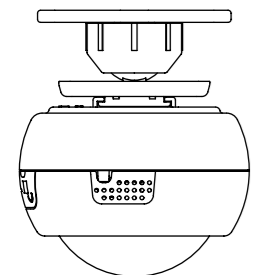




MULTISENSOR GEN5



View the expanded manual: <http://aeotec.com/support>



1 Aeotec by Aeon Labs MultiSensor.

Motion sensor. Humidity sensor. Thermometer. Light sensor.

The corner of your room just got smart.

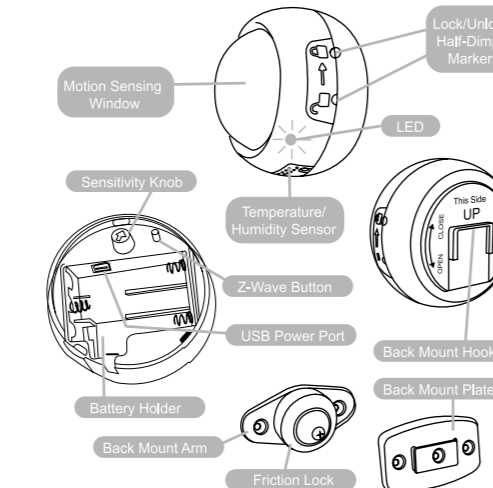
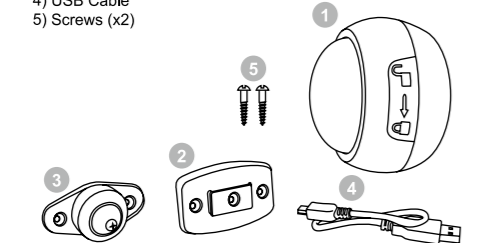
Aeotec by Aeon Labs' MultiSensor looks like a motion sensor and it acts like one too. But it's also so much more. Installing this 1 piece of Z-Wave® technology is the same as installing 4 pieces of Z-Wave technology. Your home control network will immediately understand motion, temperature, humidity and light readings wherever MultiSensor installed. Those intelligent readings will equate to intelligence automation. And intelligent automation will give you the perfect, smart home.

2 Familiarize yourself with your MultiSensor.

Your MultiSensor comes packaged with a number of accessories that will help with its installation and operation.

Package Contents:

- 1) MultiSensor
- 2) Back-Mount Plate
- 3) Back-Mount Arm
- 4) USB Cable
- 5) Screws (x2)



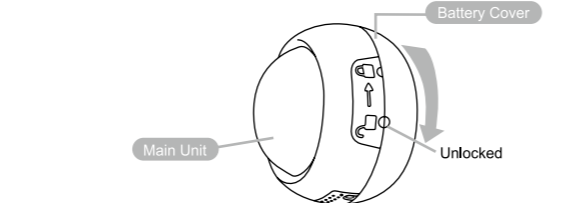
3 Quick start.

• Setup your power.

Your MultiSensor can be powered by battery or by USB with an appropriate adaptor. For the purposes of installation and setup, and even if you intend to power your sensor with batteries, we recommend utilising the provided USB cable for setup. For this you'll need an adaptor to plug your USB cable into, this can include any USB port on a computer and most mobile phone chargers. These first steps can be performed in any location with your home, and not necessarily in your MultiSensor's final installation location.

For a USB powered installation:

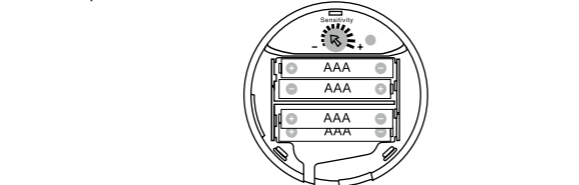
1. Remove the rear part of your sensor by twisting the battery cover in a counter-clockwise motion and separating the two parts of your sensor.



2. Insert the appropriate end of the provided USB cable into your sensor's USB port. Your MultiSensor is now powered on.

For a battery powered installation:

1. Remove the rear part of your sensor as shown in the previous step 1.
2. Insert 4 AAA batteries oriented according to the picture below. Your MultiSensor is now powered on.

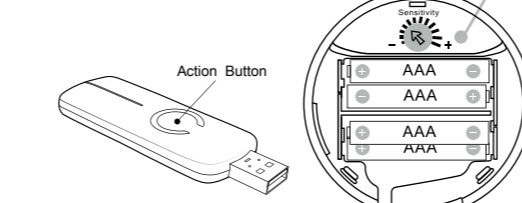


• Add your MultiSensor to your Z-Wave network.

