

Indoor Siren 6



Engineering Specification

Indoor Siren 6

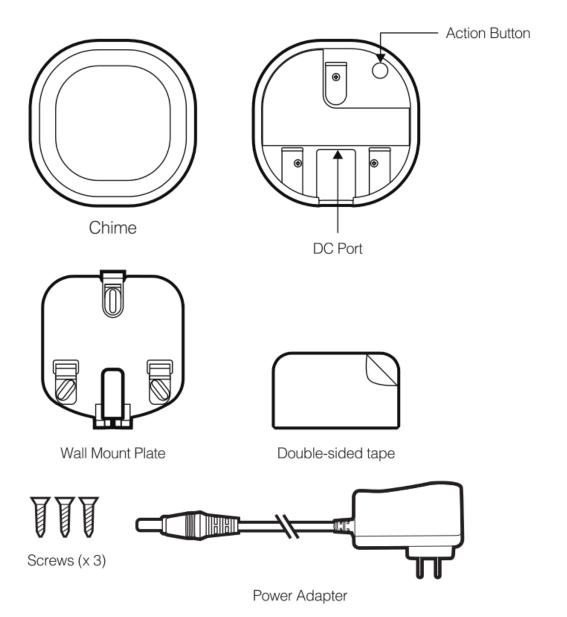
Document No.	SPEC-ZW164
Version	6
Description	This document mainly introduces AEOTEC new generation Indoor Siren 6. The content mainly includes its interfaces, accessories, features, specifications, quick start, and software function definition. Indoor Siren 6 is a smart siren based on Z-Wave and 433.92MHz/FSK. Not only a siren, but also can be used as a doorbell via setting. Can be wireless controlled by more Button, up to 3. Longer Button control distance, up to 120m. Built-in multiple tones, up to 30. Built-in multiple adjustable Light Effect.
Written By	
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Date	

		REVISION RECORD
Version	Date	Brief description of changes
1	2018.10.26	First revision.
2	2018.10.29	Update.
3	2018.12.29	 Modify Directory Outline. Update the picture. Add new Chapter PRODUCT QUICK START. Add some explanation about Endpoint. Modify the function definition of ALL Configuration Parameter.
4	2019.01.14	 Replace Inclusion to Add, Exclusion to Remove, Gateway to Controller. Modify the function definition of Configuration Parameter 0x01 (1) and 0xFF (255).
5	2019.01.17	 Distinguish SO NIF and S2 NIF. Modify AGI Profile of Group 2-9, changing from Notification: Siren to Control: Key. Modify the valid value of Configuration Parameter 0x01 (1) to 0x08 (08), limiting their highest value. Modify the unit of both Gradually bright duration and Gradually extinguished duration of Configuration Parameter 0x10 (16) to 0x16 (22), changing from 10ms to 20ms; and limit their highest value. Modify the valid value of Configuration Parameter 0x34 (52) to 0x36 (54), limiting their highest value.
6	2019.03.01	 Add a Configuration Parameter 0x60(96). Its function is enable or disable the ability that click the Action Button to stop a playing tone, and 0=disable (default), 1=enable.

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1 INTERFACES & ACCESSORIES



Terminology	Description
Chime	A component based on Z-Wave and 433.92MHz/FSK technology, and it can be used to play tone when triggered by Z-Wave Command or paired Button. Note: Chime is equivalent to Indoor Siren 6 in this Engineering Specification. Refer to Section 2.1 for details.
Button	A component based on 433.92MHz/FSK technology, and it can be used to wireless control Chime to play tone. Note: There is no Button in the box. If you want to make your Indoor Siren 6 become a doorbell, you need to purchase another product, ZW166 Button. Or purchase a set of ZW162 Indoor Siren 6 directly, which is with one Button inside. The function of Indoor Siren 6 is the same as Doorbell 6. Refer to Section 2.2 for details.
Action Button	A button in Chime, and it can be used for networking, resetting, and pairing Button, etc. ■ Refer to Section 4.1 for details.
Ring Button	A button in Button, and it can be used for wireless controlling Chime to play tone. • Refer to Section 4.2 for details.

2 FEATURES & SPECIFICATIONS

2.1 Chime

Note: Chime is equivalent to Indoor Siren 6 in this Engineering Specification.

Parameter	Value
Product Identifier	ZW164
Dimensions	76*76*38.5mm
Weight	100g
Color	White
Shell Material	PC-6600
Shell Surface Treatment	Bright scrub
Shell Fire-proof Level	UL94 V-0
Waterproof and Dustproof	Rated IP20 under IEC standard 60529
Operating Temperature	32~104°F (0~40°C)
Relative Humidity	8%~80%
Wireless Technology	Z-Wave (Between Chime and Controller), 433.92MHz/FSK(Between Chime and Button)
Z-Wave Plus	Yes
Z-Wave Module	ZM5101
Z-Wave Version	6.71.03
Z-Wave Library Type	Enhanced 232 Slave
Z-Wave Device Type	Sound Switch
Z-Wave Role Type	Always On Slave
Security Class	Non-Security, SO, S2 Unauthenticated, and S2 Authenticated
Smart Start Compatible	No
Over The Air (OTA)	Support
Multi Channel Device	Yes
Association	Support
Factory Reset	Support
Power-down Memory	Support
Z-Wave Antenna Distance	30m (Indoor) /150m (Outdoor). Between Chime and Controller.
Button Control Distance	120m (Barrier-free sight line distance). Between Chime and Button.
Indicator Light Color	White
Indicator Light Color Temperature	5500K
Indicator Light Power	2W
Buttons and Connectors	Action Button (x1) DC Port (x1)
Input Voltage	DC 5V/2A Power Adapter
Battery	Quantity: 1 Model: PT502035 Capacity: 400mAh Detachable: No Chargeable: Yes. Charging via Power Adapter. Endurance: 4 hours
Working Current	80mA
Standby Current	70mA
Built-in Sensors	Vibration Sensor
Supported Paired Buttons	Max: 3
Tones Storage Size	16M
Supported Tones	Max: 30. No interface to replace the built-in tones. If you want to change these built-in tones, please contact us to customize.

Tone Effect Configurable	Support
Light Effect Configurable	Support
Volume	Max: 105dB
Volume Adjustable	Support
Safety Certifications	US: FCC ID, FCC SDOC EU: CE-EMC, CE-RED, CE-LVD, Battery AU: RCM

2.2 Button

Note: There is no Button in the box. If you want to make your Indoor Siren 6 become a doorbell, you need to purchase another product, ZW166 Button. Or purchase a set of ZW162 Doorbell 6 directly, which is with one Button inside. The function of Indoor Siren 6 is the same as Doorbell 6.

Parameter	Value
Product Identifier	ZW166
Dimensions	85*38*14mm
Weight	35g
Color	White
Shell Material	ABS PA757
Shell Surface Treatment	Bright scrub
Shell Fire-proof level	UL94 HB
Waterproof and Dustproof	Rated IP55 under IEC standard 60529
Operating temperature	32~104°F (0~40°C)
Relative Humidity	8%~80%
Wireless Technology	433.92MHz/FSK(Between Chime and Button)
Button Control Distance	120m (Barrier-free sight line distance). Between Chime and Button.
Indicator Light Color	White
Buttons and Connectors	Ring Button(x1)
Input Voltage	3V lithium battery
Battery	Quantity: 1 Model: CR2450 Capacity: 630mAh Detachable: Yes Chargeable: No Endurance: 2 years
Working Current	20mA
Standby Current	0.1uA
Safety Certifications	US: FCC ID EU: CE-RED, CE-LVD AU: RCM

3 PRODUCT QUICK START

3.1 Important safety information

Please read this Engineering Specification carefully for correct and effective use.

Failure to follow the recommendations set forth by AEOTEC Limited may be dangerous or cause a violation of the law. The manufacturer, importer, distributor, and/or reseller will not be held responsible for any loss or damage resulting from not following any instruction in this guide or in other materials.

Chime is intended for indoor use in dry locations only. Do not use in damp, moist, and/or wet locations. Button offers IP55 water protection and is suitable for outdoor use without direct exposure to heavy and penetrative rain. Button is constructed with nylon; away from heat and do not expose to flame.

Warning

To prevent possible hearing damage, test only when wearing appropriate hearing protection.

Contains small parts; keep away from children.

3.2 How to add Chime into Z-Wave network

This product supports Security 2 Command Class. While a Security S2 enabled Controller is needed in order to fully use the security feature. This product 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.

- 1. Set your Z-Wave Controller into its 'Add Device' mode in order to add Chime into your Z-Wave system. Refer to the Controller's manual if you are unsure of how to perform this step.
- 2. Power on Chime via the provided power adapter; its LED will be breathing white light all the time.
- 3. Click Chime Action Button once, it will quickly flash white light for 30 seconds until Chime is added into the network. It will become constantly bright white light after being assigned a NodelD.
- 4. If your Z-Wave Controller supports S2 encryption, enter the first 5 digits of DSK into your Controller's interface if /when requested. The DSK is printed on Chime's housing.
- 5. If Adding fairs, it will slowly flash white light 3 times and then become breathing white light; repeat steps 1 to 4. Contact us for further support if needed.
- 6. If Adding succeeds, it will quickly flash white light 3 times and then become off. Now, Chime is a part of your Z-Wave home control system. You can configure it and its automations via your Z-Wave system; please refer to your software's user guide for precise instructions.

Note:

If Action Button is clicked again during the Learn Mode, the Learn Mode will exit. At the same time, Indicator Light will extinguish immediately, and then become breathing white light.

3.3 How to remove Chime from Z-Wave network

- 1. Set your Z-Wave Controller into its 'Remove Device' mode in order to remove Chime from your Z-Wave system. Refer to the Controller's manual if you are unsure of how to perform this step.
- 2. Power on Chime via the provided power adapter; its LED will be off.
- 3. Click Chime Action Button 6 times quickly; it will bright white light, up to 2s.
- 4. If Removing fairs, it will keep off; repeat steps 1 to 3. Contact us for further support if needed.

