〖Please read the installation manual before installing and using the product〗

TCSG5416W Wireless Sounder Installation manual

1.Overview

The TCSG5416W wireless sounder (hereinafter referred to as sounder) is suitable for installation in public places, factories and other environments, and is used in conjunction with the JB-TB-TC5126W wireless sounder control panel (hereinafter referred to as the panel). When the panel receives the sounder command from other fire alarm equipment, the panel activates the siren through wireless signals, and the siren emits sound and light signals to achieve the purpose of sounder.

2.Features

2.1. Adopting 470MHz wireless communication technology, no need to pre-buried wiring, easy and quick engineering installation;

2.2. With battery undervoltage detection function, it can remind users to replace the battery in time;

2.3. Use microprocessor to realize signal processing, and use digital signal to communicate with control panel, work stably and reliably, and have good suppression ability against electromagnetic interference.

3.Technologic Charateristics

3.1. Battery model: CR17450-2-080-02

3.2. Rated working voltage: DC3V

3.3. Working current: monitoring current ≤45uA alarm current ≤240mA

.4. Indicator light:

　　Fault light: yellow, flashing periodically when communication fails

　　Working light: green, flashing periodically when communication is normal

3.5. Sound pressure level: 75dB ~ 115dB (A weighting)

3.6. Modulation cycle: 3.0S～4.0S

3.7. Flash frequency: 1Hz～1.5Hz

3.8. Coding method: automatically assigned by the control panel during networking

3.9. Communication method: 470MHz FSK coded two-way communication

3.10. Communication distance: ≤50m

3.11. Transmitting power: <20dBm

3.12. Reset method: control panel reset

3.13. Use environment:

    Type: Indoor atmospheric pressure: 86kPa～106kPa

    Temperature: 0℃～+55℃ Relative humidity ≤95%, non-condensing

3.14. Dimensions: 95mm×127mm×56mm

3.15. Shell material and color: ABS, red

3.16. Executive standard:

    GB 26851-2011 "Fire Sound and/or Light Alarm"

    XF 1151-2014 "General Requirements for Wireless Communication Functions of Fire Alarm Systems"

4.Structural features and working principle

4.1、The outline diagram of the module is shown in Figure 1:
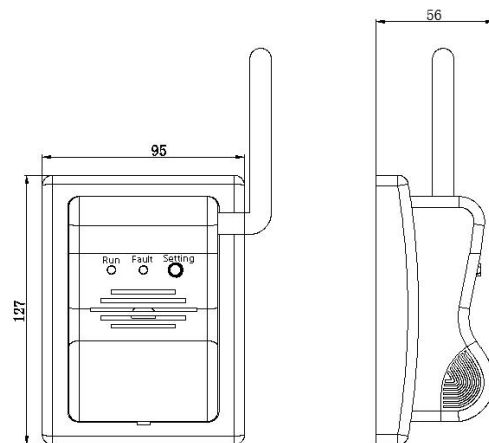

Figure 1 Schematic diagram of the appearance of the alarm

4.2. working principle

    When the sounder receives the start signal from the control panle, it will start the sound and light alarm output;

When the sounder receives the stop signal from the control panel, it will stop the sound and light alarm output;

When the sounder is in the starting state, after receiving the reset signal from the control panel, it will stop the sound and light alarm output, and the sounder will be reset;

When the sounder battery is low, the sounder sends a battery undervoltage signal to the control panel , and the yellow indicator light flashes.

5.Installation Method

5.1. Before installation, first check whether the shell is intact and whether the identification is complete.

5.2. The way the sounder is fixed:

When installing, use two screws to fix the base of the alarm on the 86 series (width 72mm, height 49mm, depth 47mm) embedded box, and then install the sounder, the installation hole distance is 60mm.
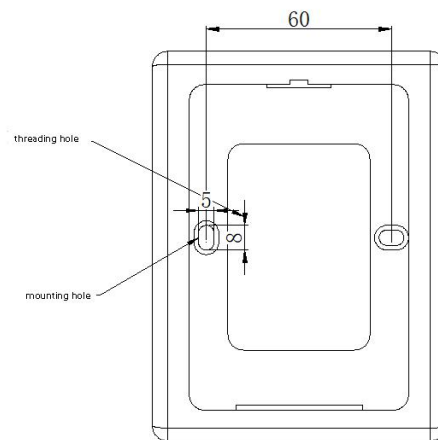

Figure 3 Installation hole distance

6.Test

Warning: Please make sure that the polarity of the battery is correct before proceeding.