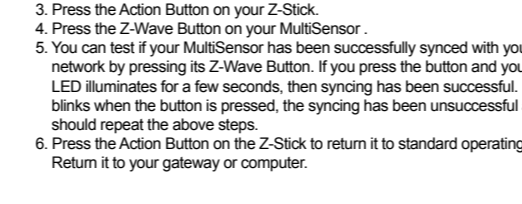
It's now time to sync your MultiSensor with a Z-Wave network. The following instructions explain how to do this using a Z-Stick or a Minimote from Aeotec. If you're using an alternative controller for your Z-Wave network, please refer to its user manual for network inclusion instructions.

If you're using a Z-Stick:

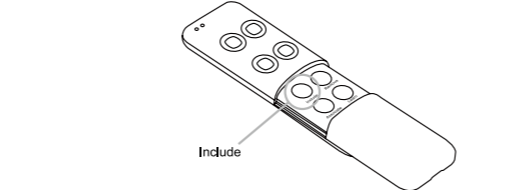
1. Take your Minimote to your MultiSensor.
2. Press the Include button on your Minimote.
3. Press the Z-Wave Button on your MultiSensor.
4. You can test if your MultiSensor has been successfully synced with your Z-Wave network by pressing its Z-Wave Button. If you press the button and your sensor's LED illuminates for a few seconds, then syncing has been successful. If the LED blinks when the button is pressed, the syncing has been unsuccessful and you should repeat the above steps.
5. Press any button on your Minimote to return it to standard operating mode.



1. If your Z-Stick is plugged into a gateway or a computer, unplug it.
2. Take your Z-Stick to your MultiSensor.
3. Press the Action Button on your Z-Stick.
4. Press the Z-Wave Button on your MultiSensor.
5. You can test if your MultiSensor has been successfully synced with your Z-Wave network by pressing its Z-Wave Button. If you press the button and your sensor's LED illuminates for a few seconds, then syncing has been successful. If the LED blinks when the button is pressed, the syncing has been unsuccessful and you should repeat the above steps.
6. Press the Action Button on the Z-Stick to return it to standard operating mode. Return it to your gateway or computer.

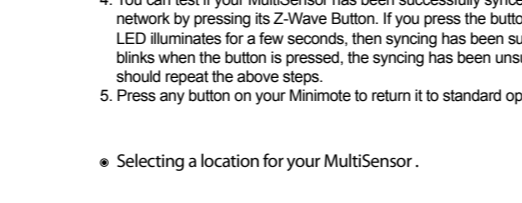


If you're using a Minimote:



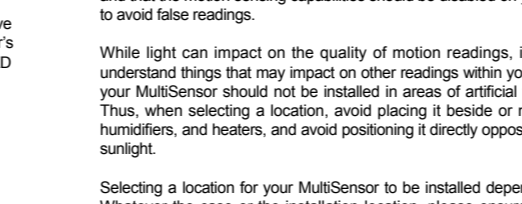
For ceiling mounting using the Back-Mount Plate:

1. Take your MultiSensor to your MultiSensor.
2. Press the Include button on your Minimote.
3. Press the Z-Wave Button on your MultiSensor.
4. You can test if your MultiSensor has been successfully synced with your Z-Wave network by pressing its Z-Wave Button. If you press the button and your sensor's LED illuminates for a few seconds, then syncing has been successful. If the LED blinks when the button is pressed, the syncing has been unsuccessful and you should repeat the above steps.
5. Press any button on your Minimote to return it to standard operating mode.



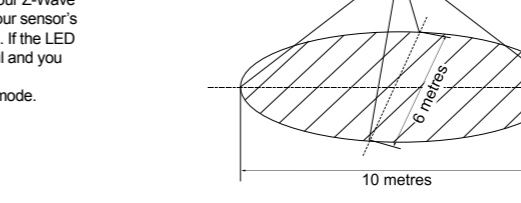
For wall mounting using the Back-Mount Arm:

1. Take your MultiSensor to your MultiSensor.
2. Press the Include button on your Minimote.
3. Press the Z-Wave Button on your MultiSensor.
4. You can test if your MultiSensor has been successfully synced with your Z-Wave network by pressing its Z-Wave Button. If you press the button and your sensor's LED illuminates for a few seconds, then syncing has been successful. If the LED blinks when the button is pressed, the syncing has been unsuccessful and you should repeat the above steps.
5. Press any button on your Minimote to return it to standard operating mode.