5. If Removing succeeds, it will quickly flash white light 3 times and then become breathing white light. Now, Chime is removed from Z-Wave network successfully.

3.4 How to factory reset Chime

If the primary controller is missing or inoperable, you may need to reset the device to factory settings.

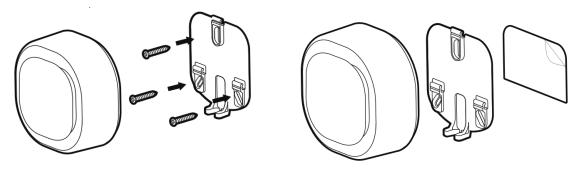
Make sure the Chime is powered. To complete the reset process manually, press and hold the Action Button for at least 20s. The LED indicator will quickly flash white light 3 times and then become breathing white light, which indicates the reset operation is successful. Otherwise, please try again. Contact us for further support if needed.

Note:

- 1. This procedure should only be used when the primary controller is missing or inoperable.
- 2. Factory Reset Chime will:
- (a) Remove Chime from Z-Wave network;
- (b) Delete the Association setting;
- (c) Restore the configuration settings to the default. (Except configuration parameter 51/52/53/54)

3.5 How to install Chime

- 1. Select an installation location for Chime. Do not yet install it.
- 2. Power on Chime via the provided power adapter.
- 3. Affix Chime in the desired installation location using the provided mounting plate.
- a. Affix the mounting plate to the selected surface; affix it using either 3 × 20mm screws or double-sided tape.
- b. Lock your Chime onto the mounting plate.



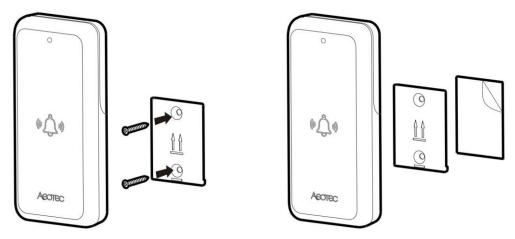
3.6 How to install Button

There is no Button in the box. If you want to make your Indoor Siren 6 become a doorbell, you need to purchase another product, ZW166 Button. Chime and Button communicate wirelessly and can be installed up to 120 meters/393 feet apart. However, the wireless range is reduced by interference from competing wireless signals, doors, and walls. Before installing Chime, test your desired installation location for both Button and Chime first to ensure that a reliable wireless connection can be made between the 2 parts.

Avoid exposing Button to direct sunlight where possible to avoid UV damage and reduced battery performance.

- 1. Select an installation location for Button. Do not yet install it.
- 2. Power on Button.
- a. Remove the 2 screws from Button's rear to open its battery cover and install the provided CR2450 battery with the positive (+) on top.

- b. Replace the battery cover and the 2 screws.
- 3. Test the wireless connection by pressing Ring Button to trigger a doorbell alert. Select an alternative installation location for Chime if the connection is poor.
- 4. Install Button.
- a. Affix the mounting plate to the selected surface; affix it using either 2 × 20mm screws or double-sided tape.
- b. Lock your Button onto the mounting plate.



3.7 How to pair Button

There are two way to trigger pairing Button:

- Manually quick click Chime Action Button. Can be done both in and out of the network.
- With Configuration Set. Can only be done in the network. Refer to Configuration Parameter 49/50/51 for details.

Below is mainly about manually quick click Chime Action Button to trigger pairing Button.

- 1. Different click times will trigger different Pairing Button Mode. Please action as shown below.
- Click Action Button 3 times quickly will trigger Pairing #1 Button Mode.
- Click Action Button 4 times quickly will trigger Pairing #2 Button Mode.
- Click Action Button 5 times quickly will trigger Pairing #3 Button Mode.
- 2. Observe Chime Indicator Light to make sure which Button is waiting for pairing.
- When Pairing #1 Button Mode is triggered, Chime Indicator Light will bright 1 time ON 0.5s OFF 1s, and then become
 constantly bright white light, indicating that Pairing #1 Button Mode has already triggered. Pairing time is up to 10
 seconds. In this time period, user MUST manually click Ring Button 3 times quickly. Otherwise it cannot be paired
 successfully.
- When Pairing #2 Button Mode is triggered, Chime Indicator Light will bright 2 times ON 0.5s OFF 1s, and then become
 constantly bright white light, indicating that Pairing #2 Button Mode has already triggered. Pairing time is up to 10
 seconds. In this time period, user MUST manually click Ring Button 3 times quickly. Otherwise it cannot be paired
 successfully.
- When Pairing #3 Button Mode is triggered, Chime Indicator Light will bright 3 times ON 0.5s OFF 1s, and then become
 constantly bright white light, indicating that Pairing #3 Button Mode has already triggered. Pairing time is up to 10
 seconds. In this time period, user MUST manually click Ring Button 3 times quickly. Otherwise it cannot be paired
 successfully.
- 3. Determine pairing results.

- If pairing Button succeeds, Chime Indicator Light will quickly flash white light 3 times and play the corresponding tone of paired Button, and then become breathing white light (when Chime is out of the Z-Wave network) or off (when Chime is in the Z-Wave network)
- If pairing Button fairs, Chime Indicator Light will slowly flash white light 3 times and then become breathing white light (when Chime is out of the Z-Wave network) or off (when Chime is in the Z-Wave network).

Note:

- Only one Button can be paired at one time.
- Each successful pairing will overwrite the previous paired Button which has the same Button Number.
- This manually quick click Action Button operation can only be used to trigger pairing, not unpairing.
- If you want to exit Pairing Button Mode, what you need to do is that click the Action Button once.

3.8 How to unpair Button

There is only one way to trigger unpairing Button:

• With Configuration Set. Can only be done in the network. Refer to Configuration Parameter 48 for details.

3.9 How to factory reset Button

There is no way to factory reset Button. If something happens to Button, please try to re-power it. Contact us for further support if needed.

4 SOFTWARE FUNCTION DEFINITION

4.1 User Behavior Interaction

Note: Indicator Light in the table below refers to Chime Indicator Light, but not Button Indicator Light.

User behavior	Out of the Z-Wave network	In the Z-Wave network		
Power OFF	Cut the power.	Cut the power.		
Power ON	Supply the power: When powered by battery, Indicator Light will be breathing white light for 30s (max). When powered by adapter, Indicator Light will be breathing white light all the time.	Supply the power: Indicator Light will become white light for 2s indicating the product has been powered, and then extinguish.		
Click Action Button once	1.Send Node Info for Adding: When click Action Button once, Indicator Light will quickly flash white light for 30s until Chime is added into the network. It will become constantly bright white light after being assigned a NodelD.	Light will extinguish immediately. Please note that this function is related to the value of configuration parameter 0x60(96). 2.Exit Paring Button Mode: Indicator Light will slowly flash white light stimes and then become off.		
	2.Exit Classic Inclusion Learn Mode: If Action Button is clicked again during the Learn Mode, the Learn Mode will exit. At the same time, Indicator Light will extinguish immediately, and then become breathing white light. 3.Exit Paring Button Mode: Indicator Light will slowly flash white light 3 times and then become breathing white			
Click Action Button 3 times quickly	Trigger Pairing #1 Button Mode: Indicator Light will bright 1 time ON 0.5s OFF 1s, and then become constantly bright white light, indicating that Pairing #1 Button Mode has already triggered.	Trigger Pairing #1 Button Mode: Indicator Light will bright 1 time ON 0.5s OFF 1s, and then become constantly bright white light, indicating that Pairing #1 Button Mode has already triggered.		
	will quickly flash white light 3 times and then become breathing white light.	If pairing Button succeeds, Indicator Light will quickly flash white light 3 times and then become off. If pairing Button fairs, Indicator Light will slowly flash white light 3 times and then become off.		
Click Action Button 4 times quickly	Trigger Pairing #2 Button Mode: Indicator Light will bright 2 times ON 0.5s OFF 1s, and then become constantly bright white light, indicating that Pairing #2 Button Mode has already triggered.	Trigger Pairing #2 Button Mode: Indicator Light will bright 2 times ON 0.5s OFF 1s, and then become constantly bright white light, indicating that Pairing #2 Button Mode has already triggered.		
	will quickly flash white light 3 times and then become breathing white light. If pairing Button fairs, Indicator Light will	If pairing Button succeeds, Indicator Light will quickly flash white light 3 times and then become off. If pairing Button fairs, Indicator Light will slowly flash white light 3 times and then become off.		

Click Action Button 5 times quickly	OFF 1s, and then become constantly bright white light, indicating that Pairing #3 Button Mode has already triggered. If pairing Button succeeds, Indicator Light	white light, indicating that Pairing #3 Button Mode has already triggered. If pairing Button succeeds, Indicator Light			
	If pairing Button fairs, Indicator Light will slowly flash white light 3 times and then become breathing white light.	If pairing Button fairs, Indicator Light will slowly flash white light 3 times and then become off.			
Click Action Button 6 times quickly	Reserved: Indicator Light is off from press to release.	Send Node Info for Removing: Indicator Light will become white light for up to 2s.			
		If Removing succeeds, Indicator Light will quickly flash white light 3 times and then become breathing white light. If Removing fairs, Indicator Light will become off, but not breathing white light.			
Press and hold Action Button for [1, 2s)	Reserved: Indicator Light is off from press to release.	Reserved: Indicator Light is off from press to release.			
Press and hold Action Button for [2, 5s)	Test the Tone Effect and Light Effect of the Browse Group:				
Press and hold Action Button for [5, 10s)		Test communication quality: Indicator Light will become brighter white light when press, and quickly flash white light when release, indicating start to test communication quality between Chime and Node 1.			
		At the end of the test, Indicator Light will become solid white light for 2 seconds.			
		If the communication quality is Good, it will quickly flash white light 3 times and then become off. If the communication quality is Weak, it will slowly flash white light 3 times and then become off.			
Press and hold Action Button for [10, 20s)		Reserved: Indicator Light will become speedup flashing white light when press, and become off when release.			
Press and hold Action Button for [20, ∞)	When the time reaches 20s, Indicator Light	Factory Reset: When the time reaches 20s, Factory Reset is performed no matter Action Button is pressed or released.			
		Chime will send out Device Reset Locally Notification Report via Lifeline, and it will perform factory reset no matter the Nodes in the Lifeline Group receive the Device Reset Locally Notification from Chime or not.			
		Indicator Light will become quickly flash white light 3 times and then become breathing white light, which indicates the			

reset operation is successful. Otherwise,
please try again.

