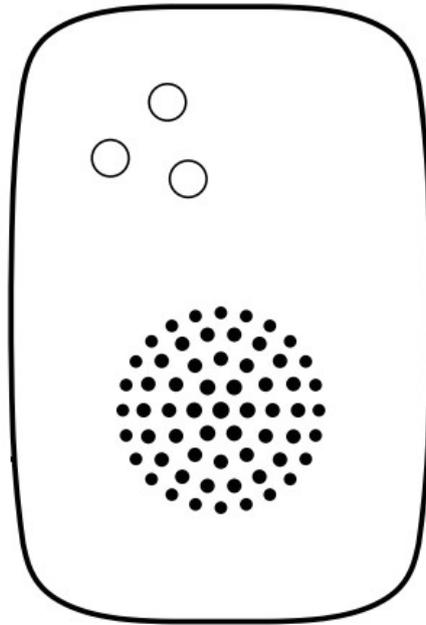




# Siren 8

(ZWA065)



## REVISION RECORD

Version	Date	Brief description of changes
0.1	2025.06.17	First revision.
0.2	2025.08.27	Update.
0.3	2025.11.04	Add the function of "Switch Device Type"

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# 1 OVERVIEW

The Siren 8 is a wireless Z-Wave® device that allows you to have additional sirens placed throughout the home. It can be powered by AC power socket or its internal backup battery. Three LED lights that strobe when the siren is triggered.

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 operated in any Z-Wave network with other Z-Wave/ Z-Wave Plus® certified devices from other manufacturers. All mains operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network. This product also supports SmartStart.



Terminology	Description
Action Button	Used for networking ,resetting and protect the device.
Network Led	Used for indicating the current state of the product.
Safety Led	Send out alarm lights
Speaker System	Make an alarm sound

## 2 SPECIFICATIONS

### 2.1 Structural

Parameter	Value
Product Identifier	ZWA065
Dimensions	85x57x28mm
Color	White
Usage	For indoor use.
Operating Temperature	0~45°C
Relative Humidity	20%~80%

### 2.2 Hardware

Parameter	Value
Z-Wave Module	EFR32ZG23
Z-Wave TX Power	Max: 14dBm
Z-Wave Classic Antenna Distance	30m (Indoor) /150m (Outdoor)
Z-Wave Long Range Antenna Distance	40m (Indoor) / 400m (Outdoor)
Indicator Light Color	white
Buttons	Action Button x 1
Battery	Built-in Lithium Battery 450mAh, Powered by battery, capable of continuous alarm for 2 hours.
Input Voltage	US: 120V~60Hz, EU/ANZ: 230V~50Hz
Working Power	2.55W (Peak)
Standby Power	0.2W (No Charge)
Maximum alarm volume	105dB

### 2.3 Software

Parameter	Value
Wireless Technology	Z-Wave
Certification Type	Z-Wave Plus v2 Certification
Z-Wave SDK Version	7.23.2
Z-Wave Library Type	Enhanced 232 Slave
Z-Wave Role Type	Always On Slave [0x05]
Generic Product Type	GENERIC_TYPE_SWITCH_BINARY[0x10] (when Device Type is Binary Switch) or GENERIC_TYPE_AV_CONTROL_POINT [0x03] (when Device Type is Sound Switch)
Specific Product Type	SPECIFIC_TYPE_NOT_USED[0x00] (when Device Type is Binary Switch) or SPECIFIC_TYPE_SOUND_SWITCH [0x01] (when Device Type is Sound Switch)
Security Class	Non-Security, S0, S2 Unauthenticated, and S2 Authenticated
SmartStart Compatible	Support. After powering on, SmartStart is auto activated.
Over The Air (OTA)	Support. Firmware can be updated via RF. IMPORTANT: This is a device for security situation, the OTA process MUST be carried out in the Ac power supply mode.
Multi Channel Product	No
Association	Support. Refer to Section 4.7 Association Group Info.
Factory Reset	Support. Refer to Section 3.6 How to factory reset.
Power-down Memory	Support. All command settings will stay unchanged even power down.

