

# **GA222G**

## **USER MANUAL**

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# Function and Specifications

## Function:

- LCD screen with clock display, simple and elegant
- Compatible with Smartphone APP (IOS, Android)
- 4 wired and 10 wireless defense zones, 2-way defense alarm output, different zones different function application
- Support maximum 90 wireless detectors
- Can be used as a telephone by using keypad to make calls
- Remote control the device to arm, disarm by sending SMS
- Can preset 6 phrases phone numbers: when alarming, system will make alarm call to these numbers automatically
- Can preset 3 phrases SMS numbers: when alarming, system will send alarming SMS automatically
- Can preset 3 phrases SOS phone numbers
- Wireless learning code: easy to add additional wireless accessories
- 6 groups of timely arm/disarm by week, convenient for users and alarm center to control the system.
- 20 seconds voice recording message
- Record checking: the device can store 50 alarm records
- Built-in high capacity battery, SMS alert for power failure or low voltage
- Support timely patrol, can be elder monitor, security inspection, warehouse inspection.

## Technical parameters :

Power supply: AC=220V±10% DC=5V

Static current: ≤60MA

Alarm current: ≤450MA

GSM frequency : 850/900/1800/1900MHZ

Wireless receiving frequency: 433MHZ

External siren voice: 110db

## Standard package including:

- 1\*main panel
- 2\*remote controller
- 1\*wireless door sensor
- 1\*wireless PIR detector
- 1\*external wired small siren
- 1\*power supply
- 1\*backup battery
- 1\* user manual

## Chapter 1 Installation

### Panel installation

- 1 .Install in center area of defense zone to make sure get all wireless sensor signal very well.
- 2 .Stay away large metal objects or high frequency interference household appliance, It's better stall in hidden space

### Panel configuration



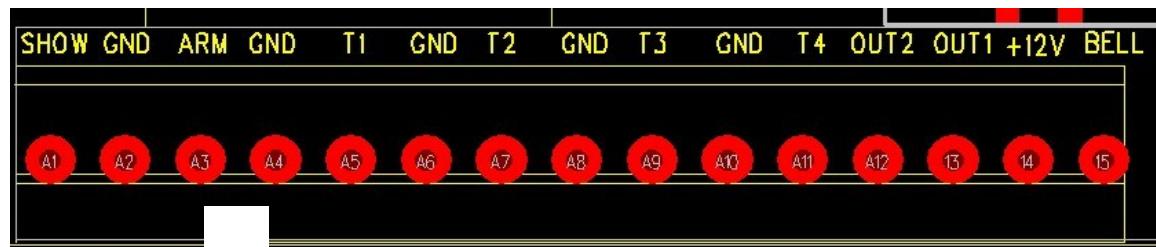
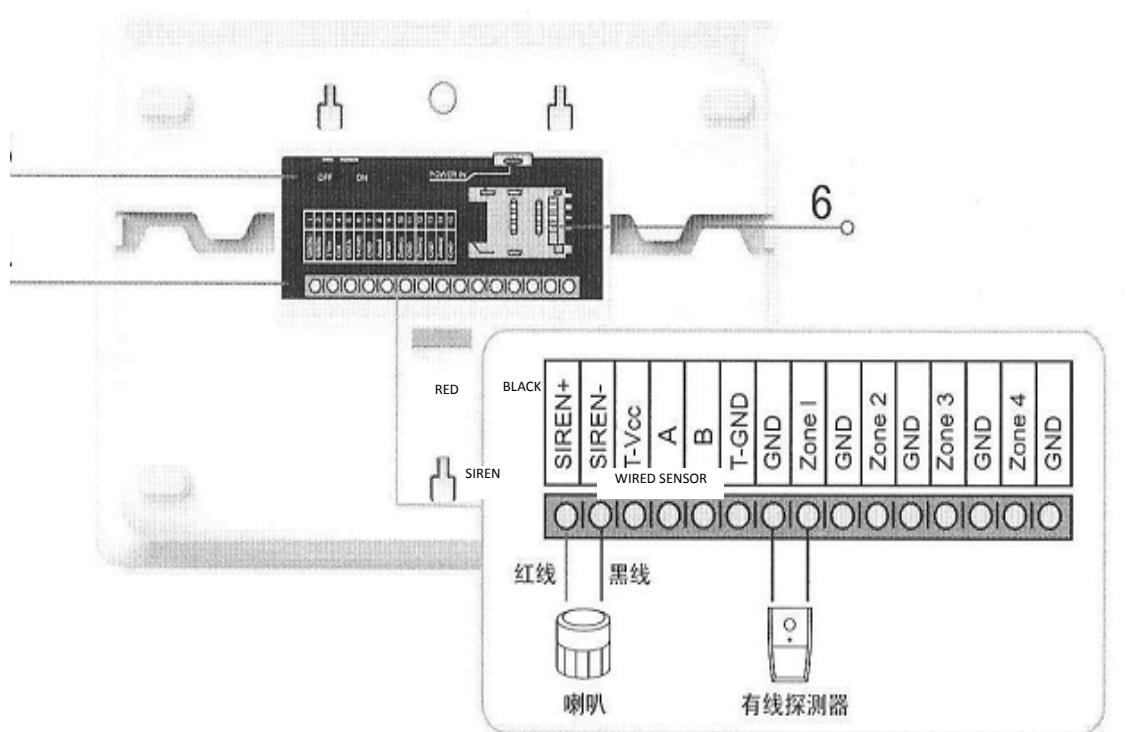
1. Main frame screen: 128x64, support English and Chinese display
2. Status LED: power (red): insert the external power supply, it lights, if remove, it goes out.
  - set(green): enter into setup interface, it lights, exit the interface, it goes out.
  - Signal(green): when receive valid RF signals, the signal light blinks.
  - Alarm (red): when the panel alarms, it lights, when disarm, it goes out.
3. Touch keypad:
  - ESC: exit or turn back
  - ENTER: confirm or OK
  - CALL: in system disarming state, it can achieve phone function.
  - ARM: press it; system be AWAY ARM status

