DOME

BY ELEXA
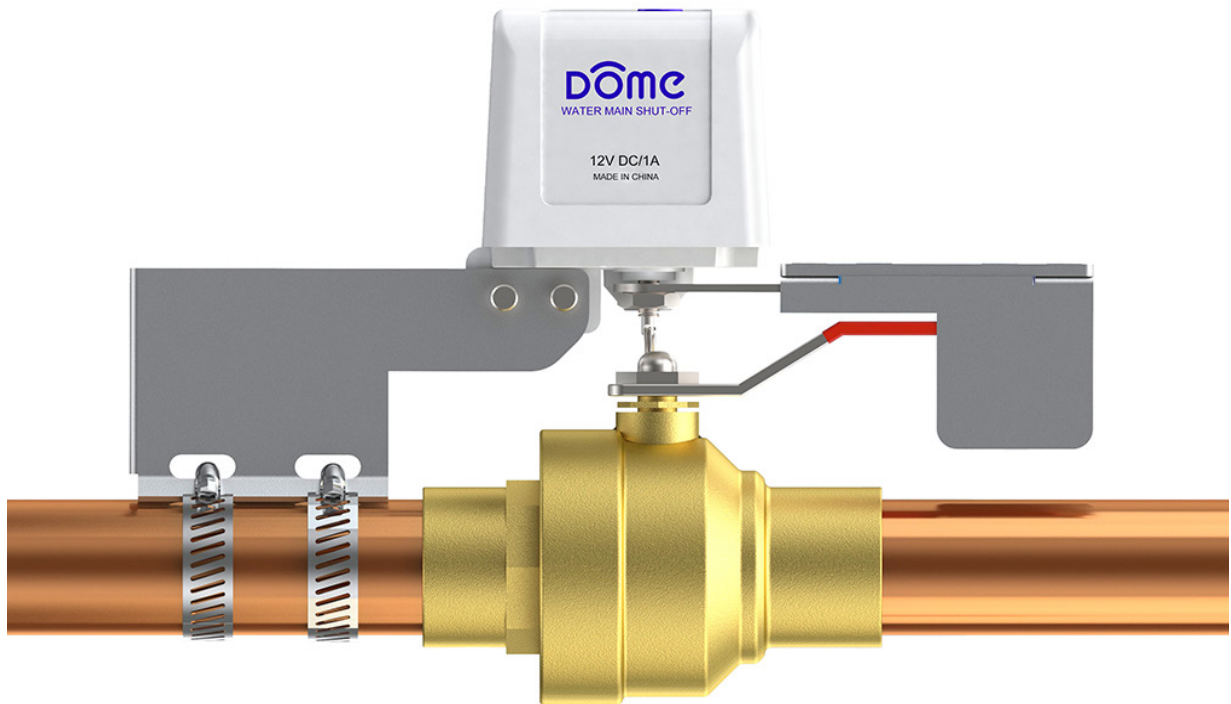
Always Connected. Always Covered.

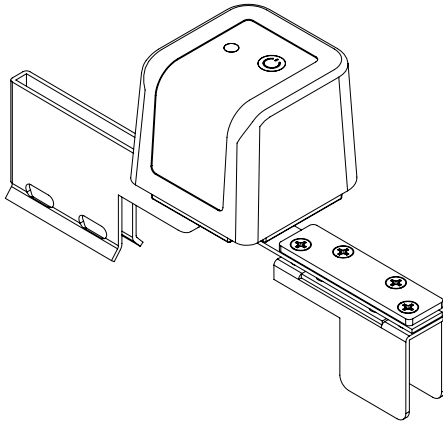# Water Main Shut-Off

DMWV1

User Manual

Preface

As this is the full User Manual, a working knowledge of Z-Wave automation terminology and concepts will be assumed. If you are a basic user, please visit www.domeha.com for instructions. This manual will provide in-depth technical information about the Water Main Shut-Off, especially in regards to its compliance to the Z-Wave standard (such as compatible Command Classes, Association Group capabilities, special features, and other information) that will help you maximize the utility of this product in your system.