4.2 Supplementary Explanation about Button

Function	Description			
Wireless Control Chime	When click Ring Button once, Button can wireless control the corresponding paired Chime.			
Pairing Chime	When click Ring Button 3 times quickly, Button can be paired to Chime while Chime triggers Pairing Button Mode.			
Sending Button Info to Chime	When re-power or click Ring Button, Button will send its Button ID, Battery Voltage and Button Software Version to its corresponding paired Chime.			
Automatic sleep	After sending Button Info to Chime, Button will sleep automatically for saving battery life.			
Low Battery Light Effect	If #1 Button is low battery, Chime Indicator Light will repeat cycle (ON 100ms, OFF 5s)			
	If #2 Button is low battery, Chime Indicator Light will repeat cycle (ON 100ms, OFF 100ms, ON 100ms, OFF 5s)			
	If #3 Button is low battery, Chime Indicator Light will repeat cycle (ON 100ms, OFF 100ms, ON 100ms, OFF 5s)			
	When the battery voltage of Button is lower than 2.8V, it is judged to be low battery. When the battery voltage of Button restores to over 2.9V, it is judged to return to normal.			
	Low Battery Light Effect will be activated when Chime detects the corresponding paired Button is low battery, and disappears after the battery returns to normal.			
	Low Battery Light Effect has the lowest priority among all light effects, that is, it will be displayed when there is no other light effect.			
	The Light Effect of the 3 Buttons are different. When multiple Buttons is low battery at the same time, the corresponding light effect of the Button with smaller Button number is displayed first.			

4.3 Announced Command Classes in NIF

Note: When DUT is included on S0 level, MANUFACTURER_SPECIFIC CC is supported non-securely, while included on S2 level, MANUFACTURER_SPECIFIC CC is supported securely only.

Common d Class	Version	Not added	Non-secure added	Securely O added		Securely 2 added	
Command Class				Non-secure	Secure	Non-secure	Secure
ZWAVEPLUS_INFO	2	Support	Support	Support		Support	
VERSION	2	Support	Support		Support		Support
CONFIGURATION	1	Support	Support		Support		Support
MANUFACTURER_SPECIFIC	2	Support	Support	Support			Support
ASSOCIATION_GRP_INFO	1	Support	Support		Support		Support
ASSOCIATION	2	Support	Support		Support		Support
POWERLEVEL	1	Support	Support		Support		Support
MULTI_CHANNEL_ASSOCIATION	3	Support	Support		Support		Support
MULTI_CHANNEL	4	Support	Support		Support		Support
DEVICE_RESET_LOCALLY	1	Support	Support		Support		Support
TRANSPORT_SERVICE	2	Support	Support	Support		Support	
SECURITY	1	Support	Support	Support		Support	
SECURITY_2	1	Support	Support	Support		Support	
SUPERVISION	1	Support	Support	Support		Support	
FIRMWARE_UPDATE_MD	4	Support	Support		Support		Support

NOTIFICATION	8	Support	Support	Support	Support
SOUND_SWITCH	1	Support	Support	Support	Support

4.4 Basic Command Class mapping

Basic Set Command (Value) maps to Sound Switch Tone Play Set Command (Tone Identifier).

Basic Get Command maps to Sound Switch Tone Play Get Command.

Basic Report Command (Value) maps to Sound Switch Tone Play Report Command (Tone Identifier).

4.5 Z-Wave Plus Info

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	0x2200 (ICON_TYPE_GENERIC_SOUND_SWITCH)
User Icon Type	0x2200 (ICON_TYPE_GENERIC_SOUND_SWITCH)

4.6 Manufacturer Specific

Parameter	Value		
Manufacturer ID 1	0x03		
Manufacturer ID 2 0x71			
Product Type ID 1	0x00(EU), 0x01(US), 0x02(AU)		
Product Type ID 2	0x03		
Product ID 1	0x00		
Product ID 2	0xA4		

4.7 Version

Parameter	Value
Z-Wave Protocol Library Type	0x03
Z-Wave Protocol Version	0x05
Z-Wave Protocol Sub Version	0x03
Firmware 0 Version	ZM5101 Software Version MSB
Firmware 0 Sub Version	ZM5101 Software Version LSB
Hardware Version	0xA4
Number of firmware targets	0x00

4.8 Notification

Notification Type		Notification Events		Description
Home Security	0x07	State idle	0x00	N/A
		Tampering, product moved	0x09	Chime is tampered and moved.
Power Management	0x08	State idle	0x00	Button's battery comes back to normal.
		Replace battery soon	0x0A	Button's battery is in low battery.
Siren 0x0E		State idle	0x00	Chime alarm is inactive.
	Siren active		0x01	Chime alarm is triggered.

4.9 Multi Channel

4.9.1 Endpoint Capability

Parameter	Value
Individual End Points	8
Aggregated End Points	0
Dynamic	0
Identical	1
Generic Device Class	GENERIC_TYPE_AV_CONTROL_POINT
Specific Device Class	SPECIFIC_TYPE_SOUND_SWITCH
Command Classes	COMMAND_CLASS_ZWAVEPLUS_INFO COMMAND_CLASS_SECURITY COMMAND_CLASS_SECURITY_2 COMMAND_CLASS_SUPERVISION COMMAND_CLASS_ASSOCIATION COMMAND_CLASS_ASSOCIATION_GRP_INFO COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION COMMAND_CLASS_NOTIFICATION COMMAND_CLASS_SOUND_SWITCH

Note:

In order to implement multiple different applications, especially the function that customize different Light Effect and Tone Effect for different Endpoints with Configuration CC and Sound Switch CC, and the function that distinguish which paired Button is clicked, although this product has only one speaker and one Indicator Light, we still design it as Multi Channel Device. For easy understanding, we suggest you consider these Endpoints as Virtual Application Resources. In addition, you may get an overview of Endpoint's application function through the Group Name in the AGI. Designed as Multi Channel Device will greatly enrich the product's functions and meet more application scenarios.

4.9.2 Endpoint Priority Definition

Endpoint	Application Function	Priority
1	Browse	1 (Highest)
2	Tampering	4 (Lowest)
3	Doorbell 1	3
4	Doorbell 2	3
5	Doorbell 3	3
6	Environment	2
7	Security	2
8	Emergency	2
Rule Description		Example
same-priority or high-priority then the playing tone will	Endpoint is also triggered, be replaced by the new	The Endpoint 2(Doorbell 1) is playing tone; at the same time, if Endpoint 4(Doorbell 2) or Endpoint 6(Environment) is also triggered, then the playing tone will be replaced by Endpoint 4 or Endpoint 6, and Endpoint 2 will stop playing.
low-priority Endpoint is also t	riggered, then the playing the new Endpoint, and the	The Endpoint 1(Browse) is playing tone; at the same time, if Endpoint 2(Tampering) or Endpoint 3(Doorbell 1) is also triggered, then the playing tone will NOT be replaced by Endpoint 2 or Endpoint 3, and Endpoint 1 will keep playing.

4.9.3 Endpoint responses to receiving Notification Report

Some nodes may only support Lifeline association group, without any other control association groups. And some nodes may not support Multi Channel communication. Considering compatibility, we implement the application function that Endpoint responses to receiving Notification Report. Below is more details.

When Endpoint receives Notification Report issued from other notification nodes, Endpoint will be triggered to play tone and light, as long as the Notification Report is listed in the following table. For example, when Endpoint 6 (Environment) receives Notification Report (Smoke detected) or Notification Report (Water Leak detected) issued from other notification nodes, it will trigger Endpoint 6 to play tone and light corresponding to Endpoint 6's configuration.

Besides, when Root Device receives Notification Report issued from other notification nodes, Root Device will transfer the Notification Report to Endpoint 6, 7 or 8 to trigger playing tone and light, as long as the Notification Report is listed in the following table. For example, when Root Device receives Notification Report (Intrusion), it will trigger Endpoint 7 (Security) to play tone and light corresponding to Endpoint 7's configuration. In other words, this product is also compatible with nodes that do not support Multi Channel communication.

In short, notification nodes in the Z-Wave network can operated with this product to make a notable siren alarm for some environment, security or emergency events.

The table below defines which Notification Report can trigger Endpoint to play tone and light.