Sound State Report	Support. Send out sound state report via Group 1.
Control other product	Yes
Altering capabilities	changing the Device Type(Binary Switch or Sound Switch) with configuration parameter 13, the device must be re-included afterwards.

## 3 QUICK START

### 3.1 Important safety information

Please read this manual carefully. Failure to follow the recommendations in this manual may be dangerous or may violate the law. The manufacturer, importer, distributor and seller shall not be liable for any loss or damage resulting from failure to comply with the instructions in this manual or any other material. Use this equipment only for its intended purpose. Follow the disposal instructions. Do not dispose of electronic equipment in a fire or near open heat sources.

### 3.2 How to add the product

The following will step you through adding the product to your Z-Wave network.

1. Set your Z-Wave gateway into its 'add device' mode in order to connect the product to your Z-Wave system. Refer to the gateway's manual if you are unsure of how to perform this step.
2. Click Action Button twice; its LED will flash fast to indicate it has entered pair mode.
3. When the product successfully joins your Z-Wave network its LED will turn on for 1 seconds and then turn off. Should the LED keep blinking, it has been unable to join your Z-Wave network; repeat the above steps and please contact us for further support if needed.

If your Z-Wave gateway supports SmartStart: scan the QR code on the product using the gateway's app. Your sensor will join your Z-Wave network automatically.

### 3.3 How to remove the product

1. Set your Z-Wave gateway into its 'remove device' mode.
2. Click Action Button twice on the product; its LED will flash fast to indicate it has entered remove mode.
3. When the product successfully remove, its LED will breathing light.

### 3.4 About SmartStart

SmartStart enabled products can be added into a Z-Wave network by scanning the Z-Wave QR Code present on the product with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on in the network vicinity. The QR Code and PIN code can be found on the back of the product, like this:



The DSK Code can be found on the packaging, like this:

Z-Wave DSK: **05065**-41336-16018-47313-50335-02212-29424-38760

**Note:** Do not remove or damage them.

### **3.5 About Product**

This product can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers. All mains operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

### **3.6 How to factory reset**

This device also allows to be reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.

Make sure the product is powered. To complete the reset process manually, press and hold the Action Button for at least 12s. The Indicator Light will become flash, which indicates the reset operation is successful. Otherwise, please try again. Contact us for further support if needed.

### **3.7 Long Range**

The product can be included using Z-Wave Long Range.

## 4 SOFTWARE FUNCTION DEFINITION

### 4.1 User Behavior Interaction

User behavior	Out of the Z-Wave network	In the Z-Wave network
Power OFF	Cut the power.	Cut the power.
Power ON	Send Inclusion Requests for SmartStart Learn Mode. LED will breathing light	LED will become on one second, and turn off.
Click Action Button once	1. Exit Classic Inclusion Learn Mode. If Action Button is clicked again during the Classic Inclusion Learn Mode, the Learn Mode will exit. At the same time, Indicator Light will extinguish immediately, and then become breathing white light. Product will start SmartStart Mode again. 2. stop play tone and safety led when in alarm (Refer to configuration configured parameter 2)	1. Exit Classic Inclusion Learn Mode. If Action Button is clicked again during the Classic Inclusion Learn Mode, the Learn Mode will exit. 2. stop play tone and safety led when in alarm (Refer to configuration configured parameter 2)
Click Action Button twice	1. Send Node Info for Adding. Indicator Light will flash for up to 30s. If Adding succeeds, it will turn on for 1 seconds and then turn off. If Adding fails, it will return breathing white light. 2. Exit Classic Inclusion Learn Mode. If Action Button is clicked twice again during the Classic Inclusion Learn Mode, the Learn Mode will exit. At the same time, Indicator Light will extinguish immediately, and then become breathing white light. Product will start SmartStart Mode again.	1. Send Node Info for Removing. Indicator Light will flash for up to 30s. If Removing succeeds, it will turn on for 1 seconds and then turn off. If Removing fails, it will it will turn off the led. 2. Exit Classic Inclusion Learn Mode. If Action Button is clicked twice again during the Classic Inclusion Learn Mode, the Learn Mode will exit.
Press and hold Action Button for [1, 5s)	Reserved. LEDs flash individually when press, and become off when release.	Reserved. LEDs flash individually when press, and become off when release.
Press and hold Action Button for [5, 8s)	Test Mode: LEDs flash together when press, and into test mode when release. In the test mode, the sound rings for 5 seconds, LEDs are blink fast.	Test Mode: LEDs flash together when press, and into test mode when release. In the test mode, the sound rings for 5 seconds, LEDs are blink fast. Will send tone play report to lifeline.
Press and hold Action Button for [8, 12s)	Reserved. Indicator Light will speed up flashing when press, and turn off when release.	Reserved. Indicator Light will speed up flashing when press, and turn off when release.
Press and hold Action Button for 12 seconds	Factory Reset. If the LED starts breathing light, which indicates the reset is success	Factory Reset. If the LED starts breathing light, which indicates the reset is success