6.1. The sounder will be tested every year after installation and during use.

6.2. Startup test: After the networking is successful, you can choose a sounder and make it meet the startup conditions artificially (please turn off the fire alarm linkage function to avoid unnecessary sounder linkage). After the test, power on again and notify the relevant management The department restored the system to normal.

6.3. During the test, the unqualified alarm will be resolved according to "general failure and maintenance" and "maintenance".

7.Use and operation

7.1. Network segment setting: Before the detector is connected to the network, the device network segment should be set first, and the network setting should be selected on the menu interface of the alarm control panel (such as: JB-TB-TC5126W wireless fire alarm control panel, etc.) that can be equipped with the detector. After entering the network settings, first set the local address number, and then set the detector network segment according to the actual situation on site (29 optional).

7.2. The device enters and exits the network:

A) Network access operation: When the control panel is in the "wireless registration interface" and the alarm is not connected to the network, quickly press the setting button 3 times, the alarm will sound 3 times, and the green light will flash 3 times, and the module will report to the control panel Send the

network access application. After the application is successful, the total number of network access displayed by the control panel +1.

B) Exit the network operation: When the control panel is in the "wireless registration interface" and the module is in the network connection state, quickly press the setting button 3 times, the alarm will sound 3 times, and the green light will flash 3 times, the alarm will turn The control panel sends an exit request. After the application is successful, the total number of exits displayed by the control panel is +1.

C) Status detection: After the sounder is powered on, press the setting button once, and the green light flashes once. If the control panel responds to the device and displays the loop and address number, it indicates that the device has successfully connected to the network, otherwise the sounder is not connected to the network. .

3. Equipment start: When the sounder receives the start signal from the control panel when it is in normal working state, it will start the sound and light alarm output.

4. Equipment stop: when the alarm receives the stop signal from the control panel in the starting state, it stops the sound and light alarm output.

5. Equipment reset: When the alarm receives the reset signal from the control panel when it is in the starting state, it stops the sound and light alarm output, and the alarm is reset.

6. Restore factory settings: After the siren is connected to the network, when it is powered on again, the working indicator will be on for 10s. During this period, the factory setting can be restored by pressing the setting button 5 times. The working indicator flashes 3 times, and the factory restoration is successful.

8. General faults and maintenance

Common faults and their solutions are shown in the following table:

Fault	Reason	Solution
According to the sensitivity level of the control panel, the yellow fault light will flash once periodically (75 seconds at level 1 Level 2 40 minutes Level 3 2 and a half hours Level 4 5 hours)	Too far away from the control panel or interference sources nearby cause communication failure	Move the device near the control panel, reconnect to the network and remove the source of interference
The faulty yellow light flashes 2 times periodically (every 48 seconds is a cycle)	Report a low battery fault	Replacement battery
After the device alarms, the control panel has no status prompt	The device is not connected to the network	Restart the network operation
Device networking is unsuccessful	Too far away from the control panel or interference sources nearby	Move the device near the control panel, reconnect to the network and remove the source of interference

Note: After reporting the low battery failure, the sounder can still work continuously for 30 days in the monitoring state (it can work continuously for 4 hours in the sound and light start state).

9. Notes

1. After the signal passes through the wall, the signal strength will be greatly attenuated, so try to reduce the number of partition walls for wireless products.

2. When installing the product, keep it away from metal to reduce the shielding of metal objects to the

signal. For example, it cannot be installed in a metal box such as a fire hydrant box or outside of a metal cabinet.

3. It should be installed in a low-interference environment and far away from motors or large-scale electrical equipment. .

10.File and warranty

10.1 . Packing documents:

1) Packing List: 1 page

2) Instructions : 1 copy

10.2 . Warranty: My company responsible for the maintenance of the product , a problem please and my company's technical service department, the user may not own disassemble or repair, or peril .

10.3 . Maintenance contact the following: