



W20 WIFI/GSM network alarm panel

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1. Product Summary

W20 alarm system adopts the up-to-date digital sensor and transfer technology, which integrates burglar, and fire/gas protection for smart alarm system. W20 adopts dot-matrix, voice, support IOS and Android app software. Users can remotely control and program the alarm host Via APP, also support multi-language. The system adopts WIFI/GSM、wireless network digital signal processing technical. When alarm, it will inform alert via voice, information push, popup alarm on screen. W20 Alarm System is a advisable choice for personal house 's security, working office's security and factory's security with fashionable appearance and multi-functions.

For a better service for users, please read this user's manual before installing and operating this alarm system.

We reserve the right to manual modification and explanation, so the manual changes without any prior notice.

2. Main Features

- ◆ WIFI and GSM dual- network transmission alert, two network backup mode selection. (W20)
- ◆ 32 wireless zone type are optional: disable, delay, burglar, perimeter, fire, gas, duress, panic, medical, doorbell, smart.
- ◆ Support to auto push messages about doorbell zone.
- ◆ Support 8 RFID card maximum, swiping to disarm. Content of each RFID card can be editable.
- ◆ 8 alarm numbers. Alarm phone type can be set in SMS, dialing or SMS & dialing. (W20)
- ◆ Support IOS and Android APP software, user can operate and program alarm host via app software.
- ◆ Support arm/disarm, system, alarm information pushed in multi-language, alarm information pop-up on the screen, alarm voice and vibration.
- ◆ Intelligently connecting with network in short time, the host panel can be controlled by more than 1 mobile phone at the same time, joining networking center and centralizing monitoring of over 1 host panel with app. and also can share selectivity function to other user.

- ◆ zone name can be edited by users, Check all states of the host in real time.
- ◆ Support remotely updated the firmware by APP software.
- ◆ Real-time monitor the open/close state of door and window, protecting the armed zone from failure with open door/window.
- ◆ Built-in siren, the volume have three level can adjust, can work with wireless siren.
- ◆ support remote operation by phone, support arm, disarm, monitoring and so on.
- ◆ 2 arming/disarming timers can be set based on weekdays and weekends.
- ◆ Built-in high power capacity 800mAh 3.7V lithium battery can be standby 8 hours at least.
- ◆ Support 100 pieces of latest alarm records and querying via APP.

3. System Introduction

3.1. Installation

3.1.1. Panel Installation

The panel can be installed on desk or hanged on wall with an easy and convenient operation. Please install the bracket first before installing the panel on a desk or wall and make sure that the panel is installed in the center with good WIFI signal and wireless signal reception. Keep the panel away from big metal objects, high-frequency household appliances, concrete walls and firewall.

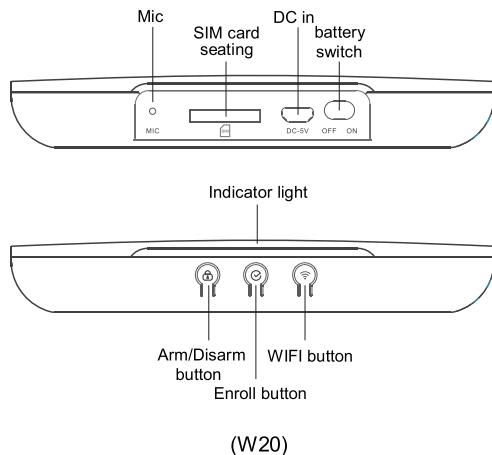
3.1.2. Wireless Detectors Installation

Install the detectors in an effective distance from alarm host as the user's manual of wireless detector describes. Make sure to test the detectors and alarm system after installation.

Wireless transmitting function: when the alarm system may not receive the signal from wireless detectors due to far distance or wall-shading between wireless detectors and alarm host, the wireless repeater can be chosen to lengthen transmitting distance.

3.2. Panel Introduction

1. Front of panel



(W20)

Arm/Disarm: Shortly press to switch between away arm、home arm、disarm.

Enroll: Shortly press to query GSM working status. (W20)

Shortly press to query phone line status.

Long press to enroll wireless accessories.

WIFI button: Long press into WIFI intelligent networks status.

2. Indicator light

Status	Internet Connected	Panel Alarm	Router Connected	Internet Connecting
Away Arm	Red light long bright	Red light quick flashing	Red light flashes once	Red light slow flashing
Home Arm	Yellow light long bright	Red light quick flashing	Yellow light flashes once	Yellow light slow flashing
Disarm	Cyan light long bright	Red light quick flashing	Cyan light flashes once	Cyan light slow flashing

Indicator	Status
Green light	Enrolling
Violet light	Intelligently Internet Connecting
White light	Firmware upgrading
Blue light	GSM module status Phone line status

4. Prompt Voice illustration

Prompt Tone	Illustration
A short "Di"	Enrollment of wireless accessory succeeded Arm
A long "Di"	Wrong operation The wireless accessory has been repeatedly enrolled .
Two short "Di"	Correct operation Disarm
A short "Di"/s	Arm delay Alarm delay
A long "Di"/15s	Low power of battery Phone line fault

3.2.2. Function Introduction

1. Zone type

Zone Type	Alarm Delay	Output Alarm Voice	Arm	Disarm
Bypass	✗	✗	✗	✗
Delay	✓	✓	✓	✗
Burglar	✗	✓	✓	✗
Perimeter	✗	✓	✓	✗
Fire	✗	✓	✓	✓
Gas	✗	✓	✓	✓
Duress	✗	✗	✓	✓
Panic	✗	✓	✓	✓
Medical	✗	✓	✓	✓
Doorbell	✗	✗	✗	✗
Smart	✗	✓	✓	✗

Smart zone: The host won't ring alarm at once when detector in the zone get triggered by 1 time, it will ring alarm if detector get triggered again in the same zone within 40s.

2. Swiping RFID card to inform

The user can swipe RFID card to disarm, and host will send the RFID card notification to user mobile phone .

3. Door open/close function

3.1.door Open/Close

User can set door open/closed function for any zones to avoid arming failure when door's open. When door open/closed setting is enabled/activated, all doors/windows should be closed to arm.

3.2. Force arm

When user wants to arm the zones with open door, it needs to enable the force arm function. When arming compulsively, the zones with open door are disabled. Only the door is closed, the zones will work normally.

3.3. Doorbell zone

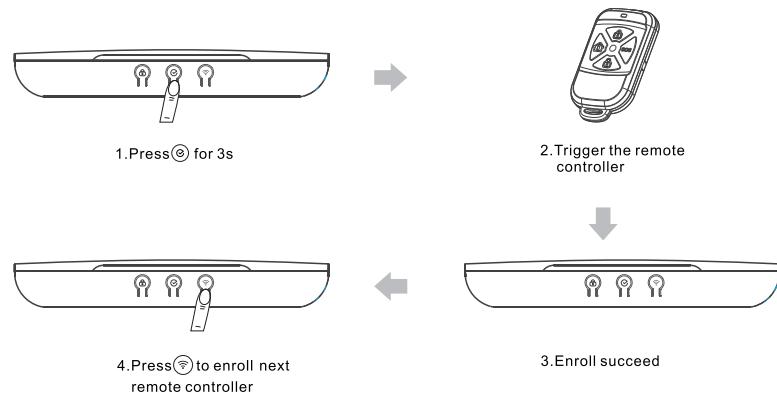
When set as "doorbell zone", control panel will ring "Ding-dong" if sensors got triggered under "disarm " or "home arm "status. control panel will not only ring "Ding-dong" but also auto push messages to user's mobile phone if sensors got triggered under "away arm" status.

4. System Operation

4.1. Remote controller

1. Enroll remote controller

Under the normal status without alarm event, long press “” button for 3s until hearing a short “Di” from Host and indicator light color turn in Green , it enters remote controller enrolling status, then user can start to trigger the remote controller to get it enrolled. To go enroll next remote controller, press “” button to go enroll next one. If the current indicator light is flashing, it means the current remote controller has not yet been enrolled and user can trigger remote controller to enroll. If enrollment succeeded, the host will prompt a short “Di”, meanwhile the indicator light will turn flashing into long bright, it means enrollment of remote controller is successful. If the current indicator light is long bright, it means the current address has been already enrolled. User should delete previous one before re-enrolling.



Note: If heard a long "Di", it means the remote controller has already been enrolled.

2. Delete remote controller

In remote controller enrolling status, press " " button for 3s to delete the existing remote controller. After user heard two short "Di" from host and the indicator turn long bright into flashing, deletion is successful.

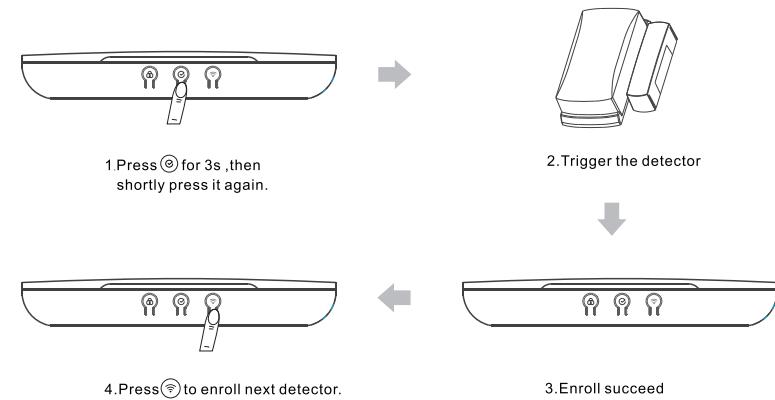
3. Exit Remote Controller enrollment

In remote controller enrolling status, short press " " button 4 times to exit.

4.2. Detector

1. Enroll PIR detector

Under the remote controller enrolling status, short press " " button one time, then host enters the detector enrollment. Then short press " " button into the next zone, If the current indicator light is flashing, it means the current detector has not yet been enrolled and user can trigger the signal of detector to enroll. If enroll succeeded, host will prompt a short "Di", meanwhile the indicator light will turn flashing into long bright, it means successful enrollment of detector. If the current indicator light is long bright, it means the current address has been already enrolled. User should delete previous one before re-enrolling.



Note: If heard a long "Di", it means the detector has already been enrolled.

2. Delete Detector

In detector enrolling status, press button for 3s to delete the existing detector. After user heard two short "Di" from host and the indicator turn long bright into flashing, deletion is successful.

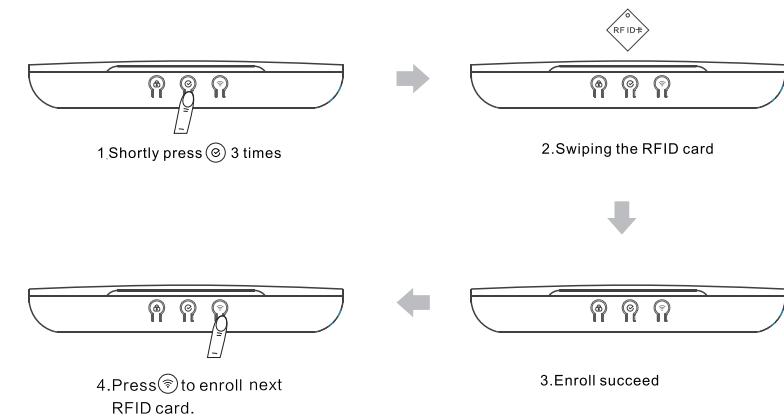
3. Exit Detector Enrollment

In detector enrolling status, short press button 3 times to exit.

4.3. RFID card

1. Enroll RFID card

Under the remote controller enrolling status, short press button twice, host enters the RFID card enrollment. Then press button to go enroll next RFID card. If the current indicator light is flashing, it means the current RFID card has not yet been enrolled and user can swipe card in the swiping area of host to enroll it. If enrollment succeed, host will prompt a short "Di", meanwhile indicator light will turn flashing into long bright, it means successful enrolling of RFID card. If the current indicator light is long bright, it means the current address has been already enrolled. User should delete previous one before re-enrolling.



Note: If heard a long "Di", it means the RFID card has already been enrolled.

2. Delete RFID Card

In RFID card enrolling status, press "⌚" button for 3s to delete the existing RFID card. After user heard two short "Di" from host and the indicator turn long bright into flashing, deletion is successful.

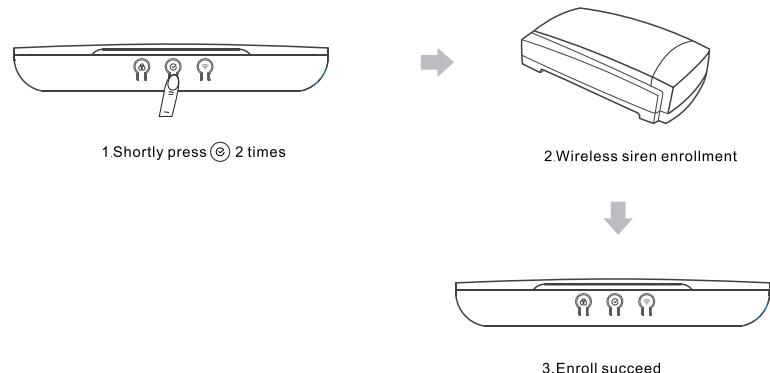
3. Exit RFID Card Enrollment

In RFID card enrolling status, short press "⌚" button twice to exit.

4.4. Wireless siren

1. Enroll wireless siren

Under the remoter controller enrolling status, short press "⌚" button three times, host enters the wireless siren enrolling status. If the current indicator light is flashing, it means the current wireless siren has not yet been enrolled and user can trigger it to enroll. If enrollment succeeded, host will prompt a short "Di", meanwhile the indicator light will turn flashing into long bright, it means successful enrollment of wireless siren. If the current indicator light is long bright, it means the current address has been already enrolled. User should delete previous one before re-enrolling.



Note: Wireless siren can also be enrolled with host by manually inputting wireless address code at APP of mobile phone, when user chose to enroll wireless siren in 2 ways, Triggered the signal of wireless siren to enroll is preferred.

2. Delete wireless siren

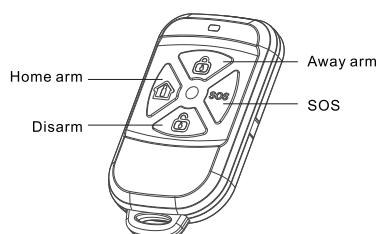
Under the wireless siren enrolling status, press "(SOS)" button with 3s to delete wireless siren, after user heard two short "DI" and indicator turn long bright into flashing, deletion is successful .

3. Exit wireless siren

In wireless siren enrolling status, short press "(C)" button one time to exit.

4.5. Basic operation

4.5.1. Remote controller



1. Away Arm

Away arm means when nobody is at home, home needs all around protection. When away arming is enabled, all detectors will be keep alert, so when something or somebody (fire, gas, theft) trigger the detector, panel will ring an alarm at once.

2. Stay/home Arm

Stay/home arm means when somebody at home, they want the outdoor detectors to keep alert, including door, window or balcony detector, while indoor detectors are dumb. So they will choose home arm function, which means part of detectors are keeping alert, while the others are not. Importantly, before enabling the home arm function, user need to add the detectors which you need them to keep alert in the zones into home arm list on app

3. Disarm

Disarm refers to terminate alarm or enable all the detectors not to work. In the disarming status, when the detectors are triggered, panel will not to give an alarm. (except the 24 hours zone type)

4. Emergency Alarm

When emergency happens, press the SOS button on remoter controller into alarm status.