Table of Contents

Description & Features

 The Dome Water Main Shut-Off is a Z-Wave Plus Certified device that installs over any standard 1/2" to 1-1/2" ball valve, and opens or closes the valve when given a signal. The Water Main Shut-Off consists of three main parts - the "MOTOR ASSEMBLY," the "MOUNTING BRACKET," and the "CONTROL ARM." The MOUNTING BRACKET is clamped onto the pipe with HOSE CLAMPS and the CONTROL ARM secures around the VALVE HANDLE to control the valve, while the MOTOR ASSEMBLY connects to your home automation system and ties everything together.

Key Features:

» Open or close any valve remotely

» Single-tool installation

» Install over existing valve - no need for a plumber!

» Use with 1/2" to 1 1/2" size 1/4-turn flat handle brass ball valves

» Z-Wave Plus Certified

» Up to 150' range

» Pair with Flood Sensors to automatically shut off your water when there is a leak anywhere in your home.

Specifications

Technical Specifications

Radio protocol	Z-Wave(500 series)
Power supply	12VDC
Power Consumption	0.13W
Working current	35mA
Operating temperature	32 - 112 °F
Radio frequency	908.4 MHz US
Range	Up to 150' depending on environment
Dimensions (L x W x H)	2.5" x 3.5" x 6"

Table 1 - Technical Specifications

Package Contents:

» User Manual

» Water Main Shut-Off

» Power Supply

Physical Characteristics

The names used in Figures 1 & 2 will be used throughout this manual. Please refer to this page as needed.
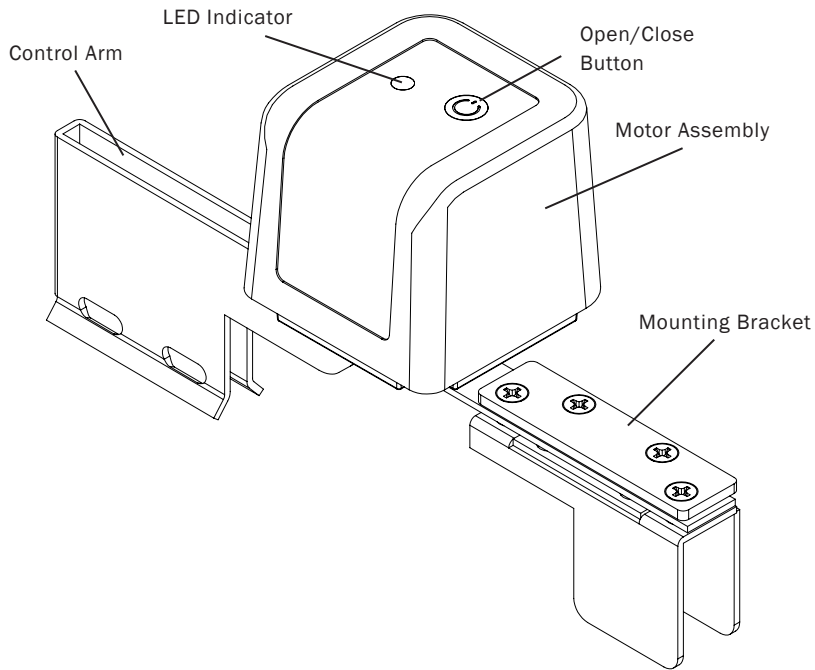
LED Indicator

