

## Heat Alarm User Manual

**Model number: GS412B Class: A2**

Thank you for purchasing our heat alarm with Z-Wave protocol connection. Please take a few minutes to read the user's manual thoroughly and familiarize yourself and your family with its operation. And save it for future reference.



**Diagram 1**

### Product Specifications:

- **Power:** DC2\*1.5V Alkaline AA battery  
(Golden Peak Group: GN15A).
- **Operation current:** <30uA(standby), <110mA (alarm).
- **Alarm volume:** >85dB(A) at 3 meters.
- **Heat sensitivity:** 54-70°C.
- **Silence time:** approx. 10 minutes.
- **Do not disturb time:** approx.8-10 hours.
- **Wireless frequency:** 868.4MHz EU.
- **Radio Protocol:** Z-Wave.
- **Security:** S2\_UNAUTHENTICATED.
- **Wireless distance:** >50 meters in a clear line of sight.
- **Heat alarm sound pattern:**  
BI 0.5s - pause 0.5s – BI 0.5s – pause 0.5s – BI 0.5s –  
pause 1.5s, with the red LED flash, repeat this alarm  
pattern.
- **Comply with:** BS5446-2:2003 and Z-Wave Alliance.

### Introduction:

Heat alarm is an alarm device that can give off warning under the condition that the environmental temperature between 54°C -70°C—the abnormal temperature may caused by an actual fire, in order to alert the dwelling of the dangerous situation and notice them to evacuate right away. At the same time in this alarm state if the alarms have been matched Smart home or other Z-Wave system, they will send a warning message to the

main controller in this network group. The heat alarm can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers under the same radio frequency. It is the point that only under same radio frequency the heat alarm can be included and operated. All non-battery operated alarms within the network will act as repeaters, as to increase reliability of the network. In the Z-Wave network communication, the heat alarm can communicate with other devices associated. Through the Z-Wave network controller, you can get the status of the alarm, such as battery level.

### Technical Information:

#### **Type of alarm:**

Siterwell heat alarm can rapidly detect incremental temperature and absolutely meet heat level.

#### **Heat alarm signal:**

The heat alarm has a visible and acoustic signal. In the standby, the LED will flash every 32 seconds to indicate normal operation. If the alarm matches other Z-Wave system, in the alarm status, they will send a warning message to the main controller, at the same time the frequency of LED flashing speeds up, and the heat alarm will give off a loud sound to alert occupants.

#### **Status indicator:**

- 1: When the alarm is running normally, the red LED will flash once per 32 seconds.
- 2: When the battery fails or low battery is detected, the alarm will “chirp” once and with a corresponding red LED flashing once per 32 seconds.
- 3: When the unit goes wrong , the alarm will “chirp” once per 32 seconds.

**Note:** When the unit chirps once per 32 seconds, press the test button, it will pause this warning tone for approx.8-10 hours. It can still normally detect air temperature during this period, but only remove the warning tone.

- 4: When the unit is running in the silence mode, the red LED will flash once every 8 seconds.

**Note:** When the unit is in the alarm status, press the test button, it will pause for approx. 10 minutes, and remove the warning tone during the period.

#### **Testing:**

Test the heat alarm to ensure proper operation once per week by pressing the test button, the heat alarm should give off a loud alarm tone.

#### **Alarm silence mode:**

During the unit's alarming, push the test button, it will pause

the unit alarming for approx 10 minutes. The red LED will flash once every 8 seconds, which indicates that the heat alarm is running into the silence mode. The heat alarm will automatically reset after approximately 10 minutes. If after this period, the air temperature is still within the heat sensitivity range, the alarm will sound again. The alarm silence mode can be repeated.

**Note:** Before using the alarm silence, be sure there must be a safe condition.

### **Battery Specification:**

Rating voltage: DC 1.5V

Package: AA alkaline battery

Recommend battery:

Gold Peak Group: GN15A

### **Placement:**

Designed for placement on the ceiling. The heat alarm should be at least 50cm from the nearest wall.