Endpoint	Application	Notification Type	Value	Notification Event	Value
1	Browse	N/A	N/A	N/A	N/A
2	Tampering	N/A	N/A	N/A	N/A
3	Doorbell 1	N/A	N/A	N/A	N/A
4	Doorbell 2	N/A	N/A	N/A	N/A
5	Doorbell 3	N/A	N/A	N/A	N/A
6	Environment	Smoke Alarm	0x01	Smoke detected (location provided)	0x01
				Smoke detected	0x02
		CO Alarm	0x02	Carbon monoxide detected (location provided)	0x01
				Carbon monoxide detected	0x02
		CO2 Alarm	0x03	Carbon dioxide detected (location provided)	0x01
				Carbon dioxide detected	0x02
		Heat Alarm	0x04	Overheat detected (location provided)	0x01
				Overheat detected	0x02
				Under heat detected (location provided)	0x05
				Under heat detected	0x06
		Water Alarm	0x05	Water leak detected (location provided)	0x01
				Water leak detected	0x02
		Gas Alarm	0x12	Combustible gas detected (location provided)	0x01
				Combustible gas detected	0x02
				Toxic gas detected (location provided)	0x03
				Toxic gas detected	0x04
7	Security	Access Control	0x06	Window/door is open	0x16
				Intrusion (location provided)	0x01
				Intrusion	0x02
				Tampering, product cover removed	0x03
				Tampering, invalid code	0x04
		Home Security	0x07	Glass breakage (location provided)	0x05
				Glass breakage	0x06
				Motion detection (location provided)	0x07
				Motion detection	0x08
				Tampering, product moved	0x09
8	Emergency	Emergency Alarm	0x0A	Contact police	0x01
				Contact fire service	0x02
				Contact medical service	0x03

4.10 Association Group Info

Root device

ID	Name	Node count	Profile	Function
1	Lifeline	5	General: Lifeline	Device Reset Locally Notification: Issued when Factory Reset is performed. Sound Switch Tone Play Report: Issued when a tone has started playing. Sound Switch Configuration Report: Issued when volume or default tone has changed. Notification Report (Type=0x0E; Event=0x01): Issued when Chime starts playing tone. Notification Report (Type=0x0E; Event=0x00): Issued when Chime stops playing tone. Notification Report (Type=0x07; Event=0x09): Issued when Chime is tampered and moved. Notification Report (Type=0x08; Event=0x0A): Issued when Button is low battery. Notification Report (Type=0x08; Event=0x00): Issued when Button comes back to normal battery. Configuration Report (Parameter=0x32): Issued when Pairing Button Mode is triggered. Configuration Report (Parameter=0x33): Issued when Unpairing or Pairing Button Mode finishes.
2	On/Off control (Browse)	5	Control: Key01	Mirror of endpoint 1, group 2
3	On/Off control (Tampering)	5	Control: Key02	Mirror of endpoint 2, group 2
4	On/Off control (Doorbell 1)	5	Control: Key03	Mirror of endpoint 3, group 2
5	On/Off control (Doorbell 2)	5	Control: Key04	Mirror of endpoint 4, group 2
6	On/Off control (Doorbell 3)	5	Control: Key05	Mirror of endpoint 5, group 2
7	On/Off control (Environment)	5	Control: Key06	Mirror of endpoint 6, group 2
8	On/Off control (Security)	5	Control: Key07	Mirror of endpoint 7, group 2
9	On/Off control (Emergency)	5	Control: Key08	Mirror of endpoint 8, group 2

Endpoint 1

ID	Name	Node count	Profile	Function
1	Lifeline	0	General: Lifeline	Sound Switch Tone Play Report: Issued when a tone has started playing. Sound Switch Configuration Report: Issued when volume or default tone has changed. Notification Report (Type=0x0E; Event=0x01): Issued when Endpoint 1 starts playing tone. Notification Report (Type=0x0E; Event=0x00): Issued when Endpoint 1 stops playing tone.
2	On/Off control (Browse)	5	Control: Key01	When Endpoint 1 starts playing tone or stops playing tone, Nodes associated are controlled and will receive a Basic Set CC.

Endpoint 2

ID	Name	Node count	Profile	Function
1	Lifeline	0	General: Liteline	Sound Switch Tone Play Report: Issued when a tone has started playing.

				Sound Switch Configuration Report: Issued when volume or default tone has changed. Notification Report (Type=0x0E; Event=0x01): Issued when Endpoint 2 starts playing tone. Notification Report (Type=0x0E; Event=0x00): Issued when Endpoint 2 stops playing tone.
2	On/Off control (Tampering)	5	Control: Key02	When Endpoint 2 starts playing tone or stops playing tone, Nodes associated are controlled and will receive a Basic Set CC.

Endpoint 3

ID	Name	Node count	Profile	Function
1	Lifeline	0	General: Lifeline	Sound Switch Tone Play Report: Issued when a tone has started playing. Sound Switch Configuration Report: Issued when volume or default tone has changed. Notification Report (Type=0x0E; Event=0x01): Issued when Endpoint 3 starts playing tone. Notification Report (Type=0x0E; Event=0x00): Issued when Endpoint 3 stops playing tone. Notification Report (Type=0x08; Event=0x0A): Issued when #1 Button is low battery. Notification Report (Type=0x08; Event=0x00): Issued when #1 Button comes back to normal battery.
2	On/Off control (Doorbell 1)	5	Control: Key03	When Endpoint 3 starts playing tone or stops playing tone, Nodes associated are controlled and will receive a Basic Set CC.

Endpoint 4

ID	Name	Node count	Profile	Function
1	Lifeline	0	General: Lifeline	Sound Switch Tone Play Report: Issued when a tone has started playing. Sound Switch Configuration Report: Issued when volume or default tone has changed. Notification Report (Type=0x0E; Event=0x01): Issued when Endpoint 4 starts playing tone. Notification Report (Type=0x0E; Event=0x00): Issued when Endpoint 4 stops playing tone. Notification Report (Type=0x08; Event=0x0A): Issued when #2 Button is low battery. Notification Report (Type=0x08; Event=0x00): Issued when #2 Button comes back to normal battery.
2	On/Off control (Doorbell 2)	5	Control: Key04	When Endpoint 4 starts playing tone or stops playing tone, Nodes associated are controlled and will receive a Basic Set CC.

Endpoint 5

ID	Name	Node count	Profile	Function
1	Lifeline	0	General: Lifeline	Sound Switch Tone Play Report: Issued when a tone has started playing. Sound Switch Configuration Report: Issued when volume or default tone has changed. Notification Report (Type=0x0E; Event=0x01): Issued when Endpoint 5 starts playing tone. Notification Report (Type=0x0E; Event=0x00): Issued when Endpoint 5 stops playing tone. Notification Report (Type=0x08; Event=0x0A): Issued when #3 Button is low battery. Notification Report (Type=0x08; Event=0x00): Issued when #3 Button comes back to normal battery.

1/	On/Off control (Doorbell 3)	5	Control: Key05	When Endpoint 5 starts playing tone or stops playing tone, Nodes associated are controlled and will receive a Basic Set CC.
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Endpoint 6

ID	Name	Node count	Profile	Function
1	Lifeline	0	General: Lifeline	Sound Switch Tone Play Report: Issued when a tone has started playing. Sound Switch Configuration Report: Issued when volume or default tone has changed. Notification Report (Type=0x0E; Event=0x01): Issued when Endpoint 6 starts playing tone. Notification Report (Type=0x0E; Event=0x00): Issued when Endpoint 6 stops playing tone.
2	On/Off control (Environment)	5	Control: Key06	When Endpoint 6 starts playing tone or stops playing tone, Nodes associated are controlled and will receive a Basic Set CC.

Endpoint 7

ID	Name	Node count	Profile	Function
1	Lifeline	0	General: Lifeline	Sound Switch Tone Play Report: Issued when a tone has started playing. Sound Switch Configuration Report: Issued when volume or default tone has changed. Notification Report (Type=0x0E; Event=0x01): Issued when Endpoint 7 starts playing tone. Notification Report (Type=0x0E; Event=0x00): Issued when Endpoint 7 stops playing tone.
2	On/Off control (Security)	5	Control: Key07	When Endpoint 7 starts playing tone or stops playing tone, Nodes associated are controlled and will receive a Basic Set CC.

Endpoint 8

ID	Name	Node count	Profile	Function
1	Lifeline	0	General: Lifeline	Sound Switch Tone Play Report: Issued when a tone has started playing. Sound Switch Configuration Report: Issued when volume or default tone has changed. Notification Report (Type=0x0E; Event=0x01): Issued when Endpoint 8 starts playing tone. Notification Report (Type=0x0E; Event=0x00): Issued when Endpoint 8 stops playing tone.
2	On/Off control (Emergency)	5	Control: Key08	When Endpoint 8 starts playing tone or stops playing tone, Nodes associated are controlled and will receive a Basic Set CC.

4.11 Configuration

Note: R=Read Only, W=Write Only, WR=Write and Read.

Parameter	Description	on							W/R	Default	Size
0x01(1)	Configure	the Light	Effect an	d Tone Pla	y Mode fo	r Endpo	int 1(Bro	wse).	WR	0x01000000	4
	7	6	5	4	3	2	1	0			
	Light Effe	ect Index									
	Tone Pla	y Mode									
	Reserved	ł									
	Reserved	i									

ight Effe	
Value	Description
1	#1 Light Effect, mapping to Parameter 16.
2	#2 Light Effect, mapping to Parameter 17.
4	#3 Light Effect, mapping to Parameter 18.
8	#4 Light Effect, mapping to Parameter 19.
16	#5 Light Effect, mapping to Parameter 20.
32	#6 Light Effect, mapping to Parameter 21.
64	#7 Light Effect, mapping to Parameter 22.
127	Use the last valid configuration value.
one Play	Mode
/alue	Description
0	Single playback.
1	Single loop playback.
2	List loop playback for auto-selecting tone:
	If you're not sure which tone to use, you can configure the value of
	Tone Play Mode to be 2. Then send Basic Set 0xFF to Endpoint 1 or
	Root Device to trigger auto-selecting tone function. Chime will play
	built-in tones in order and the Default Tone Identifier will be
	changed each time a new tone is played. When send Basic Set 0x00
	to Endpoint 1 or Root Device to stop playing tone, the Default Tone
	Identifier will store, which means the tone has been selected.
	Please note that the Tone Play Mode needs to be configured to be
	0 or 1 after the tone is selected, otherwise the automatic selection
	tone function will be retriggered when the Endpoint 1 or Root
	Device is triggered to play tone and light again.
3	List random playback for auto-selecting tone:
3	If you're not sure which tone to use, you can configure the value of
	Tone Play Mode to be 3. Then send Basic Set 0xFF to Endpoint 1 or
	Root Device to trigger auto-selecting tone function. Chime will play
	built-in tones randomly and the Default Tone Identifier will be
	changed each time a new tone is played. When send Basic Set 0x00
	to Endpoint 1 or Root Device to stop playing tone, the Default Tone
	Identifier will store, which means the tone has been selected.
	Please note that the Tone Play Mode needs to be configured to be
	0 or 1 after the tone is selected, otherwise the automatic selection
	tone function will be retriggered when the Endpoint 1 or Root
	Device is triggered to play tone and light again.
255	Use the last valid configuration value.
ampla	
cample:	nt to use #5 Light Effect and Single loop playback, please configure the
	in to use #3 Light Effect and Single loop playback, please configure the .i.ght Effect Index field to be 16 and Tone Play Mode field to be 1, that
	ue of the parameter is equal to 0x10010000.
s, the var	de of the parameter is equal to extendence.
hen if v	ou send Basic Set or Sound Switch Tone Play Set to Endpoint 1 or Roo
	will trigger Endpoint 1, actually Chime, to single loop play the tone
	the value of the sending Basic Set or Sound Switch Tone Play Set. At the
	e, Chime Indicator Light will display #5 Light Effect based on the
	tion of Parameter 20.
Jonngara	tion of Furdinete, 20.
In such ca	ase, the tone and light will not stop until Endpoint 1 or Root Device
	Basic Set (Value=0) or Sound Switch Tone Play Set (Tone Identifier=0).
	, , ,
ere is ar	nother example about "Use the last valid configuration value":
	hat current value equals to 0x02000000, if you set the value to be
	00, then Value1 (Light Effect Index) will use the last valid configuration
hac auley	Value2 (Tone Play Mode) will be update to be 1, that is, the final value
varue anu	Talace (Tone 1 la) mode, will be aparte to be 1, that is, the final talace

WR 0x01000001 4

Configure the Light Effect and Tone Effect for Endpoint 2(Tampering).

equals to 0x02010000.

