
ZigBee™- Siren

Siren

Z602A

User Manual

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1. Introduction

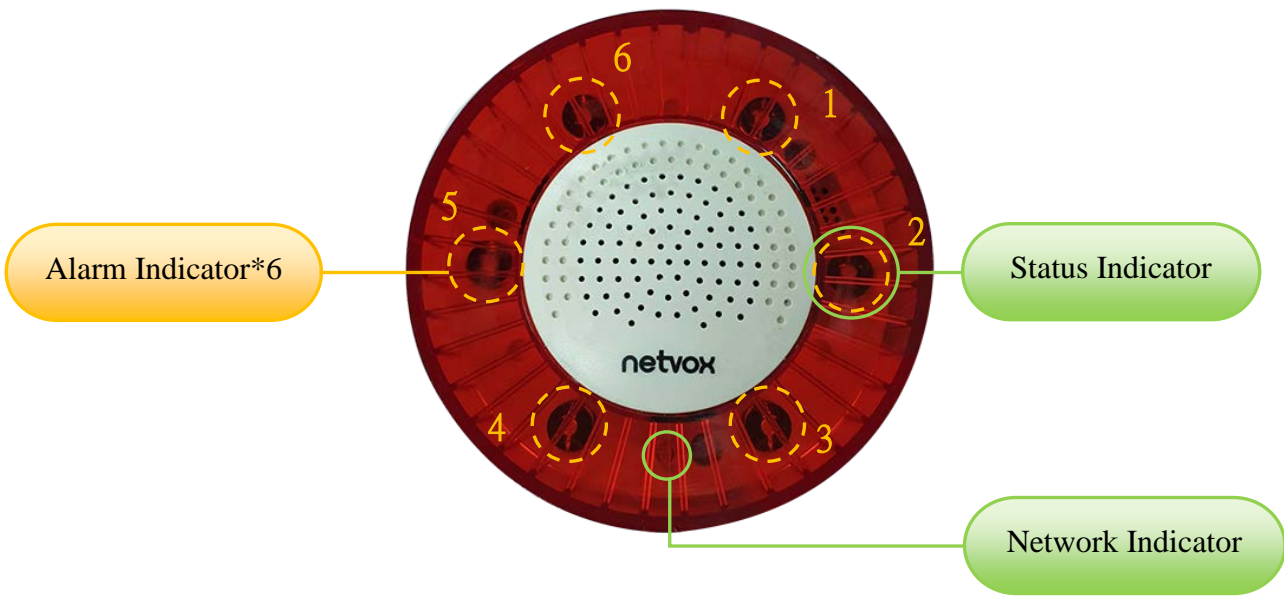
Z602A can be used as a router in ZigBee network.

Z602A can be as an alarm in security center (IAS), it can use flashing indicators and alarm sound to alert. There are four different sounds: fire alert, emergency alert, burglar alert, and doorbell sounds.

What is ZigBee?

ZigBee is a short range wireless transmission technology based on IEEE802.15.4 standard and supports multiple network topologies such as point-to-point, point-to-multipoint, and mesh networks. It is defined for a general-purpose, cost-effective, low-power-consumption, low-data-rate, and easy-to-install wireless solution for industrial control, embedded sensing, medical data collection, smoke and intruder warning, building automation and home automation, etc.

2. Product Appearance



3. Product Features

- Compatible with IEEE 802.15.4
- Utilizes 2.4GHz ISM band; up to 16 channels
- DC 12V power supply
- 4 different sounds (fire, emergency, burglar, and doorbell)
- Different light flashing
- Easy installation and configuration
- Wireless transmission is up to 200 meters linear distance in open field

4. Operating Instructions

4.1. Power On

After Z602A is powered on, the network indicator will flash once and make a sound.

4.2. Join The ZigBee Network

- a. Z602A will search for ZigBee network automatically after it is turned on.
- b. If others ZigBee network have a coordinator or router with the same channel, Z602A will join the network automatically.
- c. After Z602A is successfully joined, status indicator will flash and make a “beep” sound; the light of network indicator will stay on. If Z602A fail joining, the light of network indicator will stay off.

4.3. Operation

Z602A as a router in ZigBee network whose permit-join feature is enabled, Others device will be active permit-join.

The default permit-join period of time is 60 seconds. Please refer to the following steps to complete the join: Press the “Binding Key” once to enable the permit-join function, the network indicator will flash.

After Z602A is joined successfully, the network indicator will flash once and then stay ON. Moreover, it will generate a long sound. When it is failed to join the network, the indicator

will stay OFF.

In the process of joining, if you press the binding key again, it would turn off permit-join function, and the indicator will stay on.

4.4. Binding

Z602A can be bound with Z312 to work as a doorbell.

Step1. Press and hold the *Binding Key* for 3 seconds.

Step2. Release the *Binding Key* when the network indicator flashes **once**.

Step3. Z602A would send out binding request, and Z312 would also need to send out binding request.

Step4. The indicator flashes 5 times means that the binding is completed; otherwise, it will flash 10 times.

After the binding is complete, when Z312 is triggered, Z602A would make a doorbell sound.

4.5. Alarm

4.5.1 Type of alarm and the hint of alarm light flashing

Z602A can be an alarm in IAS system, it can generate 4 different sounds:

- A. Fire Alert
- B. Emergency Alert
- C. Burglar Alert
- D. Doorbell Sound

The priority level from high to low : Fire = Emergency = Burglar > doorbell

Fire alarm, emergency alarm and burglary alarm have the same priority level and can cover each other, if it is a doorbell, it cannot cover the other three

Ex.1 When the priority level of alarm that triggered at the same time are equal, the alarm will

flash and alert according to the time that event triggered.

Ex2. If the level of alarm triggered at the same time is high (one of the three), then the priority level of alarm trigger is low (doorbell), then the lower one will not cover other alarm because the priority level of doorbell is low, and the alarm will flash and alarm according to the higher one.

No matter what kind of alarm status, when Z602A receives command to stop alarming, it will stop generating sounds.

Except the 4 alarms mentioned above, Z602A would not generate sounds toward any other alarms e.g. malfunctioning alert, it would only flash the light.

According to different alarm types, the flashing method will be different, such as Doorbell and malfunctioning alert are on & off flashing alternately (blink), and the rest are flowing light.

Z602A alarm preset time is 240 seconds (Range: 5~65535).

Under the security status, when the door sensor is triggered, the burglar alarm will be generated.

Under the disarmed status, if the door sensor is triggered, and the doorbell sound be generated.

4.5.2 IAS of alarm and the hint of alarm light flashing

When the security system is set as disarm, Z602A would beep twice, and flash twice.

When the security system is set as arm, Z602A would beep once, and flash once.

When the security system is set as arm, the two indicators^{*1} would turn on.

When the security system is set as disarm, the two indicators would turn off.

^{*1} Two indicators: Alarm indicator 2 and 5 of product appearance picture.

4.6. Restore To Factory Setting

Z602A will keep network information while losing power, including to store the network address that it was assigned etc. If Z602A needs to join a new network, it would need to go back to factory default first.

Operation:

If you want the device go back to factory default, powered up the device while pressing the setting key, and the status indicator will flash quickly and make the doorbell sound twice. After going back to factory default, re-power up the device, and the device should be able to join the network.

4.7. Others

4.7.1 Identify

The device can be identified through the APP, the status indicator will flash 5 times and then return to a steady light.

4.7.2 Announce

Press setting key and the device would send out announcement to the network, and the network indicator would flash for 5 times.

4.7.3 Enroll

When the device is turned on, device would determine whether it has been ENROLL.

If it is not ENROLL yet, it would go through the ENROLL process automatically.

If ENROLL is successful, the status indicator would flash **6 times**.

If it failed, the status indicator would flash **4 times**.

If the device has already been ENROLL, then this process would not be gone through, but the status indicator would still flash 6 times.

The device will send relevant device information to all ENROLL devices every hour to ensure that the devices keep in touch (heartbeat default setting is 1 hour, setting range: 30 seconds - 7 days)

5.Home Automation Clusters for Z602A

1. End Point(s) : 0x01:
2. Device ID: IAS Warning Device (0x0403)
3. End Point Cluster ID
4. This lists the attributes of the basic information.

Server side	Client side
EP : 0x01 (Device ID : IAS Warning Device (0x0403))	
Basic(0x0000)	IAS ACE(0x0501)
Identify(0x0003)	
IAS WD(0x0502)	None
IAS ZONE(0x0500)	None
Commissioning(0x0015)	
power configure(0x0001)	
Diagnostics Information(0x0B05)	

Attributes of the Basic Information

Identifier	Name	Type	Range	Access	Default	Mandatory / Optional
0x0000	ZCLVersion	Unsigned 8-bit integer	0x00 – 0xff	Read only	0x03	M
0x0001	ApplicationVersion	Unsigned 8-bit integer	0x00 – 0xff	Read only	0x29	O
0x0002	StackVersion	Unsigned 8-bit integer	0x00 – 0xff	Read only	0x36	O
0x0003	HWVersion	Unsigned 8-bit integer	0x00 – 0xff	Read only	0x03	O
0x0004	ManufacturerName	Character string	0 – 17 bytes	Read only	netvox	O
0x0005	ModelIdentifier	Character string	0 – 17bytes	Read only	Z602AE3R	O
0x0006	DateCode	Character string	0 – 17 bytes	Read only	2017.01.17	O
0x0007	PowerSource	8-bit Enumeration	0x00 – 0xff	Read only	0x84	M
0x0010	LocationDescription	Character string	0 – 17 bytes	Read/write		O

0x0011	PhysicalEnvironment	8-bit Enumeration	0x00 –0xff	Read/write	0x00	O
0x0012	DeviceEnabled	Boolean	0x00 –0 0x01	Read/write	0x01	M

6. Flashing indicators and alarm sound

Powered on	Network Indicator flashes once with 1 sound
Join the network successfully	Network Indicator stays ON with 1 long sound
Failed to join the network	Network Indicator stays OFF
Permit-join feature is enabled	Network Indicator flashes for 60 seconds
Enroll in the security system successfully	Status Indicator flashes 6 times
Failed to enroll (there is a CIE device in the network)	Status Indicator flashes 4 times
Failed to enroll (there is no CIE device in the network)	Status Indicator flashes twice
Binding feature is enabled	Status Indicator flashes once
The binding is successful	Status Indicator flashes 5 times
The binding is failed	Status Indicator flashes 10 times
Restoring	Status Indicator flashes 3 times with 2 doorbell sounds
Restore is completed	Status Indicator generates fast flashes
Identify	Status Indicator flashes 5 times
Disarm	Alarm Indicators flash twice with 2 short sounds
Arm	Alarm Indicators flash once with 1 long sound
Announce	Network Indicator flashes 5 times
Fire/Burglar/Emergency alarm	Alarm Indicators flashes with Fire/Burglar/Emergency alert
Doorbell	Alarm Indicators flashes with doorbell sound

7. Installation

After plug the DC adapter, it should be hung on the wall indoor.



8.Related Netvox Devices

- Z201B: IAS Control and Indicating Equipment



- Z210R: IAS Control and Indicating Equipment



- Z501A: IAS Ancillary Control Equipment



- Z302A: IAS Zone



9. Important Maintenance Instructions

- Please keep the device in a dry place. Precipitation, humidity, and all types of liquids or moisture can contain minerals that corrode electronic circuits. In cases of accidental liquid spills to a device, please leave the device dry properly before storing or using.
- Do not use or store the device in dusty or dirty areas.
- Do not use or store the device in extremely hot temperatures. High temperatures may damage the device or battery.
- Do not use or store the device in extremely cold temperatures. When the device warms to its normal temperature, moisture can form inside the device and damage the device or battery.
- Do not drop, knock, or shake the device. Rough handling would break it.
- Do not use strong chemicals or washing to clean the device.
- Do not paint the device. Paint would cause improper operation.

Handle your device, battery, and accessories with care. The suggestions above help you keep your device operational. For damaged device, please contact the authorized service center in your area.