

Quick Start Guide - ZBALRM Model # 1021A

Wireless Alarm



Product Brief

This wireless alarm can generate up to 4 different alert sounds and visible LED indicators: fire alert, emergency alert, burglar alert, and doorbell. Use it in conjunction with any zigbee[®] CIE Device to create a sensor/ alarm relationship. It acts as a network router, strengthening signals and coverage.

The device can be mounted on a wall or used as a portable siren anywhere in the range of a home automation network. Uses 12V DC as its main power supply with 3 AAA Ni-MH rechargeable batteries as backup (optional).

Installation (for indoor use only)

Mounting

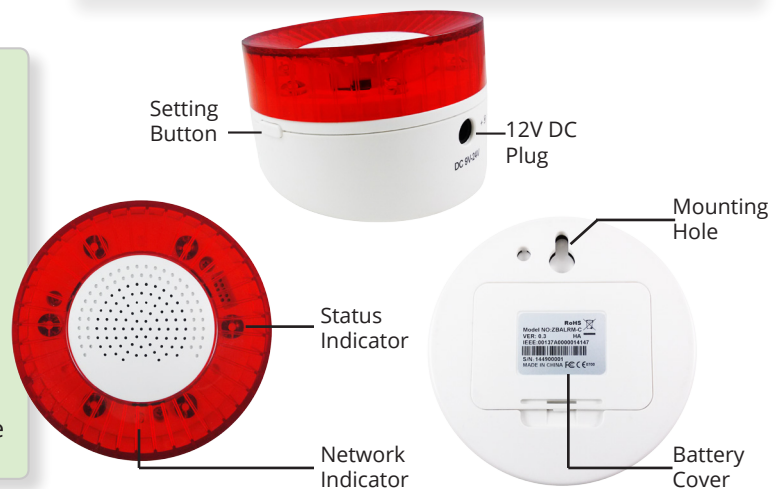
- 1 mounting hole on bottom plate for wall mounting

Backup Battery Installation (optional)

- Carefully remove the battery cover on the back
- Insert 3 AAA Ni-MH **rechargeable batteries only**
- Install battery cover

Connect to Power

- Connect 12V power supply (included) to DC Plug
- Connect power supply to 120V or 240V AC receptacle



Set-up

1) Factory Reset (if ZBALRM does not join network)

- Press and hold the *Setting Button* while connecting the ZBALRM to power
- Continue holding button until the ZBALRM generates 2 doorbell sounds and the *Status Indicator* flashes rapidly
- Power cycle the ZBALRM now to complete factory reset (unplug it and plug it back in after 5 seconds)

2) Join Network

- Open a zigbee router/coordinator to permit joining of the ZBALRM-C to the network
- Power on the ZBALRM (if not already powered). The device is now searching for an open network to join.
- The *Network Indicator* LED will be lit solid when the ZBALRM has successfully joined the network and it will emit a single siren chirp. The *Network Indicator* will stay off if the ZBALRM has failed to join a network.

3) Binding/Unbinding

- Press and hold the *Binding Button* for 3 seconds and then release. The *Status Indicator* will flash once.
- Enable binding on the IAS Warning device you wish to bind to the ZBALRM within 13 seconds
- The *Status Indicator* will blink **5 times** when successfully bound or **10 times** if unsuccessful
- Repeat these steps to unbind

Enroll ZBALRM in Security System

The ZBALRM will automatically search for a CIE (Control and Indicating Equipment) device with which to enroll upon joining the network. The Status Indicator will flash with the following patterns to indicate registration status.

- 2 blinks of the Status Indicator means ZBALRM did not find a CIE device or a compatible CIE device in the network
- 4 blinks of the Status Indicator means enrollment failed
- 6 blinks of the Status Indicator means enrollment was successful

Permit-Join

ZBALRM is designed to work as a zigbee router. In order to allow other devices to join the network, users can enable the permit-join feature of ZBALRM as follows:

- Tap the *Binding Button* once to enable permit-join. The *Network Indicator* will blink once per second while in open join
- The default permit-join period is 60 seconds

Backup Battery

- The ZBALRM can use 3 AAA rechargeable batteries as a backup, should the 12V DC power get disconnected. Only Ni-MH **rechargeable** AAA batteries should be used for the ZBALRM.
- While charging the batteries, the left most *Alarm Indicator* will be lit solid until fully charged.
- If the 12V DC power is disconnected, the *Status Indicator* will flash **20 times** (assuming the battery voltage is between 1V and 3.5V).

LED Pattern Indication	
Network Indicator LED	Indication
Off	Not joined to network
On solid	Joined to network
Flashes once per second	Open permit join
Flashes 5 times	Device announce
Status Indicator LED	Indication
Flashes once	Binding enabled
Flashes twice	Failed to enroll (No CIE device in network)
Flashes 4 times	Failed to enroll (CIE device is in network)
Flashes 5 times	Binding/unbinding successful
Flashes 6 times	Enrollment to CIE successful
Flashes 10 times	Binding/unbinding failed
Flashes 20 times	Battery is low and not connected to 12V DC
On solid (left most alarm LED)	Batteries are recharging



Troubleshooting

During Installation	
After an optimal spot has been selected to place the ZBALRM, it must join a zigbee network and needs to be enrolled as an IAS Zone to a CIE network.	
The device won't join the zigbee network	<ul style="list-style-type: none"> • Ensure the device is powered • Ensure the device is looking for a viable network (Network LED should be off) • Ensure device hasn't joined another network (network LED is on when joined) • Ensure that the network is open for joining • Ensure device is within range of an open coordinator/ router • Ensure the device is not surrounded or near a big source of metal
The device won't enroll to CIE network	<ul style="list-style-type: none"> • Ensure network does support CIE
The device won't bind to IAS Warning device	<ul style="list-style-type: none"> • The IAS Warning client device may have been asleep when bind command was sent - wake up IAS Warning device and try again • IAS Warning device may have a full binding table
During Operation	
After the device has been joined to a zigbee network and bound to a controller, the following may occur:	
Cannot communicate with ZBALRM	<ul style="list-style-type: none"> • Position a zigbee router that is on the same network closer to the ZBALRM • Check that device is powered (if battery powered, check battery level)
IAS Warning device does not sound ZBALRM (assuming the devices are already bound)	<ul style="list-style-type: none"> • Ensure IAS Warning device is within range of the ZBALRM • Ensure the devices are both powered and turned on (turned on and has sufficient power, if battery powered)