STAY: press it; system be STAY ARM status

SOS: emergency alarm

↑↓←→: choice for up/down/left/right and move

## Back wall function interface configuration



### 4. Functional interface

1	SHOW	wired LED light, on in arm, off in disarm
2	GND	Grounded cord(negative)
3	ARM	Wired arm swift, from On to off is arm, from off to on is disarm
4	GND	Grounded cord(negative)
5	T1	Wired sensor 1 positive
6	GND	Grounded cord(negative)
7	T2	Wired sensor 2 positive
8	GND	Grounded cord(negative)
9	T3	Wired sensor 3 positive

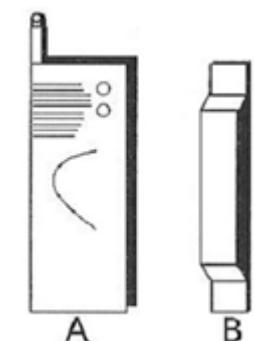
10	GND	Grounded cord(negative)
11	T4	Wired sensor 4 positive
12	OUT2	Out put 2 or remote control output 2
13	OUT1	Out put 1 or remote control output 1
14	+12V	Power output
15	BELL	Wired siren

5. Built-in battery switch

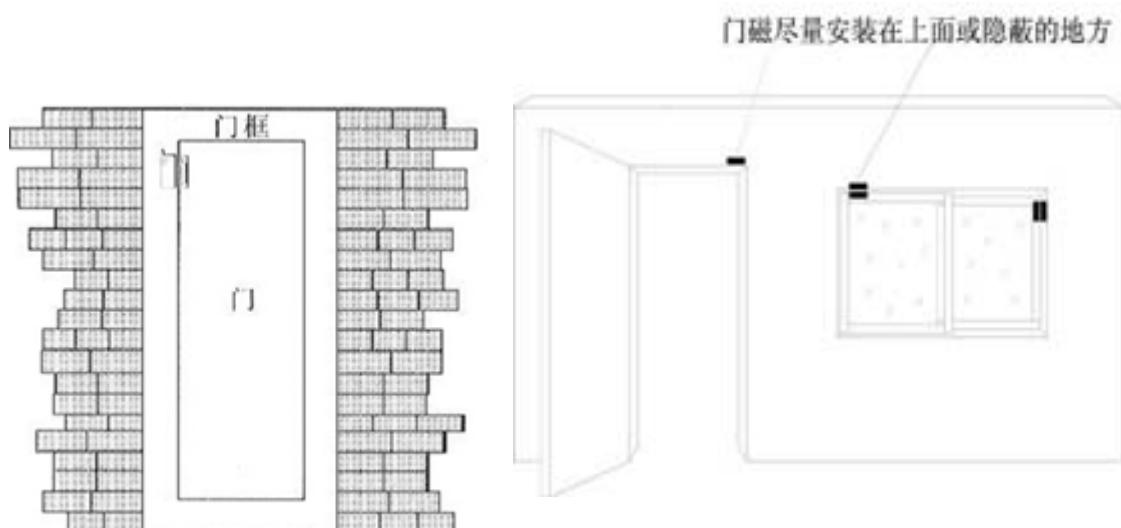
6. SIM card slot

## 2. Door sensor installation

Door sensor photo:



Installation diagram:

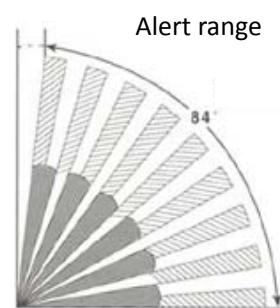
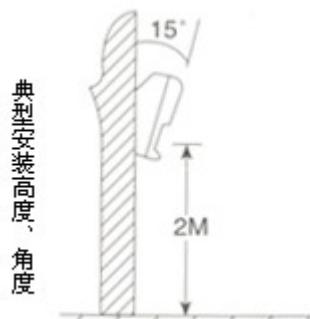


### Door sensor installation instruction:

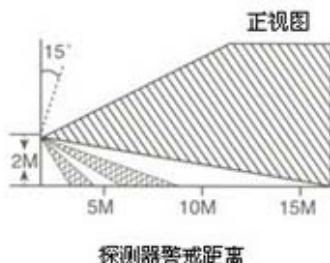
- 1) Door sensor is to monitor door/window open and close, Mount the sensor on the door frame and the magnet on the door by use random enclosed double-side adhesive, and suggest use glass glue or super glue to fix because viscosity of adhesive will be decreased after long term use.
- 2) Line up part A and part B on the same place and try stay close, the distance should be less than 10mm.
- 3) o get best wireless transmission range, please pull out antenna and placed vertically.
- 4) Do not close to metal or directly installed on metal to avoid effect door sensor performance.

