AEOTEC
BY AEON LABS

Garage Door Controller GEN5

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

① Aeotec by Aeon Labs Garage Door Controller.

Aeon Labs Garage Door Controller is a smart and wireless Garage Door Control system, you can control the garage door to open, close, or stop moving via wireless signal on your gateway client or phone application. You can also control it by using the external switch when your controller or mobile phone is not on hand.

Its 105dB speaker system will play alarm sounds and at the same time, the indicator of the Garage Door Controller's Alarm LED will turn on in which will let you know that the garage door will start to open or close.

The Garage Door Controller allows you to configure different alarm sounds to indicate the door's action. Each action alarm sound can be customized. To change or update new alarm sounds for the Garage Door Controller, connect the Garage Door Controller to your PC host with a USB cable and download your sound files to the flash memory (128 MB) of the Garage Door Controller.

You can also manually switch the alarm sound. To do this, short press the "Button -" or "Button +" button on the Garage Door Controller which will switch the alarm sound to the next sound. Press and hold the "Button -" or "Button +" to decrease or increase the volume.

The Garage Door Controller is also a security Z-Wave® device and supports the Over The Air (OTA) feature for the product's firmware upgrade.

- Safety Notes.

⚠ WARNING ⚠
This operator system is equipped with an unattended operation feature. This door could move unexpectedly. NO ONE SHOULD CROSS THE PATH OF A MOVING DOOR!

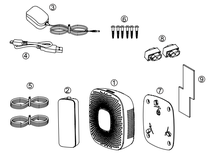
⚠ WARNING ⚠
This system can be installed on sectional type (roll up) doors only per (UL-325). DO NOT INSTALL ON ONE-PIECE DOORS!

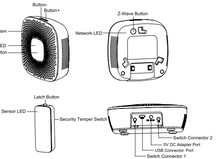
⚠ WARNING ⚠
The Remote Command Controller must be mounted in the garage, in sight of the garage door, where the visual and audible movement warning indicators can be clearly seen and heard.

⚠ WARNING ⚠
Do not install the Remote Command Controller on garage door systems manufactured prior to 1993 (models without an operational safety beam entrapment detection system).

② Familiarize yourself with your Garage Door Controller.

Package contents:
1. Garage Door Controller.
2. Sensor.
3. 5V DC Adapter.
4. USB Cable.
5. Switch Cable (×2).
6. Screw (×6).
7. Back Mount Plate.
8. Fast Wiring Clip (×2).
9. Double-Sided tape.

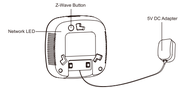




③ Quick start.

- Power on your Garage Door Controller.

Power your Garage Door Controller by connecting the 5V DC Adapter to the input.



Now that your Garage Door Controller is powered on, you will see the Network LED blinking slowly. While the Network LED is blinking, this indicates that the Garage Door Controller is ready to be included into a Z-Wave network.

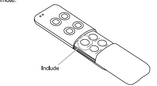
- Add/include/link your Garage Door Controller to a Z-Wave network.

The following instructions will tell you how to link your Garage Door Controller to your Z-Wave network via an Aeotec by Aeon Labs' Z-Stick or Minimote controller. If you are using another Z-Wave controller as your main controller, please refer to their respective manual on how add new devices to your network.

If you're using a Z-Stick:

1. Connect 5V DC Adapter to the Garage Door Controller. Its Network LED will begin to blink.
2. If your Z-Stick is plugged into a gateway or a computer, unplug it.
3. Take your Z-Stick to your Garage Door Controller.
4. Press the Action Button on your Z-Stick.
5. Press the Z-Wave Button on the Garage Door Controller.
6. If Garage Door Controller has been successfully linked to your Z-Wave network, its Network LED will no longer blink. If the linking was unsuccessful and the Network LED continues to blink, repeat the steps above.
7. Press the Action Button on the Z-Stick to take it out of inclusion mode.

If you're using a Minimote:



1. Connect 5V DC Adapter to the Garage Door Controller. Its Network LED will begin to blink.
2. Take your Minimote to your Garage Door Controller.
3. Press the Include button on your Minimote.
4. Press the Z-wave Button on your Garage Door Controller.
5. If Garage Door Controller has been successfully linked to your Z-Wave network, its Network LED will no longer blink. If the linking was unsuccessful and the Network LED continues to blink, repeat the steps above.
6. Press any button on your Minimote to take it out of inclusion mode.