Control Arm

Open/Close Button

Motor Assembly

Mounting Bracket

Figure 1 - Main Parts of the Water Main Shut-Off
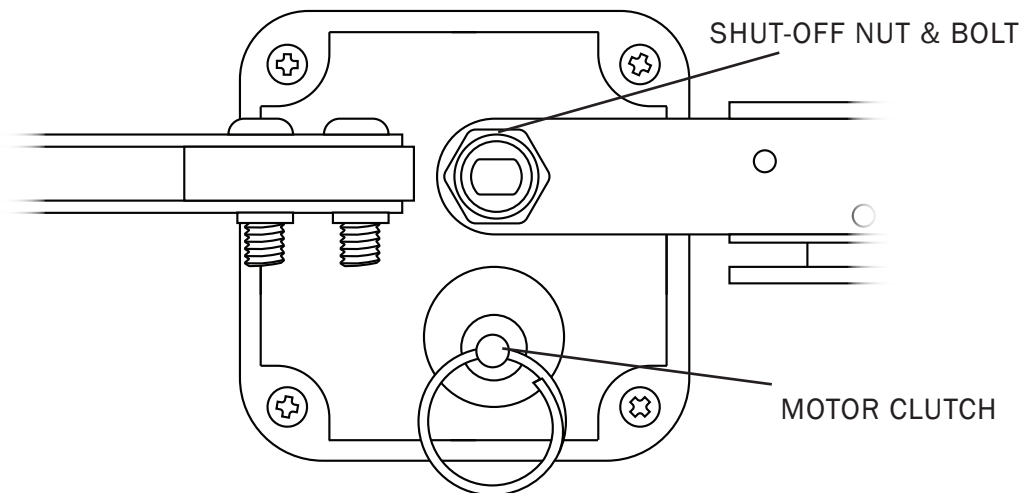
SHUT-OFF NUT & BOLT

MOTOR CLUTCH

Figure 2 - Underside Detail of the Water Main Shut-Off

Inclusion & Exclusion

Inclusion

Follow the instructions for your Z-Wave Certified Conto enter inclusion mode. When prompted by the controller:

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CAUTION

Upon inclusion, the motor will engage and start turning automatically. To avoid serious injury, keep your fingers and hands clear of the CONTROL ARM and its path, only gripping the unit firmly by either the MOUNTING BRACKET or the top of the MOTOR ASSEMBLY

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1. Plug the Water Main Shut-Off into an outlet 10' from your controller. You can bring it to your desired location after the inclusion process. If successfully powered up, the LED INDICATOR will keep blinking until the device is included in a system.
2. Press the OPEN/CLOSE BUTTON quickly 3 times in a row.
3. The LED INDICATOR will stop blinking and stay on continuously after inclusion.

Exclusion

Follow the instructions for your Z-Wave Certified Conto enter exlusion mode. When prompted by the controller:

1. Press the OPEN/CLOSE BUTTON quickly 3 times in a row.
2. The LED INDICATOR will start blinking after successful exclusion.

Factory Reset & Misc. Functions

Resetting the Water Main Shut-Off

If needed, the Water Main Shut-Off can be reset locally by following these steps. Only do this when your Z-Wave controller is disconnected or otherwise unreachable. Beware that resetting your device will disconnect it from your system:

1. Press and hold the OPEN/CLOSE BUTTON for at least 10 seconds then release.

2. The Water Main Shut-Off's memory will be erased to factory settings.

3. A flashing light indicates a successful factory reset.

Emergency Operation
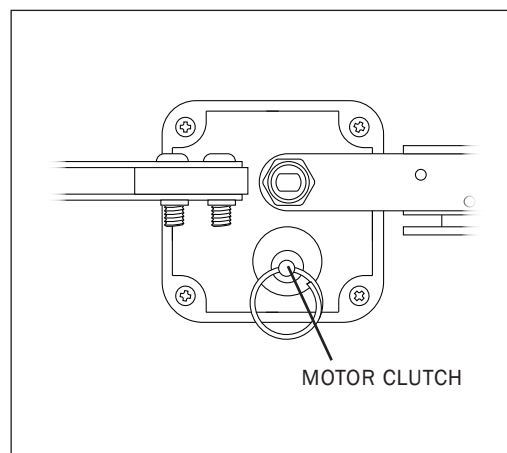
Figure 3 - Finding the MOTOR CLUTCH

The Water Main Shut-Off can be operated manually in the event of a power outage, loss of communication with your Z-Wave Hub, or some other emergency. Follow these instructions to manually operate the Shut-Off:

1. Unplug the power from your device.

2. Locate the MOTOR CLUTCH on the underside of your device (Fig 3,) and pull it outward by the keychain ring. The CONTROL ARM will disengage from the motor and move freely.