### 3. PIR detector installation instruction:

Normally height and angle



Top view



### Wireless PIR detector installation instructions:

- 1) PIR detector can monitor if have people moving in a certain range, when installation, mount the sensor on the face of wall, above ground 2 to 2.2 meters, adjust angle, face with detection area.
- 2) More sensitive for horizontal movement in a certain range, less sensitive for vertical movement. So PIR orientation should be vertical with people walk direction.
- 3) To minimize false alarms, do not expose to the place which temperature change fast, high air velocity and pet passed, such as outdoors, air conditioners, fireplace and sun.
- 4) Do not have large obstruction within detection area.

### Remote controller

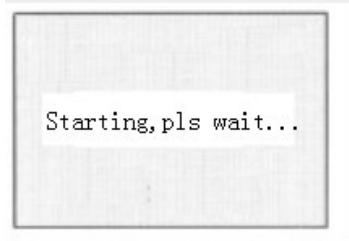


- 1) arm for main panel with all accessories
- 2) stay arm when host or other people at home, parts of detection area invalid or disarm
- 3) send "SOS" to main panel
- 4) disarm for main panel with all accessories

# Chapter 2 Operation and setting instruction

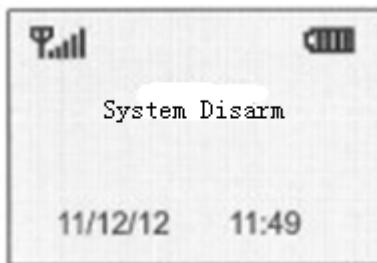
## Operation instruction

### 1. Instruction of alarm panel:



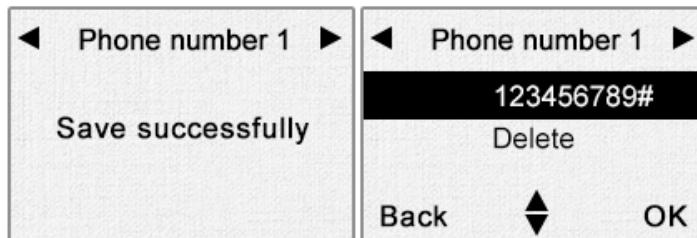
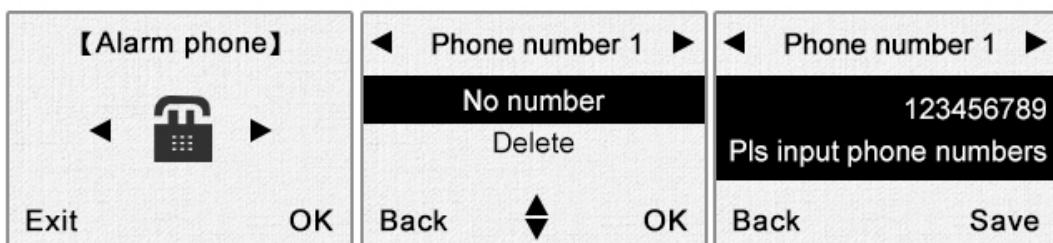
- 1) Insert SIM card
- 2) Power on the power adapter, alarm panel will start self-inspection and display screen information
- 3) Waiting alarm panel connect the network well, GSM signal strength at least 3 which means connection successful, otherwise, weak signal will affect normal use.

### 2. Main interface



- 1) GSM signal bars: display current GSM signal strength
- 2) Battery Charge: display current battery charge.
- 3) Panel Status: display current panel status(away arm, stay arm ,system disarm, SOS alarm)
- 4) System Time: display system time, the time needs to set first.
- 5) when system is in state of 《system disarm》, all buttons are valid.
- 6) when system is in state of 《system disarm》,input original password 888888 + ENTER to setting system.
- 7) when system is in state of 《away arm 》 or 《stay arm》, system enter into related detection operation, only ESC、ENTER、number keys、《SOS alarm 》 is valid. Input original password 888888 to be disarm.
- 8) In state of 《away arm 》 and 《stay arm》 , main panel cannot switch directly. It must be able to enter into corresponding arm in exit to disarm state.
- 9) Remote controllers can switch between 《away arm》《stay arm》《disarm》《SOS alarm》

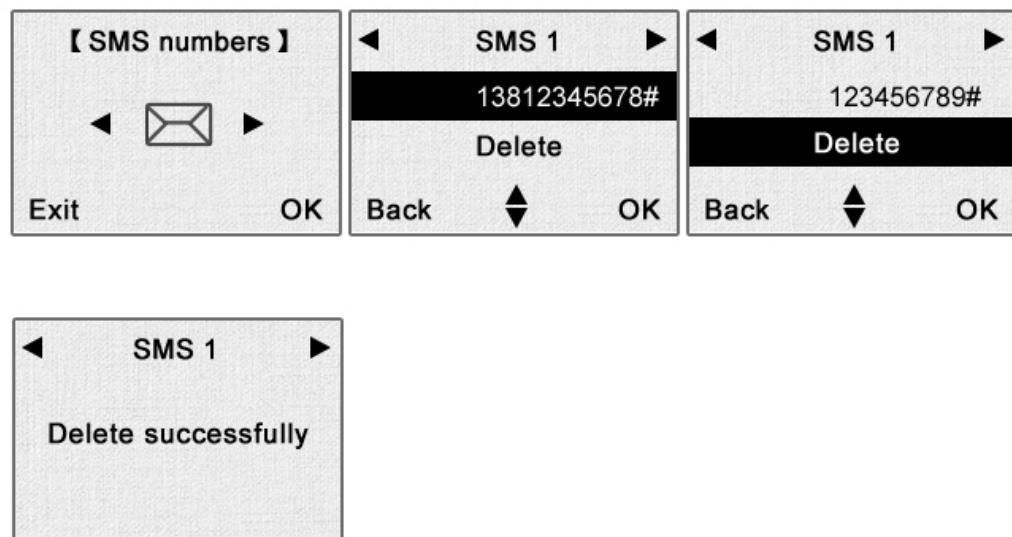
### 3. Dial interface



Only in state of setting interface, main pane can be set all operation. In state of setting interface, set indication lighting, in that time  $\uparrow\downarrow\leftarrow\rightarrow$  means up/down/left/right.