With your Garage Door Controller now working as a part of your smart home, you'll be able to configure it from your home control software or phone application. Please refer to your software's user guide for precise instructions on configuring Garage Door Controller to your needs.

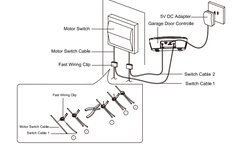
The speaker system is 105dB and you can reduce its volume via long pressing the "Button-" or increase the volume via long pressing the "Button -". When the "Button -" or "Button +" is pressed, the default Garage Door Controller alarm sound will be triggered. To switch to the next alarm sound, short press the "Button -" or "Button +".

- Physically install your Garage Door Controller.

The Garage Door Controller must be installed in your home and near the garage door. It cannot be installed outdoors in elements such as rain and snow.

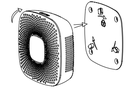
1. Utilize the provided 20mm screws to affix it to the desired surface.

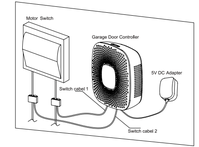
2. Connect the 2 Switch cables to the Switch Connector 1 and 2 on the Garage Door Controller, and then use the Fast Wiring Clip to connect the 2 Switch Cables to the Motor Switch Cables, see the figure below:



Note: The Fast Wiring Clip need to be used with pliers. When the Switch Cable and the Motor Switch Cable have been connected by Fast Wiring Clip, you will need to use the pliers to clamp the Fast Wiring Clip, see the figure above.

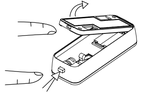
3. Now lock the Garage Door Controller to the Back Mount Plate by twisting the Garage Door Controller.





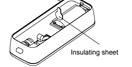
- Installing the Sensor on your garage door.

1. Press and hold the Latch Button to unlock the sensor mounting plate:



Press and hold the Latch Button

2. Pull out the insulating sheet, then you will see the Sensor LED blink once to indicate it has been powered on.

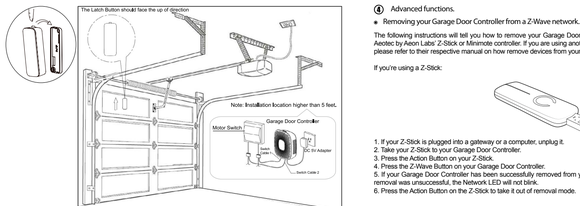


3. Affix your sensor mounting plate to the garage door.
The sensor mount plate should be installed on the top of the garage door (on the left, middle, or right side). Now affix your sensor mounting plate to the surface. Your mounting plate can be affixed using screws or double-sided tape.
If you are using screws, attach the mounting plate to the respective surface using the two 20mm screws provided.

If you are using double-sided tape, wipe the two surfaces clean of any oil or dust with a damp towel. When the surface has completely dried, peel one side of the tape back and attach it to the corresponding section on the rear side of the mounting plate.

You can choose each of way from these 2 installations above. Just need to note if the environment temperature of the garage door is less than -5℃, we suggest to choose the first way (using screws to affix the mounting plate) that would be more stable.

4. Lock your Sensor on the mounting plate.
Press and hold/tap the Latch Button, and then push the Sensor into the mounting plate.



After completing all installation steps, you may need to test your Garage Door Controller to see if it has been successfully installed. You can implement this via short pressing the Switch Button on the Garage Door Controller. When you press the Switch Button, you will see the alarm LED blink and ring the alarm sound. After about 5 seconds, the garage door will move to a full open or closed position. If you press the Switch Button again, the garage door will immediately stop moving. If not, please check or repeat the steps above.

Note: If you have confirmed the installation is successful, you need to calibrate the Sensor once.
For detailed calibration steps, please refer to the "Configuration Parameter 34" as below:
Parameter 34[1 byte dec] can be configured through your gateway or controller.
Calibration Steps:
1. Let the garage door move to full close position via sending control commands or pressing manual Switch.
2. Send this parameter (34) with "value=1" to Garage Door Controller through your gateway/controller.
3. Let the garage door move to full open position via sending control commands or pressing manual Switch.
4. Let the garage door move to full close position via sending control commands or pressing manual Switch after the step 3 has completed.
After the step 4 has completed, all calibration steps are complete.

⑥ Advanced functions.