### 4.2 Supported Command Classes

Command Class	Version	Securely added	
		Non-secure	Secure
ZWAVEPLUS_INFO	2	Support	Support
ASSOCIATION	2		Support
MULTI_CHANNEL_ASSOCIATION	3		Support
ASSOCIATION_GRP_INFO	3		Support
TRANSPORT_SERVICE	2	Support	Support
VERSION	3		Support

MANUFACTURER_SPECIFIC	2		Support
DEVICE_RESET_LOCALLY	1		Support
INDICATOR	3		Support
POWERLEVEL	1		Support
CONFIGURATION	4		Support
SCENE_ACTUATOR_CONF	1		Support
SCENE_ACTIVATION	1		Support
NOTIFICATION	8		Support
APPLICATION_STATUS	1	Support	Support
SECURITY	1	Support	Support
SECURITY_2	1	Support	Support
SUPERVISION	1	Support	Support
FIRMWARE_UPDATE_MD	5		Support
BINARY_SWITCH(Device Type is Binary Switch) Or SOUND_SWITCH(Device Type is Sound Switch)	2		Support

### 4.3 Basic Command Class mapping

When Device Type is Binary Switch:

Basic Command	Mapped Command
Basic Set	Map to Binary Switch Set
Basic Get	Map to Binary Switch Get
Basic Report	Map to Binary Switch Report

Or Device Type is Sound Switch:

Basic Command	Mapped Command
Basic Set (value)	Map to Sound Switch Tone Play Set (total number of supported is 5) When value = 0x00, stop playing any tone When 1 <= value <= 5, play the specified tone id. When 5 < value < 99, play the default tone When value = 0xFF, play the default tone
Basic Get	Map to Sound Switch Tone Play Get
Basic Report (current value, Target value, duration)	Map to Sound Switch Tone Play Report Current value = 0x00, has stopped playing Current value <= 5, playing the specified tone. Target value = current value Duration = instantly

### 4.4 Binary Switch (When Device Type is Binary Switch)

Command	Description
Binary Switch Set	Target Value = 0x00, stop playing any tone When 1 <= value <= 5, play the specified tone id. When 5 < value < 99, play the default tone When value = 0xFF, play the default tone Duration = instantly
Binary Switch Get	Request the current On/Off state from the node
Binary Switch Report	Current value = 0x00, has stopped playing Current value = 0xFF, playing tone. Target value = current value Duration = instantly

## 4.5 Z-Wave Plus® Info

Parameter	Value
Z-Wave Plus Version	0x02
Role Type	0x05 [ROLE_TYPE_SLAVE_ALWAYS_ON]
Node Type	0x00 [ZWAVEPLUS_INFO_REPORT_NODE_TYPE_ZWAVEPLUS_NODE]

When Device Type is Binary Switch:

Parameter	Value
Installer Icon Type	0x0F00 [ICON_TYPE_GENERIC_SIREN]
User Icon Type	0x0F00 [ICON_TYPE_GENERIC_SIREN]

Or Device Type is Sound Switch:

Parameter	Value
Installer Icon Type	0x0900 [ICON_TYPE_GENERIC_REMOTE_CONTROL_AV]
User Icon Type	0x0900 [ICON_TYPE_GENERIC_REMOTE_CONTROL_AV]

## 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 (When Device Type is Binary Switch) / 0x04 (When Device Type is Binary Switch)
Product ID 1	0x00
Product ID 2	0x41 (65)

## 4.7 Version

Parameter	Value
Z-Wave Protocol Library Type	0x03
Z-Wave Protocol Version	0x07
Z-Wave Protocol Sub Version	0x17
Firmware 0 Version	0x01 [Z-Wave Chip Firmware Version]
Firmware 0 Sub Version	0x00 [Z-Wave Chip Firmware Sub Version]
Hardware Version	0x41 (65)
Number of firmware targets	0x00

## 4.8 Association Group Info

When Device Type is Binary Switch:

ID	Name	Node count	Profile	Function
1	Lifeline	5	General: Lifeline (0x0001)	<p><b>Device Reset Locally Notification:</b> Issued when Factory Reset is performed.</p> <p><b>Basic Report:</b> Issued when Play Tone is changed(enable by configuration 80)</p> <p><b>Notification Report:</b> Issued when power supply is changed.</p> <p><b>Indicator Report:</b> Issued when indication is changed.</p> <p><b>Switch Binary Report:</b> (When Device Type is Binary Switch) Issued when Play Tone is changed(enable by configuration 80)</p>

				<p><b>Sound Switch Tone Play Report:</b> (When Device Type is sound switch) Issued when Play Tone is changed ,including testing mode.</p> <p><b>Sound Switch Configuration Report:</b> (When Device Type is sound switch) Issued when default tone id or volume is changed.</p> <p><b>Sound Switch Tone Info Report:</b> (When Device Type is sound switch) Issued when tone duration is changed.</p>
2	Retransmit	5	Control: NA(0x2000)	<p><b>Basic Set:</b> Issued when received Basic Set command(enable by configuration 80)</p> <p><b>Switch Binary Set:</b> (When Device Type is Binary Switch) Issued when received Binary Switch Set command(enable by configuration 80)</p> <p><b>Sound Switch Tone Play Set:</b> (When Device Type is sound switch) Issued when received Sound Switch Tone Play Set command.</p>

Or Device Type is Sound Switch:

ID	Name	Node count	Profile	Function
1	Lifeline	5	General: Lifeline (0x0001)	<p><b>Device Reset Locally Notification:</b> Issued when Factory Reset is performed.</p> <p><b>Basic Report:</b> Issued when Play Tone is changed(enable by configuration 80)</p> <p><b>Notification Report:</b> Issued when power supply is changed.</p> <p><b>Indicator Report:</b> Issued when indication is changed.</p> <p><b>Sound Switch Tone Play Report:</b> Issued when Play Tone is changed ,including testing mode.</p> <p><b>Sound Switch Configuration Report:</b> Issued when default tone id or volume is changed.</p> <p><b>Sound Switch Tone Info Report:</b> Issued when tone duration is changed.</p> <p><b>Configuration Report:</b> Issued when default tone id or volume is changed.</p>
2	Retransmit	5	Control: NA(0x2000)	<p><b>Basic Set:</b> Issued when received Basic Set command(enable by configuration 80)</p> <p><b>Sound Switch Tone Play Set:</b> Issued when received Sound Switch Tone Play Set command. Issued when manually stop the tone Issued when enter or exit testing mode</p>

#### 4.9 Notification

Notification Type		Notification Events		Description
Power Management	0x08	Power has been applied	0x01	Power has been applied

		AC mains disconnected	0x02	Supply by battery
		AC mains re-connected	0x03	Supply by AC

#### 4.10 Sound Switch (When Device Type is sound switch)

1. Sound Switch Tones Number: 5
2. Default Tone Identifier: 01
3. Default Tone Volume: 100
4. Sound Switch Tone Info:

Tone Identifier	Name	Durations (Second)
01	Sound 1	300 (configuration parameter 1)
02	Sound 2	300 (configuration parameter 1)
03	Sound 3	300 (configuration parameter 1)
04	Sound 4	300 (configuration parameter 1)
05	Sound 5	300 (configuration parameter 1)

Mark: Durations can be set through configured parameter 1.