- 1) In state of 《system disarm》, press main panel password "888888" and <<CALL>>, choose Enter and ESC.
- 2) In setup interface, only up/down & left/right keys、ESC、ENTER keys and number keys are valid.
- 3) Phone number can't be repeat
- 4) Can store 6 phrases phone numbers, when alarming, system will make alarm call to these numbers automatically

#### 4. Alarm SMS numbers

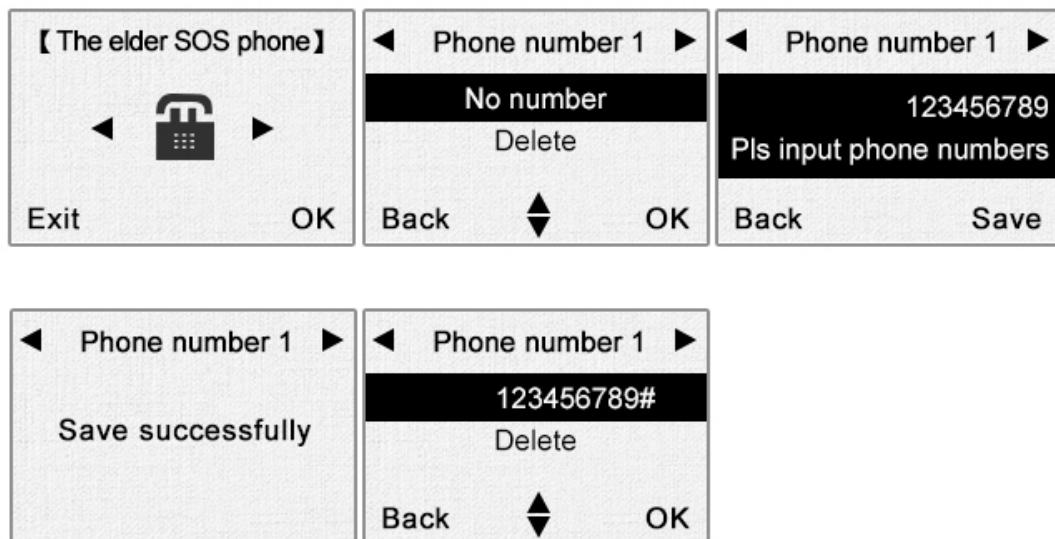


- 1) In state of system disarming, left/right keys to select 《alarm phone number》, enter key for 《confirm》,

ESC for 《exit》

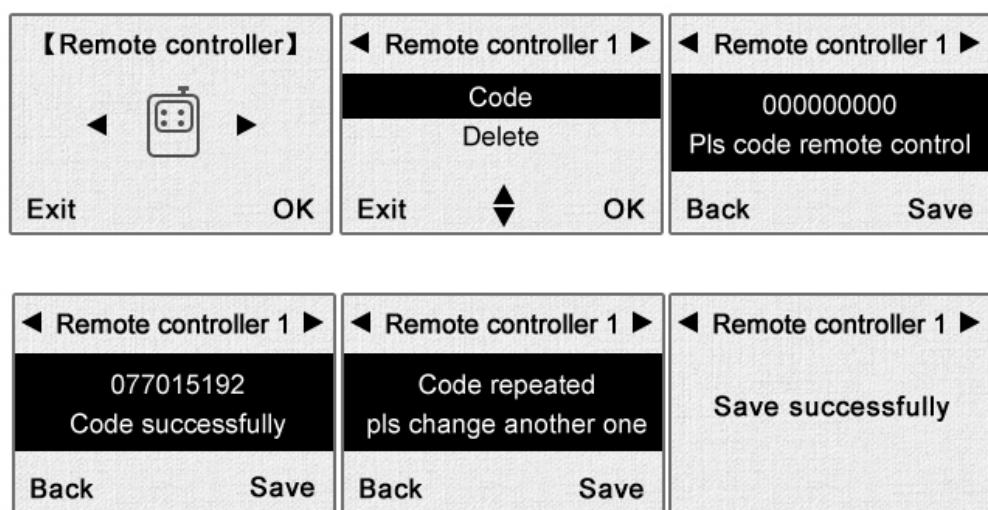
- 2) In state of setup interface, only up/down & left/ right keys 、ESC、enter key and number keys are valid.
- 3) Phone number cannot be repeated.