0x02(2)

7	6	5	4	3	2	1	0
Light Effe	Light Effect Index						
Intercept	Intercepting duration of a tone						
Interval between 2 tones							
Tone Play	Tone Play Count						

Light Effect Index

Value	Description
1	#1 Light Effect, mapping to Parameter 16.
2	#2 Light Effect, mapping to Parameter 17.
4	#3 Light Effect, mapping to Parameter 18.
8	#4 Light Effect, mapping to Parameter 19.
16	#5 Light Effect, mapping to Parameter 20.
32	#6 Light Effect, mapping to Parameter 21.
64	#7 Light Effect, mapping to Parameter 22.
127	Use the last valid configuration value.

Intercepting duration of a tone

	0
Value	Description
0	Keep the original duration of a tone itself, without any interception.
1254	1-254 seconds. Intercept the duration of a tone. If the intercepting duration is shorter than the original duration of a tone, actual single play time is equal to the intercepting duration. If the intercepting duration is longer than the original duration of
	a tone, actual single play time is equal to the original duration.
255	Use the last valid configuration value.

Interval between 2 tones

Value	Description
0	No interval.
1254	1-254 seconds. Specify the interval time between 2 tones.
255	Use the last valid configuration value.

Tone Play Count

Value	Description
0	Unlimited playback until stop by user.
1254	1-254 times. Specify the count that the tone will be repeated to be
	played.
255	Use the last valid configuration value.

Example:

If you want to use #1 Light Effect, 2s intercepting duration, 3s interval, and 4 times play count, please configure the value of the parameter to be 0x01020304.

Then, if you send Basic Set or Sound Switch Tone Play Set to Endpoint 2, it will trigger Endpoint 2, actually Chime, to play tone. The tone identifier is based on the value of the sending Basic Set or Sound Switch Tone Play Set. And the duration of the tone is intercepted to be 2s. Chime will continuously play the intercepted tone up to 4 times, with 3s interval between 2 tones. At the same time, Chime will display #1 Light Effect based on the configuration of Parameter 16.

Tone and light will stop when the tone play count reaches 4 or Endpoint 2 receives Basic Set (Value=0) or Sound Switch Tone Play Set (Tone Identifier=0).

Here is another example about "Use the last valid configuration value":

Assume that current value equals to 0x01020304, if you set the value to be 0x02FF00FF, then both Value2 (Intercepting duration of a tone) and Value4 (Tone Play Count) will use the last valid configuration value, but Value1 (Light Effect Index) will be update to be 2 and Value3 (Interval between 2 tones) to be 0, that is, the final value equals to 0x02020004.

	Note:				
	Count, you	rcepting duration of a tone, Interval between 2 tones and Tone Play a can edit the playback of the built-in tones according to your own ideas, e tones more diverse and personalized.			
	someone	neter will also work when Chime is moved, which indicates that perhaps is tampering and moving the product. However, please note that the ight will stop once the tampering and moving stops.			
0x03(3)	Configure	the Light Effect and Tone Effect for Endpoint 3(Doorbell 1).	WR	0x02000001	4
	7	6 5 4 3 2 1 0			
	Light Effe				
		ing duration of a tone letween 2 tones			
	Tone Play				
	1011011107				
	Light Effec				
	Value	Description			
	2	#1 Light Effect, mapping to Parameter 16.			
	4	#2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18.			
	8	#4 Light Effect, mapping to Parameter 19.			
	16	#5 Light Effect, mapping to Parameter 20.			
	32	#6 Light Effect, mapping to Parameter 21.			
	64	#7 Light Effect, mapping to Parameter 22.			
	127	Use the last valid configuration value.			
	Intercenti	ng duration of a tone			
	Value	Description			
	0	Keep the original duration of a tone itself, without any interception.			
	1254	1-254 seconds. Intercept the duration of a tone.			
		If the intercepting duration is shorter than the original duration of a tone, actual single play time is equal to the intercepting duration.			
		If the intercepting duration is longer than the original duration of a tone, actual single play time is equal to the original duration.			
	255	Use the last valid configuration value.			
	Interval b	etween 2 tones			
	Value	Description			
	0	No interval.			
	1254	1-254 seconds. Specify the interval time between 2 tones.			
	255	Use the last valid configuration value.			
	Tone Play	Count			
	Value	Description			
	0	Unlimited playback until stop by user.			
	1254	1-254 times. Specify the count that the tone will be repeated to be played.			
	255	Use the last valid configuration value.			
	Please ref	er to parameter 0x02(2) for more examples.			
	Note:				
	_	rcepting duration of a tone, Interval between 2 tones and Tone Play			
		u can edit the playback of the built-in tones according to your own ideas, e tones more diverse and personalized.			
		neter will also work when Chime is triggered by the paired #1 Button to which indicates that perhaps someone is outside the door.			
(04(4)	Configure	the Light Effect and Tone Effect for Endpoint 4(Doorbell 2).	WR	0x02000001	4
	7	6 5 4 3 2 1 0			

Light Effe	ct Index		
_	ing duration of a tone		
	petween 2 tones		
Tone Play			
,			
Light Effe		1	
Value	Description		
1	#1 Light Effect, mapping to Parameter 16.		
2	#2 Light Effect, mapping to Parameter 17.		
8	#3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19.		
16	#4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20.		
32	#6 Light Effect, mapping to Parameter 21.		
64	#7 Light Effect, mapping to Parameter 22.		
127	Use the last valid configuration value.		
Value	ng duration of a tone Description		
0	Keep the original duration of a tone itself, without any interception.		
1254	1-254 seconds. Intercept the duration of a tone.		
	If the intercepting duration is shorter than the original duration of		
	a tone, actual single play time is equal to the intercepting duration.		
	If the intercepting duration is longer than the original duration of		
	a tone, actual single play time is equal to the original duration.		
255	Use the last valid configuration value.		
	etween 2 tones		
Value 0	Description No interval.		
1254	1-254 seconds. Specify the interval time between 2 tones.		
255	Use the last valid configuration value.		
Tone Play			
Value 0	Description Unlimited playback until stop by user.		
1254	1-254 times. Specify the count that the tone will be repeated to be		
1254	played.		
255	Use the last valid configuration value.		
5. (
riease ref	er to parameter 0x02(2) for more examples.		
Note:			
	ercepting duration of a tone, Interval between 2 tones and Tone Play		
	u can edit the playback of the built-in tones according to your own ideas,		
making th	e tones more diverse and personalized.		
This Parar	neter will also work when Chime is triggered by the paired #2 Button to		
	which indicates that perhaps someone is outside the door.		
Configure	the Light Effect and Tone Effect for Endpoint 5(Doorbell 3).	WR	0x0200000
7	6 5 4 3 2 1 0		
Light Effe			
	ing duration of a tone		
	petween 2 tones		
Interval b		[]	
	Count	-	
Interval b Tone Play			
Interval b			
Interval k Tone Play	ct Index		
Interval b Tone Play Light Effe Value	ct Index Description		

	1		1	1	
	8	#4 Light Effect, mapping to Parameter 19.			
	16	#5 Light Effect, mapping to Parameter 20.			
	32	#6 Light Effect, mapping to Parameter 21.			
	64	#7 Light Effect, mapping to Parameter 22.			
	127	Use the last valid configuration value.			
		ing duration of a tone			
	Value	Description			
	0	Keep the original duration of a tone itself, without any interception.			
	1254	1-254 seconds. Intercept the duration of a tone.			
		If the intercepting duration is shorter than the original duration of a tone, actual single play time is equal to the intercepting duration.			
		a tone, actual single play time is equal to the intercepting duration.			
		If the intercepting duration is longer than the original duration of			
		a tone, actual single play time is equal to the original duration.			
	255	Use the last valid configuration value.			
	Interval b	etween 2 tones			
	Value	Description			
	0	No interval.			
	1254	1-254 seconds. Specify the interval time between 2 tones.			
	255	Use the last valid configuration value.			
	Tone Play				
	Value	Description			
	0	Unlimited playback until stop by user.			
	1254	1-254 times. Specify the count that the tone will be repeated to be			
	255	played.			
	255	Use the last valid configuration value.			
	Count, yo	ercepting duration of a tone, Interval between 2 tones and Tone Play u can edit the playback of the built-in tones according to your own ideas, e tones more diverse and personalized.			
		neter will also work when Chime is triggered by the paired #1 Button to which indicates that perhaps someone is outside the door.			
0x06(6)	Configure	the Light Effect and Tone Effect for Endpoint 6(Environment).	WR	0x04000000	4
	7	6 5 4 3 2 1 0			
	Light Effe				
	Intercept	ect Index			
1	Interval b	ing duration of a tone			
	Tone Play	ing duration of a tone petween 2 tones			
		petween 2 tones / Count			
	Light Effe	ct Index			
	Light Effe Value	ct Index Description			
	Light Effe Value	ct Index Description #1 Light Effect, mapping to Parameter 16.			
	Light Effe Value 1	ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17.			
	Light Effe Value 1 2	ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18.			
	Value 1 2 4 8	cing duration of a tone petween 2 tones / Count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19.			
	Value 1 2 4 8 16	cing duration of a tone petween 2 tones / Count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20.			
	Light Effe Value 1 2 4 8 16 32	ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21.			
	Light Effe Value 1 2 4 8 16 32 64	ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22.			
	Light Effe Value 1 2 4 8 16 32	ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21.			
	Light Effe Value 1 2 4 8 16 32 64 127	ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value.			
	Light Effe Value 1 2 4 8 16 32 64 127	ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value.			
	Light Effe Value 1 2 4 8 16 32 64 127 Intercepti Value	ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value. ing duration of a tone Description			
	Light Effe Value 1 2 4 8 16 32 64 127	ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value.			