5. The actual volume of the product has only 10 levels, and the mapping relationship is as follows:

Volume	Actual volume level	Safety Led
01--10	LEVEL_1 (Low)	LEVEL_1 (Low)
11--20	LEVEL_2	LEVEL_2
21--30	LEVEL_3	LEVEL_3
31--40	LEVEL_4	LEVEL_4
41--50	LEVEL_5	LEVEL_5
51--60	LEVEL_6	LEVEL_6
61--70	LEVEL_7	LEVEL_7
71--80	LEVEL_8	LEVEL_8
81--90	LEVEL_9	LEVEL_9
91--100	LEVEL_10(High)	LEVEL_10 (High)

#### 4.11 Scene Actuator Configuration and Scene Activation

1. Supports 255 scenes;
2. Level field map to sound switch tone id;
3. Dimming Duration field map to instantly.

#### 4.12 Indicator

Indicator ID		Property ID	
Node Identify	0x50	Multilevel	0x01

(Only supports LED)	On Off Period	0x03
	On Off Cycles	0x04
	On time within an On/Off period	0x05
	Timeout minutes	0x06
	Timeout seconds	0x07

### 4.13 Application Status

When the product is in alarm and receives a indicator set command, it will send a application busy status to the source node.

### 4.14 Configuration

Parameter	0x01 (1)			
Name	Set the alarm duration in seconds			
Info	Set the alarm duration in seconds			
Properties	Size	2	Min Value	10
	Format	Unsigned Integer	Max Value	600
	Read-only	False	Default Value	180
	Altering capabilities	False	Advanced	False
Description	Set the alarm duration in seconds			

Parameter	0x02 (2)			
Name	Set default tone id			
Info	Set default tone id			
Properties	Size	1	Min Value	1
	Format	Unsigned Integer	Max Value	5
	Read-only	False	Default Value	1
	Altering capabilities	False	Advanced	False
Description	Set default tone id			

Parameter	0x03 (3)			
Name	Set default volume			

Info	Set default volume			
Properties	Size	1	Min Value	0
	Format	Unsigned Integer	Max Value	100
	Read-only	False	Default Value	100
	Altering capabilities	False	Advanced	False
Description	Set default volume			

Parameter	0x04 (4)								
Name	Enable button click to stop function								
Info	Enable button click to stop function								
Properties	Size	1			Min Value	0x00			
	Format	Bit field			Max Value	0x03			
	Read-only	False			Default Value	0x03			
	Altering capabilities	False			Advanced	False			
Description	Enable button click to stop alarm and indicator								
	Bit	7	6	5	4	3	2	1	0
	Function	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Stop indicator	Stop alarm
	0	disable							
	1	enable							

Parameter	0x05 (5)			
Name	Enable play sound when AC outage			
Info	Enable play sound when AC outage			
Properties	Size	1	Min Value	0
	Format	Enumerated	Max Value	1
	Read-only	False	Default Value	0
	Altering capabilities	False	Advanced	False

Description	Enable play sound when AC outage		
	Value	Function	
	0	Disable	
	1	Enable.	

Parameter	0x06 (6)			
Name	Stop alarm when AC reconnect			
Info	Stop alarm when AC reconnect			
Properties	Size	1	Min Value	0
	Format	Enumerated	Max Value	1
	Read-only	False	Default Value	0
	Altering capabilities	False	Advanced	False
Description	Stop alarm when AC reconnect			
	Value	Function		
	0	Don't stop alarm when AC reconnect		
	1	Stop alarm when AC reconnect.		