## 5. Elder help call setting



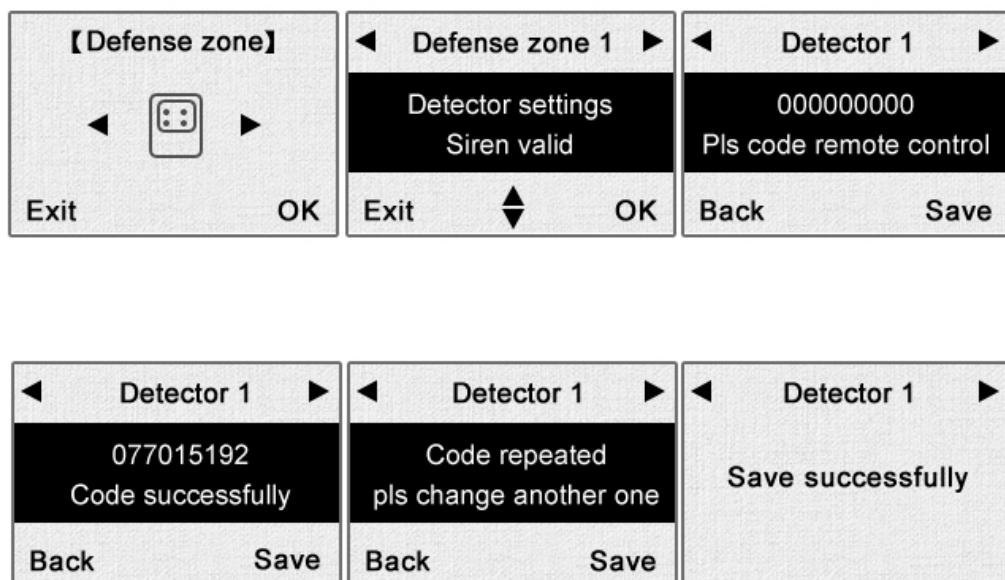
- 1) In state of system disarming, left/right keys to select 《Elder help call》 ,enter key for 《confirm》, ESC for 《exit》
- 2) Phone number can't be repeated.
- 3) Support 3 group specified phone number.
- 4) This area number is specified phone number, SOS is second option.

## 6. Add remote controller



- 1) Support maximum 8 remote controllers, only in state of system disarming can add remote controller.
- 2) Press 4 buttons: Stay arm. Away arm, disarm, SOS alarm when coding.
- 3) Can't add remote controller If remote controller code is invalid or repeat with main panel, please see operation illustration.
- 4) Interface will display "delete" for already coded remote controller, user can choose delete this code separately.

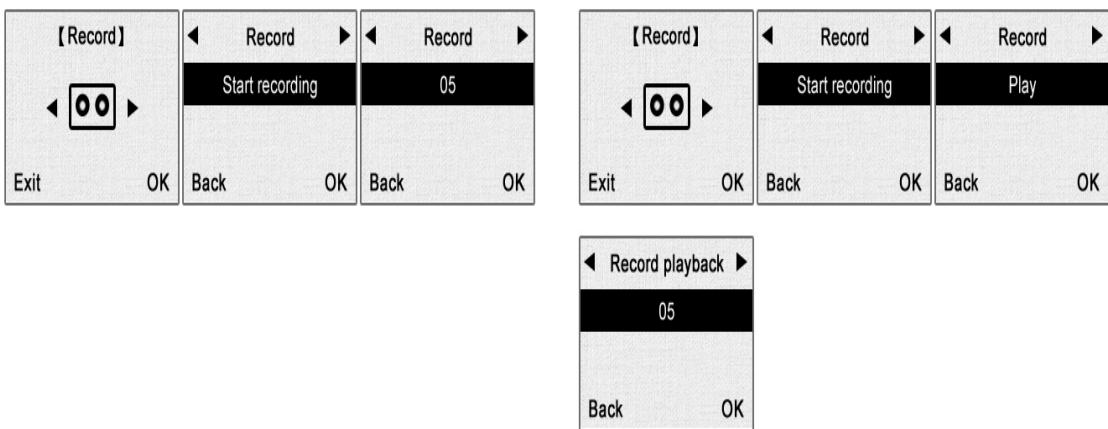
## 7. Add defense zoon setting



Supports 10 defense zones, maximum with 90 detectors, only in system setup can add detector, please refer to above illustration.

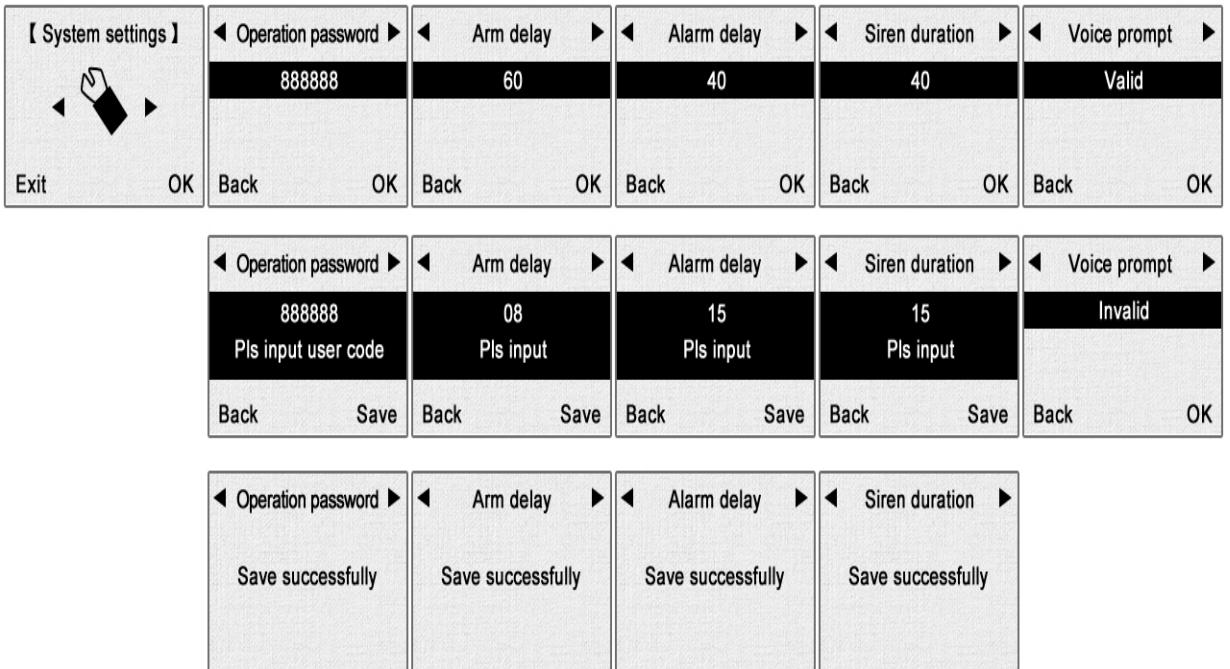
- 1) After enter into defense zone, it has zone 1 to zone 10, each zone has 9 detectors.
- 2) left/right button to select 《defense zone》 and 《detector》 option, ENTER key for 《confirm》, ESC for 《exit》
- 3) Siren is valid/ invalid: when set valid, this defense zone alarming.
- 4) in state of setup interface, only up/down & left/ right keys 、 ESC、 enter key are valid, already coded detectors are invalid.
- 5) Interface will display "delete" for already coded detector, user can choose delete this code separately.

