## 8-16 road

## alarm host manual



English version
V3.0

## Professional alarm manufacturers

## User instructions

This installation programming manual is applicable to the installation engineers who first installed the multi-function antitheft alarm control host and have used other types of anti-theft control / communication host.

This manual without any form of guarantee and commitment, if this manual or the mentioned product information, the direct or indirect benefit loss or business termination, or by any direct, indirect, improper installation, intentional damage and hidden trouble, the company and its employees will not bear any responsibility for its.

This manual can contain technical inaccuracies or printing errors. We will always improve or update the products or procedures described in this manual, and the contents of this manual will be updated regularly without notice, which will be added to the new version of this manual.

## Preface

Thank you for choosing multi-function anti-theft alarm control host, as can fusion information age development requirements of a new generation of alarm network control host, the alarm host with its rigorous professional design, many humanized and intuitive convenient control management mode, various communication information format, and double mutual backup alarm transmission way, for all kinds of financial or other outlets to form a more reliable networking alarm system provides a new comprehensive solution.

I hope this advanced alarm system will bring safety and convenience to your life and work!

## Safety instructions

## Electrical safety aspect

There is an ac 220 V high voltage access in the machine. In order to avoid serious damage caused by the possible motor, please be sure to cut off the AC 220 V power supply introduced by the host engine when installing or maintaining the host.

When you connect the 220 V AC power cable to the terminal in the host, you should ensure that the metal part of the wire is not exposed to the terminal, and the metal part of the wire cannot touch or may touch the case of the chassis.

The terminal with the grounding symbol should be reliably grounded according to the requirements, and there are multiple lightning protection design inside the host, but this requires the reliable grounding of the system, otherwise these protective measures can not play an effective protection role.

The wiring must be installed strictly according to the host wiring diagram. Incorrect installation and wiring will not only cause the system to not work properly, but also may cause damage to the internal circuit of the equipment.

## Operational security

Please install this system through a professional technician and please read the information provided in this manual before you are ready to power on.

Due to unpredictable reasons such as transportation, the hardware in the host may become loose and fall off. Before installing this product, please open the chassis to check whether the parts are loose and fall off. If there is any major defect that you cannot solve, please contact your dealer as soon as possible.

Dust, moisture and drastic temperature changes can affect the life of the host, so avoid placing in these places.

Please install the host in a hidden or long-term protected by the detector as far as possible, and the control keyboard of the system should be installed in the manned or protected by the detector for a long time.

There are many internal parameters of the system, so please operate carefully without training. If there are any technical problems in the use, please contact the verified or experienced technical personnel.

## Security in terms of system operation

The system requires regular maintenance and testing by the installation engineer (at least once a year), and regular alarm tests (at least once a week) are recommended to ensure that the system works correctly and effectively at all times to ensure the operability and safety of the system.

The installation engineer shall conscientiously provide the user with a daily system maintenance code, and shall inform the user of the correct use of the equipment, the limitations of the system and the composition of the system, and let the user know how to conduct the periodic alarm test.

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## Chapter 1: A System Overview

This series of anti-theft alarm host is a number of advanced technology, functions in one of the excellent intelligent security technology prevention products. The anti-theft system consists of control keyboard, user host, remote control, infrared detector, door magnetic, smoke detector and strong sound siren. Convenient for installation and simple in operation, it can simultaneously store 8 groups of user alarm phone numbers (fixed phone or mobile phone numbers) and 4 groups of center numbers (such as 110 command center). It can not be used separately, or regional networked through telephone lines. Widely used in a variety of financial business places, a variety of warehouses, commercial stores, office offices, enterprises and institutions, families and other security systems. Support to expand IP network communication, 2G (GSM) / GPRS communication, 4G (GSM) / GPRS, support to expand LORA, receiving module, voice broadcast module and other functions. Support fixed-line and IP and 4G multinetwork combination, support CID network alarm, support cloud alarm. APP / wechat / PC software alarm alarm. Support IP LAN, WAN and other transmission. Support for GPRS transmission.

## 1.Explanation of daily operationnouns

Outside defense: means that all the defense areas are in the defense state, and the system will produce alarm signal after the defense area is triggered.
Home protection: can allow the user to only the perimeter or need to guard the defense area, and the automatic bypass pre-set indoor defense area so that the user can walk freely indoors in this mode without generating alarm. Rescue: cancel the security task (refers to theft), also known as the alert.

Bypass: temporarily close the defense area. When some areas have faults or some activities affect the defense, the bypass can make it do not work, withdraw once, and cancel the bypass area.
Note: Bypass defense areas are not protected.
Defense zone trigger: withdrawal state, the detector detected someone, does not alarm. For example, the door is opened by the magnet and the main body part, which is the door magnetic trigger.
Alarm: under the defense state, the detector in the defense area triggers the alarm.

Exit delay: after the host defense deployment, provide a period of time for the user to leave.

Entry delay: When the user comes back and enters the trigger detector from the gate, the host will not alarm immediately. Provide the user to withdraw the host.

Password: a combination of numbers used for deployment or other special functions.

## 2. Notes before use

- Before setting the alarm telephone number of the 110 command center of the Public Security Bureau, the " 110 " can be applied after the consent of the public security department The number is stored in the user host, otherwise the company is not responsible for all the consequences arising therefrom.
- Please read the project installation programming manual carefully, and pay attention to the marks and instructions of the user host, so that you can better master the compilation Process and use shall be properly installed.
- The AC power supply must be checked in the whole system installation project before access to the user host.
- When connecting the battery, note that the red positive line is inserted in the positive extreme (+); the black negative line is inserted in the negative battery Extreme (-).
- When installing wiring, do not use metal, hand knock, touch the electronic components on the circuit board, so as not to damage the host.
- In order to ensure the 24-hour uninterrupted operation of the main engine, the main engine should be connected to the 220 V power switch during installation End, avoid cutting off the mains power supply when pulling the brake.
- If the mains is out frequently, the service life of the internal backup battery will be shortened. Do not disassemble the user host at will, in order to avoid accidents and artificial damage.


## 3. Host features and functions

## Programmable zone characteristics

- 8 Defense zone host: support 8 wired defense zones and 16 wireless defense zones 16 defense zone host: support 16 wired defense zones, 16 wireless defense zones Each wiring guard area can be set to include immediate, entrance, internal guard area, 24 hours, fire, emergency, gas, gas, medical, 24 hours hijacking, dismantling, key cloth, doorbell, the second group of delay guard area, access control, one of the 14 types.


## Strong system control capability

- Using embedded system design, 32-bit ARM, processor, faster running speed, super large capacity design.
- The host has an internal calendar date clock (annual error within 5 minutes), and through the keyboard Chinese LCD display, also It can be viewed through the LED keyboard.
- Chinese LCD control keyboard can be deployed and other operations and various alarm and system information display.
- The system supports up to 64 output, which can realize system evacuation, zone evacuation, system alarm, zone alarm Defense area to follow the linkage output, convenient and flexible.
- The system supports up to 10 event-driven functions, which can realize the timing of evacuation in a single defense area.
- Single defense area timing bypass, a single linkage output point timing switch, can meet some special needs of the occasion, can do no People on duty
- Automatic timing deployment and withdrawal capacity, the system can set 3 time periods a day and weekly cycle, the system for automatic fortification or withdrawal as planned. And support Saturday, Sunday all day hou cloth defense.
- System programming and reading system configuration, distribution and defense operations, various alarms and system information display support two modes:

> Chinese (English) LCD control keyboard, more intuitive.(Recommended by the manufacturer)
$\checkmark$ The LED keyboard display. The system supports up to 5 keyboards.

- Real-time printing function, can achieve the alarm, all operations of real-time printing function.
- Support 4 zoning management, different defense areas are divided into different areas, to realize the independent control and evacuation of different areas.
- Support expansion recording module: can record a piece of voice content, dial the phone will automatically play: such as: the center road is small, learn emergency, request immediate support, etc.(This function is optional)


## Safety and stability

- The host has the automatic protection function of the backup battery. When the backup battery voltage is lower than the protection value, it will automatically shut down to avoid storage, discharging the battery and damage the battery.
- Keyboard password anti-guess function, continuous input password error 115 times (programmable), keyboard lock for $1-255$ seconds (programmable) does not respond to any keyboard input.
- The system can support 1 group of host passwords and 14 user passwords, as well as the password threat alarm.
- Multiple trigger alarm function in the key defense area: the trigger response times can be set for $1 \sim 9$ times in $0 \sim 255$ seconds, and the false positives due to the detector are completely eliminated.(Recommended by the manufacturer)
- Circuit anti-short circuit damage: no fuse design, reduce maintenance, comprehensive line protection, to prevent line cutting, short circuit damage.
- Multiple triggering of the defense area can set the number of messages sent to the reporting center or, which can effectively prevent the detector misalarm from causing high communication costs.(Recommended by the manufacturer) - After the telephone line is illegally cut off, the alarm system sounds the horn on the spot to alarm. If the GSM host is used, it can notify the user through GSM SMS or telephone.
- The host has a voice prompt function, alarm voice dial: 4 central telephone, 8 user phone, the alarm situation automatically dial 110 command center alarm phone, quickly transmit the alarm situation to the command center (network users). And automatically call the user's mobile phone, fixed phone to notify the user (non-connected users). No omission: intelligent loop dialing to ensure that the receiver receives the alarm information.


