

〔Please read the installation manual before installing and using the product〕

**J-SAP-TCSB5406W**  
**Wireless Digital Manual Call Point**  
**Installation instructions**



**YINGKOU TIANCHENG FIRE PROTECTION  
EQUIPMENT CO., LTD**

Version	Date	Author	Note
Ver1.0 202006	29 <sup>th</sup> June 2020	Deng Yi Wang Gang	create
Ver1.1 202011	3 <sup>rd</sup> , Nov. 2020	Wang Gang	Correction function description

## 1.Overview

J-SAP-TCSB5406 W Wireless Digital Manual Call Point (hereinafter referred to as the alarm button ) is suitable for installation in public places, factories and other environments. When a fire is manually confirmed, press the button on the MCP, and the red light of the MCP is always on. to the wireless communication technology transmits an alarm signal to the control panel, the control panel when the response should the alarm signal the alarm button enters a wait control panel reset state, an alarm button while the control panel displays the encoded information and an alarm sounds.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Important: You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



## 2.Features

2.1 using the pressing structure design, alarm button press need to use special tools to reset ;

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2.2 Adopting 470MHz wireless communication technology , without pre-buried wiring, convenient and quick engineering installation;

2.3 With battery low voltage detection function , it can reflect the battery power situation in time;

2.4 The use of microprocessor to realize signal processing and digital signal to communicate with the control panel, the work is stable and reliable, and has a good ability to suppress electromagnetic interference.

### 3.Techical characteristic

3.1 . Battery Type: CR17450 3.0 V / 2400mAh Voltage range: 2 .7 ~ 3.3 V

3.2 . Operating Current: Monitor current  $\leq$  10 uA alarm current  $\leq$  .19 m A

3.3 . Indicator:

Fire light: red, not network when logging every 48s flash time, alarm always lightens

Fault light: yellow , flashes twice every 48s when the battery is under power, and periodically flashes when the communication fails after being connected to the network

Working light: green , flashing periodically when the communication is normal after entering the network

3.4 . Encoding: automatically allocated when the network control panel

3.5 . Communication: 470MHz FSK encoded two-way communication

3.6 . Communication distance:  $\leq$ 50m

3.7. Transmitting power: <20dBm

3.8 . Reset: special key reset

3.9. Form of starting parts: reusable type

3.10 . Use of the environment:

Type: Indoor atmospheric pressure: 86kPa~106kPa

Temperature: -10°C~+55°C Relative humidity  $\leq$ 95%, non-condensing

3.11 . Dimensions: 95 m m  $\times$  96 m m  $\times$  50 m m

3.12 . Shell materials and colors: the ABS , red color

3.13 . Weight: about . 19 0 G (with battery)

3.14 . Implementation of the standards:

GB 19880-2005 "manual fire alarm button "

XF 1151-2014 " General Requirements for Wireless Communication Function of Fire Alarm System "

### 4.Structural features and working principle

4.1 . Alarm button contour diagram shown in Figure 1 below:

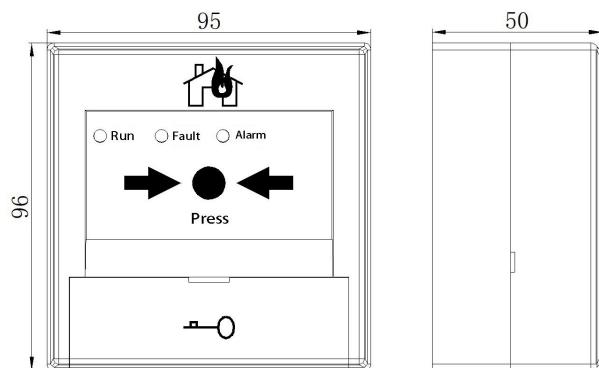


Figure 1 Schematic diagram of the appearance of the alarm button

#### 4.2. working principle

This alarm button uses pressing the alarm mode, the alarm signal is triggered switch is pressed , the alarm button red normally lit , an alarm signal through the wireless communication transmission scheme to a control panel in response to the alarm signal an alarm . When the alarm button battery power is low, alarm button transmits the battery voltage signal to the control panel by wireless , and failure light every 48 flashes second two times .

### 5. Installation Method

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

5.2 . Alarm button fixed manner :

When installed , using two screws alarm button base fixed to the series 86 (72mm wide, 49mm high, 47mm deep) on the embedded box, and then installed to the front panel button, as the installation pitch . 6 0 mm .