## 8. Record setting



- 1) 20-second automatic message recording, when alarm, record message send out by phone.
- 2) recording/play, left/right button to select in main interface.

## 9. System setting



- 1) in state of disarm, left/right button to select <<system setup>>, ENTER key for 《confirm》, ESC for 《exit》
- 2) Operation password: this system only has one password, Factory default :888888, user can change the password
- 3) Recovery factory: Restore factory default when confirm restore system.
- 4) Arm/disarm SMS: message send to cell phone when received arm/disarm operation notice.

5) Language: Chinese/English

6) Remote controller alarm: remote controller control siren valid/invalid

7) Voice prompt: In the state of are/disarm will have voice prompt, default valid.

8) Backlight keeping, main panel display backing and keypad on/off

9) Alarm delay: in state of arm, if there is alarm situation, main panel will alarm after determined time, default 60 seconds, ranging from 0 ~99 seconds.

10) Arm delay: after press arm key, the panel enter into disarm state within determined time. Default 60 seconds, ranging from 0 ~99 seconds.

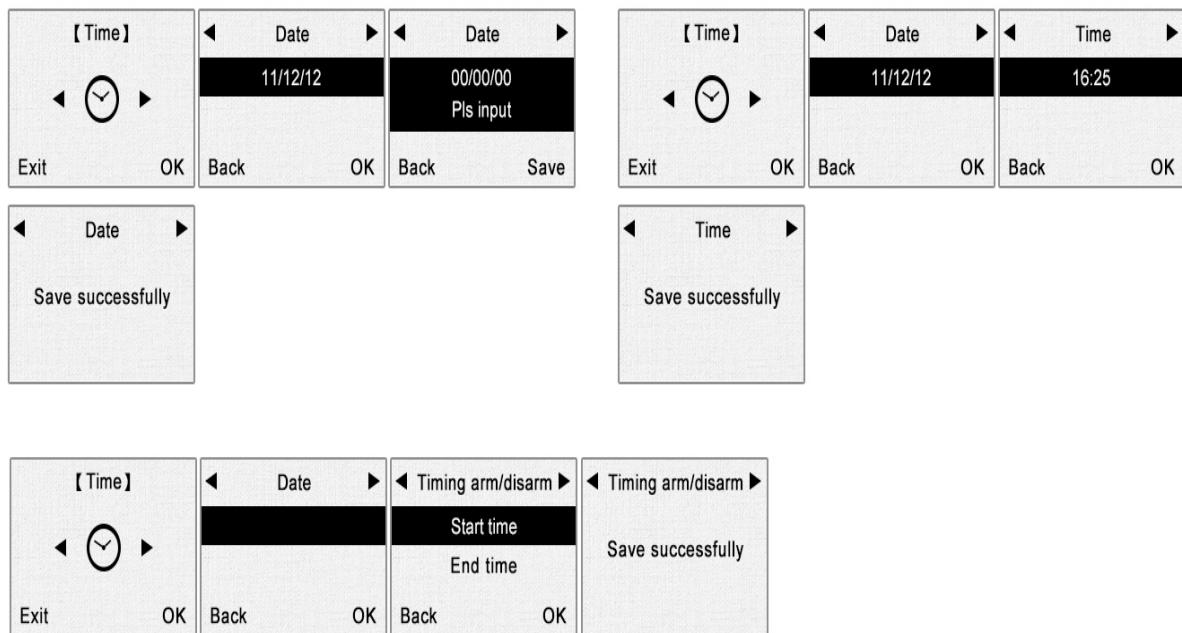
11) siren sound time : when siren sounds, the sound time, default 60 seconds, ranging from 10~600 seconds.

12) Linkage alarming, controlled by some defense area, linkage output high electric and affect outside electrical equipment, such as close electric valve!

13) Alarm dialing: when main panel alarm, can select if dial.

## 10. Time setting

- 1) Enter in time setup interface, see below picture, left/right button to select.
- 2) Date: Year/Month/Day
- 3) Time: Hour: Minute, 24 hours system.
- 4) Timely arm/disarm: time is H: M to H: M. End time must be later than start time.