## Multiple forms of communication

- Using international standard Contact ID communication protocol and DTMF $4+2$ communication protocol, it is fully compatible with a variety of alarm center receivers on the market and supports zero call fee network. Is the best model to network with the security center
- Telephone line disconnection timing detection function, automatic timing communication test and manual test function.
- Chinese SMS transmits various alarm and evacuation information (GSM host only)
- Can regularly send text messages to the user's mobile phone, let you have a stable heart at any time.
- Support extended GSM (GPRS) 2G / 4G module / IP network module / CDMA (GPRS) module / LORA communication way.
- Support APP alarm / WeChat alarm, PC software alarm alarm (optional, open this function, there is a certain cost)


## System event memory ability

- The system has the ability of recording various events, and can automatically store the recent 50 alarms and 50 operation events, type and occurrence time, and can be read through the keyboard at any time. It is more intuitive to query with the LCD keyboard.(Recommended by the manufacturer)
- Users can use the local keyboard password for deployment, evacuation, or use the remote control for deployment, evacuation, emergency alarm and other operations, can also use the mobile phone for remote telephone deployment, evacuation, listening to the scene of the location of the alarm sound, control and other operations, convenient for the majority of users to use.
- GSM host also supports SMS deployment, SMS modify the host name, defense area name.
- GSM host supports 8 groups of specified numbers free withdrawal function, convenient and practical.


## 4, Technical Data

| Host type8  <br>  zo | 8 Defense zone | 16 Defense zone |  | Host type | 8 Defense zone | 16 Defense zone |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| defence area |  |  |  | storage battery |  |  |
| Cable defense zone | 8 | 16 |  | Reserve batteries are recommended | 12V7AH Lead acid battery |  |
| Wireless zone | 16 |  |  | Battery charging voltage | 13.8 V |  |
| Type of loop in the zone | End resistance of the 3.3K line |  | $3.3 \mathrm{~K} / 6.8$ <br> K <br> Linear resistanc e | Battery low pressure | 10.8 V |  |
| Anti-zone circuit current | About 1 mA |  |  | Wireless features |  |  |
| Prevention area response time | 100 ms |  |  | working frequency | $315 \mathrm{M} / 433 \mathrm{MHZ}$ |  |
| Type and type of prevention area | 14 Species |  |  | working | superhet |  |
| source |  |  |  | sensitivity | -105dBm |  |
| AC input | 16.5 V |  |  | tape width | $\pm 180 \mathrm{KHz}$ |  |
| The alarm number | $13.8 \mathrm{~V} / 800 \mathrm{~mA}$ |  |  | Wireless zone | Sixteen |  |


| outputs <br> current |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Auxiliary <br> power <br> output | 13.8 V, max. 800 mA | Wireless <br> remote control | Eight |  |
|  | current <br> consumption |  | environment condition |  |
| mainboard | 80 mA | working <br> temperature | $-20 \mathrm{C}-50 \mathrm{C}$ |  |
| LCD keyset | 90 mA | Working <br> humidity | Not greater than 90\%, <br> non-condensation |  |
| LED keyset | 50 mA | external dimensions (mm ) |  |  |
| GSM module |  | Await <br> 150 mA | Host case |  |

## 5. Name and use of the main parts



A Schematic diagram of LCD control keyboard


A Schematic diagram of the LED control keyboard
1.Keyboard LCD Chinese (English) display screen
2.Keyboard digital key area (0-9, *, \#)
3.Keyboard emergency key (sos)
4.LCD keyboard function indicator light (power, Armed, comm, alarm)
5.Shortcut keys (Away [ok / enter], Stay, Disarm [Exit / return], bypass)
6.set
7.LED Keyboard zone indicator
8.LED Keyboard function indicator light
notice
A single host can connect up to four keyboards. When connecting more than two (including two) keyboards, each keyboard should set different addresses: LED keyboard address is 128~132, and LCD keyboard address is 0~3, otherwise the alarm host and keyboard will not work properly. refer to the keyboard control interface in the wiring description section.

## Chapter 2 A ming Guide to Quick Programming

## Step 1: Connect to the wired detector (refer to the chassis face cover system diagram for detailed wiring diagram)

(For wireless detector, please refer to the "pairing wireless detector with host" method on page 11)

1. If the alarm host is power off, the corresponding detector (such as emergency button, infrared, door magnetic) and other equipment shall be connected to the alarm main board defense port: Z1-Z8 port respectively.
2. The default of the zone port is normally closed input. Each zone port should be connected with 13.3 K or 6.8 K resistance, and the zone port without the detector is directly connected with ZN and COM 2 ports.( $N$ represents $1-8$ ) The following 2 figures:


Figure (1) with 3.3 K resistance


In unused areas, directly with resistance

Figure (2) Resistance short connection

## Step 2: Connect the control keyboard (no keyboard to ignore this step)

The control keyboard is connected to the alarm motherboard keyboard port (RED / BLK / YEL) from left to right corresponding to the keyboard wiring "red, black, yellow", and connect 13P line with the same color. Refer to the back "motherboard structure diagram" or the main engine face cover wiring diagram.

## Step 3: connect the antenna, the hom

Connect the pull rod antenna inside the accessory package to the yellow copper column port in the upper left corner of the motherboard, twist with the screw, and access the black GSM suction cup antenna to the "GSM antenna holder" position of the alarm motherboard. The positive horn is connected to BELL + and the negative horn is connected to BELLport.

## Step 4: Insert a SIM card (the 2G / 4G version only)

Insert the SIM card into the motherboard SIM card nest (note the gap toward the lower right corner), and support China Mobile and China Unicom GSM cards and IOT cards. If it is the IP network version, you need to insert the network cable and connect to the alarm center software platform through the netword.

## Step5: Power-on

Connect the 220V power cord to the safety seat (fire wire, zero line, ground wire), host LO indicator flash (1 second), after The backup power cord is connected to the backup power supply (12V / 7A) according to the red " + " and black "-".

## Step 6: Host fast programming Settings

How to enter the programming settings with the control keyboard:
Keyboard input "888888 + programming", the keyboard "Settings" light is always on, enter the programming mode.

When the host is in place, the keyboard enters the "123456" + "Remove" key. Then enter "888888 + programming" to enter the programming mode. At this point, input the corresponding programming code and parameter value + cloth defense key to modify the parameters.

1. Set the alarm user number, mobile phone number or landline number (code 50) can set 8 user numbers.
in the programming state, the coding format is: $50+2$ user number + 3~11 phone number + arrange the first alarm user: input "5001 + 3~11 phone number + arrange defense"

The second alarm user: input "5002 + 3~11 digit telephone number + defense"

The third alarm user: input "5003 + 3~11 digit telephone number + defense"
The fourth alarm user: input "5004 + 3~11 digit telephone number + defense"

The eighth alarm user: input "5008 + 3~11 digit phone number + defense"
After setting a user number each time, hearing the keyboard "drops" represents the success of setting. If you hear "drops" 3 sounds, it means the setting failure. Re-input "50 + 2-bit user number + 3~11-digit phone number + defense". If the wrong number is lost, press the "withdraw" key, and then re-input " $50+2$ user number $+3 \sim 11$ phone number + defense".
2. Set the Event Reporting User Mode (2G / 4G version code 56 only)

In the programming state, the encoding format is: $56+A A+B C+$ layout. The specific code significance is as follows: AA (2-bit user number): corresponding to the 50 code user 01-06.

B (alarm notification mode): 0: send text; 1: call; 2: send text and call; 3: no text, no call.

C (withdrawal notice mode): 0: Do not send text messages; 1: send text messages; 2: send text messages, do not send text messages; 3: Do not send text messages, send text messages.

If the first user is set as " $56+01+10+$ defense" representative to the first user to call the first user, the withdrawal defense does not receive SMS prompt.

If the second user is set as " $56+02+10+$ defense" representative of the alarm to the second user to call, the withdrawal does not receive SMS prompt.

If the third user is set as " $56+03+01+$ defense" representative alarm to the third user, the withdrawal to receive SMS prompt. Other users can be set up in turn.
3. Wireless detector is paired with the host (the host supports 16 wireless detectors)

In the programming state, the encoding format is: $20+2$-bit anti
-area code + trigger detector + keyboard layout anti-key.
Learn the first wireless detector: $20+01+$ trigger detector

+ keyboard pad.
When learning the second wireless detector, keyboard input: 20 + 02 + trigger detector + keyboard cloth antikey.
When learning the third wireless detector: $20+03+$ trigger detector + keyboard pad key.
When learning the fourth wireless detector: $20+04+$ trigger detector + keyboard pad key.

For a wireless detector, press the "cloth" key and hear the keyboard "drop" representing the success of matching learning. If you hear three "drops", it means the pairing failure. Need to learn again. When pairing, multiple wireless detectors cannot be turned on at the same time, and there can be no other signal interference in the same band, otherwise it is easy to learn the wrong matching signal.
4. Wireless detector is removed from the host

- In the programming state, the coding format is: $20+2$ bit defense area code + deployment
- If delete the first wireless detector keyboard input: $20+01+$ deployment.
- If the second wireless detector is deleted, the keyboard input: $20+02+$ deployment.
- After deleting a wireless detector each time, press the "cloth" key and hear a "drop" representing the deletion.

