitute the sole remedy of the purchaser and the sole liability of DynaQuip® Controls Corporation. To the extent permitted by law, the forgoing is exclusive and in lieu of all other warranties or representations whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall DynaQuip® Controls Corporation be liable for special or consequential damages. The WaterCop Brass Ball Valve has a 5-year warranty.

The WaterCop Z-Wave system is based on wireless (RF) transmissions through the air. Any wireless transmission can be subject to RF interference and, although it is highly unlikely, this interference may cause the system to not operate as intended. The WaterCop Z-Wave system must not be used in life support and/or safety applications.

Information contained in this publication regarding WaterCop Z-Wave applications and the like is provided only for your convenience and may be superseded by updates. It is your responsibility to ensure that the WaterCop Z-Wave system meets with your specifications.

Notes

Notes

WaterCop
AUTOMATIC WATER
SHUT-OFF SYSTEMS

Z-WAVE by DynaQuip®

Made in the USA