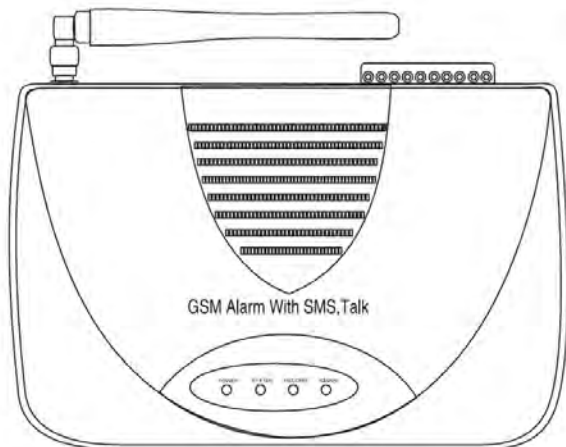


# Business/ Home GSM Alarm System



## User Manual

### ***Profile***

For a better understanding of this product, please read this user manual thoroughly before using it.



## **Warning**

Do not remove the front or back cover of the unit and keep it intact. There is no part that can be repaired by user. If repair is needed, please send it to seller or authorized service point.

The information contained in this manual is prepared for the alarm system only. It adopts a sustainable development strategy. Therefore, the company retains the right to modify or make improvement to any product described herein without giving prior notice. All rights reserved. The name of other companies or products referred to herein may be the brand or product name of their respective owners.

Thank you for purchasing this alarm system. For proper use and your safety, please read these instructions thoroughly and carefully before you put the system in use. Keep this manual carefully for your reference in the future.

## Precautions

Please read and follow the brief instructions below, otherwise physical danger or system damage may be incurred. This manual contains more detailed information about safety issues concerning the system in other parts hereof.



### Proper use

Read this manual carefully before you put the system in use. Operate in accordance with the instructions herein.



### Waterproofness

The alarm system is not waterproof. Please keep it dry.



### Qualified maintenance service

Only those qualified maintenance professionals may repair the alarm system.



### Backup

Be sure to back up all important information stored in the system.



### Original parts and batteries

Only original parts and batteries approved by manufacturer may be used, otherwise the warranty term may be breached and danger may occur.



### Addition of other equipment

Before adding other equipment, please read the user manual for detailed safety instructions. Be sure not to connect incompatible products to the system.



### Switch on safety

Do not switch the Device on when wireless phone use is prohibited or when it may cause interference or danger.



### Interference

All wireless devices may be susceptible to interference, which could affect performance.



### Switch off in restricted areas

Follow any restrictions. Switch the device off in aircraft, near medical equipment, fuel, chemicals, or blasting areas.

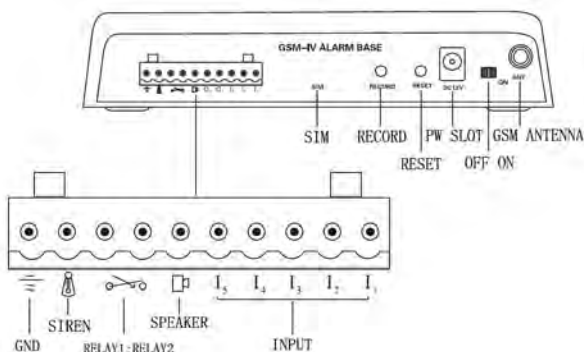
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## **I. Functions**

1. GSM 900/1800/1900 bands, can be used all over the world.
2. 5 wired and 16 wireless defense zones, each can arm, disarm and 24-hour arm independently.
3. SMS of each zone (5 wired zones, 16 wireless zones) can be edited independently.
4. Users can record 10 seconds alarm audio message with the scene location information.
5. Arm & alarm delay function, the delay time is adjustable (00~99 seconds).
6. Timely arm/disarm, convenient for users and alarm center to control the system.
7. Can set 5 phone numbers, which used to receive alarm phone and alarm SMS.
8. Set Out Arm, Home Arm, Disarm or Panic alarm with remote controllers.
9. Can control the system by calling-in or SMS, such as arm, disarm, listening-in, output, and so on.
10. Listen-in function: can hear the sound of people move, dig and other actions at the scene.
11. Two-way intercom function: can communicate with people at the scene.
12. SMS alert for power failure or recovery.
13. Password operation to make sure the security of system.
14. Siren port for shift between silence and sound.
15. Optional built-in battery, AC-DC shift, automatically recharge.

## II. Identify the ports of the host



- SIM card slot:** at the back of the main panel there is a cover of the SIM card, open the cover and insert SIM card, then close the cover.
- Record:** press it for 2 seconds to enter recording status.
- Rset:** press “RESET” on the back of the host and then plug in power. The signal light flashes once or the siren sounds a “di”, means the main panel has been reset. The system restores to factory settings, and all detectors are deleted. (default password is 123456)
- Power slot:** connect 12V/1.2A DC, inner core is positive, shell is negative.  
When the external power is cut off, the system will send SMS “**Power changer off**” to inform the user. When the external power recovered, the system will send SMS “**Power changer on**”.
- Switch:** turn right to start the host, otherwise close.
- Antenna:** GSM antenna, you should connect the antenna before power supply.
- 10-pin ports:** GND; SIREN; RELAY1; RELAY2; SPEAKER;  $O_2(I_5)$  ;  $O_1(I_4)$  ;  $I_3$ ;  $I_2$ ;  $I_1$

**GND** is reduced end of ground.

**SIREN** is to connect one end of siren, the other end connects to GND.

**RELAY1, 2:** relay output, It is normally opened, and will keep closed for three minutes when alarming (this function can be set off). When alarming, it can link the power, video, etc.