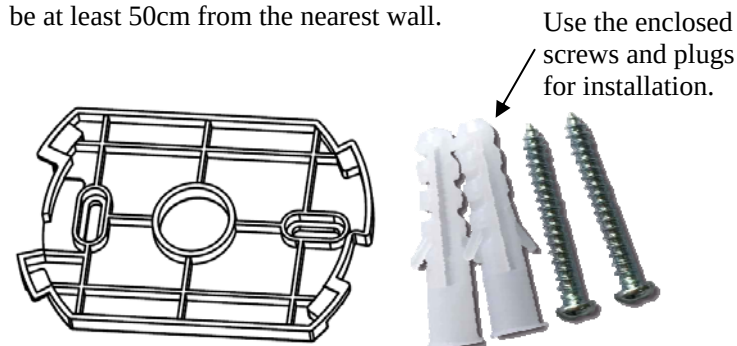


**Diagram 2**

### **Where is the best place to install:**

Place a heat alarm near possible fire source such as:

- Kitchen area
- Generator room
- Living room with wooden stove burner
- Garage area
- Washing and drying area

Additional heat alarms increase your security

### **Installation of heat alarm:**

1. Press the bracket on the installation position, mark installation hole of bracket with pencil.
2. Bore two installation holes on the sign with electric drill; Make two 5mm diameter holes; Strike the two plastic plugs into holes with hammer.
3. Attach the bracket to the plastic plugs and fix tightly the screws into the plastic plugs (**refer to Diagram 4**).
4. Fit the alarm on the bracket and turn the alarm body

clockwise, until matching well on the bracket. After mounting, test this heat alarm by pushing test button on the top and hearing alarm signal.

**Note:** The label in the product cannot be removed as it shows important information about the product.

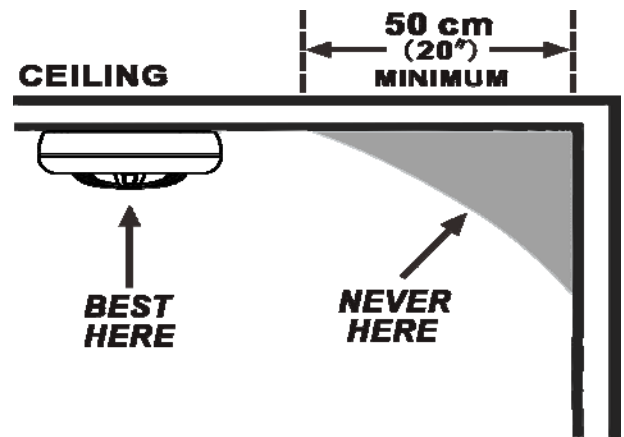


**Diagram 3**

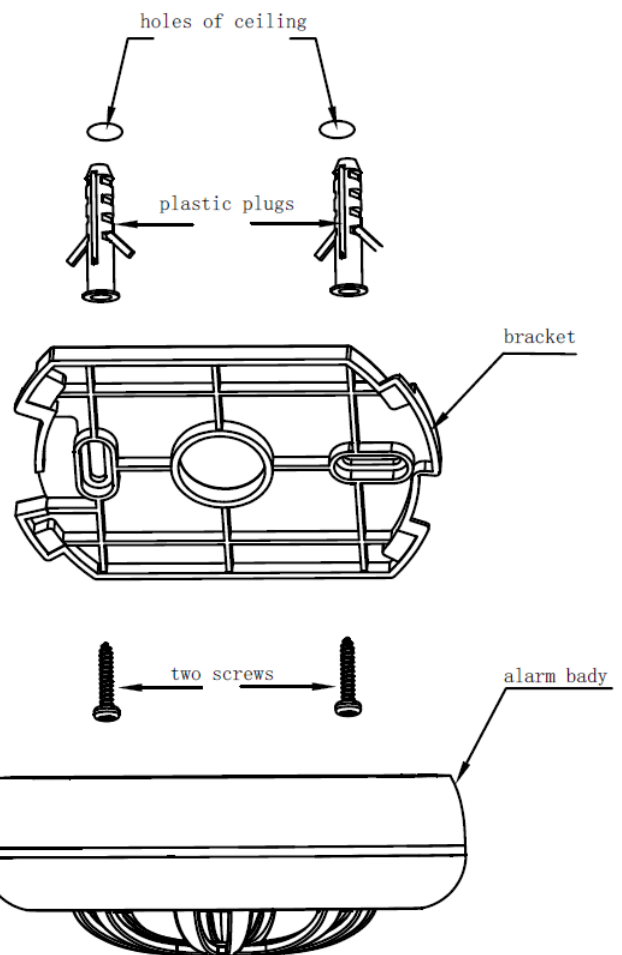


**Diagram 4**

### **Replace Battery:**

- 1: Turn the alarm body counterclockwise and take out the alarm body from the bracket.
- 2: Take out the old batteries from the battery box.

3: Fix the two new batteries into the battery box. Please note the battery polarities.

4: Fix alarm body on bracket and turn the alarm body clockwise.

5: Test heat alarm by pressing the test button. The sound pattern is BI 0.5s - pause 0.5s – BI 0.5s – pause 0.5s – BI 0.5s – pause 1.5s, with the red LED flash, repeat it. If there is no sound output, it means that the heat alarm is faulty or the installing operation is wrong, and you should follow the correct method of disposal through reading

“**Troubleshooting**”.