## 11. Timely arm/disarm

- 1) In the state of timely arm/disarm, main panel will arm/ disarm within in determined time.
- 2) In the state of arm/disarm, press left/right button to set timing 1, timing 6 for 6 group time setting , press up/down button to set timing 1 or timing 6 separately or week setup.

## 12. Patrol setting

- 1) Detector in this defense zone no matter in arm or disarm, if not be triggered in time interval area, main panel will alarm.
- 2) In the state of system arm/disarm, press up/down button to set time range and time interval area.

## 13. Linkage defense zone setting

### 14. Defense zone function instruction:

Normal zone 1: in the state of arm or stay arm, it will alarm once detector triggered, no action in disarm.

Normal zone 2: in the state of arm or stay arm, it will alarm once detector triggered, no action in disarm.

Stay zone3: in the state of stay arm, it will not alarm when detector triggered.

Gas sensor zone: in the state of arm or disarm, if this area detector work, main panel will send alarm information

Intelligence zone 5:in the state of arm/stay arm, not alarm for first triggered, will alarm if triggered again within 30 seconds.

Help Zone 6: in the state of arm/disarm; it will alarm once triggered, and calling specialized number.

Patrol Zone 7: in the state of arm/disarm, it will alarm if not triggered within preset time range

Door ring 8: once detector be triggered, it will make “ding-dong” sounds.

Welcome zone 9: once detector be triggered, it will make “welcome” sounds.

Closed zone 10: anytime, detector triggered invalid.

Every defense zone maximum 9 code detector.

## Chapter 3 Main function description

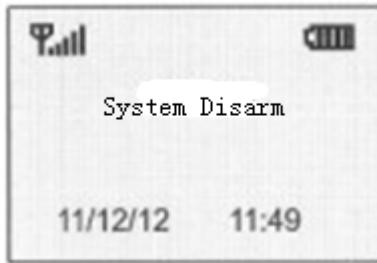
### 1. Panel disarm

Panel disarm refers to let the panel in state of non-alert. Two ways to enter into system disarm, one way is normal disarming after operation of arming, and other way is to stop the main unit alarming. After the operation of disarm, all the defense zones will not work (some item have no this function).

Use the panel keypad to input operation password + ENTER. The screen will display “system disarmed”.

Remote controller operation: press disarm button [  ] on the remote controller.

Panel operation: password+ENTER



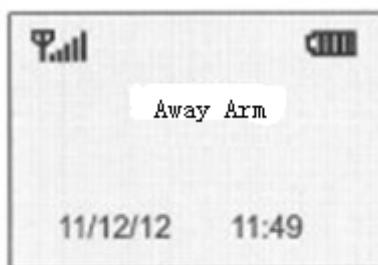
## 2. Away arm

Away arm means all the defense zones are in arm status. When there's nobody at home, it is required to set all the detectors working. Any detection source (such as thief, fire, or gas leakage) trigger the detector, the alarm system will make alarm.

Use the panel keypad to press [ARM], heard beeps and the screen will display "system armed".

Remote controller operation: press arm button [  ] on the remote controller.

Panel operation: press [ARM]. The system will enter arm status after the delay time.



## 3. Stay arm

Stay arm means part of the defense zones are in arm status. For safety, when people at home, some of the detectors (such as sensors for door, window, balcony, etc) in stat of arm, the others (such as sensors for the hall or some places easy to be triggered at home) in state of disarm.

Use main panel keypad to press [STAY]. The screen will display "system armed".

Remote controller operation: press stay arm button [  ] on the remote controller.

Main panel operation: press [STAY].



#### 4. Answer alarm call

When the panel alarm, it will dial the preset numbers. If no one answers the call, the system will call the next number automatically. It will call all the preset numbers in order for 3 times.

If you answer the call, you can set system via your telephone or mobile phone keypad.

If you hang up directly without answering the call, the system will call all the numbers 3 times circularly.

**Press [1]:** The panel stop alarm, read the alarm information, stop calling users..

**Press [2]:** The panel stop alarm and in disarm; stop calling users.

**Press [3]:** The panel stop alarm and close siren, then monitor on-site.

**Press [4]:** The panel stop alarm and intercom on-site.

**Press [5]:** The panel stop alarm and in arm

#### 5. Remote control

Through cell phone to control the panel, when connect to the panel, it beep voice prompt: Please input password. After input password correctly, voice prompt: please input command. If password is error, voice prompt: password incorrect, please re-input.

- (1) press 1 key, enter into playback state.
- (2) press 2 key, the panel disarm
- (3) press 3 key to monitor on-site.
- (4) press 4 key to intercom on-site
- (5) press 5 key, the panel arm

#### 6. SOS

Sometimes, there may be some accidents happening (such as sudden illness of old people or children, fire accident, burglar intrusion).sudden illness of old people or children, fire accident,

burglar intrusion), just press [SOS] button on keypad, or [  ] button on remote controller, the panel whether sound siren or not according to the setup, meanwhile dial the set alarm number

The panel operation: press [SOS].

#### 7. System dialing function

Can use the panel to make any call just like a land-line telephone. For example, in disarm status, dial telephone number on keypad, press [CALL] button, the panel will make a beep and the LCD screen will display the number you are calling. After the call, press [CALL] button again, the call will be hanged up and the panel will be in disarm status.

## 8. Alarm records check

This alarm system can store 10 alarm records. Each time after alarm, the panel display the latest alarm info, it includes: date + time + defense zone + detector number.