Parameter	0x07 (7)			
Name	Delay of (AC outage) alarm cancelation			
Info	Delay of (AC outage) alarm cancelation			
Properties	Size	2	Min Value	0
	Format	Unsigned Integer	Max Value	300
	Read-only	False	Default Value	0
	Altering capabilities	False	Advanced	False
Description	Delay of (AC outage) alarm cancelation			
	Value	Function		
	0	no Cancelation		

	1-300	1 – 300 sec.
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Parameter	0x08 (8)			
Name	Enable LED when siren alarm			
Info	Enable LED when siren alarm			
Properties	Size	1	Min Value	0
	Format	Enumerated	Max Value	1
	Read-only	False	Default Value	1
	Altering capabilities	False	Advanced	False
Description	Enable / Disable LED when siren alarm is turned on/off			
	Value	Function		
	0	Disable		
	1	Enable.		

Parameter	0x09 (9)			
Name	Enable tone when Siren alarm			
Info	Enable tone when Siren alarm			
Properties	Size	1	Min Value	0
	Format	Enumerated	Max Value	1
	Read-only	False	Default Value	1
	Altering capabilities	False	Advanced	False
Description	Enable/ Disable Siren tone when siren alarm is turned on/off			
	Value	Function		
	0	Disable		
	1	Enable.		

Parameter	0x0A (10)			
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Name	Set level of light pattern			
Info	Set level of light pattern			
Properties	Size	1	Min Value	1
	Format	Unsigned Integer	Max Value	99
	Read-only	False	Default Value	1
	Altering capabilities	False	Advanced	False
Description	Only valid in light pattern mode			
	Value	Function		
	1-99	Led level		

Parameter	0x0B (11)			
Name	set led on together of light pattern			
Info	set led on together of light pattern			
Properties	Size	1	Min Value	0
	Format	Enumerated	Max Value	1
	Read-only	False	Default Value	1
	Altering capabilities	False	Advanced	False
Description	Set led light up together or one by one, only valid in light pattern mode.			
	Value	Function		
	0	light up one by one		
	1	light up together		

Parameter	0x0C (12)			
Name	Set effect of light pattern			
Info	Set effect of light pattern			
Properties	Size	4	Min Value	0
	Format	Unsigned Integer	Max Value	0xFFFFFFFF

	Read-only	False	Default Value	0
	Altering capabilities	False	Advanced	False
Description	The unit of periods and On time is 0.1 seconds. For example, setting the periods to 1 second, cycles to 6 times, and on time to 0.5S, then the value is 0x010A0605.			
	BYTE 1 (High Byte)	BYTE 2	BYTE 3	BYTE 4 (Low Byte)
	Multilevel group (0x00)	Multilevel value	ignored	ignored
	toggling group (0x01)	On/Off Periods	On/Off Cycles	On time
	timeout group (0x02)	Timeout(minutes)	Timeout(seconds)	ignored

Parameter	0x0D (13)			
Name	Changing Device Type			
Info	Changing the Device Type between in Binary Switch or Sound Switch			
Properties	Size	1	Min Value	0
	Format	Enumerated	Max Value	1
	Read-only	False	Default Value	1
	Altering capabilities	True	Advanced	False
Description	The product supports 2 Device Types: Binary Switch or Sound Switch. <b>Note:</b> Changing the Device Type with this configuration parameter 13, the device must be re-included afterwards.			
	Value	Function		
	0	Device Type=Binary Switch		
	1	Device Type= Sound Switch		

Parameter	0x50 (80)			
Name	Enable Association group report			
Info	Enable Association group report			
Properties	Size	1	Min Value	0
	Format	Enumerated	Max Value	1

	Read-only	False	Default Value	1
	Altering capabilities	False	Advanced	False
Description	Enable Association group report			
	Value	Function		
	0	enable basic report of group1, enable basic set of group2.		
	1	(if the Device Type is Binary switch) enable switch binary report of group1, enable switch binary set of group2.		

Parameter	0xFC (252)			
Name	lock configuration setting			
Info	lock configuration setting			
Properties	Size	1	Min Value	0
	Format	Enumerated	Max Value	1
	Read-only	False	Default Value	0
	Altering capabilities	False	Advanced	False
Description	Enable/disable to lock configuration parameters			
	Value	Function		
	0	Disable		
	1	Enable.		