4.5.2. Recovery of Factory setting

As soon as host charges the power, press “” button and “” button together within 15 s, till the host prompt two short “DI”, then factory setting is recovered.

4.5.3. Query GSM module/phone line status

Under standby status, short press “” button, enter the GSM module status instructions.(W20)

Indicator light	Status
Long bright	GSM module works normally
Quick flashing	GSM module fault or initializing failure
Slow flashing	GSM module has weak signal or no signal

4.5.4. Factory setting:

Arm/disarm information push: close
System information push: open
32 zone type : Burglar
The time of Arm delay: 0s
The time of alarm delay: 15s
PSTN fault detection: close
The dial times of phone: 5 times
The vibration of phone: 0 time
The volume of siren: High
The arm/disarm siren prompt: close
Alarm duration: 5minuts
Wireless siren: close
Arm/disarm timing: close
Open/close door: close

4.5.4 Answering alarm call & remote operation

1. Answering alarm call (W20)

When alarm happens, panel will automatically call to the preset number. When users answer alarm call, panel will send voice alarm report to users. After that, there are 5s for users to input Instruction (table 1) by phone keypad. If users have no any operations after answering, the panel will reply the voice alarm report for three times and then hang up automatically.

Note: when user opens monitoring, panel will force closing the siren automatically.

If there are no any operations within 60s, panel will hang up automatically.

Note: If there are no any operations within 60s, panel will hang up automatically.

The user must set the Ring time as any value but zero.

Table 1:

Instruction	Implication	Instruction	Implication
1#	Away arm	7#	Open/close monitoring
2#	disarm	8#	Open/Close Intercom
5#	Open siren	0#	Hand up
6#	Close siren		

(W20)

5. Usage of APP Software

5.1. App installation

Scan the the following QR code, or users can search the key word“Smart Alarm”、
“Smart”、 “Alarm”at“APP store”、 “Google Play” to download and install.



IOS



Google Play

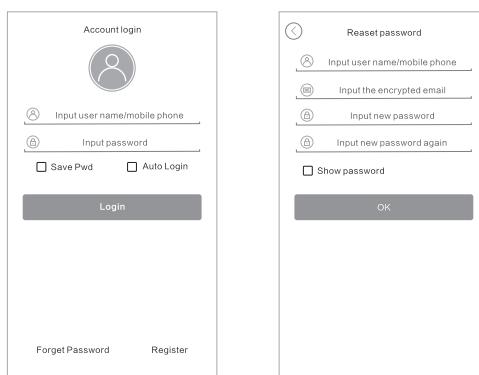


Android

5.2. Register account

Enter the APP software, register one account. Registered as follow:

Click the[Registrar]- input register information - click[Registrar].

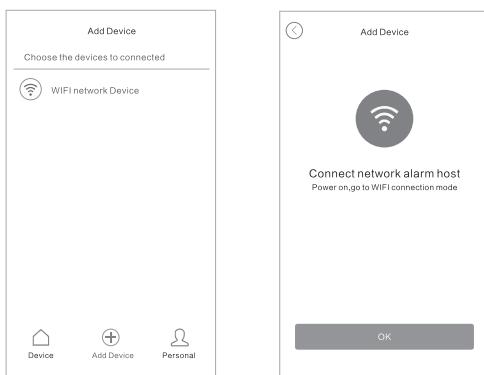


Note: pls save email address, once you forget password you can set new password via email.

5.3. Add device

The process of adding device helps host to get the WIFI connecting password, and add it to the device list at app.

1. Enter the app [Add Device] page, choose [WIFI network Device], go into the connect network alarm host page.

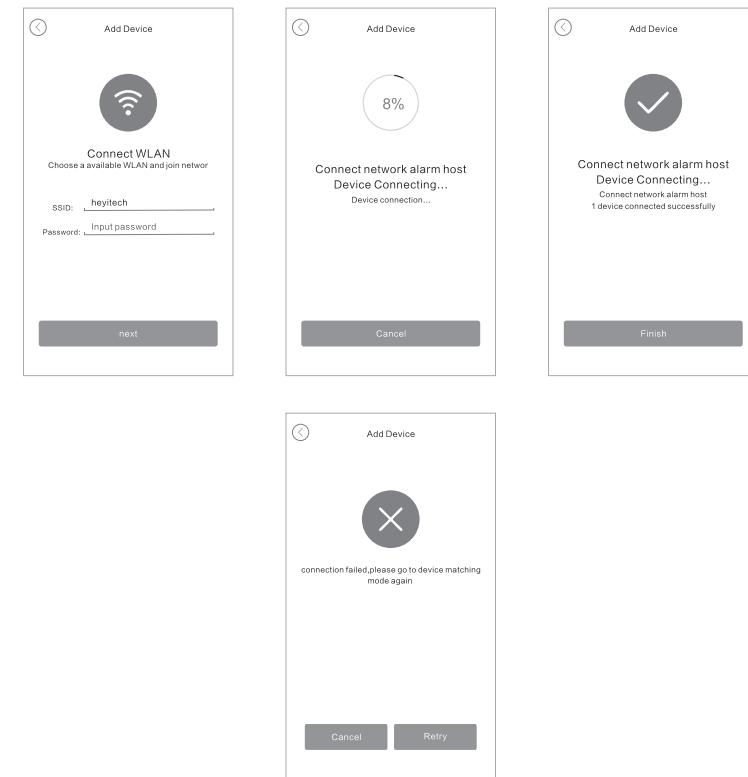


2. Long pressing host  button for 3s, the host go into the network connection mode, meanwhile the indicator light will turn into violet light and flash slowly.

Note: When WIFI module is initialized, long press host  button for 3s, the host will prompt long "DI", it means the host unable to go connect network mode, so the user must try again same operation is ok.



3. On the connect network alarm host page, choose [next], go into WIFI input password page. After input the WIFI password, then choose [next], go into the connect network page. APP will start count down 100s for connect time, when connection succeed, go into the successful page. when connect fail, go into the connect fail page, the user need click [Retry], connect again.



Note: Connect network must be processed and requiring the APP and host under same WIFI environment.

5.4. APP usage

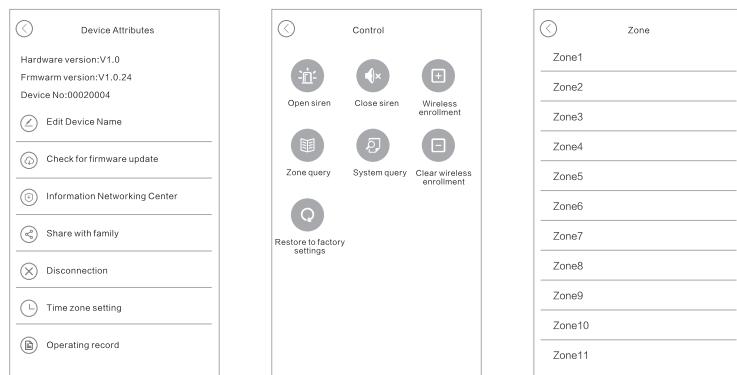
1. App home page

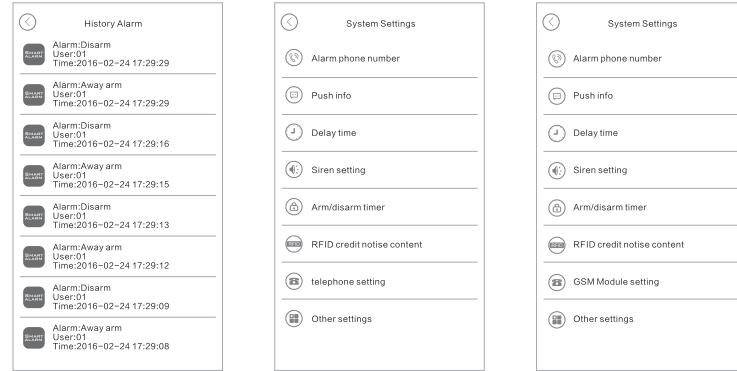
On [Device] page choose one device, go into the device home page, operate arm/disarm.