For ceiling mounting using the Back-Mount Plate:

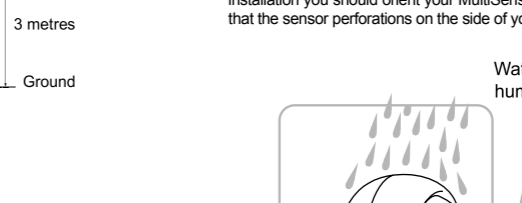
1. Reattach the two parts of your MultiSensor to each other. To do this, align the lock/unlock half-dimple markers that are under the unlock symbol and then twist in a clockwise motion.



Further, for optimal performance your MultiSensor should NOT be mounted directly on or near metal framing or other large metallic objects. Large metal objects may weaken the Z-Wave wireless signal.

For wall mounting using the Back-Mount Arm:

1. Take your MultiSensor to your MultiSensor.
2. Press the Include button on your Minimote.
3. Press the Z-Wave Button on your MultiSensor.
4. You can test if your MultiSensor has been successfully synced with your Z-Wave network by pressing its Z-Wave Button. If you press the button and your sensor's LED illuminates for a few seconds, then syncing has been successful. If the LED blinks when the button is pressed, the syncing has been unsuccessful and you should repeat the above steps.
5. Press any button on your Minimote to return it to standard operating mode.



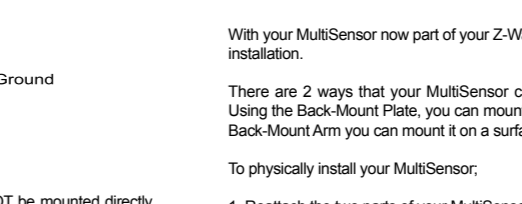
• Physically install your MultiSensor.

With your MultiSensor now part of your Z-Wave network, it's time to finish its physical installation.

There are 2 ways that your MultiSensor can be mounted on on a wall or ceiling. Using the Back-Mount Plate, you can mount it flat against a wall or ceiling. Using the Back-Mount Arm you can mount it on a surface or in a corner and angle it as desired.

To physically install your MultiSensor,

1. Reattach the two parts of your MultiSensor to each other. To do this, align the lock/unlock half-dimple markers that are under the unlock symbol and then twist in a clockwise motion.



• Selecting a location for your MultiSensor.

MultiSensor can bring its intelligent readings to many locations of your home. That includes outside of your home. MultiSensor is weatherized and can operate outdoors in elements such as rain and snow. Please note that when installed outdoors, your MultiSensor should only be relied on for temperature, light and humidity readings and that the motion sensing capabilities should be disabled on your gateway in order to avoid false readings.

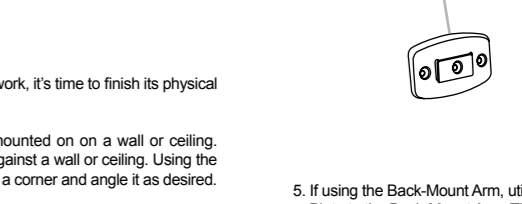
While light can impact on the quality of motion readings, it's also important to understand things that may impact on other readings within your home. Specifically, your MultiSensor should not be installed in areas of artificial temperature change. Thus, when selecting a location, avoid placing it beside or near air conditioners, humidifiers, and heaters, and avoid positioning it directly opposite a window or direct sunlight.

Selecting a location for your MultiSensor to be installed depends on the use case. Whatever the case or the installation location, please ensure that it fits with your sensor's effective motion sensing range as described in these diagrams.



For ceiling mounting using the Back-Mount Plate:

1. Reattach the two parts of your MultiSensor to each other. To do this, align the lock/unlock half-dimple markers that are under the unlock symbol and then twist in a clockwise motion.



For wall mounting using the Back-Mount Arm:

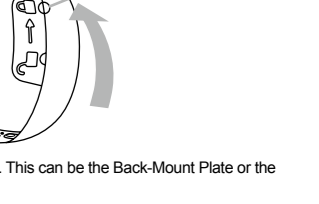
1. Reattach the two parts of your MultiSensor to each other. To do this, align the lock/unlock half-dimple markers that are under the unlock symbol and then twist in a clockwise motion.



2. If used the USB cable to power your MultiSensor, ensure that power can be provided to your desired installation location. Please note that when installed in areas that where the temperature can drop below -10°C, it is advised that mains power is used and battery power is not.

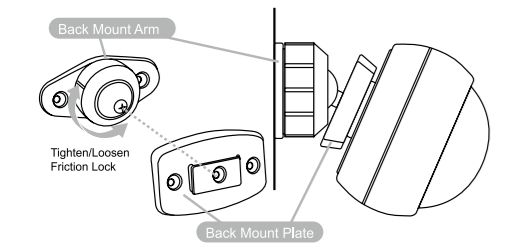
Attach your desired mounting accessory. This can be the Back-Mount Plate or the Back-Mount Arm.

4. If using the Back-Mount Plate, utilize the provided 3mm screws to affix it to a surface.



5. If using the Back-Mount Arm, utilize one 3x10mm screw to attach the Back-Mount Plate to the Back-Mount Arm. Then affix the Back-Mount Arm to a surface utilizing the provided 3x20mm screws.

6. The Back-Mount Arm may be locked at various angles by turning the Friction Lock clockwise and counter-clockwise to respectively tighten or loosen the angle of the arm.



4 Advanced functions.

● Changing batteries.

Your MultiSensor has built in battery level detection. It will automatically report its battery level to the associated control point throughout its life until the battery is fully drained and needs replacing. The battery status will often be displayed in the user interface of the control point.

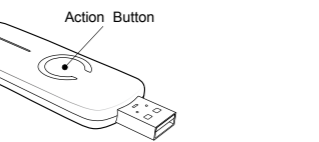
When used properly in an optimised Z-Wave network, your MultiSensor can be powered by batteries for 12 months before battery replacement is necessary.

Recommendation: For networks which do not offer a method to display the battery level of your MultiSensor, it is recommended that the sensor be tested occasionally to ensure that the batteries still hold enough charge to operate. Batteries naturally lose their charge over time.

● Removing your MultiSensor from a Z-Wave network.

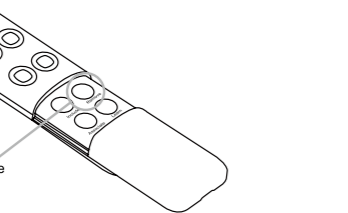
Your MultiSensor can be removed from your Z-Wave network at any time. You'll need to use your Z-Wave network's main controller to do this and the following instructions tell you how to do this using Aeotec by Aeon Labs' Z-Stick and Minimote controllers. If you are using other products as your main Z-Wave controller, please refer to the part of their respective manuals that tells you how remove devices from your network.

If you're using a Z-Stick:



1. If your Z-Stick is plugged into a gateway or a computer, unplug it.
2. Take your Z-Stick to your MultiSensor .
3. Press and hold the Action Button on your Z-Stick for 3 seconds and then release.
4. Press the Z-Wave Button on your MultiSensor .
5. If your MultiSensor has been successfully removed from your network, its LED will blink when you press the Z-wave Button. If the removal was unsuccessful, the LED will stay solid for a few seconds when you press the Z-wave Button.
6. Press the Action Button on the Z-Stick to take it out of removal mode.

If you're using a Minimote:



1. Take your Minimote to your MultiSensor.
2. Press the Remove Button on your Minimote.
3. Press the Z-wave Button on your MultiSensor .
4. If your MultiSensor has been successfully removed from your network, its LED will blink when you press the Z-wave Button. If the removal was unsuccessful, the LED will stay solid for a few seconds when you press the Z-wave Button.
5. Press any button on your Minimote to take it out of removal mode.

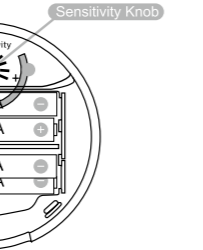
● Monitoring motion.

The MultiSensor can send Basic Set Command to association group 1, which is setup via the Association Command Class, when the Motion Sensor detects movement to control the associated devices to "OPEN" state. After 4 minutes by default, if the Motion Sensor is not triggered again, the MultiSensor will send Basic Set Command to these devices to set them to their "CLOSE" state. However, if the Motion Sensor is triggered again in 4 minutes, the MultiSensor will reset the timing and start timing again.

The 4 minutes delay time can be changed through the usage of Z-Wave command built into Z-Wave certified control points. (The specific Z-Wave command supporting this function is Configuration Command Class) Please consult the operation manual for these control points for specific instructions on setting the MultiSensor.

● Adjusting the sensitivity of your MultiSensor.

Turn the Sensitivity Knob in a clockwise direction to increase sensitivity and counter-clockwise to decrease sensitivity.



● Monitoring temperature, humidity and luminance.