Physical Installation

Review the Pre-Installation Checklist below to make sure the Water Main Shut-Off can be used for your application. The device should already be included in your Z-Wave system before continuing further.

Pre-Installation Checklist

✓ The Water Main Shut-Off can be installed on any 1/2" to 1-1/2" brass ball valve

✓ Make sure the VALVE HANDLE is comfortably usable by hand prior to installation

✓ The valve should be 5" away from any walls or other obstructions (Figure 3)

✓ Make sure the OPEN/CLOSE BUTTON is accessible in the final position

✓ Make sure there is a working power outlet (that will always be powered on) reachable with a 10' cord from the valve

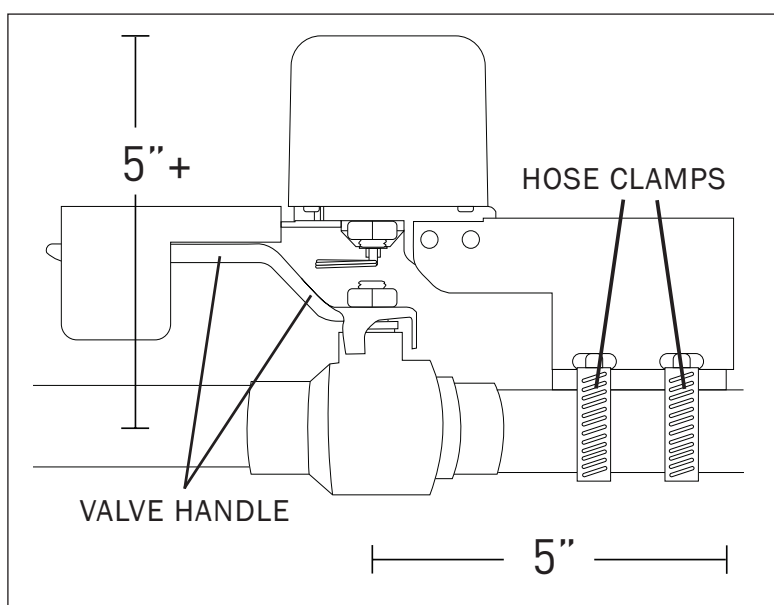✓ Finally, confirm that you are still within range of your Z-Wave controller.

Figure 4 - Water Main Shut-Off Installation

Installation Process

1. Make sure the installed valve is comfortably usable by hand before continuing further.

2. Open both HOSE CLAMPSs completely so their ends are free, insert both of them into the slots in the MOUNTING BRACKET, and let them hang loosely.

3. Remove the protective film covering the screws on the CONTROL ARM and spread the CONTROL ARM.

4. Make sure both the valve and the Water Main Shut-Offare in the "open" position (where the handle is in line with the pipe, not at a right angle to it,) and slide the CONTROL ARM around the valve's handle.