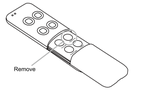
● Removing your Garage Door Controller from a Z-Wave network.

The following instructions will tell you how to remove your Garage Door Controller from your Z-Wave network via an Aeotec by Aeon Labs' Z-Stick or Minimote controller. If you are using another Z-Wave controller as your main controller, please refer to their respective manual on 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 Garage Door Controller.
3. Press the Action Button on your Z-Stick.
4. Press the Z-Wave Button on your Garage Door Controller.
5. If your Garage Door Controller has successfully removed from your network, its Network LED will blink. If the removal was unsuccessful, the Network LED will not blink.
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 Garage Door Controller.
2. Press the Remove Button on your Minimote.
3. Press the Z-Wave Button on your Garage Door Controller.
4. If your Garage Door Controller has been successfully removed from your network, its Network LED will blink. If the removal was unsuccessful, the Network LED will not blink.
5. Press any button on your Minimote to take it out of removal mode.

● Reset your Garage Door Controller.

If your primary controller is missing or inoperable, you may wish to reset your Garage Door Controller to its default factory settings. To do this, press and hold the Z-Wave Button for 20 seconds and then release it. Your Garage Door Controller will now be reset to its original settings, and the Network LED will be solid for 2 seconds and then start slow blinking to confirm a success.

● Download new ringtones to your Garage Door Controller from PC host.

1. Use the Micro USB cable to connect Garage Door Controller to your PC host. PC host will detect the removable storage after a few seconds and then you will find it in the section of "Device with Removable Storage".
2. Double click the "Removable Disk (G:)" to open it.
3. Now you can copy/drag the new alarm sounds from the PC hard disk to the Garage Door Controller's flash memory.
4. Wait a few minutes to complete the copying.

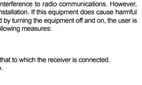
Note: Please do not disconnect the USB port until the copying has completed.

⑤ Technical specifications.

Model Number: ZW062
Power Supply: 5V DC Adapter for Garage Door Controller. CR2 Lithium battery 3V, 800mA for Sensor.
Max Alarm Power: 2W.
Max Standby Power: 1W.
Max Volume: 105dB.
Operating Temperature: -10℃to 45℃.
Storage Temperature: -20℃to 70℃.
Supported Audio Formats: MP3 within 320 Kbps or WAV at 1411 Kbps.
Operating Distance: Up to 980 feet/300 metres outdoors.

● System Operation.

1. USE THE MOBILE APPS TO CONTROL YOUR GARAGE DOOR, VIEW STATUS, AND SET CUSTOM RULES
2. THE GARAGE DOOR CONTROLLER WILL BEEP AND FLASH FOR FIVE SECONDS BEFORE THE DOOR MOVES
3. THE CONTROLLER WILL ACTIVATE THE DOOR OPENER AND OPEN OR CLOSE THE DOOR
4. THE MOBILE APP WILL SHOW THE NEW STATUS OF THE DOOR AFTER THE DOOR COMPLETES ITS CYCLE



● Operation Notes.

1. The Alarm LED will blink and the Speaker System will sound for 5 seconds before the door opener is activated. STAY CLEAR OF THE DOOR, AND DOOR OPENER. THEY ARE ABOUT TO MOVE!
2. If the door does not completely open or close after remote activation, you need to calibrate the Sensor again. Please use the "Configuration Parameter 34" to calibrate it. For detailed calibration steps, see the section of 3.4 above.

KEEP AWAY FROM SMALL CHILDREN. IF BATTERY IS SWALLOWED, PROMPTLY SEE A DOCTOR. DO NOT TRY TO RECHARGE THIS BATTERY. DISPOSAL OF USED BATTERIES MUST BE MADE IN ACCORDANCE WITH THE WASTE RECOVERY AND RECYCLING REGULATIONS IN YOUR AREA.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.
3. Product is suitable for its own lighting and sound alarm garage door opener, or by UL325 certified door opener.