5. Wireless remote control paired with host (host supports 8 remote

In the programming state, the coding format is: $21+2$ remote control number + trigger remote control key + keypad :

Learn the first wireless remote control keyboard input: $21+01+$ remote control key + keyboard - key.

Learn the second wire ss remote control keyboard input: $21+02+$ remote control key + keyboad key.

With a wireless remote control, press the keyboard "arrange" key and hear the keyboard "drop" to represent the success of matching learning. If you hear three "drops", it means the pairing failure. Need to learn again. When pairing, multiple wireless remote controls can not be triggered at the same time, and there can be no other signal interference in the same frequency band, otherwise it is easy to learn the wrong matching signal.
6. Wireless remote control is removed from the host

In the programming state, the encoding format is: $20+2$-bit remote control number + cloth anti-key.

If delete the first wireless remote control input: $20+01+$ cloth anti-key.
If delete the second wireless remote control input: $20+02+$ cloth anti-key.
Delete a wireless detector each time, press the "cloth defense" key and hear a "drop" to represent a successful deletion.
7. How to deploy and remove the host host ( 6 ways)

Method 1: deploy and withdraw defense through the keyboard:
Keyboard cloth guard: 123456 + cloth guard key
Keyboard withdrawal: 123456 + withdrawal key
Method 2: deploy and withdraw through the remote control:
press the or $\bigcirc$ key of the remote control:
Whether keyboard deployment, evacuation, or remote control deployment, evacuation, each operation heard the keyboard "drop" represents "successful deployment or evacuation; in the deployment, if the area is not ready (triggered state), will hear" drops " 3 , need to check the abnormal condition of the area, such as the recovery, can be deployed again.

Method 3: SMS protection, edit SMS: 123456 + defense, sent to the mobile phone number of the alarm host.

SMS withdrawal, edit SMS: 123456 + withdrawal, sent to the mobile phone number of the alarm host.

Method 4: telephone deployment and withdrawal: dial the mobile phone number or landline number of the alarm host, enter the password, press 1, deployment, press 2 evacuation, or call the called number, when answering the phone, according to the voice prompt, press 1 deployment, press 2 evacuation.

Method 5: PC software deployment / withdrawal, this function is determined by the deployment and withdrawal function of the software, refer to the software setting instructions.(LAN and WAN software versions differ).

Method 6: APP deployment and withdrawal. Install the corresponding APP, log in the corresponding account and password, and can realize the wechat or APP deployment, withdrawal function. APP refer to the following section 11 (mobile phone APP setting steps)
7. Clear the display alarm record and close the alarm linkage output Clear alarm record: keyboard input: $123456+2$ drop key or 2 the remote control "withdraw " key.
Disconnect the alarm linkage output: keyboard input: 123456 + \# key.

8, Keyboard setting of GPRS, parameter method: (The 2G / 4G (GPRS) version is available only) , This step is not applicable to the IP Network Edition.。 Note: "deploy" is the confirmation key, "withdraw" is the return key, if there is a data error, press the "withdraw" key to return.

In the withdrawal state, the keyboard input: 888888 + set.
Set up the center IP: $83+120076042236+$ Away
Set the destination port number: $85+5001+$ Away
Set machine ID: $61+4$ ID number + Away (ID number is the factory assigned ID number, each ID number is different) open GPRS function: 911 + Away. After the parameter setting, press "set" to exit.
10. Set GPRS, with the following parameters: (The "+" number cannot be omitted) The GSM / GPRS version is available only

| Server parameters | Edit the "SMS content" and send it to the alarm host mobile phone number |
| :---: | :---: |
| Set up the central IP | $123456+18300+120076042236$ |
| Set the destination port number | $123456+18500+5001$ |
| Turn on the GPRS function | $123456+19100+1$ |
| Set up the machine ID | $123456+16100+4$-bit ID number (factory distribution) |


| Alarm users | Edit the "SMS content" and send it to the alarm host mobile phone number |  |
| :---: | :---: | :---: |
| Mobile phone number of user No. 1 | 123456+15001+3~11 Phone number |  |
| Mobile phone number of user No. 2 | 123456+15002+3~11 Phone number |  |
| Mobile phone number of user No. 3 | 123456+15003+3~11 Phone number |  |
| Mobile phone number of user no. 4 | 123456+15004+3~11 Phone number |  |
| ........................ | ................................... |  |
| No.8: The user's mobile phone number | 123456+15008+3~11 Phone number |  |
| Alarm notification mode |  | Edit the "SMS content" and send it to the alarm host mobile phone number |
| A A (customer number 01/02/03/04/05/06 ) <br> $B$ (Alarm notification mode) :0: send message; 1: dial; 2: Text messages and make phone calls; 3 : No texting, no phone calls. <br> C(Dispatch the defense notification mode) : 0 : Do not send text messages; 1: Cloth and send text messages ; 2 : Send text messages, and do not send text messages; 3: Do not send text messages, remove prevention and send text messages. |  | The editing format is: $123456+156 A A+B C$ |

## Chapter III Installation and Wiring Instructions

## 1. Host machine wiring diagram

8 Wiring diagram of the main motherboard


## 16-way sub-line alarm host | system wiring topology



Specification of wire rod:
1, the same line must be unified specifications, brand.
2. Keyboard 485 signal line best use RVS4 * $0.5 / 0.75$ specifications, followed by RVV4 * $0.5 / 0.75$ specifications.
3. keyboard 485 signal line the largest not more than 1.0 , otherwise the signal transmission distance close and unstable, but also increase the cost of wire.
4. The same 485 communication interface can connect 2 keyboard 485 signal lines without repeater.
5. If the project has been laid the keyboard 485 signal line, and is RVSP this with shielding layer, then the construction wiring, shielding layer must be unified ground processing, otherwise, can affect the signal stability of 485 equipment because of the accumulation of static electricity, serious time will burn the equipment, and even static electricity hurt people.
6. If the wire is too thick and the signal is unstable, add a 485 repeater/splitter in place for $\mathbf{4 8 5}$ signal enhancement.

## 2. Wiring instructions

## 1 ) Reserve battery interface

The multi-function alarm host uses the $12 \mathrm{~V} / 7.0 \mathrm{AH}$ sealed lead-acid battery (product model 1270). Non-rechargeable batteries or non-sealed lead-acid batteries cannot be used. It is recommended to replace the battery every 3 to 5 years. The red line connector is connected to the positive electrode of the battery, and the black line connector is connected to the negative electrode.

## 2 ) The AC power supply input interface

The two red lines of the transformer are connected with AC AC220V input, and the transformer secondary $A C 16.5 \mathrm{~V}$ output is connected to the main board $A C$ terminal $A C$ and $A C$.

## 3 ) The connection of the police number

With BELL, output motherboard: connect the positive electrode of the alarm number to the host BELL terminal " + ", and the negative electrode to the BELL terminal " - ". The alarm bell (BELL) terminal has a driving capacity of 800 MA .

## 4 ) Auxiliary power supply output interface

The AUX power output terminal may provide a 14VDC power output to power the detector or control keyboard.
8 Zone alarm host: the total current of AUX and keyboard RED port does not exceed 800 mA .

16 Zone protection alarm host: the total current of AUX and keyboard RED port does not exceed 1500 mA .

The electronic fuse is automatically protected when the current is overloaded. At this time, the user should immediately disconnect the power supply to reduce the load.

## 5) Keyboard Control Interface

a) Keyboard connection:

LED keyboard connection: connect the keyboard KEY +, C, BLK and YEL with the copper wire.
LCD Chinese keyboard connection: with copper core wire keyboard R (red), B (black), Y (yellow) and the host terminal RED, BLK, YEL corresponding connection, the remaining $G$ (green) and BLK connection.

The longest distance between the keyboard and the motherboard is 150 meters, and can connect up to 4 keyboards;
b) Installation and wiring of the linkage equipment

The multi-function alarm host supports up to 64 output, and can be connected to 3 linkage output modules with addresses of 160,161 and 162 respectively. The wiring method is exactly the same as the LCD keyboard. R (red), B (black), Y (yellow) are connected to the host terminal RED, BLK, YEL, and the remaining G (green) is connected to BLK. Detailed programming can be referred to the section Item 75 of the program list outputs the linkage setting。

The multi-function zone alarm host supports printing function, which can print alarm information and operation information in real time. The printer module address is 163, and the wiring method is exactly the same as the LED keyboard.

The linkage module and printer module are as follows •: It indicates that the address setting is short.

| Address value | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 160 |  |  |  |  |  | $\bullet$ |  | $\bullet$ |
| 161 | $\bullet$ |  |  |  |  | $\bullet$ |  | $\bullet$ |
| 162 |  | $\bullet$ |  |  |  | $\bullet$ |  | $\bullet$ |
| 163 | $\bullet$ | $\bullet$ |  |  |  | $\bullet$ |  | $\bullet$ |

c) Keyboard address setting method:

LED Keyboard address setting table: (Set the address by using the jumper cap behind the short keyboard)

| Address value / jumper cap | 1 | 2 | 3 |
| :--- | :--- | :--- | :--- |
| 128 |  |  | $\bullet$ |
| 129 | $\bullet$ |  | $\bullet$ |
| 130 |  | $\bullet$ | $\bullet$ |
| 131 | $\bullet$ | $\bullet$ | $\bullet$ |

- : For short address settings.8-16, the defense zone supports 5 keyboards, with keyboard addresses ranging from 128-132.