5. Loosely tighten the hose clamps around the pipe on the opposite side of the valve handle so it remains moveable.

6. Position the bolt of the Water Main Shut-Off directly above the bolt of the
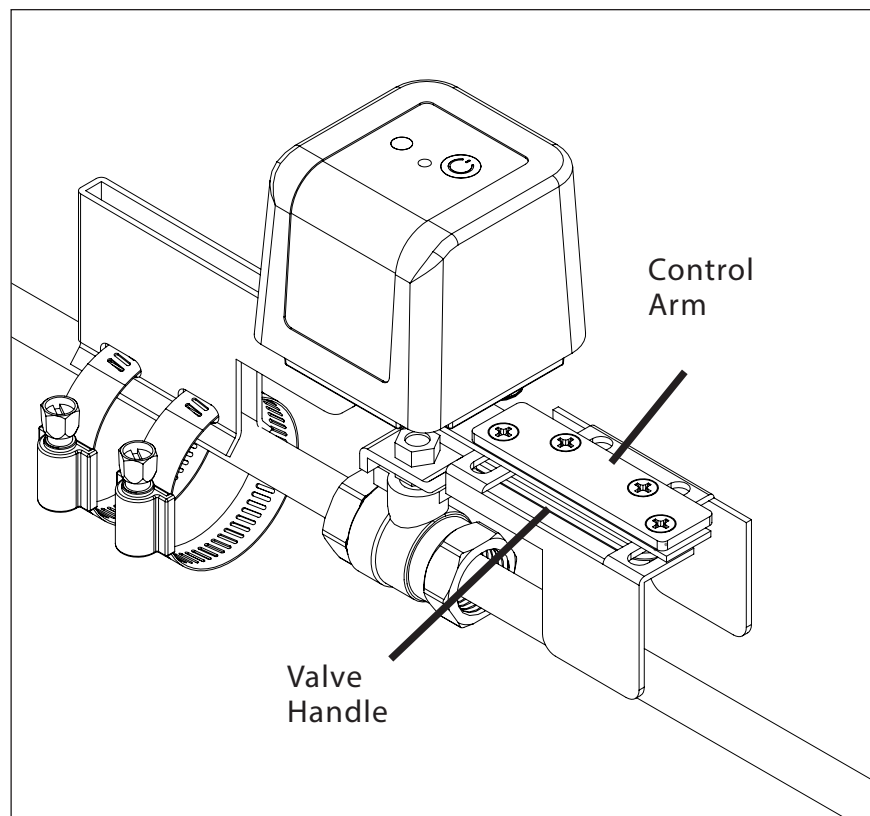

Figure 5 - Sliding the CONTROL ARM around the valve handle

Water Main Shut-Off Advanced User Manual

Physical Installation
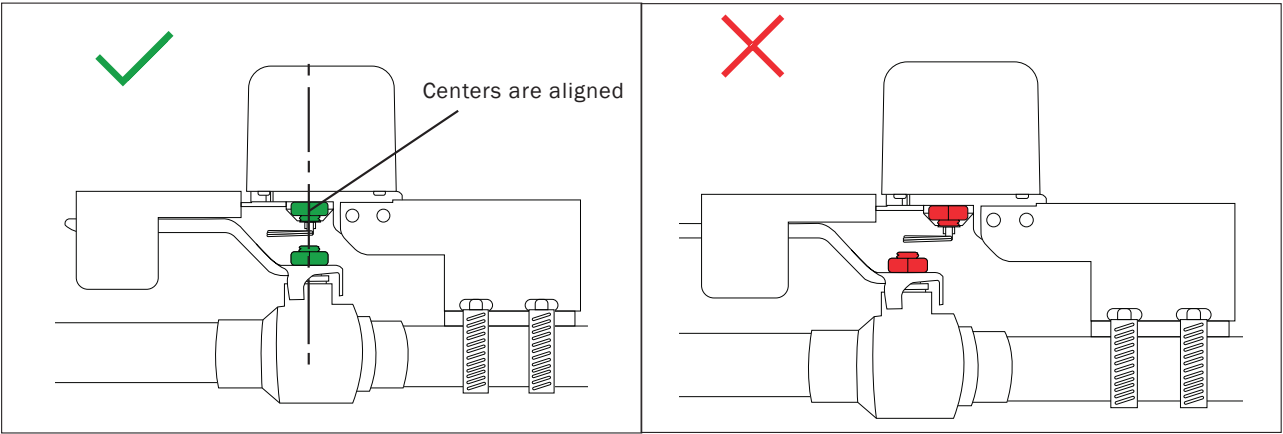
Figure 6 - Proper Alignment of the Water Main Shut-Off

ball valve, and tighten the HOSE CLAMPS until the Shut-Off is completely secure (Figure 5.)

7. Squeeze the CONTROL ARM closed around the valve handle and secure it

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CAUTION

It is absolutely critical that the axes for both the valve and Water Main Shut-Off are aligned. Improper installation will result in unreliable performance. Examine Figure 5 for more details and please visit www.domeha.com/support if you require further assistance.

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tightly with the four screws previously covered by the protective film.

8. To test for proper installation, power up the device and press the OPEN/CLOSE BUTTON. The motor will engage and your valve will close.

LED & Button Behavior

Color	Behavior	This happens when...
Blue	Blink Continuously	...the device is not yet included in a Z-Wave Network.
	On Continuously	...the device is included in a Z-Wave Network and is in the "Closed" position.
	Off Continuously	...the device isincluded in a Z-Wave Network and is in the "Open" position.

Table 2 - LED Blinking Behavior

Action	Condition	Result
Push Button Once	All Conditions	Open or Close Valve
Push OPEN/CLOSEBUTTON 3 Times	Water Main Shut-Off Already Included in System	Device sends node info to Group 1
	Water Main Shut-Off Already Included in System and Controller is in Exclusion Mode	Device is excluded from the z-Wave Network
	On/Off Plug Not Yet Included in System	Device enters inclusion mode
Press and Hold for 10+ seconds	All conditions	Device will be reset to factory settings, and a DEVICE_RESET_LOCALLY command will be sent to Node 1

Table 3 - Button Behavior

Compatible Command Classes

Command Class	Notes
Device Reset Locally V1 (5A)	-
Powerlevel V1 (73)	-
Association Group Information V1 (59)	-
Z-Wave Plus Info V2 (5E)	**Returned Value:** 01 05 00 0F 00 0F 00 **Z-Wave Plus Version:** 01 **Role Type:** 05 *(Slave—Always On)* **Node Type:** 00 *(Z-Wave Plus Node)* **Installer Icon Type:** 0F 00 *(Generic Relay Device)* **User Icon Type:** 0F 00 *(Generic Relay Device)*
Version V2 (86)	**Returned Value:** 06 04 05 00 02 02 00 **Z-Wave Library Type:** 06 **Protocol Version:** 04 05 **Protocol Sub-Version:** 00 02 **Application Version:** 02 **Application Sub-Version:** 00
Manufacturer Specific V2 (72)	**Returned Value:** 02 1F 03 00 02 **Manufacturer ID:** 02 1F **Product Type:** 03 **Product ID:** 00 02
All Switch (27)	All Switch commands open and close the Water Main Shut-Off along with any other device included in your Z-Wave Network. See the Z-Wave Command Class specifications for details on how the All Switch command class is typically implemented. See below for All Switch status values and their corresponding meaning within the Shut-Off: **Valve Open:** FF **Valve Closed:** 00

Table 4 - Command Classes

Command Class	Notes
Association V2 (85)	**Group 1** Group 1 is the "Lifeline" group, which can hold five devices. The Water Main Shut-Off sends this group a Binary Switch Report whenever it is turned on or off. The Water Main Shut-Off also sends this group a Device Reset Locally notification to remove itself from the Z-Wave network.
Binary Switch V1 (25)	Binary Switch commands will open and close the Water Main Shut-Off. Binary Switch Report commands are also used to communicate changes in device status (e.g. the Valve opening/closing) to the controller. See below for Binary Switch status values and their corresponding meaning within the Shut-Off: **Valve Open**: FF **Valve Closed**: 00

Table 5 - Command Classes Continued

Troubleshooting

Q: Help! My Water Main Shut-Off paired successfully, but my controller can't see it anymore after I installed it!

A: First, make sure your battery didn't come loose during set-up. Otherwise, the Z-Wave signal is probably weak in that area of your home. Remember that the 120' - 150' range doesn't take into account walls, furniture, and other obstacles. To boost your Z-Wave network coverage, add a few non-battery powered Z-Wave devices between the controller and the furthest device, like the Dome On/Off Plug or Water Main Shut-Off. You can even purchase dedicated Z-Wave extenders from 3rd party manufacturers.