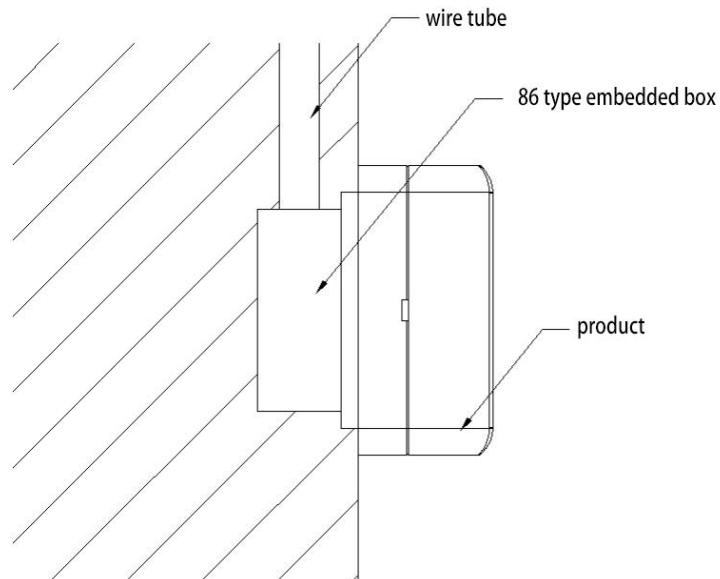


Figure 2 Installation method

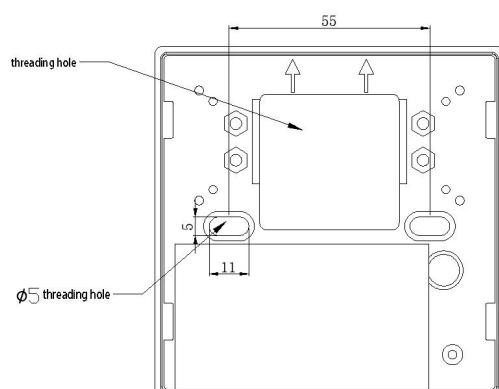


Figure 3 Installation hole distance

## 6. Test

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

- 1 . Alarm button after the installation and every year in the course of the test.
- 2 . Alarm Test: After a successful network, optionally an alarm button , it artificial alarm condition (please off linkage function fire, to avoid unnecessary alarm linkage), after the end of the test, using a dedicated reset key that the alarm button to reset , And notify the relevant management department to restore the system to normal.
- 3 . During the test failed probe by "general faults and maintenance" and "maintenance" to resolve.

## 7. Use and operation

7.1 . Network is provided: the alarm button preceded network segment of the network apparatus provided in the control panel a menu of network setting interface , arranged according to the actual situation alarm button network segment.

7.2 . Network equipment and network back:

A) Network Operation: When the control panel is in the "wireless enrollment interface", and alarm button in a non-network state, by pressing the fast network button three times, **while the green light flashes 3 times** , alarm button sending an application to the network control panel, After the application is successful, **the total number of network access displayed by the control panel + 1** .

B) disconnection operation: when the control panel is in the "wireless enrollment interface", and alarm button in a state that has accessed, rapid continuous press Network button three times, **while the green light flashes 3 times after** , alarm button is sent to the control panel back network application, the application is successful , **the control panel displays the total number of network exit + 1** .

C) the state detection: The alarm button on the power, pressing a key network times, **the green light flashes a secondary control panel as the control panel displays alarm button loop address number** indicates that the alarm button has accessed successfully, otherwise the alarm button is not Network access status.

7.3 . **Device Alarm:** When the alarm button is pressed , the red constant light, alarm button alarm signal is transmitted wirelessly to the control panel, the control panel in response to the alarm signal .

7.4 . **Device Reset: special key reset .**

7.5 . Restore factory settings: alarm button after the network, when the reset or power on, the alarm lamp long bright 10s , during which the batter networking button five times to restore the factory settings.

## 8. General faults and maintenance

The general faults and their solutions are shown in the following table:

Failure phenomenon	reason	Solution
The control panel has no status prompt after the device alarms	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	Move the device near the control panel, reconnect to the network

	nearby	and remove the source of interference
The device's red light is off	Low battery or no battery inserted	Replacement battery

## 9.Notes

- 9.1 . Signal through the wall, the signal strength will be greatly attenuated, thereby minimizing the number of partition between wireless products.
- 9.2 . When the product is mounted, away from the metal, thereby reducing the signal shielded metal article, such a metal can not be installed in the fire hydrant box cabinets and the like, or the outer metal cabinet.
- 9.3 . Installed at a low interference environment, and a large distance from the machine or electrical equipment.

## 10.File and warranty

10.1 . Packing documents:

- 1) Packing List: 1 page
- 2) Instructions : 1 copy

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 .

3 . Maintenance contact the following:

Liaoning Yingkou Tiancheng Fire Equipment Co., Ltd.

Address: No. 11-2, Kechechang Xili, Xishi District, Yingkou, Pilot Free Trade Zone (Liaoning) China , City

Fax: 0417-4835568

Postcode: 115004

Tel: 400-6930-119

Email: [info@tcfiretech.com](mailto:info@tcfiretech.com)

Website: [www.tcfiretech.com](http://www.tcfiretech.com)