		If the intercepting duration is shorter than the original duration of a tone, actual single play time is equal to the intercepting duration.			
		If the intercepting duration is longer than the original duration of a tone, actual single play time is equal to the original duration.			
	255	Use the last valid configuration value.			
	Interval b	etween 2 tones			
	Value	Description			
	0	No interval.			
	1254 255	1-254 seconds. Specify the interval time between 2 tones. Use the last valid configuration value.			
	Tone Play				
	Value	Description			
	0	Unlimited playback until stop by user.			
	1254	1-254 times. Specify the count that the tone will be repeated to be played.			
	255	Use the last valid configuration value.			
	Please ref	er to parameter 0x02(2) for more examples.			
	Count, you	ercepting duration of a tone, Interval between 2 tones and Tone Play u can edit the playback of the built-in tones according to your own ideas, e tones more diverse and personalized.			
	from othe anomaly o				
0x07(7)	Configure 7	the Light Effect and Tone Effect for Endpoint 7(Security).	WR	0x04000000	4
	,				
	Light Effe				
	Light Effe	ct Index			
	Intercept				
	Intercept	ing duration of a tone petween 2 tones			
	Intercept Interval b	ing duration of a tone petween 2 tones v Count			
	Intercept Interval b Tone Play	ing duration of a tone petween 2 tones Count ct Index Description			
	Intercept Interval b Tone Play Light Effect Value 1	ct Index ing duration of a tone petween 2 tones Count ct Index Description #1 Light Effect, mapping to Parameter 16.			
	Intercept Interval b Tone Play Light Effect Value 1 2	ct Index ing duration of a tone petween 2 tones Count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17.			
	Intercept Interval b Tone Play Light Effer Value 1 2 4	ct Index ing duration of a tone petween 2 tones count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18.			
	Intercept Interval b Tone Play Light Effer Value 1 2 4 8	ct Index ing duration of a tone petween 2 tones count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19.			
	Intercept Interval b Tone Play Light Effect Value 1 2 4 8 16	ct Index ing duration of a tone petween 2 tones count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20.			
	Intercept Interval b Tone Play Light Effect Value 1 2 4 8 16 32	ct Index ing duration of a tone petween 2 tones count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21.			
	Intercept Interval b Tone Play Light Effect Value 1 2 4 8 16	ct Index ing duration of a tone petween 2 tones count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20.			
	Intercept Interval b Tone Play Light Effer Value 1 2 4 8 16 32 64 127	ct Index ing duration of a tone petween 2 tones Count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22.			
	Intercept Interval b Tone Play Light Effer Value 1 2 4 8 16 32 64 127	ct Index ing duration of a tone petween 2 tones count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value.			
	Intercept Interval b Tone Play Light Effect Value 1 2 4 8 16 32 64 127 Intercepti Value 0	ing duration of a tone petween 2 tones Count Ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value. Ing duration of a tone Description Keep the original duration of a tone itself, without any interception.			
	Intercept Interval b Tone Play Light Effer Value 1 2 4 8 16 32 64 127 Intercepti Value	ing duration of a tone between 2 tones Count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value. ng duration of a tone Description			
	Intercept Interval b Tone Play Light Effect Value 1 2 4 8 16 32 64 127 Intercepti Value 0	ing duration of a tone Detween 2 tones Count Ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value. In duration of a tone Description Keep the original duration of a tone itself, without any interception. 1-254 seconds. Intercept the duration of a tone. If the intercepting duration is shorter than the original duration of a tone, actual single play time is equal to the intercepting duration of a tone, actual single play time is equal to the original duration.			
	Intercept Interval b Tone Play Light Effect Value 1 2 4 8 16 32 64 127 Intercepti Value 0	ing duration of a tone petween 2 tones Count ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value. Ing duration of a tone Description Keep the original duration of a tone itself, without any interception. 1-254 seconds. Intercept the duration of a tone. If the intercepting duration is shorter than the original duration of a tone, actual single play time is equal to the intercepting duration of If the intercepting duration is longer than the original duration of			
	Intercept Interval b Tone Play Light Effer Value 1 2 4 8 16 32 64 127 Intercepti Value 0 1254	ing duration of a tone Detween 2 tones Count Ct Index Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value. In duration of a tone Description Keep the original duration of a tone itself, without any interception. 1-254 seconds. Intercept the duration of a tone. If the intercepting duration is shorter than the original duration of a tone, actual single play time is equal to the intercepting duration of a tone, actual single play time is equal to the original duration.			
	Intercept Interval b Tone Play Light Effer Value 1 2 4 8 16 32 64 127 Intercepti Value 0 1254	ing duration of a tone Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value. In duration of a tone Description Keep the original duration of a tone itself, without any interception. 1-254 seconds. Intercept the duration of a tone. If the intercepting duration is shorter than the original duration of a tone, actual single play time is equal to the intercepting duration. If the intercepting duration is longer than the original duration of a tone, actual single play time is equal to the original duration. Use the last valid configuration value.			
	Intercept Interval b Tone Play Light Effer Value 1 2 4 8 16 32 64 127 Intercepti Value 0 1254	ing duration of a tone Description #1 Light Effect, mapping to Parameter 16. #2 Light Effect, mapping to Parameter 17. #3 Light Effect, mapping to Parameter 18. #4 Light Effect, mapping to Parameter 19. #5 Light Effect, mapping to Parameter 20. #6 Light Effect, mapping to Parameter 21. #7 Light Effect, mapping to Parameter 22. Use the last valid configuration value. In duration of a tone Description Keep the original duration of a tone itself, without any interception. 1-254 seconds. Intercept the duration of a tone. If the intercepting duration is shorter than the original duration of a tone, actual single play time is equal to the intercepting duration. If the intercepting duration is longer than the original duration of a tone, actual single play time is equal to the original duration. Use the last valid configuration value.			

1254	1 254 seconds. Specify the interval time between 2 tanes	
1254	1-254 seconds. Specify the interval time between 2 tones.	
255	Use the last valid configuration value.	
	Tool the last rank comparation ranks.	
Tone Dies	Count	
Tone Play	Count	
Value	Description	

WR

0x04000000

Value	Description
0	Unlimited playback until stop by user.
1254	1-254 times. Specify the count that the tone will be repeated to be
	played.
255	Use the last valid configuration value.

Please refer to parameter 0x02(2) for more examples.

Note:

Using Intercepting duration of a tone, Interval between 2 tones and Tone Play Count, you can edit the playback of the built-in tones according to your own ideas, making the tones more diverse and personalized.

This Parameter will also work when Chime is triggered by the Notification Report from other nodes to play tone, which indicates that perhaps some security event

0x08(8) Configure the Light Effect and Tone Effect for Endpoint 8(Emergency).

7	6 5 4 3 2 1 0						
Light E	Light Effect Index						
Interce	Intercepting duration of a tone						
Interv	Interval between 2 tones						
Tone P	Tone Play Count						

Light Effect Index

Value	Description
1	#1 Light Effect, mapping to Parameter 16.
2	#2 Light Effect, mapping to Parameter 17.
4	#3 Light Effect, mapping to Parameter 18.
8	#4 Light Effect, mapping to Parameter 19.
16	#5 Light Effect, mapping to Parameter 20.
32	#6 Light Effect, mapping to Parameter 21.
64	#7 Light Effect, mapping to Parameter 22.
127	Use the last valid configuration value.

Intercepting duration of a tone

Value	Description
0	Keep the original duration of a tone itself, without any interception.
1254	1-254 seconds. Intercept the duration of a tone.
	If the intercepting duration is shorter than the original duration of
	a tone, actual single play time is equal to the intercepting duration.
	If the intercepting duration is longer than the original duration of a tone, actual single play time is equal to the original duration.
255	Use the last valid configuration value.

Interval between 2 tones

Value	Description
0	No interval.
1254	1-254 seconds. Specify the interval time between 2 tones.
255	Use the last valid configuration value.

Tone Play Count

Value	Description
0	Unlimited playback until stop by user.
1254	1-254 times. Specify the count that the tone will be repeated to be
	played.
255	Use the last valid configuration value.

	Please refer to parameter 0x02(2) for more examples.			
	Note: Using Intercepting duration of a tone, Interval between 2 tones and Tone Play Count, you can edit the playback of the built-in tones according to your own ideas, making the tones more diverse and personalized.			
	This Parameter will also work when Chime is triggered by the Notification Report from other nodes to play tone, which indicates that perhaps some emergency event occur.			
0x10(16)	Configure #1 Light Effect. 7 6 5 4 3 2 1 0 Gradually bright duration Gradually extinguished duration Keep bright duration Keep extinguished duration	WR	0x4B191403	4
	Gradually bright duration Value Description 0127 The time from Indicator Light extinguished to bright. (Unit = 20ms) Gradually extinguished duration			
	Value 0127 The time from Indicator Light bright to extinguished. (Unit = 20ms) Keep bright duration Value Description 0255 The time of Indicator Light keep bright. (Unit = 100ms)			
	Keep extinguished duration Value Description 0255 The time of Indicator Light keep extinguished. (Unit = 100ms)			
	Note: The Light Effect is displayed cyclically, and the maximum display duration is equal to the total duration of the tone playback. In other words, the Light Effect will be displayed in a loop until stop playing tone.			
	The minimum set of complete Light Effect is in the order of: [Gradually bright]->[Keep bright]->[Gradually extinguished]->[Keep extinguished]			
0x11(17)	Configure #2 Light Effect. 7 6 5 4 3 2 1 0 Gradually bright duration Gradually extinguished duration Keep bright duration Keep extinguished duration	WR	0x32320003	4
	Gradually bright duration Value Description 0127 The time from Indicator Light extinguished to bright. (Unit = 20ms)			
	Gradually extinguished duration Value 0127 The time from Indicator Light bright to extinguished. (Unit = 20ms) Keep bright duration			
	Value Description 0255 The time of Indicator Light keep bright. (Unit = 100ms)			
	Keep extinguished duration			

	Value Description			
	0255 The time of Indicator Light keep extinguished. (Unit = 100ms)			
	Note:			
	The Light Effect is displayed cyclically, and the maximum display duration is equal			
	to the total duration of the tone playback. In other words, the Light Effect will be			
	displayed in a loop until stop playing tone.			
	The minimum set of complete Light Effect is in the order of:			
	[Gradually bright]->[Keep bright]->[Gradually extinguished]->[Keep extinguished]			
0x12(18)	Configure #3 Light Effect. 7 6 5 4 3 2 1 0	WR	0x00210103	4
	Gradually bright duration			
	Gradually extinguished duration			
	Keep bright duration			
	Keep extinguished duration			
	Gradually bright duration			
	Value Description			
	0127 The time from Indicator Light extinguished to bright. (Unit = 20ms)			
	Gradually extinguished duration			
	Value			
	0127 The time from Indicator Light bright to extinguished. (Unit = 20ms)			
	Keep bright duration			
	Value Description			
	0255 The time of Indicator Light keep bright. (Unit = 100ms)			
	Keep extinguished duration			
	Value Description			
	0255 The time of Indicator Light keep extinguished. (Unit = 100ms)			
	Note:			
	The Light Effect is displayed cyclically, and the maximum display duration is equal			
	to the total duration of the tone playback. In other words, the Light Effect will be displayed in a loop until stop playing tone.			
	ansprayed in a roop until stop praying tone.			
	The minimum set of complete Light Effect is in the order of:			
0×12/10)	[Gradually bright]->[Keep bright]->[Gradually extinguished]->[Keep extinguished]	WR	0x21000003	4
0x13(19)	Configure #4 Light Effect. 7 6 5 4 3 2 1 0	VVK	0.721000003	4
	Gradually bright duration			
	Gradually extinguished duration			
	Keep bright duration Keep extinguished duration			
	reeh evrillanzuen antarion			
	Gradually bright duration			
	Value Description			
	0127 The time from Indicator Light extinguished to bright. (Unit = 20ms)			
	Gradually extinguished duration			
	Value			
	The time from Indicator Light bright to extinguished. (Unit = 20ms)			
	Keep bright duration			
	Value Description 0255 The time of Indicator Light keep bright. (Unit = 100ms)			
	0255 The time of Indicator Light keep bright. (Unit = 100ms)			
	Keep extinguished duration			
	Value Description			

	1				1
	0255	The time of Indicator Light keep extinguished. (Unit = 100ms)			
	to the total	fect is displayed cyclically, and the maximum display duration is equal duration of the tone playback. In other words, the Light Effect will be a loop until stop playing tone.			
	The minimu	ım set of complete Light Effect is in the order of:			
		oright]->[Keep bright]->[Gradually extinguished]->[Keep extinguished]			
0x14(20)		5 Light Effect.	WR	0x0000000A	4
	7 Gradually h	5 5 4 3 2 1 0 oright duration			
		extinguished duration			
	Keep brigh				
	Keep extin	guished duration			
		oright duration			
	Value 0127	Description The time from Indicator Light extinguished to bright. (Unit = 20ms)			
	0127	The time from marcator right extinguished to bright. (oint = 20113)			
		extinguished duration			
	Value 0127	The time from Indicator Light bright to extinguished. (Unit = 20ms)			
	0127	The time from marcator right bright to extinguished. (onte = 20113)			
	Keep bright				
	Value 0255	Description The time of Indicator Light keep bright. (Unit = 100ms)			
	0233	The time of mulcator right keep bright. (Oint - 100ms)			
		guished duration			
	Value	Description The time of Indicator Light had autimorphism (Unit 100ms)			
	0255	The time of Indicator Light keep extinguished. (Unit = 100ms)			
	to the total	ffect is displayed cyclically, and the maximum display duration is equal duration of the tone playback. In other words, the Light Effect will be a loop until stop playing tone.			
		im set of complete Light Effect is in the order of: oright]->[Keep bright]->[Gradually extinguished]->[Keep extinguished]			
0x15(21)	Configure #	6 Light Effect.	WR	0x00000A00	4
	7 6				
		bright duration extinguished duration			
	Keep brigh				
		guished duration			
	Value	Description			
	0127	The time from Indicator Light extinguished to bright. (Unit = 20ms)			
		extinguished duration			
	Value 0127	The time from Indicator Light bright to extinguished. (Unit = 20ms)			
	Keep bright	t duration Description			
	0255	The time of Indicator Light keep bright. (Unit = 100ms)			
	Keep exting	guished duration Description			
	0255	The time of Indicator Light keep extinguished. (Unit = 100ms)	L		

	Note: The Light Effect is displayed cyclically, and the maximum display duration is equa			
	to the total duration of the tone playback. In other words, the Light Effect will be			
	displayed in a loop until stop playing tone.			
	The minimum set of complete Light Effect is in the order of:			
046(22)	[Gradually bright]->[Keep bright]->[Gradually extinguished]->[Keep extinguished	-	024000004	4
0x16(22)	Configure #7 Light Effect. 7 6 5 4 3 2 1 0	WR	0x21000001	4
	Gradually bright duration			
	Gradually extinguished duration	-		
	Keep bright duration	-		
	Keep extinguished duration	1		
		1		
	Gradually bright duration			
	Value Description 0127 The time from Indicator Light extinguished to bright. (Unit = 20ms)			
	0127 The time from Indicator Light extinguished to bright. (Unit = 20ms)	4		
	Gradually extinguished duration			
	Value 0127 The time from Indicator Light bright to extinguished. (Unit = 20ms)	1		
	0127 The time from Indicator Light bright to extinguished. (Unit = 20ms)	4		
	Keep bright duration	_		
	Value Description			
	0255 The time of Indicator Light keep bright. (Unit = 100ms)]		
	Keep extinguished duration	_		
	Value Description			
	0255 The time of Indicator Light keep extinguished. (Unit = 100ms)			
	Make			
	Note: The Light Effect is displayed cyclically, and the maximum display duration is equa			
	to the total duration of the tone playback. In other words, the Light Effect will be			
	displayed in a loop until stop playing tone.			
	The minimum set of complete Light Effect is in the order of:			
0. 20(22)	[Gradually bright]->[Keep bright]->[Gradually extinguished]->[Keep extinguished	+		
0x20(32)	Configure how to send Basic Set to nodes in Group 2.	WR	3	1
	Value Description			
	0 Don't send Basic Set.	_		
	When Endpoint 1 starts playing tone, send Basic Set 0xFF. When Endpoint 1 stops playing tone, don't send Basic Set.			
	2 When Endpoint 1 starts playing tone, send Basic Set. 2	1		
	When Endpoint 1 stops playing tone, don't send Basic Set.			
	3 When Endpoint 1 starts playing tone, send Basic Set 0xFF.	-		
	When Endpoint 1 stops playing tone, send Basic Set 0x00.			
	When Endpoint 1 starts playing tone, send Basic Set 0x00.			
	When Endpoint 1 stops playing tone, send Basic Set 0xFF.			
0x21(33)	Configure how to send Basic Set to nodes in Group 3.	WR	3	1
	Value Description			
	0 Don't send Basic Set.	<u> </u>		
	When Endpoint 2 starts playing tone, send Basic Set 0xFF.			
	When Endpoint 2 stops playing tone, don't send Basic Set.	-		
	When Endpoint 2 starts playing tone, send Basic Set 0x00. When Endpoint 2 stops playing tone, don't send Basic Set.			
	When Endpoint 2 stops playing tone, don't send Basic Set. 3 When Endpoint 2 starts playing tone, send Basic Set 0xFF.	1		
	When Endpoint 2 starts playing tone, send Basic Set 0xFF. When Endpoint 2 stops playing tone, send Basic Set 0x00.			
		11		
1	When Endpoint 2 starts playing tone, send Basic Set 0x00.			
	When Endpoint 2 starts playing tone, send Basic Set 0x00. When Endpoint 2 stops playing tone, send Basic Set 0xFF.			
0x22(34)		WR	3	1

	Value	Description			
	0	Don't send Basic Set.			
	1	When Endpoint 3 starts playing tone, send Basic Set 0xFF.			
		When Endpoint 3 stops playing tone, don't send Basic Set.			
	2	When Endpoint 3 starts playing tone, send Basic Set 0x00.			
		When Endpoint 3 stops playing tone, don't send Basic Set.			
	3	When Endpoint 3 starts playing tone, send Basic Set 0xFF. When Endpoint 3 stops playing tone, send Basic Set 0x00.			
	4	When Endpoint 3 storts playing tone, send Basic Set 0x00.			
		When Endpoint 3 stops playing tone, send Basic Set 0xFF.			
0x23(35)	Configure	how to send Basic Set to nodes in Group 5.	WR	3	1
	Value	Description			
	0	Don't send Basic Set.			
	1	When Endpoint 4 starts playing tone, send Basic Set 0xFF.			
		When Endpoint 4 stops playing tone, don't send Basic Set.			
	2	When Endpoint 4 starts playing tone, send Basic Set 0x00. When Endpoint 4 stops playing tone, don't send Basic Set.			
	3	When Endpoint 4 starts playing tone, send Basic Set 0xFF.			
		When Endpoint 4 stops playing tone, send Basic Set 0x00.			
	4	When Endpoint 4 starts playing tone, send Basic Set 0x00.			
		When Endpoint 4 stops playing tone, send Basic Set 0xFF.			
0x24(36)	Configure	how to send Basic Set to nodes in Group 6.	WR	3	1
	Value	Description			
	0	Don't send Basic Set.			
	1	When Endpoint 5 starts playing tone, send Basic Set 0xFF.			
		When Endpoint 5 stops playing tone, don't send Basic Set.			
	2	When Endpoint 5 starts playing tone, send Basic Set 0x00. When Endpoint 5 stops playing tone, don't send Basic Set.			
	3	When Endpoint 5 storts playing tone, send Basic Set 0xFF.			
		When Endpoint 5 stops playing tone, send Basic Set 0x00.			
	4	When Endpoint 5 starts playing tone, send Basic Set 0x00.			
		When Endpoint 5 stops playing tone, send Basic Set 0xFF.			
0x25(37)		how to send Basic Set to nodes in Group 7.	WR	3	1
	Value	Description			
	0	Don't send Basic Set.			
	1	When Endpoint 6 starts playing tone, send Basic Set 0xFF. When Endpoint 6 stops playing tone, don't send Basic Set.			
	2	When Endpoint 6 starts playing tone, send Basic Set 0x00.			
		When Endpoint 6 stops playing tone, don't send Basic Set.			
	3	When Endpoint 6 starts playing tone, send Basic Set 0xFF.			
		When Endpoint 6 stops playing tone, send Basic Set 0x00.			
	4	When Endpoint 6 starts playing tone, send Basic Set 0x00.			
		When Endpoint 6 stops playing tone, send Basic Set 0xFF.			
0x26(38)		how to send Basic Set to nodes in Group 8.	WR	3	1
	Value	Description Description			
	0	Don't send Basic Set. When Endpoint 7 starts playing tone, send Basic Set 0xFF.			
	*	When Endpoint 7 starts playing tone, send Basic Set Oxfr. When Endpoint 7 stops playing tone, don't send Basic Set.			
	2	When Endpoint 7 starts playing tone, send Basic Set 0x00.			
		When Endpoint 7 stops playing tone, don't send Basic Set.			
	3	When Endpoint 7 starts playing tone, send Basic Set 0xFF.			
		When Endpoint 7 stops playing tone, send Basic Set 0x00.			
	4	When Endpoint 7 starts playing tone, send Basic Set 0x00.			
0,27/20)	Configure	When Endpoint 7 stops playing tone, send Basic Set 0xFF.		2	1
0x27(39)	Value	phow to send Basic Set to nodes in Group 9. Description	WR	3	1
	0	Don't send Basic Set.			
	1	When Endpoint 8 starts playing tone, send Basic Set OxFF.	\dashv		
		When Endpoint 8 stops playing tone, don't send Basic Set.			
	2	When Endpoint 8 starts playing tone, send Basic Set 0x00.			
				i	

									1		
		When E	ndpoint 8	stops play	ing tone, d	on't send	l Basic Set	t.			
	3		ndpoint 8		-						
		When E	ndpoint 8	stops play	ing tone, s	end Basic	Set 0x00				
	4		ndpoint 8		-						
		When E	ndpoint 8	stops play	ing tone, s	end Basic	Set OxFF.				
0x30(48)	Tigger Unpairing Button Mode (Write Only)									-	1
	7	6	5	4	3	2	1	0			
	Reserved	Reserved	Reserved	Reserved	Reserved	#3	#2	#1			
						Button	Button	Button			
					•						
	Valid value	e:									
	Value	Descrip	tion								
	1	Tigger l	Jnpairing #	1 Button I	Mode.						
	2	Tigger l	Jnpairing #	2 Button I	Mode.						
	3	Tigger l	Jnpairing #	2 and #1 E	Button Mo	de.					
	4	Tigger l	Jnpairing #	3 Button I	Mode.						
	5	Tigger l	Jnpairing #	3 and #1 E	Button Mo	de.					
	6	Tigger l	Jnpairing #	t3 and #2 E	Button Mo	de.					
	7	Tigger l	Jnpairing #	3, #2 and	#1 Button	Mode.					
	Note:										
			iring multi			me.					
			ed to do a			imas who	an Unnair	ing Button			
		finishes.	iii quickiy	iiasii wiiii	ie ligiii 5 i	illes wile	en Unpan	ing button			
021/40)			- NA - d - /\A	/::ta Onl::\					14/		1
0x31(49)	Tigger Pair	6	5	4	3	2	1	0	W	-	1
		-		-	-			#1			
	Reserved	Reserved	Reserved	Reserved	Reserved	#3 Button	#2 Button	#1 Button			
						Button	Button	Dutton			
	Valid value	<u>.</u>									
	Value	Descrip	tion								
	0		ring Buttor	n Mode.							
	1		Pairing #1 E		de.						
	2		Pairing #2 E								
	4		Pairing #3 E								
		- 00									
	Note:										
	1. Can N			•							
		-	•			•		manually			
		-		-				ccessfully.			
			-	l overwrite	e the previ	ous paire	ed Button	which has			
	-	me Button									
0x32(50)	Report wh						1		R	0	1
	7	6	5	4	3	2	1	0			
	Reserved	Reserved	Reserved	Reserved	Reserved		#2	#1			
						Button	Button	Button			
	N = 12 al l										
	Value		tion								
	Value	Descrip		- Dutte - * *	lada bii	+*:	4				
	0		no Pairing			triggered	1.				
	1		#1 Button								
	2		#2 Button								
	4	Pairing	#3 Button	iviode is tr	iggered.						
	Nota										
	Note:	ing Rutto	n Mada i	triagoro:	d nada u	vill autor	matically	send this			
		-						for being			
	paired.	ion report	VIG EIICIII		WITTE	Dation 1	5 waiting	ioi beilig			
<u> </u>	1								1	I	1

7	6	5	n paired (F ₄	Read Only)	2	1	0	R	0	1
Pocory	ed Reserved					#2	#1			
like ser v	i neserved	i Neserveu	ineserveu	ineserveu	Button	Button	Button			
			I		<u> </u>		1	1		
Valid va										
Value 0	Descri	ption is no paired	Putton							
1		ton had bee								
2		ton had bee	•							
3		#1 Button		paired.						
4	#3 But	ton had bee	en paired.							
5	#3 and	d #1 Button	had been p	paired.						
6		#2 Button								
7	#3, #2	and #1 But	ton had be	en paired.						
Note: Once U	ipairing or P	airing Butto	n Mode fir	nishes. noc	le will aut	omaticall	v send this			
	ation repor	_					•			
	ameter does vork or rese				when Chi	me is rem	oved from			
52) Get the	information		on (Read (Only)				R	0x00000000	4
7	6	Ĭ	4	3	2	1	0			
-	Battery Volt									
	Battery Volt									
-	Software Ve									
Button	Software Ve	ersion LSB								
Button	Battery Volt	age MSB &	LSB							
Value	Descri									
0		is unpaired	d.							
1-3276	7 The un	nit of Batter	y Voltage i	s mV.						
Button	Software Ve	ersion MSB 8	& LSB							
Value	Descri									
0	Button	n is unpaired	d.							
1-6553		ample, if Bu		are Versio	n equals t	o 0x0100	, it means			
	its ver	sion is 1.00.								
Note:										
This par	ameter does vork or rese				when Ch	me is rem	oved from			
53) Get the	information	n of #2 Butt	on (Read (Only)				R	0x00000000	4
7	6	5	4	3	2	1	0			
1	Battery Volt	tage MSB								
								11		
Button Button	Battery Volt							11	1	
Button Button Button	Software Ve	ersion MSB								
Button Button Button		ersion MSB								
Button Button Button Button	Software Ve Software Ve Battery Volt	ersion MSB ersion LSB cage MSB &	LSB							
Button Button Button Button Value	Software Ve Software Ve Battery Volt Descri	ersion MSB ersion LSB cage MSB & ption								
Button Button Button Button Value	Software Ve Software Ve Battery Volt Descri Button	ersion MSB ersion LSB cage MSB & ption n is unpaired	1 .	s mV						
Button Button Button Button Value	Software Ve Software Ve Battery Volt Descri Button	ersion MSB ersion LSB cage MSB & ption	1 .	s mV.						
Button Button Button Button Value 0 1-3276	Software Ve Software Ve Battery Volt Descri Button	ersion MSB ersion LSB cage MSB & ption n is unpaired nit of Batter	I. y Voltage i	s mV.						
Button Button Button Button Value 0 1-3276	Software Version Software Version Version Sattery Volt Descrion Button The un	ersion MSB ersion LSB cage MSB & ption n is unpaired nit of Batter	I. y Voltage i	s mV.						
Button Button Button Button Value 0 1-3276	Software Versions Software Versions Software Versions Software Versions Descri	ersion MSB ersion LSB cage MSB & ption n is unpaired nit of Batter	i. y Voltage i & LSB i.							

	-	r does not restore to the default value when Chime is removed from r reset the factory settings.			
0x36(54)	7 6 Button Batter Button Batter Button Softwa	y Voltage MSB y Voltage LSB are Version LSB	R	0x00000000	4
	Value C 0 B 1-32767 T	y Voltage MSB & LSB Description Sutton is unpaired. The unit of Battery Voltage is mV. Sire Version MSB & LSB			
	0 B 1-65535 F	Description Sutton is unpaired. Our example, if Button Software Version equals to 0x0100, it means its version is 1.00.			
	This paramete	\boldsymbol{r} does not restore to the default value when Chime is removed from \boldsymbol{r} reset the factory settings.			
0x60(96)	Value [Description Disable Enable	WR	0	1
0xFF(255)	Value 1431655765	or Initialization (Write Only) Description Factory Reset: Restore the product to factory settings and remove from the network. Initialization: Initialize all configuration parameters to default values.	W	-	4
		52/53/54 will not restore the configuration settings to the default Reset or Initialization is performed.			