LCD The keyboard address is set by programming, please refer to the Chinese LCD keyboard instructions.
d ) The alarm output of the keyboard
Both LED and LCD keyboards have an alarm output. The output is voltage 12VDC output and the maximum current is 400 mA . The output is programmable output. For specific programming, refer to item 75 output linkage setting.

6 ) Connection of the wired detectors
Connection of the wired-detector signal line:a)
8 area alarm host can connect up to eight wired detector, host a total of 8 wired zone access terminal, through programming (reference programming address value 34) each area interface can have three wiring mode, respectively without resistance of often open method (often open detector), with 1 resistance often open method (often open detector), with 1 resistance often closed method (often closed detector). The factory default is the connection method with 3.3 K resistance.b)

The zone alarm host can be connected to up to 16 wired detectors. When the number of wired zone detectors is less than 8 (including 8 zones), the detector can be connected by programming the line resistance value of the zone (34); when the number of wired zone detectors is more than 8 , the cable detector with 2 lines (programming address value 34 should be set to 2 ) (only supporting normally closed type). The factory default is with $3.3 / 6.8 \mathrm{~K}$ dual resistance mode.

The specific wiring methods are described as follows:


Definition of the anti-theft alarm host: if defined as two line tail resistance modes, the area code corresponding to 3.3 k resistance is $\mathbf{1 - 8}$, and the area code corresponding to 6.8 k resistance is 9-16. Area $\mathbf{9}$ corresponds to the 6.8 k resistance circuit of the $\mathbf{Z 1}$ terminal, 10-16 corresponds to $\mathbf{Z 2 - Z 8}$, and the $\mathbf{6 . 8 k}$ resistance circuit of the terminal.

## Unused wired area area

Direct use the tail resistance short connect or programming to shield the unused wired defense area (refer to the programming address value 13), otherwise the corresponding defense, the area is in an open state, the defense area indicator light will always be on, cloth not guard.

7 ) Connection of telephone lines
Receiving the TIP and RING from the host terminal outside; R1 and T1 are the lead lines and receive the telephone.
8) electrical grounding (EARTH)

In order to make the lightning protection circuit work normally, the control host must be grounded. Connect the safety contact point lead of the main machine to the grounding rod or other grounding device to realize the grounding of the main machine box.

## 3, engineering installation

## Host installation requirements

- The input port of the alarm host telephone line must be connected with the local telephone line, and the parallel connection with the extension is prohibited. - The alarm host should be installed in the position, and the keyboard should be installed in the position of convenient cloth and evacuation control, off the ground About 1.2 meters of the installation is more appropriate to ensure a full view of the keyboard display and daily operation.
- Alarm host do not close to the TV, air conditioning, computer, microwave oven, refrigerator to be strong electromagnetic radiation setting, so as not to affect Wireless receiving effect.
- To ensure the wireless reception effect, please pull the receiving antenna to the maximum length.
- The host grounding wire should be well grounded to improve the antiinterference performance.
- Installation dimensions of alarm host case and keyboard hook: (unit: mm)


Figure (3) Size diagram of the fixed screw hole of the main engine case


Figure (4) The size of the screw hole with the keyboard hook

Note for the installation of various detectors:

- When installing the probe, attention should be paid to the Angle and height of the probe and the horizontal plane, which has a great impact on the protection range.
- Avoid being close to cold and heat sources, such as cold and hot air vents, electric heaters, air conditioners, etc.
- The probe shall look directly within the protected range without shielding.
- Use RVV four-core cable to connect to the 24-hour protection area.
- The vibration sensor should be fastened to the surface of the protected object as far as possible, but it fails if it is loose.
- Glass crushing sensor, facing glass doors and Windows installed.
- The gating switch (magnetron) shall determine the installation position according to the minimum angle of entering the door, and the distance between the magnetic block and the magnetron switch shall not exceed 10 mm .


## Chapter 4: System programming and setting code

## 1. System basic factory setting

Installer password : 888888 User primary code: 123456
System alarm time : 180 sec
Automatic sound: 0, Do not automatically sound

The number of ringing : 6
Recording: No
Wireless detector: None

User primary code: 123456
Exit delay time: 60 sec
AC power-off detection: 0
, Do not detect
Telephone line detection : 1
, check
user ID : 1000
Wireless remote control : no

Alarm phone number : no
Telephone remote control: ok
Prevention zone type: Factory default is the immediate defense zone.
Battery low pressure detection: 1, Do not detect

## 2, Cable / wireless zone zone type table

| 즐 <br> ¿ | Prevention <br> zone type | The ses of various types of defense areas |
| :---: | :--- | :--- |
| 0 | Shield zone | When wired and wireless areas are not in use, they <br> can be programmed to 0 closed or circuit <br> resistance. |
| 1 | Immediatel <br> y prevent <br> zone | Once the user is triggered, alarm immediately, applied to <br> door magnetic, infrared grating and infrared radiation. |
| 2 | Access <br> prevention <br> area | Provide exit and entry delay time, convenient for <br> users to deploy, withdraw control host, applied to the <br> door magnetic. |
| 3 | Internal <br> defense <br> zone | Used for living room, bedroom and other internal <br> areas, provide exit delay and follow the entry and exit <br> of the entry delay time. |
| 4 | The 24- <br> hour <br> defense <br> zone | Once triggered under normal working condition, <br> immediately alarm the siren and apply to the emergency <br> button. |


| 5 | Fire <br> prevention <br> area | Once the working state is triggered, immediately alarm <br> the scene to sound the siren, and use smoke and other fire <br> detectors. |
| :---: | :--- | :--- |
| 6 | Emergency <br> prevention <br> zone | Once triggered under normal working condition, <br> immediately alarm the siren and apply to the emergency <br> button. |
| 7 | Gas zone | Once triggered under normal working condition, <br> immediately alarm the scene sound siren, applied to the <br> gas (gas) detector. |
| 8 | The 24- <br> hour <br> medical <br> prevention <br> area | Once triggered under normal working condition, <br> immediately alarm the siren and apply to the emergency <br> button. |
| 9 | A 24-hour <br> hijacking | Once triggered under normal working condition, <br> immediately alarm and report to the central station, but <br> the area code will not be displayed on the keyboard, nor <br> the alarm will be applied to emergency buttons (such as <br> bank, jewelry counter, etc.). |
| 10 | Anti- <br> demolition <br> alarm the scene alarm siren to prevent the machine from <br> being maliciously removed. |  |
| 11 | key | The control zone triggers the deployment and <br> withdrawal of the control host, and the key switch <br> type is set by item 16 in the programming list. |
| 12 | the doorbell | In the state of withdrawal, the defense area is triggered, the <br> keyboard rings two prompts (1 long 1 short), in the state of <br> deployment, the same as the immediate defense area. |
| 13 | The <br> second <br> set of <br> time- <br> delay <br> preventio <br> n zone | Deldelay of a single defense area |
| 14 | Brush card <br> prevention <br> area | After swiping the card, it will be automatically <br> deployed within a certain period of time.(06 Code sets <br> the withdrawal time) |

## 3, System programming(Remove the host before programming)

| step | operate | point out |
| :---: | :--- | :--- |
| 1 | Enter the <br> installation <br> code $[x][x][x][x]$ <br> $[x][x]$ | Only the installation code has a programming <br> mode, and the user password cannot be used <br> for programming. Factory default:888888 |
| 2 | Press the <br> $[$ Programming $]$ key to <br> enter the <br> programming mode | The host buzzer will sound for 1 second and <br> set the light to indicate that you have <br> entered programming mode. |
| 3 | Enter the <br> programming <br> address: $[x][x]$ | Address 00~99 Enter the 2-digit <br> reference following the programming list |
| 4 | Enter the <br> programming value: <br> for $[x]$ to <br> [x][x][x][x][x][x][x][x] <br> $[x]$ | Reference to the address programming <br> format, the programming value input is <br> correct, the host will sound for 2 seconds; <br> setting error, clear by [remove], and return <br> to step 3. |
| 5 | Enter $[d e p l o y m e n t] ~$ <br> confirmation | If the programming value is entered correctly, <br> the host will confirm the sound for 2 seconds; <br> the input is wrong, ring 3, return to step 3. |
| 6 | Repeat steps 3 and 4 <br> to program the other <br> addresses | Press $[$ Programming] <br> to exit the <br> programming mode |
| The host buzzer will sound for 1 second, and <br> set the light to turn out, indicating that the <br> programming mode has been withdrawn. |  |  |

explain:

1. If the Chinese LCD keyboard, after entering the programming, press the [Away] key, the keyboard displays as follows:

## Add :

After entering the programming address, the keyboard displays the programming value of the current address. For example, enter 02, when the keyboard displays:
Add: 02 060 Indicates that the current alarm time is 60 seconds. To modify the current value, enter 3-bit data and press [Away].
2. The LED keyboard is required to view the system data:

In the non-programmed state, you can view the data by entering a view system data command. Query system data method: password + * $+3+$ programming address value + programming value subitems + "defense" (the subitems of programming value is determined according to the actual programming address, some no subitems can omit this data), press the "withdraw" key to exit the query system data.