Q: There's so many words in this manual I don't understand. How can I learn more about Z-Wave?

A: Remember you don't have to understand everything in this manual to start automating your home. Our Quick-Start Guides have all you need to start using any device. For more thorough information about Z-Wave home automation, visit www.domeha.com/support.

Q: My Water Main Shut-Off is not turning my valve properly.

A: Check to make sure the bolts on the Shut-Off and your valve are aligned properly (see "Figure 6 - Proper Alignment of the Water Main Shut-Off" on page 11.) If you are still having issues, please visit www.domeha.com/support

Q: I've tried multiple times, but I can't include the Water Main Shut-Off in my system.

A: Check your battery and make sure your device is getting power. Then, follow the procedure to Factory Reset on Page 8 and try going through the inclusion process again. If you are still having issues, please visit www.domeha.com/support

Q: All of a sudden, my Water Main Shut-Off is offline.

A: Check your battery and make sure your device is getting power. If powered, make sure you still have Z-Wave network coverage. If you are still having issues, visit www.domeha.com/support.

Warranty & Support

If you have questions, our trained Customer Service Department is happy to assist you 24 hours a day, 7 days a week. Contact Dome Customer Service as follows: • In North America dial: 1-855-249-1754 • Email Dome at support@domeHA.com DO NOT RETURN THIS PRODUCT TO THE STORE OR WEBSITE FROM WHICH IT WAS PURCHASED

If you believe the product is defective, has a missing or broken part or are having difficulty with it please contact Dome as listed above for a quick and efficient solution to the problem.

Legal Notices: 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.

Note: 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 the equipment and the 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.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Elexa Consumer Products, Inc. ("ECP") warrants to the original retail purchaser ("Purchaser") that the DOME Window/Door sensor (the "Product") will be free of defects in materials or workmanship under use for one (1) year from the date of purchase (the "Warranty period").

For the Purchaser only, if the Product fails to perform as specified during the Warranty Period due to defective parts or faulty workmanship, ECP will repair or replace the defective or damaged parts of the Product. Normal wear and tear is not covered nor is abnormal use, misuse, mishandling, faulty installation, improper shipping, damage caused by disasters such as fire, flood or earthquake, neglect, accident or tampering. This warranty covers only normal use in the United States or Canada.

To obtain warranty service during the Warranty Period, call Dome Customer Service (1-855-249-1754) or email: support@domeHA.com for instructions on sending damaged parts and documentation for a Return Material Authorization (RMA). Products returned to ECP for repair or replacement without authorization will be returned at the sender's expense. All warranty claims must be accompanied by a legible copy of the original receipt showing date and details of purchase. The RMA number must be clearly written on the side of the shipping container in which you return the Product or defective parts. Unless otherwise instructed by ECP, the Product must be sent freight prepaid to the following address:

Elexa Consumer Products, c/o Promac,
1153 Timber Dr., Elgin, IL 60123

ECP will repair or replace the defective parts and return them at ECP's cost by a shipping method selected by ECP. When contacting ECP to obtain an RMA, Purchaser may request expedited return shipping at Purchaser's expense.

THIS WARRANTY IS NOT TRANSFERABLE, AND, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW IS IN LIEU OF ALL OTHER WARRANTIES, REPRESENTATIONS AND CONDITIONS, EXPRESSED OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. NO OTHER PERSON OR REPRESENTATIVE IS AUTHORIZED TO MAKE ANY OTHER WARRANTY ON BEHALF OF ECP OR ASSUME FOR ECP ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THIS PRODUCT. IN NO EVENT WILL ECP BE LIABLE FOR ANY DAMAGES, INCLUDING BUT NOT LIMITED TO INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT, INCLUDING DAMAGES DUE TO ECP'S NEGLIGENCE.

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This marking on the product, accessories or literature indicates that the product and its electronic accessories should not be disposed of with other household waste.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other wastes for disposal.

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.