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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⊐ FCC NOTICE (for USA)

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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, pursant 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

Version:501006200002-AA

www.aeotec.com

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BY AEON LABS

Aeon Labs Garage Door Controller Gen5
Engineering Specifications and Advanced Functions for Developers

Aeon Labs Garage Door Controller is a smart and wireless Garage Door Control system, you can control the garage door to open, close, or stop moving via wireless signal on your gateway client or phone application.
The Garage Door Controller allows you to configure different alarm sounds to indicate the door's action. Each action alarm sound can be customized. To change or update new alarm sounds for the Garage Door Controller, connect the Garage Door Controller to your PC host with a USB cable and download your sound files to the flash memory (128 MB) of the Garage Door Controller.
It 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 is also a security Z-Wave device and supports the Over The Air (OTA) feature for the product's firmware upgrade.

1. Library and Command Classes

1.1 SDK: 6.51.06

1.2 Library

- Basic Device Class: BASIC_TYPE_ROUTING_SLAVE
- Generic Device class: GENERIC_TYPE_ENTRY_CONTROL
- Specific Device Class: SPECIFIC_TYPE_SECURE_DOOR

1.3 Commands Class

	Included Non-Secure Network	Included Secure Network
Node Info Frame	COMMAND_CLASS_ZWAVEPLUS_INFO V2 COMMAND_CLASS_SWITCH_BINARY V1 COMMAND_CLASS_CONFIGURATION V1 COMMAND_CLASS_ASSOCIATION_GRP_INFO V1 COMMAND_CLASS_ASSOCIATION V2 COMMAND_CLASS_MANUFACTURER_SPECIFIC V2 COMMAND_CLASS_VERSION V2 COMMAND_CLASS_FIRMWARE_UPDATE_MD V2 COMMAND_CLASS_POWERLEVEL V1 COMMAND_CLASS_BARRIER_OPERATOR, COMMAND_CLASS_APPLICATION_STATUS, COMMAND_CLASS_NOTIFICATION_V4, COMMAND_CLASS_SECURITY V1 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_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_SWITCH_BINARY V1 COMMAND_CLASS_CONFIGURATION V1 COMMAND_CLASS_ASSOCIATION_GRP_INFO V1 COMMAND_CLASS_ASSOCIATION V2

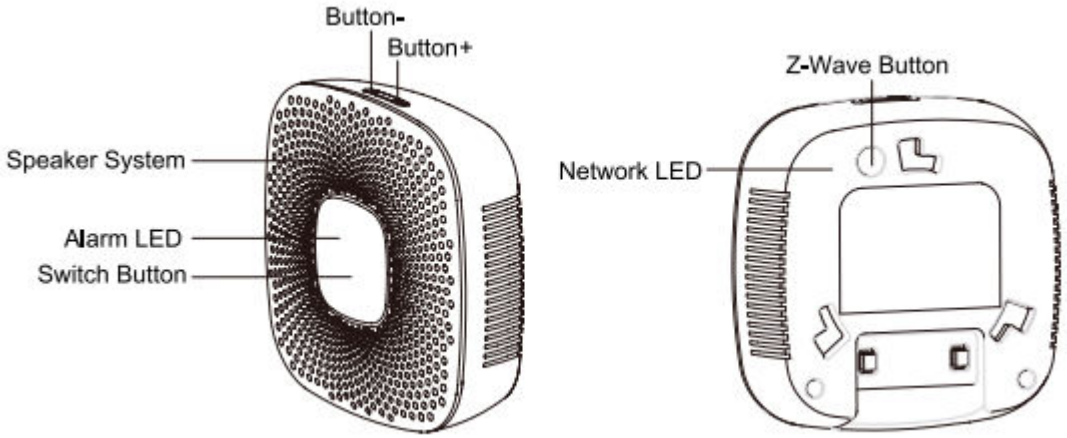
		COMMAND_CLASS_FIRMWARE_UPDATE_MD V2 COMMAND_CLASS_POWERLEVEL V1 COMMAND_CLASS_BARRIER_OPERATOR COMMAND_CLASS_APPLICATION_STATUS COMMAND_CLASS_NOTIFICATION_V4

2. Technical Specifications

Operating Distance: Up to 980 feet/300 metres outdoors.

3. Familiarize Yourself with Your Garage Door Controller

3.1 Interface



4. All functions of each trigger

4.1 Functions of Action Button

Button	Trigger	Description
Z-Wave Button	Click one time	**Let Garage Door Controller into inclusion/exclusion Mode.** **Add Garage Door Controller into Z-Wave Network:** 1. Install Garage Door Controller, and connect it to the 5V DC Adapter. 2. Let the primary controller into inclusion mode (If you don't know how to do this, please refer to its manual). 3. Press the Z-Wave Button. 4. If the inclusion is failed, please repeat the process from step 2. **Remove Garage Door Controller from Z-Wave Network:** 1. Install Garage Door Controller, and connect it to the 5V DC Adapter. 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 remove is failed, please repeat the process from step 2. **Note**: If Garage Door Controller is removed from Z-wave network, it will be reset to factory default.