### **Do not install heat alarm in the following places:**

1. At the top of high pointed ceilings, in ceiling corners or within 50cm of a wall.
2. In rooms where the temperature can exceed 4°C-38°C.
3. Place the heat alarm where it is unreachable in order to test the battery and for maintenance.

### **Wireless function description:**

The heat alarm is a Z-Wave compatible alarm. It is wirelessly connected to smart home or to other Z-Wave system. Each heat alarms need to be “Including” in order to communicate with Z-Wave main controller in the same network group. The wireless range is over 50 meters in a clear line of sight architecture.

#### **Note:**

a. This alarm is not compatible with product interconnection.

### **1: Restore this alarm to Factory Default Settings**

This operation will delete all information on Z-Wave network, and restore the factory default setting.

1. Remove the battery.
2. Press the button and don't release. And then connect the battery, the red light will on 3 seconds,3 seconds later, then release the button when the red light is off.
3. The red light is on for 3 seconds when the button is released. During these 3 seconds, press the button. Only after hearing a beep, restore factory settings successfully.

#### **Note:**

a. Please use this procedure only when the network main controller is missing or inoperable.

### **2: Add (Including) this alarm to Z-Wave Network**

Document No.: RD-412B-039-001

The heat alarm can be included to the Z-Wave network by following operations:

1. Make sure the battery is installed well before operating the product.
2. Make sure the alarm is on its final installation position, and then set a main controller into the add (inclusion ) mode.
3. Quickly press the test button three times within two seconds, the red LED will light up.
4. If the red LED flashes for about two seconds, it indicates that the alarm have been added (included) successfully, otherwise repeat the operation accordingly.

#### **Note:**

a. If the add(including) is successful, the red LED flashes for about two seconds, and then exit the add mode automatically.

### **3: Remove (Excluding) this alarm From Z-Wave Network**

1. Make sure the battery is installed well before operating the product.
2. Set the main controller into the remove (exclusion ) mode.
3. Quickly press the test button three times within two seconds, the red LED will light up.
4. Wait for the main controller to remove(exclusion) the alarm. If the remove(exclusion) is successful, the red LED flashes for about two seconds, and then exit the remove mode automatically.

#### **Note:**

a. If the alarm is removed(excluded), the alarm will be restored to factory default settings.

b. When the alarm is in “Add” or “Remove” mode, you can press the test button to exit and return to operating mode.

### **Associations:**

This has the effect that when the sensor detects the temperature, all devices associated with the sensor will receive the relevant reports and can be controlled by the sensor, e.g. Fire extinguishing equipment, alarm device etc.

This device supports three linkage groups:

Linkage group 1 is Lifeline.

Linkage group 2 is assigned to the devices status - sending BASIC SET control frame to the associated devices having detected the heat alarm.

This heat alarm will send a “BASIC SET(0xFF)” message to associated group, when pressing test button

to check the function; and this heat alarm will also send a “BASIC SET(0x00)” message to associated group, when quitting the test button. This heat alarm will send a “BASIC SET(0xFF)” message to associated group, when the heat alarm is overheat alarm; and this heat alarm will also send a “BASIC SET(0x00)” message to associated group, when the overheat alarm is cleared.

Linkage group 3 reports the detection's status to the associated device. heat alarm.

The maximum number of devices that can be added to the Linkage group 1,2,3, is 5.

### Command Classes:

This alarm supports Command Classes as below:  
 COMMAND\_CLASS\_ZWAVEPLUS\_INFO(V2)  
 COMMAND\_CLASS\_ASSOCIATION(V2)  
 COMMAND\_CLASS\_MULTI\_CHANNEL\_ASSOCIATION(V3)  
 COMMAND\_CLASS\_ASSOCIATION\_GRP\_INFO(V3)  
 COMMAND\_CLASS\_TRANSPORT\_SERVICE(V2)  
 COMMAND\_CLASS\_VERSION(V2)  
 COMMAND\_CLASS\_MANUFACTURER\_SPECIFIC(V2)  
 COMMAND\_CLASS\_DEVICE\_RESET\_LOCALLY(V1)  
 COMMAND\_CLASS\_POWERLEVEL(V1)  
 COMMAND\_CLASS\_BATTERY(V1)  
 COMMAND\_CLASS\_NOTIFICATION(V8)  
 COMMAND\_CLASS\_WAKE\_UP(V2)  
 COMMAND\_CLASS\_SECURITY\_2(V1)  
 COMMAND\_CLASS\_SUPERVISION(V1)

S2 supported Command Classes:  
 COMMAND\_CLASS\_VERSION  
 COMMAND\_CLASS\_ASSOCIATION  
 COMMAND\_CLASS\_MULTI\_CHANNEL\_ASSOCIATION  
 COMMAND\_CLASS\_ASSOCIATION\_GRP\_INFO  
 COMMAND\_CLASS\_MANUFACTURER\_SPECIFIC  
 COMMAND\_CLASS\_DEVICE\_RESET\_LOCALLY  
 COMMAND\_CLASS\_POWERLEVEL  
 COMMAND\_CLASS\_BATTERY  
 COMMAND\_CLASS\_NOTIFICATION  
 COMMAND\_CLASS\_WAKE\_UP  
 COMMAND\_CLASS\_SUPERVISION

After the device is powered again all previously triggered notifications will be cleared/set to inactive

Supported Notification Type: Heat Alarm

Heat Alarm Supported Event:

- 1: Overheat detected,Unknown Location (0x02)
- 2: Heat Alarm Test (0x07)
- 3: Alarm Silenced (0x09)

4: Maintenance required, Dust in device (0x0A)

### Troubleshooting:

| Problem                                                              | Method of disposal                                                                                                                                                        |
|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Heat alarm does not sound when tested.                               | Remove heat alarm from bracket. Then check the battery is properly connected to battery connector.                                                                        |
| Heat alarm chirp with the red LED flash about 32 seconds every time. | Replace battery, please refer to “ <b>REPLACE BATTERY</b> ” section.                                                                                                      |
| Heat alarm sounds unwanted alarm intermittently.                     | 1. Problems caused by high humidity can be resolved by drying the heat alarm.<br>2. Hire an electrician to move heat alarm to a new location.                             |
| Heat alarm fails to be Included into the Z-Wave network.             | Check if the alarm has been included to another Z-Wave network. If so, do “ <b>Excluding this alarm From Z-Wave Network</b> ” before including into a new Z-Wave Network. |

### Practice Fire Safety:

If the heat alarm sounds but, you did not push the test button, it is a warning of a dangerous situation, your immediate response is necessary. To prepare for such occurrences, develop family escape plans, discuss them with all household members, and practice them regularly.

- 1: Expose everyone to the sound of a heat alarm device and explain what the sound means.
- 2: Determine two exits from each room and an escape route to the outside from each exit.
- 3: Teach all household members to touch the door and use an alternate exit when the door is hot; instruct them not to open the door if the door is hot.
- 4: Teach household members to crawl along the floor to stay below dangerous fumes and gases.
- 5: Determine a safe meeting place for all members outside the building.

### What to Do in Case of Fire:

- 1: Do not be panic; stay calm.
- 2: Leave the building as quickly as possible. Touch doors to feel if they were hot before opening them. Use an alternate exit if necessary. Crawl along the floor, and do stop to collect anything.

- 3: Meet at a pre-arranged meeting place outside the building.
- 4: Call the fire department from outside the building.
- 5: Do not go back inside a burning building. Wait for the fire department to arrive.

**Note:** These guidelines will assist you in the event of a fire, however, to reduce the chance that fires will start, practice fire safety rules and prevent hazardous situations.

### **Repair:**

**Warning:** Do not attempt to repair the alarm. It will affect your warranty. If the alarm is not operating properly, and is still under warranty, return it to the original place you buy.

Pack it in a well-padded carton, and ship to the original place you buy. If the alarm is no longer under warranty, have a licensed electrician replace it immediately with a comparable alarm.

### **Maintenance :**

Your heat alarms should be cleaned every 3 months, using a vacuum cleaner fitted with the soft brush attachment.

**Important:** Do not attempt to remove the cover to clean inside. This will affect warranty.

**Warning: Only use the batteries specified. Use different batteries may have detrimental effects on the alarm. A good safety measure is to replace the battery every three years.**

### **Other information:**

Do not paint the heat alarm.

Note the local country regulations regarding installation of main powered heat alarms in new buildings.

This is electronic waste that should be recycled.

### **Warranty Information:**

Company warrants to the original consumer.

Purchase each new heat alarm device to be free from defects in material and workmanship under normal use and service for a period of 3 years from the date of purchase. This warranty does not cover damage resulting from accident, misuse or abuse or lack of reasonable care of the product. In no case shall company be liable for any incidental or consequential damages for breach of this or any other warranty express or implied, whatsoever. The bad product can be mailed to the following address with a detail explanation of problem.

#### **Manufacturer:**

**SITERWELL ELECTRONICS CO., LTD**

**ADDRESS: No.76 Haichuan Road, Chuangye Zone B ,  
Jiangbei , Ningbo , China.**

**TEL: 0086-574-83076653**

**FAX: 0086-574-83076652**

**E-MAIL: Sales@china-siter.com**