Checking method: In disarm state, input [00] + ENTER, the panel enters the state of alarm record checking. The panel can record the latest 10 alarm info. When have new alarm info, the earliest info will be deleted automatically.

Operation figures:



## Chapter 4 System trouble shooting

Trouble symptom	Process method
No GSM signal	a. Check if SIM card installed well, reinstall b. SIM card if validate, change SIM card. c. GSM signal strength in install placement, if not strength enough, change place.
Main panel can't alarm	a. Accessories code if learned success, relearn. b. Detector can't send alarm signal if have no enough power, change battery.
Can't call	a. If GSM signal strength enough, if not change place. b. SIM card if have enough money, check the SIM card money.
Siren no sound	a. Siren wire is conned well, check the wire connection. b. If defense set in wireless siren, check the setup

Remote control can't work	Check double side GSM signal, check GSM.
Forgot password	

## Chapter 5 APP operation instruction

### 1. User registration



图一



图二

- 1) Press App will appear login screen, press 【join free】 for first time use to finish register, then you can operate main panel and the function application.
- 2) System default first register phone number on APP as host, host can operate or change specification and function.
- 3) If forgot password in the future, press 【forgot password】 to finish operate, in the state of main panel setting, you can also resume to default setting.

### 2. APP home page



- 1) On APP home page, can operate 4 function, 【Password setting】 【Setting】 【Remote Operate】 【Control】
- 2) Can be hand remote control, just press 【Stay Arm】 【Away Arm】 【Disarm】 【SOS】

### 3. Password setting



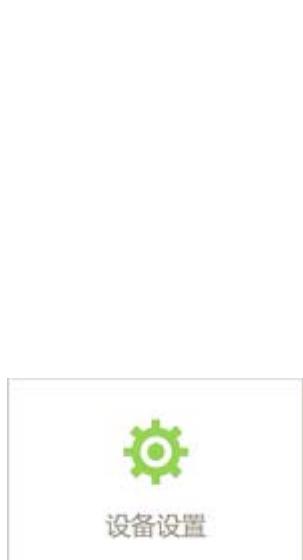
图一



图二

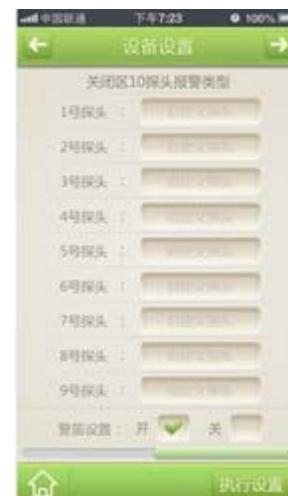
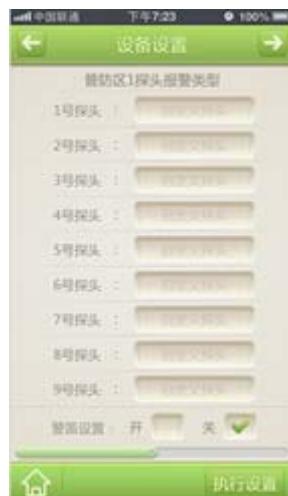
- 1) Press 【Password setting】 can set up new password or change password, see pic. 1.

### 4. Settings

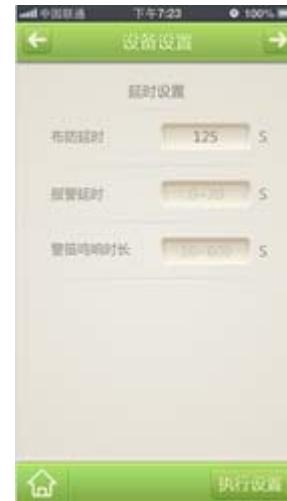


Pic.1 【Setting】

pic.2 【alarm SMS numbers setup】 pic.3 【alarm phone numbers setup】



Pic.4 【SOS phone numbers setting】 Pic.5/pic.6 【normal 1-10 defense zone detector】



Pic.7 【Timely arm/disarm】

Pic.8 【Patrol defense zone】

Pic.9 【Delay setting】



Pic.10 【Switch setting】

- 1) In 【setting】menu, submenu 【alarm SMS numbers setting】 【alarm phone numbers setting】 【SOS phone numbers setting】 【1-10 defense zone detector】 【Timely arm/disarm】 【Patrol defense zone】 【Delay setting】 【Switch setting】 can operate.
- 2) 【alarm SMS numbers setting】: Can store 6 phrases SMS numbers, when alarming, system will send SMS to these numbers automatically
- 3) 【alarm phone numbers setting】: Can store 6 phrases phone numbers, when alarming, system will make alarm call to these numbers automatically
- 4) 【SOS phone numbers setting】: Can store 3 phrases SOS phone numbers, once【SOS】was triggered, system will make alarm call to these numbers automatically.
- 5) 【1-10 defense zone detector】: custom each defense zone, such as "kitchen gas sensor", once triggered this defense zone, system send SMS content "kitchen gas sensor" to these numbers.
- 6) 【Timely arm/disarm】: 6 phrases timely arm and disarm
- 7) 【Patrol defense zone】: set detector time interval in patrol defense zone.
- 8) 【Delay setting】: Setting time
- 9) 【Switch setting】: Setting switch parameters change.

## 5. Remote control



【Remote control】 Once dialed successfully, Panel can be controlled by phone.

## 6. Panel control



【Panel control】

### **Federal Communications Commission (FCC) Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

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

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

### **RF exposure warning**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.