	Press and hold 20 seconds and released	**Reset Garage Door Controller to Factory Default:** 1. Make sure the Garage Door Controller is connected to the power supply. 2. If holding time more than one second, the Network LED will fast blink. If holding time more than 20seconds, Network LED will be on for 2 seconds, which indicates the reset operation is successful, otherwise please repeat from step1 to step2. **Note**: 1. This procedure should only be used when the primary controller is inoperable. 2. Reset Garage Door Controller to factory default settings will: a), remove Garage Door Controller from Z-Wave network state; b), delete the Association setting; c), restore the configuration settings to the default.
Switch Button	Click one time	Toggle the door to Open/close/stop.
Button +/-	Click one time	Switch the alarm sound to the next sound.
	Press and hold	Increase or decrease the volume.

5. Special Rule of Each Command

5.1 Z-Wave Plus Info Report Command Class

Parameter	Value
Z-Wave Plus Version	1
Role Type	5 (ZWAVEPLUS_INFO_REPORT_ROLE_TYPE_SLAVE_ALWAYS_ON)
Node Type	0 (ZWAVEPLUS_INFO_REPORT_NODE_TYPE_ZWAVEPLUS_NODE)
Installer Icon Type	0x1E00 (ICON_TYPE_GENERIC_BARRIER_OPERATOR)
User Icon Type	0x1E00 (ICON_TYPE_GENERIC_BARRIER_OPERATOR)

6. Special Rule of Each Command

6.1 Association CC

The Garage Door Controller supports 2 association groups and Max 5 nodes for each group..

Association Group	Nodes	Send Mode	Send commands
Group 1	0	N/A	N/A
	1 [2,5]	Single Cast	When the state of load(position status) is changed: 1, Set Configuration parameter 80 to 0：Reserved（Default）. 2, Set Configuration parameter 80 to 1：Send Hail CC. 3, Set Configuration parameter 80 to 2: Send the position info.
Group 2	0	N/A	N/A

	[1,5]	Single Cast	Forward the Basic Set, Switch Binary Set commands to associated nodes in Group 2 when the Garage Door Controller receives the Basic Set, Switch Binary Set commands from main controller.

6.2 Association Group Info Command Class

6.2.1 Association Group Info Report Command Class

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

6.2.2 Association Group Name Report Command Class

Group 1：Lifeline

Group 2：RetransmitSwitchCC

6.3 Configuration Set Command Class

7	6	5	4	3	2	1	0
Command Class = COMMAND_CLASS_CONFIGURATION							
Command = CONFIGURATION SET/GET/REPORT							
Parameter Number							
Default	Reserved				Size		
Configuration Value 1(MSB)							
Configuration Value 2							
……							
Configuration Value n(LSB)							

Configuration CC(Parameter Number**)：**

Parameter	Description	Default	Length
0x20(32)	Configure the default startup ringtone.. Value=0, disable the Startup ringtone. Value=others, Enable and select a startup ringtone for the Garage Door Controller.	1	1
0x22 (34)	Sensor Calibration. Calibration Steps: 1. Let the garage door move to full close position. 2. Send this parameter (0x22) with “value=1” to Garage Door Controller. 3. Let the garage door move to full open position. 4. Let the garage door move to full close position after the step 3 is completed. After the step 4 is complete, all calibration steps are complete.	0	1
0x23 (35)	Set the timeout of all calibration steps for the Sensor.	60	2
0x24 (36)	Get the numbers of alarm music.(not support Set CC)	1	1
0x25 (37)	Configure the alarm mode for when the garage door is opening.	Value1=10 Value2=1	4