In the continuous query of multiple system data, only need to input the password for the first time, query other data as long as the input programming address value + programming value of the subproject + "deployment", when the deployment or withdrawal operation or error operation, the continuous query will be invalid.

Note: The password to query the system data is the installer password or the main user password.
give an example:Query alarm time: 123456 + * $+3+02$ + "cloth guard",
The lights 16,6 and 16 of the LED keyboard are on successively, indicating that the alarm time is 060 .
LED keyboard light display definition:

| data <br> show | $0: 16$, | $1 \sim 9: 1 \sim 9$, | $\mathrm{A}: 10$, | $\mathrm{B} / *: 11$, |
| :--- | :--- | :---: | :---: | :---: |
|  | $\mathrm{C} / \#: 12$, | $\mathrm{D}: 13$, | $\mathrm{E}: 14$, | $\mathrm{F}: 15$ |

Keyboard keys correspond to 16 decimal data:

| Hex value | Corresponding key | Hex value | Corresponding key |
| :---: | :---: | :---: | :---: |
| A | $* 0$ | B | $* 1$ |
| C | $* 2$ | D | $* 3$ |
| E | $* 4$ | F | $* 5$ |

The factory of the installation code is set to [8][8][8][8][8][8]. If you forget the installation code, you can follow the following steps.

Install the code and restore the main password:

## 1. Turn off the power supply of the host machine;

2. Connect the main engine board jumper JP1 (refer to the wiring diagram);
3. Connect to the power supply of the host machine;

## 4. Jump off the jump cord, JP1.

## Programming for example:

After entering the programming mode, change the installation code to 666666: [0] + [0] + [6] + [6] + [6] + [6] + [6] + [6] + [defense] after entering the programming mode, modify the 5 defense area into an emergency area: [1] + [0] + [0] + [5] + [6] + [defense] a di, indicating success; three voices of failure, press "withdraw" clear, and then reinput.

Note: If no operation is performed within 3 minutes, the system will automatically exit the programming mode.

Restore the factory value: the operation is as follows: after entering the programming mode, connect the mainboard jumper JP1, enter the address 99, enter the data 18, press "deployment".

## 4, List of host programming codes

| Function | address | $\begin{array}{l}\text { Programming } \\ \text { value }\end{array}$ | $\begin{array}{l}\text { Default } \\ \text { value }\end{array}$ | $\begin{array}{c}\text { Programming value } \\ \text { option range }\end{array}$ |
| :--- | :--- | :--- | :--- | :--- |
| $\begin{array}{l}\text { Installation } \\ \text { code }\end{array}$ | 00 | $\begin{array}{l}\text { New } \\ \text { Password (6- } \\ \text { bit) }\end{array}$ | 888888 | $\begin{array}{l}\text { 000001-999999, The installation } \\ \text { code must not be deleted }\end{array}$ |
| $\begin{array}{l}\text { Subpass } \\ \text { word }\end{array}$ | 01 | $\begin{array}{l}\text { Subcode } \\ \text { number (2 } \\ \text { bits) + new } \\ \text { code (6 bits) }\end{array}$ | 000000 | $\begin{array}{l}\text { Subcode number (2 bits): } \\ \text { 01: Main password, 6-bit }\end{array}$ |
| length, 000001-999999, can |  |  |  |  |
| not be deleted, factory |  |  |  |  |
| 123456; |  |  |  |  |
| 02-15: Subcode (6 bits): |  |  |  |  |
| 000000-999999 (000000= |  |  |  |  |
| forbid the user) |  |  |  |  |$]$


| System Entry delay | 04 | The 3-bit entry time | 60 |  |
| :---: | :---: | :---: | :---: | :---: |
| Host computer suppres sion, alarm time | 05 | 3 Data | 0 |  |
| Access control, swipe card, evacuation time | 06 | 3 Data | 0 | The time range of a single swipe card is: (000-999) seconds. |
| Prevention zone type | 10 | 2 guard area code + 1 or 2-bit defense zone type | 1 | 0: shielding; 1: immediate; 2, entrance and exit, 3 , intermal defense area; $4: 24$ hours; 5 : fire alarm; 6: emergency, 7 :gas; $8: 24$ hours medical; $9: 24$ hours hijacking; 10 : demolition; 11: key, 12: doorbell, 13: the second group of delay defense area; 14: access control card <br> Please refer to 4.4.2, area type description for detailed description |
| Type of alarm sound in The defense area | 11 | 2 defense area code + 1 alarm voice type | 0 | 0 : Continuous; 1: Pulse <br> 2: Silent, with an LED <br> 3: Silent, without an LED |
| Area alarm is slow, again report to the center | 12 | 2-bit defense area code +1 -bit report enabling | 0 | 0 : defense area recovery does not report to the alarm center; 1 : defense area recovery report to the alarm center |
| Wired defense zone shield | 13 | 2 bit defense area code + 1 bit enable | 0 | 0 : No shielding; 1: shielding. When only using wireless zones, the wired shield. |
| Prevent false alarm in key Prevention areas | 14 | 2 defense area code + 1 bit Triof number (N) + 3 Position (O) effective time ( TTT ) | 0000 | $\mathrm{N}: 0-9$ times, 0 : off this function; TTT: 0 <br> -255 seconds |
| Defense area bypass reporting center | 15 | 2-bit defense area code + 1 -bit report enabling | 0 | 0: Do not report to the alarm center; <br> 1: report to the alarm center |


| Key zone switch type | 16 | $\begin{aligned} & 2 \text { bit area } \\ & \text { code }+1 \text { bit } \\ & \text { key type } \\ & \text { number } \end{aligned}$ | 0 | Please refer to the "Key Control Area Type Description" for more details |
| :---: | :---: | :---: | :---: | :---: |
| A deploy ment period Between the defense area alarm Maximum number | 17 | 2-bit defense area code + 1bit maximum number | 0 | In order to prevent the detector from constantly calling the central phone, user phone or sending short messages caused by the host, it is limited by setting.0: prohibited times, 1-9: limit times (recommended by the manufacturer). |
| Call the police, know user | 19 | 2 bits of defense area code (01-0 <br> 8) +8 bits Prevention zone enabling | $\begin{gathered} 11111 \\ 111 \end{gathered}$ | 0 : Off; 1: On. The number is determined by the 50 parameters. For example: 1 defense area only dial the first group of numbers: $19+01$ $+10000000$ |
| Add or remove wireless defense | 20 | Two antizone numbers | no | Area code: 01-16, the addition method is: input $20+2$ bit area code, trigger the wireless detector, the keyboard letter, and press "deploy" to confirm; if the wireless detector is not triggered, directly press "deploy" to delete the current wireless defense area. |
| Add or remove, a wireless remote control | 21 | The 2-bit remote control number | No | Remote control number: 01-08, the addition method is: input 21 +01 remote contrnl number, trigger the "Away" wireless remote control. After the keyboard signal light is on, press the keyboard "Away" key to confirm; if the wireless remote control is not triggered Device, directly press the "Away", delete when Front remote control. System support is up to 8 Remote control with different codes. |
| Single key cloth defense | 30 | One enable | 1 | 0: prohibit, 1: allow |
| Cloth the withdrawal Warning tone | 31 | One enable | 1 | 0 : prohibit; 1 : allow. If allowed, deployment or evacuation operation, external alarm number to send a prompt sound. |


| SettingKeyA <br>  | 32 | Key A and function definition | 00 | A:0,notused;1,firealarm;2 medicalalarm <br> :0,notused;1,panicalarm |
| :---: | :---: | :---: | :---: | :---: |
| Password antiguess from the lock | 33 | 2-bit error number (EE) + 3, bit lock time (TTT) | 00000 | EE: $0-15,0$ means that the password antiguess function is off, 1-15 password continuous maximum number of errors, beyond the rear key, the disk is automatically locked to increase security. TTT: 0-255 seconds, after the password error, lock the time, in seconds, automatically unlock after the time arrives. |
| 8 Defense Zone Host Anti-zone line tailpower resistance | 34 | 1 Data | 1 | 0 : no resistance (often open type defense zone), 1:3K3 |
| 16 Defense zone Lord Machin defense zone line tail | 34 | 1 Data | 3 | 0 : no resistance (normally open defense zone), 1:3K3, <br> 2:6K8,3:3.3K/6.8K (double number) |
| In the state of withdrawal Non-defense zone alarm The police enable | 35 | 1 Data | 0 | 0 : In the state of withdrawal, when the system fails (such as AC, battery, telephone line, etc.), the alarm number does not ring, but report to the center machine or user.1: In the state of withdrawal, when the system fails (such as ac, battery, telephone line, etc.), the alarm signal rings, and report to the central machine or user. |
| Prevent open off | 36 | Four bits of data | 1100 | 0000: close the disassembly; <br> 1100: open the disassembly |
| Dial mode | 37 | 1 Data | 0 | 0 : Just dial any number; <br> 1: Dial all the numbers |