Your MultiSensor can report temperature, humidity, and luminance across a Z-Wave network when requested. If this function is supported by a controller, generally a

gateway, the data will be displayed within its interface. The specific Z-Wave commands for the support of monitoring is the Multilevel Sensor Command Class and Multi Channel Command Class. Automatic reports are sent to association group 1, which is setup via the Association Command Class. Please consult the controller's operation manual for specific instructions on setting your MultiSensor.

Setting automatic report flags.

Parameter 101-103 [4 byte decimal] can be configured through your gateway in case the default settings of your MultiSensor are not what you desire.

Decimal	lag
128	Light Sensor
64	Humidity Sensor
32	Temperature Sensor
1	Battery Sensor

The table above shows a decimal representation of all flags that can be set on parameter 101-103 to report specific data.

Example use of the report table.

For example, if you want to report only the temperature and light sensor you would add 32 + 64 and set the sum (96) to parameter 101, 102, or 103.

As another example, if you want to report only the light sensor and battery, you would add 1 + 128, then set the sum (129) to parameter 101, 102, or 103.

And if you want to report all of the sensors, you would add the whole table together and set the sum (225) to parameter 101, 102, or 103.

Setting an automatic report interval.

Parameter 111-113 [4 byte decimal] can be configured through your gateway in case the default settings of your MultiSensor are not what you desire.

Parameter 111 will set the interval for Group 1 (parameter 101), parameter 112 will set the interval for Group 2 (parameter 102), and parameter 113 will set the interval for Group 3 (parameter 103).

As an example, you have set parameter 101 to 225 which will report all of the sensors, and you want to report it every 1800 seconds. Set parameter 111 to 1800 to accomplish this.

● Waking up your MultiSensor.

If your MultiSensor is battery powered, you will need to ensure that it is active when configuring it. To do this, press and hold its Z-Wave Button for 3 seconds and then release it. Your MultiSensor's LED should now be solid to indicate that it is active.

When you are done configuring or communicating with your MultiSensor, you can put it back into sleep mode to conserve battery power. To do this, press and hold its Z-Wave button for 3 seconds and then release it. Your MultiSensor's LED should now be off to indicate that it is asleep.

● Resetting your MultiSensor.

At some stage or your primary controller is missing or inoperable, you may also wish to reset all of your MultiSensor's settings to their factory defaults. To do this, press and hold the Z-Wave Button for 20 seconds and then release it. Your MultiSensor will now be reset to its original settings, and the LED will stay solid for 2 seconds and then turn off as a confirmation.

5 Technical specifications.

Power Supply: USB DC 5V or battery power(4×AAA batteries).
 Operating Temperature: -10°C to 60°C.
 Measured Temperature Range: -10°C to 50°C. Accuracy: ±1°C.
 Humidity Range: 20% to 80%. Accuracy: ±5% (at 25°C).
 Lighting: 0 to 1000 LUX.
 Motion Sensitivity: 3 to 5 meters.
 Water Proofing: IP42.
 Wireless Range: Up to 500 feet/150 metres outdoors.

6 Warranty.

Aeon Labs warrants to the original purchaser of Products that for the Warranty Period (as defined below), the Products will be free from material defects in materials and workmanship. The foregoing warranty is subject to the proper installation, operation

and maintenance of the Products in accordance with installation instructions and the operating manual supplied to Customer. Warranty claims must be made by Customer in writing within thirty (30) days of the manifestation of a problem. Aeon Labs' sole obligation under the foregoing warranty is, at Aeon Labs' option, to repair, replace or correct any such defect that was present at the time of delivery, or to remove the Products and to refund the purchase price to Customer.

The "Warranty Period" begins on the date the Products is delivered and continues for 12 months.

Any repairs under this warranty must be conducted by an authorized Aeon Labs service representative and under Aeon Labs' RMA policy. Any repairs conducted by unauthorized persons shall void this warranty.

Excluded from the warranty are problems due to accidents, acts of God, civil or military authority, civil disturbance, war, strikes, fires, other catastrophes, misuse, misapplication, storage damage, negligence, electrical power problems, or modification to the Products or its components.

Aeon Labs does not authorize any person or party to assume or create for it any other obligation or liability in connection with the Products except as set forth herein.

Aeon Labs will pass on to Customer all manufacturers' Material warranties to the extent that they are transferable, but will not independently warrant any Material.

Customer must prepay shipping and transportation charges for returned Products, and insure the shipment or accept the risk of loss or damage during such shipment and transportation. Aeon Labs will ship the repaired or replacement products to Customer freight prepaid.