	1, Value1: configure the frequency of blinking for the Alarm LED, there are 10 levels that 1 to10 level, the minimum frequency is level 1 and the max frequency is level 10. 2, Value2: configure the alarm sound (there are 4 types sound saved in EEPROM and user also can update it). 3, Value3: configure the volume of alarm sound (there are 10 levels, the min volume is 1 level and the max volume is 10 levels). 4, Value4=0, disable the alarm prompt. Value4=1, enable the alarm prompt.	Value3=8	
0x26 (38)	Configure the alarm mode when the garage door is closing. 1, Value1: configure the frequency of blinking for the Alarm LED, there are 10 levels that 1 to10 level, the minimum frequency is level 1 and the max frequency is level 10. 2, Value2: configure the alarm sound (there are 4 types sound saved in EEPROM and user also can update it). 3, Value3: configure the volume of alarm sound (there are 10 levels, the min volume is 1 level and the max volume is 10 levels). 4, Value4=0, disable the alarm prompt. Value4=1, enable the alarm prompt.	Value1=6 Value2=2 Value3=8	4
0x27(39)	Configuration alarm mode when the garage door is in "Unknown" state: 1, Value1: configure the frequency of blinking for the Alarm LED, there are 10 levels that 1 to10 level, the minimum frequency is level 1 and the max frequency is level 10. 2, Value2: configure the alarm sound (there are 4 types sound saved in EEPROM and user also can update it). 3, Value3: configure the volume of alarm sound (there are 10 levels, the min volume is 1 level and the max volume is 10 levels). 4, Value4=0, disable the alarm prompt. Value4=1, enable the alarm prompt.	Value1=4 Value2=3 Value3=8 Value4=0	4
0x28 (40)	Configure the alarm mode when the garage door is in closed position. Value 1 to Value 4: the function definition is the same as parameter 0x27.	Value1=2 Value2=4 Value3=8 Value4=0	4
0x29 (41)	Configuration report for the tamper switch state: 1, Value=0x00: Sensor is not removed 2, Value=0x0F: Sensor is removed Note: 1. The Garage Door Controller will send this configuration report to gateway controller or associated nodes automatically if the Sensor is removed.	0	1

	2. You can send the value=0x55555555 of this parameter to controller to relieve the alarm state.		
0x2A(42)	Configuration report for the battery state of Sensor: 1, Value=0x00: battery power is much more. 2, Value=0x0F: battery power of Sensor is in low battery. It will report the battery power state to associated nodes automatically when the battery power is in low battery.	0	1
0x2B (43)	Start playing or Stop playing the ringtone: 1, Value=0xff, stop playing ringtone. 2, Value=0x01~0x64, start playing the ringtone that you selected.	0	1
0x2C (44)	Test the volume of the current ringtone. Value=1 to value=10, which map to the volume level 1 to level 10.	—	1
0x2D (45)	Get the environment temperature: The temperature value contains one decimal point. E.g. If the report value=252(0x00FC), the temperature is 25.2℃. Rang is 0 to 500 (0 to 50.0℃).	0	2
0x2F(47)	Define the function of Button- or Button+. Value=0, short pressing the “Button +/-” will be used to adjust the volume of sound. Long pressing the “Button +/-” will be used to switch the sound to the next. Value=1, short pressing the “Button +/-” will be used to switch the sound to the next. Long pressing the “Button +/-” will be used to adjust the volume of sound.	0	1
0x50 (80)	It will send the Hail CC/configuration report CC when the state of garage door is changed: 1, Value=0， reserved. 2, Value=1， send Hail CC. 3, Value=2， send Barrier operator report CC.	2	1
0xF1 (241)	Pair the Sensor with Garage Door Controller. Send Configuration Set: Value=0x55555501, which will trigger to start the pairing of Sensor (installed on the top of the garage door), at this time, the Network LED on the Garage Door Controller will blink slowly and then short press Temper Switch back of the Sensor. If pairing is successful, the Network LED will stop blinking and the Garage Door Controller will send the configuration report with value=0x01FF to primary controller/gateway. Otherwise, repeat the operation. **Note:** 1. If you do not press the Temper Switch when starting the pairing mode, the pairing status will keep for 8 second and	-	4

	then exit the pairing status automatically. 2. The Sensor has been paired with the Garage Door Controller after factory.		
0xFC(252)	Enable/disable configuration locked 1, Value=0： Enable. 2, Value=1： Disable.	0	1
0xFF(255)	1.Value=0x55555555、Default=1、Size=4 Reset to factory default setting and removed from the z-wave network	0	4
	2.Reset to factory default setting	0	1

Note：

When you send Configuration get CC to product that will not get the report CC from product if the parameter has no default value.