2. Device operation and programming

On device home page, click top right corner [Device Properties], the under page [Control], [Zone], [Alarm], [System], go into the operation page.

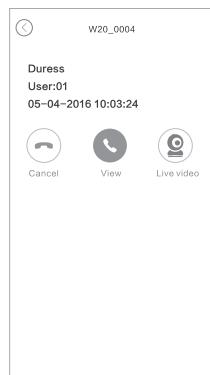




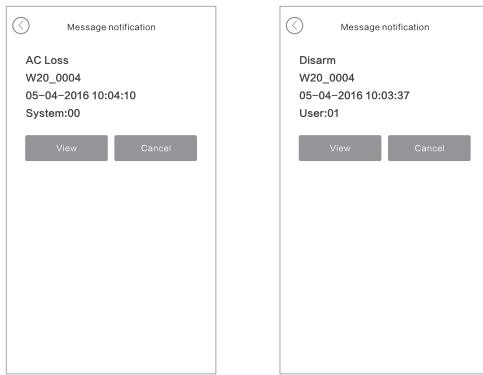
5.5. Push Notification

1. Alarm notification push

On Android app, when alarm notification push, the mobile will auto popup on the screen, with alarm sound and alarm vibration. On the alarm notification push screen direct click [Live Video] into IP camera app to check the video; click [View] into my device page. the ring time of alarm push can set at [Personal] --- [System setting].



2. Arm/disarm information, system information push.



6. SMS Query & Setting

6.1 Introduction

SMS Order adopts that users send order to panel in advance, and panel send prompt message or setting module to users after receiving the order, then users can reply panel with needed setting data according to module format request. Or users can directly send the edited message to users according to the format request of module.

Note:

1. Please use the English input method punctuation when inputting punctuations.
2. Message setting includes some help contents and parameter ranges. Please modify them with the strict message format and ranges and do not add any unnecessary characters and blank spaces, add or delete line breaks in message and exceed the limited inputting digits.
3. If the message users sent is not fitted for the panel's format or range, panel will reply "Setting failure, wrong input order format or informal characters" to users.

6.2 Modify panel language

Item	SMS by User	SMS Reply by Panel
Simplified Chinese	Program Password,0086	设置简体中文语言成功!
English	Program Password,0001	Set English successfully!

6.3 Help order format

Item	SMS by user	SMS reply by panel
SMS Help Index	Program Password,?	01: Away arming 02: Stay arming 03: Disarming 04: Monitoring 05: Open siren 06: Close siren 07: Time calibration 08: System query

6.4 Remote operation format

Item	SMS by User	SMS Reply by Panel
Away arming	Program Password, 01	Away arm successfully
stay arming	Program Password, 02	Delay arm successfully
Disarming	Program Password, 03	Disarm successfully
Monitoring	Program Password, 04	
Open siren	Program Password, 05	Open siren successfully
Close siren	Program Password, 06	Close siren successfully
Time calibration	Program Password, 07	Set Time calibration successfully X X X X - X X - X X : X X : X X X X X
System query	Program Password, 08	X X - X X X X : X X : X X Status: Stay arm/Away arm/ Disarm AC power: Normal/ Fault Panel battery: Normal / Low GSM signal: 0-5
Delete all wireless accessories and RFID cards	Program Password, 98	All wireless accessories and RFID cards are deleted successfully!
Restore factory setting	Program Password, 99	The system has been restored factory setting!