Customer shall indemnify, defend, and hold Aeon Labs and Aeon Labs' affiliates, shareholders, directors, officers, employees, contractors, agents and other representatives harmless from all demands, claims, actions, causes of action, proceedings, suits, assessments, losses, damages, liabilities, settlements, judgments, fines, penalties, interest, costs and expenses (including fees and disbursements of counsel) of every kind (i) based upon personal injury or death or injury to property to the extent any of the foregoing is proximately caused either by a defective product (including strict liability in tort) or by the negligent or willful acts or omissions of Customer or its officers, employees, subcontractors or agents, and/or (ii) arising from or relating to any actual or alleged infringement or misappropriation of any patent, trademark, mask work, copyright, trade secret or any actual or alleged violation of any other intellectual property rights arising from or in connection with the products, except to the extent that such infringement exists as a result of Aeon Labs' manufacturing processes.

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STORE INDOORS WHEN NOT IN USE. SUITABLE FOR DRY LOCATIONS. DO NOT IMMERSE IN WATER. NOT FOR USE WHERE DIRECTLY EXPOSED TO WATER.

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. 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 receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consul the dealer or an experienced radio/TV technician for help.

Warning

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available.

Certifications (regional):



Z-Wave and Z-Wave Plus are registered trademarks of Sigma Designs and its subsidiaries in the United States and other countries





Aeon Labs MultiSensor Gen5

(Z-wave MultiSensor Gen5)



Change history

Revision	Date	Change Description
1	9/23/2014	Initial.
2	11/11/2014	Added Mark CC and Hail CC

**Aeon Labs MultiSensor Gen5
Engineering Specifications and Advanced Functions for Developers
(V1.01)**

Aeon Labs MultiSensor is a routing binary sensor device based on Z-Wave routing slave library V6.51.01.

The MultiSensor can be included and operated in any Z-wave network with other Z-wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

It also supports Security Command Class and has the AES-128 bit security encryption built right in. While a Security enabled Controller is needed in order to fully use the security feature.

If the MultiSensor is included into a SIS or SUC Z-wave network, it will be associated to SIS or SUC automatically.

If PIR motion sensor is triggered, the MultiSensor will send a Basic set (0xFF) to associated devices. The PIR motion sensor will then become inactive. After an interval time (configurable), the PIR motion sensor will wake up and can detect motion again. The Multisensor will send basic set (0x00) if the PIR motion sensor is not triggered for the interval time (configurable).

As soon as MultiSensor Gen5 is removed from a z-wave network it will restore itself into factory settings.

1. Library and Command Classes

1.1 SDK: 6.51.01

1.2 Library

- Basic Device Class: BASIC_TYPE_ROUTING_SLAVE
- Generic Device class: GENERIC_TYPE_SENSOR_NOTIFICATION
- Specific Device Class: SPECIFIC_TYPE_NOTIFICATION_SENSOR

1.3 Commands Class

	Included Non-Secure	Included Secure
Node Info Frame	COMMAND_CLASS_VERSION V2 COMMAND_CLASS_MANUFACTURER_SPECIFIC V2 COMMAND_CLASS_ZWAVEPLUS_INFO V2 COMMAND_CLASS_ASSOCIATION_GRP_INFO V1 COMMAND_CLASS_ASSOCIATION V2 COMMAND_CLASS_POWERLEVEL V1 COMMAND_CLASS_NOTIFICATION V3 COMMAND_CLASS_WAKE_UP V2 COMMAND_CLASS_BATTERY V1 COMMAND_CLASS_SENSOR_BINARY V1 COMMAND_CLASS_SENSOR_MULTILEVEL V5 COMMAND_CLASS_CONFIGURATION V1 COMMAND_CLASS_SECURITY V1 COMMAND_CLASS_FIRMWARE_UPDATE_MD V2 COMMAND_CLASS_MARK V1 COMMAND_CLASS_DEVICE_RESET_LOCALLY V1 COMMAND_CLASS_HAIL V1	COMMAND_CLASS_ZWAVEPLUS_INFO V2 COMMAND_CLASS_VERSION V2 COMMAND_CLASS_WAKE_UP V2 COMMAND_CLASS_MANUFACTURER_SPECIFIC V2 COMMAND_CLASS_SECURITY V1 COMMAND_CLASS_MARK V1 COMMAND_CLASS_DEVICE_RESET_LOCALLY V1 COMMAND_CLASS_HAIL V1

Security Command Supported Report Frame	-	COMMAND_CLASS_ASSOCIATION_GRP_INFO V1 COMMAND_CLASS_ASSOCIATION V2 COMMAND_CLASS_POWERLEVEL V1 COMMAND_CLASS_NOTIFICATION V3 COMMAND_CLASS_BATTERY V1 COMMAND_CLASS_SENSOR_BINARY V1 COMMAND_CLASS_SENSOR_MULTILEVEL V5 COMMAND_CLASS_CONFIGURATION V1 COMMAND_CLASS_FIRMWARE_UPDATE_MD V2
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2. Technical Specifications

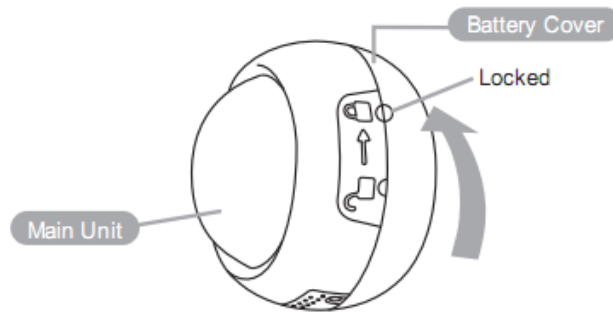
Operating distance: Up to 600 feet/150 meters outdoors.

Operating temperature: -10°C to 60°C.

Relative humidity: 8-80%

3. Familiarize Yourself with Your MultiSensor Gen5

3.1 Interface



4. All Functions of Each Trigger

4.1 Function of Z-Wave Button

Trigger	Description
Click one time	<p>Add MultiSensor Gen5 into z-wave network:</p> <ol style="list-style-type: none"> 1. Power on MultiSensor. The MultiSensor's LED will blink slowly when you short press the Z-Wave Button. 2. Let the primary controller into inclusion mode (If you don't know how to do this, refer to its manual). 3. Press the Z-Wave button. 4. If the inclusion is success, MultiSensor Gen5's LED will be kept turning on for 3 seconds when you short press the Z-Wave Button. If the LED is still in slow blink, in which you need to repeat the process from step 2. <p>Remove MultiSensor Gen5 from Z-wave network:</p> <ol style="list-style-type: none"> 1. Power on MultiSensor. The MultiSensor's LED will be kept turning on for 3 seconds when you short press the Z-Wave Button. 2. Let the primary controller into exclusion mode (If you don't know how to do this, refer to its manual). 3. Press the Z-Wave button. 4. If the exclusion is success, MultiSensor Gen5's LED will blink slowly when you short press the Z-Wave Button. If MultiSensor Gen5's LED still keeps on status, in which you

	need to repeat the process from step 2.
Press and hold 3 seconds	Send Wake Up Notification (when it is in battery power)
Press and hold 20 seconds	<p>Reset MultiSensor Gen5 to factory Default:</p> <ol style="list-style-type: none"> 1. Press and hold the Learn button for 20 seconds. 2. If holding time more than one second, the LED will blink faster and faster. If holding time more than 20 seconds, the LED will be on for 2 seconds, it indicates reset is success, otherwise please repeat step 2. <p>Note:</p> <ol style="list-style-type: none"> 1, This procedure should only be used when the primary controller is inoperable. 2, Reset MultiSensor Gen5 to factory default settings, it will: <ol style="list-style-type: none"> a), let the MultiSensor Gen5 to be excluded in Z-Wave network; b), delete the Association setting, power measure value, Scene Configuration settings; c), restore the Configuration settings to the default.

5. Special Rule of Each Command

5.1 Z-Wave Plus Info Report Command Class

Parameter	Value
Z-Wave Plus Version	1
Role Type	6(ZWAVEPLUS_INFO_REPORT_ROLE_TYPE_SLAVE_ALWAYS_ON)
Node Type	0 (ZWAVEPLUS_INFO_REPORT_NODE_TYPE_ZWAVEPLUS_NODE)
Installer Icon Type	0x0C07 (ICON_TYPE_GENERIC_SENSOR_NOTIFICATION)
User Icon Type	0x0C07 (ICON_TYPE_GENERIC_SENSOR_NOTIFICATION)

5.2 Association Command Class

The MultiSensor Gen5 supports 1 Association group.

Group 1 is assigned to the Lifeline association group and every device has 5 nodes to associate.

When the PIR motion sensor is triggered, the MultiSensor will send Basic Set (0xFF) to the associated nodes. If no any PIR motion on an interval time (configurable), the MultiSensor will send Basic Set (0x00) to the associated nodes.