| 1-8, defense area division, area distribution | 40 | Section number $(2-b i t s)+8$ <br> Position zone area (8) |  | Section number: 01-04; 8 bit: 0 or 1,0: prohibited, 1: open; <br> Factory default: <br> 1-8 All defense areas are allocated in Division 1, while other zones are not allocated |
| :---: | :---: | :---: | :---: | :---: |
| 9-16 <br> Distribut <br> ion of defense zones | 41 | Section number (2-bits) +8 Position zone area (8) |  | Section number: 01-04; 8 bit: 0 or 1,0: prohibited, 1: open; Factory default: 9-16 All areas are allocated in zone No.1, and other areas |
| Keyboard Control subsystem | 42 | Keyboard number (2 bits) +1 - 4 sub system enable position (2 bits) |  | Keyboard No.: 01-05; 1-4 subsystem enable bit: 0 or 1,0 : No, 1: Open factory default: 1 keyboard controls all zones, 2-5 keyboard controls Division 1 |
| Remote Control Control subsystem | 43 | Remote control number (2 bits) $+1-4$ subsystem enable position (2 bits) |  | Remote control number: 01-08; 1-4 subsystem enable position: 0 or 1,0: prohibited, 1: open <br> Factory default: <br> All remote controls control section 1 |
| User telephone | 50 | User Number (2 digits) + phone number | no | The system supports up to 8 sets of user phone numbers, and the phone number is up to 15 digits. If the outside line is dialed through the extension, the pause part will be replaced by the "bypass" key, and the system will automatically pause for 2 seconds. For example, the $50+$ $01+0+$ bypass $+80089999+$ deployment system stops for 2 seconds after dialing 0 . <br> Note: During alarm, dial in order. If the host cannot receive the confirmation signal, dial for 6 rounds (programmable); after withdrawal, the central dial is not affected, and the alarm dialing is stopped immediately. |
| The number of ringing | 51 | 2 Number of times | 8 | Number of ringing: 00-15; 00 is not automatic. |


| Redial times and rounds | 52 | 2 Data $(\mathrm{AA})+\mathrm{BB}$ | 6 | After the host alarm, the phone will call the user or center continuously until the dial number reaches the predetermined value or the alarm has been confirmed. BB: dial round, reach a certain round, dial failure, alarm 00: means that the communication failure is not reported. |
| :---: | :---: | :---: | :---: | :---: |
| Telephone line detection | 53 | One | 0 | 0 : no test; 1 : test. If there is no external telephone line, set this place to 0 . |
| Play the voice mode | 54 | One-bit mode | 1 | 0 : Press "7" after connecting, 1:Automatic sound within 7 seconds afterdialing |
| Telephone remote control | 55 | 1 Data | 1 | 0 : No telephone remote control; 1: Yes |
| * Event reporting in the user mode | 56 | AA (user number) <br> + B (Alarm <br> notification <br> mode) + C (cloth <br> withdrawal report) | AABC | AA: User number corresponds to the user number set by 50 address; B : Alarm information mode: 0 : text message; <br> 1: Call; 2: send text messages and make phone calls; <br> 3: Do not send text messages or make phone calls. <br> C: The withdrawal report, 0: SMS prompt, <br> 1: cloth withdrawal and defense SMS prompt.2: SMS prompt, not prompt; 3: SMS prompt, not prompt |
| *System dial mode | 57 | Dial mode (1 bit) | 4 | 0 : GSM dial; 1: fixed telephone dial; 2: first fixed phone, then GSM; 3: GSM first, then fixed phone; 4: intelligent way, fixed phone and GSM are normal, first fixed phone, then GSM; when any one has a fault, directly dial in another way. |
| * SMS withdrawa I to prevent successful response | 58 | One enable | 1 | 0: prohibit; 1: allow |


| * Free cloth withdrawal Defense user phone number | 59 | User number (2 digits) + phone number |  | The system supports up to 6 groups of free withdrawal user phone number, phone number up to 15 digits. By setting the specified number, users can achieve free cloth withdrawal operation, such as the current deployment, the specified mobile phone or landline number, dial the alarm GSM, mobile phone card number, hear a mobile phone ringtone or ringing, immediately hang up, the same. |
| :---: | :---: | :---: | :---: | :---: |
| Call <br> Alarm center telephone | 60 | Telephone group (2 digits) + phone number | no | The system supports up to 4 sets of central phone numbers. Set method to the user phone settings. Among them, the third group of telephone as the defense line, the fourth group of telephone as Withdrawal line. Note: Only set for the center network. Do not connect with the alarm center. |
| user ID | 61 | The 9-bit ID number | 1000 | 9-digit user ID, used with the alarm center. |
| Report to the center setting 1 | 62 | $\begin{gathered} A C(1-b i t)+D C \\ (1 \text { Bit })+B U S(1 \\ b i t) \end{gathered}$ | 010 | AC: AC allowance, 0 : prohibited: 1 : allow and immediately report to the center, 2: allowed but random report, the main opportunity to report randomly within 30 minutes (lest multiple hosts send information to the center at the same time during large area power failure, resulting in signal blocking) DC: DC allowed bit, 0: prohibited; 1: allowed BUS: bus fault, 0 : prohibited; 1 : allowed |
| Report to the center setting 2 | 63 | $\begin{aligned} & \text { ARM (1) + } \\ & \text { RESET (1) + } \\ & \text { PROG (1) } \end{aligned}$ | 110 | ARM: withdrawal position, 0 : prohibited; 1: allowed DC: System startup allowed bit, 0 : prohibited; 1: allowed PROG: programming changes, 0 : prohibited; 1: allowed |
| Report to the center for regular testing | 64 | AAABBCC | $\begin{gathered} 00000 \\ 0 \end{gathered}$ | AAA: regular test interval, 000-999, where 000 means irregular test; BB: first report start hour, CC: first report |


|  |  |  |  | start minute |
| :---: | :---: | :---: | :---: | :---: |
| Host and networking Center Communica tion grid type | 65 | AA (telephone group number 2 -digit data) + B (communication format 1-bit data) | 0 | Telephone group number. 1-4; communication format bit: 0: C.ID; <br> 1: DTMF $4+2$ |
| Report to the center failed | 66 | One enable | 1 | 0: prohibit, 1: allow |
| Program mable 4 $+2$ code settings | 67 | Event number (2 bit) + corresponding code (2 bit) |  | Programmable $4+2$ code to accommodate different alarm centers, please refer to page 40 "Programmable $4+2$ code setting method:" for details |
| Dial order | 68 | $\begin{aligned} & \text { A (order } 1 \text { bit) }+ \\ & \text { ( } 1 \text { digit) } \end{aligned}$ |  | A: dial center number and user number sequence, 0 : first center after user; 1: first user after center; B: Number of dial users, the value is 1-9, this data is valid only when the dial order is 1 , that is, first user after center. |
| Event Reporti ng Center mode | 69 | ```Event number (2 bits) + Reporting mode (1 bit)``` |  | 0 : No report, 1: only report to Center 1; 2: only report to Center 2,3: double center report, 4: priority report 1, Center 2 standby, 5: priority report 2,1 standby. The event number is defined consistent with the event number of the programmable $4+2$ code. The event number of 00 indicates that all events are changed to the same mode. |
| System date | 70 | $\begin{gathered} Y Y+M M+D D+ \\ W \end{gathered}$ | $\begin{gathered} 10-01- \\ 01-5 \end{gathered}$ | YY: two data for 20YY; MM: two data for month; DD: two data for day; W for day and Sunday with 7. |
| System time | 71 | HH+ MM + SS | $\begin{gathered} 08-10- \\ 12 \end{gathered}$ | HH: two-bit data, representing hours; MM: two-bit data, representing minutes, SS: two-bit data, representing seconds. The time in the system is the 24 -hours standard. |


| System time-clock correction | 72 | CAL + VAL | 100 | CAL (1-bit data): 0 : no adjusted, 1 : slow; 2: accelerated VAL (2-bit data): (00-99) clockadjusted error time seconds. |
| :---: | :---: | :---: | :---: | :---: |
| Timed cloth guard time period | 73 | $\begin{gathered} \mathrm{AA}+\mathrm{SH}+\mathrm{SM}+ \\ \mathrm{EH}+\mathrm{EM} \end{gathered}$ | $\begin{aligned} & 24: \\ & 00-24 \\ & : 00 \end{aligned}$ | AA: 2-bit period number, 01-03, the system supports 3 timing withdrawal schedule. SH: two-bit data, deployment starting hours; SM: twobit data, starting minutes; EH, EM: component deployment end time; |
| All day Throughou the weekend | 74 | SAT (1 bit enable) + SUN (1 bit enable) | 00 | 0: prohibit; 1: allow |
| Output linkage setting | 75 | AA (2-bit output number) + BB (2bit linkage type) + CC (2-bit linka Ge time) | $\begin{gathered} \text { AABB } \\ C C \end{gathered}$ | For details, please refer to the following "linkage programming parameters description:" |
| Output linkage module type | 76 | ABC | 000 | The host supports 3 output linkage modules, which can be defined by this parameter. A, B, C: corresponding to the type value of output module 1,2 and 3 respectively.0: disabled, 1:8 output module, 2:16 output module, 3:32 output module. When the host only receives a linkage module, you can not set this parameter. |
| Event- <br> Driven <br> schedule | 77 | $\begin{gathered} A A+S H+S M+E \\ H+E M \end{gathered}$ | $\begin{aligned} & 24: 00 \\ & -24: 00 \end{aligned}$ | AA: 2-bit event number, 01-10; SH, SM and component event drive start time, SH: two-bit data, start hours; SM: two-bit data, start minutes; EH, EM and component event drive end time; |
| Event-driver type | 78 | AA (2-bit event number)+ B (the 1-bit drive mode Formula) + CC ( 2-bit defense 3-area code / out 4-put number) | $\begin{gathered} A A B C \\ C \end{gathered}$ | AA: 2-bit event number, 01-10; <br> B: Drive mode definition, 0 : prohibited event drive, 1: regular distribution in the defense area; 2 : regular bypass in the defense area; <br> 3: Output timing start. CC: defense area code or output number. |


| Output linkage module type | 76 | ABC | 000 | The host supports 3 output linkage modules, which can be defined by this parameter. A, B, C: corresponding to the type value of output module 1,2 and 3 respectively.0: disabled, 1:8 output module, $2: 16$ output module, 3:32 output module. When the host only receives a linkage module, you can not set this parameter. |
| :---: | :---: | :---: | :---: | :---: |
| EventDriven schedule | 77 | $\begin{gathered} \mathrm{AA}+\mathrm{SH}+\mathrm{SM}+ \\ \mathrm{EH}+\mathrm{EM} \end{gathered}$ | $\begin{aligned} & 24: \\ & 00-24 \\ & : 00 \end{aligned}$ | AA: 2-bit event number, 01-10; SH, SM and component event drive start time, SH: two-bit data, start hours; SM: two-bit data, start minutes; EH, EM and component event drive end time; |
| Eventdriver type | 78 | $\begin{aligned} & \text { AA (2-bit event } \\ & \text { number) } \\ & + \text { B (the 1-bit } \\ & \text { drive mode } \\ & \text { Formula) + CC } \\ & \text { (2-bit defense } \\ & \text { area code / } \\ & \text { output } \\ & \text { number) } \end{aligned}$ | AAB C C | AA: 2-bit event number, 01-10; <br> B: Drive mode definition, 0 : prohibited event drive, 1: regular distribution in the defense area; 2 : regular bypass in the defense area; <br> 3: Output timing start. CC: defense area code or output number. |
| ```Printer functi on settin gs``` | 79 | AB | 11 | A: alarm information print enabled, 0 : no print, 1: print; B: Operation information print enabled, 0 : no print, 1: print |
| Reading time of the black box events | 80 | 1 Data | 4 | $03-15$, time base of $0.25 \mathrm{~s}, 0.25$ * $4=1 \mathrm{~s}$ |
| * Regular SMS reporting function | 81 | ABBBCCDD | $\begin{gathered} 00000 \\ 000 \end{gathered}$ | The host runs for a while and then sends a message to the user's phone. A: User number group number, 0-6, where 0: means closed, 1-6 for which user; BBB: periodic report time interval, 0255,0: prohibited reporting, CC, DD constitute the first report time, CC: start hour, DD: start minutes. |


| Alarm host IP addre ss | 82 | AAABBB CCCDDD | $\begin{gathered} 00000 \\ 00000 \\ 00 \end{gathered}$ | AAABBBCCCDDD Form a 12-bit IP address, for example, if the IP address is 192.168.1.110, enter 192168001110. |
| :---: | :---: | :---: | :---: | :---: |
| Central IP address | 83 | AAABBB <br> CCCDDD | $\begin{aligned} & 00000 \\ & 00000 \\ & 00 \end{aligned}$ | AAABBBCCCDDD Composition of a 12-bit IP address, the same as the host IP setting method. The objective IP is the computer IP address of the alarm center. |
| Port number of the alarm host | 84 |  | 5000 | You must enter 4 digits when programming |
| Center port number | 85 |  | 5000 | You must enter 4 digits when programming |
| gateway | 86 | AAABBB CCCDDD | $\begin{gathered} 00000 \\ 00000 \\ 00 \end{gathered}$ | AAABBBCCCDDD Composition of a 12-bit IP address, the same as the host IP setting method. |
| subnet mask | 87 | AAABBB CCCDDD | $\begin{gathered} 00000 \\ 00000 \\ 00 \end{gathered}$ | AAABBBCCCDDD Composition of a 12-bit IP address, the same as the host IP setting method. |
| Heartbea t interval | 88 | AAAA | 0300 | Report the online status to the central platform at regular intervals. AAAA: 0-9999 seconds |
| GPRS function | 89 | 1 Data | 0 | GSM upload platform function, 0 : off; 1: open. |
| Software Communi cation | 91 | AA | 00 | 00: CID format 01: Bus format |
| * Restore the SMS content | 98 | 17 |  | Restore the GSM SMS content, should be the motherboard JP1 short connection. |
| Restore factory | 99 | 18 |  | All the parameters are restored to the factory default value, and the motherboard JP1 should be shorted. |

Note: Functional parameters with "*" are only valid for hosts with GSM function.
4.1 Chinese LCD LCD keyboard menu programming instructions (LCD keyboard only)


|  | 4. Keyboard partition | All keyboard controls | subregion:1/2/3/4 | 5 keyboards, 5 subsystems, keyboard can control any one or more subsystems, factory default main keyboard can control all subsystems, X keyboard controls the $X$ subsystem. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Number 1- keyboard control | subregion:1/2/3/4 |  |
|  |  | Number 2nd keyboard control | subregion:1 |  |
|  |  | Number 3rd keyboard control | subregion:2 |  |
|  |  | 4th keyboard control | subregion:3 |  |
|  |  | Number 5th keyboard control | subregion:4 |  |
|  | 5. Smart accessories | This feature is invalid |  | This feature is invalid |
| 2 | Telephone parameters |  |  |  |
|  | 1. User number | User-1 phone number |  | Enter a landline phone number or a mobile phone number |
|  |  |  |  |  |
|  |  | User 8 phone number |  |  |
|  | 2. Alarm and report method | Report User 1 | 1 | 0 : SMS messages only 1: Phone calls only <br> 2: Send text messages to dial the phone number 3: no text messages and phone calls |
|  |  | $\cdots \cdots$ | 1 |  |
|  |  | Reports user 8 | 1 |  |
|  | 3.Release of the defense report | Report User 1 | 0 | 0 : No SMS 1: No SMS deployment 2: cloth prevention SMS 3: withdrawal SMS |
|  |  | ... ... | 0 |  |
|  |  | Reports user 8 | 0 |  |
|  | 4. Ring the bells and redial the times | The number of ringing | 8 | Number of ringing for remote deployment operation by user (0-9,0: prohibited) |
|  |  | Redial times | 06 | 0-99 Times |
|  |  | Redial the wheel | 03 | 0-99 Times |
|  | 5.Regular SMS reports | Report to users regularly | 0 | 0 : Close 1-8 corresponding to 8 user numbers |
|  |  | First report time | 00: 00 | Over the course of the period of 00-24 hours |
|  |  | Reporting period is 0 hours | 0 | Between 0-231 hours |


| 6. Center <br> number |  |  | The system supports up to <br> 4 sets of central phone <br> numbers. Set method to <br> the user phone settings. <br> Among them, the third <br> group of telephone as the <br> defense line, the fourth <br> group of telephone as the <br> evacuation line. <br> Note: Only set for the <br> center network. Do not set <br> phone number <br> this item with the alarm <br> center. |
| :--- | :--- | :--- | :--- |


| 2. Resistance mode of the defense zone | Zone resistance mode | 5 | 0 : often do not open the resistance 1:3.3K resistance 2:6.8K Resistance 3:3.3K and 6.8K <br> 4:3.3K String 6.8K 5: normally closed without resistance |
| :---: | :---: | :---: | :---: |
| 3. Type of alarm | All the zone | 0 | 0 : Continuous 1: Pulse 2: Silent |
|  | No. 1 prevention area |  |  |
|  | ...... |  |  |
|  | No. 16 prevention zone |  |  |
| 4.Response time | All the zone | 3:500 ms | 0:60 ms; 1:100 ms; 2:300 ms; 3:500 ms |
|  | No. 1 prevention area |  |  |
|  | ...... |  |  |
|  | No. 16 prevention zone |  |  |
| 5. Restore the report | No. 16 prevention zone | 1 | 0: No report 1: Report |
|  | All the zone |  |  |
|  | No. 1 prevention area |  |  |
|  | ...... |  |  |
| 6.Bypass report | All the zone | 0 | 0: No report 1: Report |
|  | No. 16 prevention zone |  |  |
|  | $\ldots$ |  |  |
|  | No. 1 prevention area |  |  |