The automatically report of temperature, humidity and luminance (configurable) also can be sent to associated nodes.

5.3 Association Group Info Command Class

5.3.1 Association Group Info Report Command Class

Profile: General: NA (Profile MSB=0, Profile LSB=0)

5.3.2 Association Group Name Report Command Class

Group 1: Lifeline

5.6 Configuration Set Command Class

7	6	5	4	3	2	1	0
Command Class = COMMAND_CLASS_CONFIGURATION							
Command = CONFIGURATION_SET							
Parameter Number							
Default	Reserved					Size	
Configuration Value 1(MSB)							
Configuration Value 2							
.....							
Configuration Value n(LSB)							

Parameter Number Definitions (8 bit):

Parameter Number Hex / Decimal	Description	Default Value	Size
0x02(2)	Enable/Disable waking up for 10 minutes when re-power on (battery mode) the MultiSensor. 1. Value = 0, disable. 2. Value =others, enable.	0	1
0x03 (3)	1. The default PIR time is 4 minutes. The Multisensor will send BASIC SET CC (0x00) to the associated nodes if no motion is triggered again in 4 minutes. 2. Range: 1~15300. Note: (1), The time unit is second if the value range is in 1 to 255. (2), If the value range is in 256 to 15300, the time unit will be minute and its value should follow the below rules: a), Interval time =Value/60, if the interval time can be divided by 60 and without remainder. b), Interval time= (Value/60) +1, if the interval time can be divided by 60 and has remainder. (3), Other values will be ignored.	240	2
0x04(4)	Enable/disable the function of motion sensor. 1. Value=0, disable. 2. Value=1, enable.	1	1
0x05(5)	Which command would be sent when the motion sensor triggered. 1. Value=1, send Basic Set CC. 2. Value=2, send Sensor Binary Report CC.	1	1

0x28(40)	Enable/disable the selective reporting only when measurements reach a certain threshold or percentage set in 41-44 below. This is used to reduce network traffic. (0 == disable, 1 == enable)	0	1
0x29(41)	Threshold change in temperature to induce an automatic report. Note: 1. When the unit is Celsius, threshold=Value. 2. When the unit is Fahrenheit, threshold=Value*1.8 The accuracy is 0.1.	1 (1 °C)	2
0x2A(42)	Threshold change in humidity to induce an automatic report. The accuracy is 0.1.	5 (5% RH)	2
0x2B(43)	Threshold change in luminance to induce an automatic report.	100 (100 LUX)	2
0x2C(44)	Threshold change in battery level to induce an automatic report.	5 (5%)	2
0x2E(46)	1.Enable/disable to send the alarm report of low temperature(<-15°C) 2. Value=1, enable (The MultiSensor will report the Multi Level Temperature CC with the value=0xFFFF to controller if the current temperature is less than -15°C). Note: The battery activity will be reduced at low temperatures (-15 degrees Celsius and below), which will lead to the product may not work normally. It is recommended to use USB power at low temperatures.	0	1
0x65 (101)	Which report needs to be sent in Report group 1 (See flags in table below).	225	4
0x66 (102)	Which report needs to be sent in Report group 2 (See flags in table below).	0	4
0x67 (103)	Which report needs to be sent in Report group 3 (See flags in table below).	0	4
0x6F (111)	The interval time of sending reports in Report group 1 (Valid values 0x05-0x28DE80). Note: the unit of interval time is second.	1800 (seconds)	4
0x70 (112)	The interval time of sending reports in Report group 2 (Valid values 0x05-0x28DE80). Note: the unit of interval time is second.	1800 (seconds)	4

0x71 (113)	The interval time of sending reports in Report group 3 (Valid values 0x05-0x28DE80). Note: the unit of interval time is second.	1800 (seconds)	4
0xFC (252)	Enable/disable Configuration Locked (0 =disable, 1 = enable).	0	1
0xFF (255)	1.Value=0x55555555、 Default=1、 Size=4 Reset to factory default setting and removed from the z-wave network	N/A	4
	2.Reset to factory default setting	N/A	1

Configuration Values for Parameter 101-103:

	7	6	5	4	3	2	1	0
configuration Value 1(MSB)	Reserved							
configuration Value 2	Reserved							
configuration Value 3	Reserved							
configuration Value 4(LSB)	Luminance	Humidity	Temperature	Reserved	Reserved	Reserved	Reserved	Battery

- Reserved

Reserved bits or bytes must be set to zero.