|  |  | Center-2-IP | 05001 | You must enter 4 digits when programming |
| :---: | :---: | :---: | :---: | :---: |
|  |  | GPRS networking | 200 | Report the sequential online status to the central platform at regular intervals. |
|  | 2.Host number | Objective 1 port number | 1000 | 4-digit user accounts |
|  | 3.IP <br> network paramete r | Fixed-line line and network mode | 000.000.000.000 | The 12-bit IP address, <br> For example: 192.168.0.110, Should be input: 192168000110 |
|  |  | heartbeat time | 05000 | You must enter 4 digits when programming |
|  |  | Aim 2 port number | 192.168.001.001 | The 12-bit IP address, For example: 192.168.0.110, |
|  |  | Center-2 IP | $\begin{aligned} & 255.255 .255 .00 \\ & 0 \end{aligned}$ | The 12-bit IP address, For example: |
|  |  | Objective 1 port number | 000.000.000.000 | The 12-bit IP address, For example: 192.168.0.110, Should be input: 192168000110 |
|  |  | Center-1-1 IP | 05001 | You must enter 4 digits when programming |
|  |  | subnet mask | 000.000.000.000 | The 12-bit IP address, For example: 192.168.0.110, Should be input: 192168000110 |
|  |  | gateway | 05001 | You must enter 4 digits when programming |
|  |  | Host port number | 100 | Report the sequential online status to the central platform at regular intervals. |
|  |  | main engine IP | 0 | 0 : Fixed-line and network report; 1: network priority fixed-line standby; 2: fixed-line priority network standby; |
| 5 | 1. Alarm and delay | 1. Alarm and delay |  |  |


|  | 1. Time of alarm | 1. Time of alarm | $\begin{aligned} & 060.000 .000 .00 \\ & 0 \end{aligned}$ | The 3-digit time is counted in seconds, and the 3-digit time range is 000-999 seconds. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2. Closure delay | $\begin{aligned} & 060.000 .000 .00 \\ & 0 \end{aligned}$ |  |
|  |  | 3. Alarm delay | $\begin{aligned} & 060.000 .000 .00 \\ & 0 \end{aligned}$ |  |
|  |  | 4. Anti delay 2 | $\begin{aligned} & 060.000 .000 .00 \\ & 0 \end{aligned}$ |  |
|  |  | 5. Alarm delay; 2 | $\begin{aligned} & 060.000 .000 .00 \\ & 0 \end{aligned}$ |  |
|  | 2. Time date |  | $\begin{aligned} & 09 / 05 / 28 \\ & 05: 25 \text { week } 4 \end{aligned}$ | 2-digit input of year, month, day, time and score; <br> 1-digit input numbers in the order of weeks. |
|  | 3. Regular evacuatio n and evacuatio n | 1 \# Away disarm | 24:00-24:00 | 2 time periods: deployment time-evacuation time |
|  |  | 2 \# Away disarm | 24:00-24:00 |  |
|  |  | 3 \# Away disarm | 24:00-24:00 |  |
| 6 | System <br> Settings |  |  |  |
|  | 1. Restore the factory | 4. All the parameters to recover |  | Motherboard JP1 short service, in the recovery of wireless parameters, SMS content, all other parameters restored factory. |
|  |  | 3. SMS content recovery |  | Main board JP1 short connection, all parameters resume the factory. |
|  |  | 2. Wireless parameter recovery |  | Main board JP1 short answer, SMS content to resume the factory. |
|  |  | 1. Partial factory recovery |  | Main board JP1 short connection, wireless parameters to restore the factory. |


| One set of passwords <br> 4. Password Settings Installer password 4. Keyboard antidemolition |  | One set of passwords | 1 | 0: prohibit single key cloth withdrawal 1: single key cloth can be deployed 2: single key withdrawal 3: single key cloth withdrawal |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 4. Password Settings | 1 | 0 : Close accompaniment 1: Open accompaniment |
|  |  | Installer password | 0 | 0: Emergency and $A B C$ are prohibited <br> 1: Emergency key is on <br> 2: The ABC key opens <br> 3: Emergency and $A B C$ are enabled |
|  |  | 4. Keyboard antidemolition | 0 | 0 : Turn off voice prompt 1: Turn on voice prompt |
| 3. Main engine antidemolition 2. Low voltage battery 3. Fault detection 1. AC current fault |  | 3. Main engine antidemolition | 0 | 0 : Non-test 1: test |
|  |  | 2. Low voltage battery | 1 |  |
|  |  | 3. Fault detection | 1 |  |
|  |  | 1. AC current fault | 1 |  |
|  | 4. GSM status prompt | 4. GSM status prompt | 888888 | 000001-999999, The installation code must not be deleted |
|  | 3. Emergency key setting | 3. Emergency key setting | 123456 | The first group of passwords is the main password, 6-digit password: 000001-999999, can not deleted, factory default 123456; Group 2-15 code is the subcode, 6 digits secret: 000000-999999, (000000= no code). |
|  |  |  | 000000 |  |
|  |  | 15 Groups of passwords |  |  |
|  | 5. Other Settings | 5. Other Settings |  |  |
| 7 | system mode |  |  |  |
|  | 2. Operation records |  |  |  |
|  | 1. Alarm records |  |  |  |
| 8 | recording parameters |  |  |  |



### 4.2 Description of the key guard zone type:

0 : Transient switch, go out to withdraw defense;
1 : Transient switch, outside cloth defense;
2 : Transient switch, host withdrawal ;
3 : Lock switch, out of the evacuation;
4 : Lock switch, out cloth;
5 : Lock switch, host withdrawal;
Transient switch: the zone loop triggered once, the main engine action a deployment or withdrawal operation. The defense area circuit is back to normal, and the host engine does not move.

Locked switch: the defense circuit is triggered once, the host action is a defense deployment or withdrawal operation, the defense circuit returns to normal, the host withdrawal, the defense area is triggered, and the host deployment.

### 4.3 Description of the linkage programming parameters

## AA: Linkage output number

- Relay No.01-64; the relay output is defined as follows:
- Keyboard itself with a road programmable voltage output (PGM)
- Keyboard 1-5: corresponding to 1-5, output, linkage type default 50: host layout;
- Linkage output module: corresponding to output 6-64, output linkage type 621 default output linkage type corresponds to 01-16 defense area alarm linkage, 22-37 output linkage type is 33-48, corresponding to 1-16,37-64 linkage type is 00 .

BB: linkage type
00: no use, 01-16:1-16 zone alarm, 17-32:1-16 zone trigger, 33-48:1-16 protection, 49: host alarm, 50: host protection, 51: host evacuation, 52: keyboard emergency, 53: keyboard fire, 54: keyboard medical,55: AC power loss, 56: host battery voltage is low, 57: phone line failure, 58 : host communication failure

## CC: Linkage time

00: Normally closed (equal to the time of the event) 01-99: Linkage time is 1-99 seconds.

When the output linkage type of the motherboard itself is defined as the host alarm, the linkage time is determined by the system alarm time.
4.4 Programmable $4+2$ code setting method:

Format: $67+2$ bit event number +2 bit code, the following is the corresponding serial number table:

| numbe <br> $r$ | explain | numb <br> er | Communication failure |
| :--- | :--- | :--- | :--- |
| $1-16$ | GSM hitch | 17 | Anti-demolition alarm |
| 18 | Anti-demolition recovery | 19 | Keyboard fault |
| 20 | Keyboard fault recovery | 21 | Programming changes |
| 22 | Power starts on the system | 23 | The telephone line is restored |
| 24 | periodic report | 25 | Battery low pressure recovery |
| 26 | Telephone line failure | 27 | Exchange recovery |
| 28 | Battery low pressure | 29 | Keyboard medical |
| 30 | Communication failure | 31 | Keyboard emergency |
| 32 | Keyboard fire alarm | 33 | place troops on garrison duty |
| 34 | withdraw a garrison | 35 | explain |
| 36 | 1-16 Zone protection and <br> alarm code setting |  |  |

## Chapter V: Troubleshooting

| fault phenomenon | Potential causes | The exclusion method |
| :--- | :--- | :--- |
| Can't cloth | 1. The defense area <br> is triggered or faulty | 1. To restore the defense <br> area or try to bypass the <br> triggered defense area or <br> shielding area, and then <br> place the defense area |


| The host <br> machine <br> cannot resume <br> leaving the <br> factory | 1. Main board JP1 has <br> no short connection | 1. Short connect JP1 and restore the factory <br> operation again |
| :--- | :--- | :--- |
| Connecting mul <br> tiple keyboards <br> cannot operate <br> The keyboard is <br> not responsive | 1. Keyboard circuit fault <br> 2.Multiple key <br> different addresses | 1. Reconnect the keyboard |

## warranty card

| type |  |  | number <br> contacts |  |  | instal I type | family <br> commer <br> cial |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | user <br> name |  |  |  |  |  |  |
|  | Q Q |  | contact number |  |  |  |  |
|  | address |  |  |  |  |  |  |
| guarantee time limit | since year date |  | month | day | One year from the purchase |  |  |
| agency | name |  | stamp |  | serve <br> telep <br> hone |  |  |
|  | address |  |  |  |  |  |  |

Installation date: $\qquad$ year $\qquad$ month $\qquad$ day Customer confirmation: $\qquad$

## Warranty Notes:

1. During the warranty period, if the fault is caused by the quality of the product itself, please contact the dealer with the completed warranty card and the purchase ticket for free repair.
2. Please keep good care of the purchase bill and warranty card as the warranty certificate. Once the bill is altered, the warranty will not be granted.
3. Customers who have expired the warranty period can contact local dealers for product repair or mail order parts.

For one of the following issues, it is not covered by the warranty:

1. No warranty card and valid bill.
2. Damage caused by improper use, storage and maintenance of consumers.
3. Damage caused by the maintenance personnel designated by the company or the dealer.
4. Damage caused by force majeure (such as lightning strike).

## 4G+IP+PSTN

## Three network alarm system