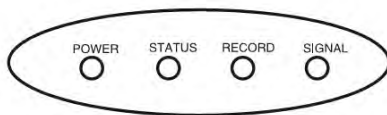
**SPEAKER** is to connect the speaker; the other end of speaker connects to GND.

**I<sub>1</sub>, I<sub>2</sub>, I<sub>3</sub>, I<sub>4</sub>, I<sub>5</sub>** are wired inputs; short circuit or disconnect to GND will trigger alarm.

### III. Installation

- a. Use a normal SIM card, delete all telephone numbers and messages in the SIM card; insert SIM card.
- b. Then connect GSM antenna.
- c. Plug in DC power supply, and power on the unit. The LED will change.

### LED status explanation



LED	LED Status	System working status
POWER	Off	Hasn't turned on the switch; hasn't connected the power; no power in built-in battery
	Red	power supply is normal
SIGNAL	Green	SIM card or GSM network is abnormal
	Green (flash)	SIM card and GSM signal are normal
RECORD	Green	Start to record
	Off	Finish recording
STATUS	Orange (flash slowly)	Check SIM card and search GSM network
	Green	SIM card and GSM signal are normal, in disarm status
	Green (flash slowly)	Out Arm
	Green (flash quickly)	Home Arm
	Orange (flash slowly), 10's later green on	Out Arm with delay time
	Orange (flash quickly), 10's later green on	Home Arm with delay time
	Red (flash slowly)	In alarm status
	Red (flash quickly)	Remote controlled by SMS commands or phone

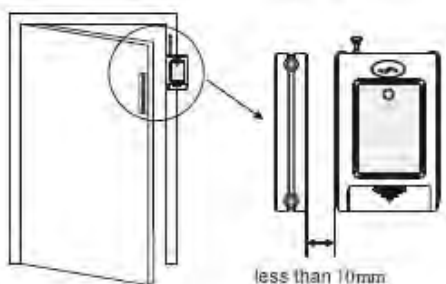


## 1. Host

- ✧ Try to install the main panel in the center of defense zone and pull out the antenna to get longer wireless receiving distance.
- ✧ Installation position should be far away from huge metal objects and wireless interference.
- ✧ Install the main panel in a hidden place.

## 2. Door sensor

Door sensors are used for detecting the status of open and close of windows and doors. It will detect it and send the signal to main panel.



- ✧ Tear apart the double-side adhesive tape on the magnet and the transmitter. Then adhere them to the appropriate position.
- ✧ Magnet should be near to the side of transmitter with indicator. The two should align with each other and the distance should not exceed 10mm.
- ✧ Please plug out the antenna for better signal.
- ✧ If the low-power indicator is on, please change the battery.

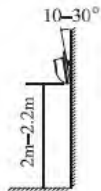
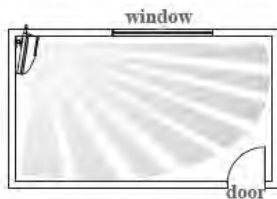
## 3. Wireless PIR detector

PIR detectors are used to detect the movement within a certain range.

- ✧ Fix the adjustment bracket on the wall with the provided screws

and attach the detector to the bracket. It is recommended to mount it at a height of 2-2.2m above the floor.

- ✧ Effect of the PIR detection is best when the detection direction is in 90°angle with the walking direction of the intruder. Choose the most suitable installation place and angle according to actual situation and taking the following installation diagram as reference to ensure the detection effect is best.



- ✧ Please do not fix it under direct sunlight or other strong lights and also keep it away from places with frequent strong air stream.
- ✧ If the low-power indicator is on, please change the battery.

## IV. System settings

### 1. Change the password of the system (can be set only by SMS)

**Format:** original password#30#new password# (new password is 0-6 digits)

For example: change original password 123456 to 888000: send SMS: 123456#30#888000#.

### 2. Set alarm phone numbers and SMS numbers (can be set only by SMS)

The following operations take original password 123456 as example:

SMS commands	Functions
123456#10#13988821001#	Send SMS to the 1st phone number 13988821001 when alarming
123456#11#13988821002#	Send SMS to the 2nd phone number 13988821002 when alarming
123456#12#13988821003#	Send SMS to the 3rd phone number 13988821003 when alarming
123456#13#13988821004#	Send SMS to the 4th phone number 13988821004 when alarming
123456#14#13988821005#	Send SMS to the 5th phone number 13988821005 when alarming
123456#15#13988821001#	Call the 1st phone number 13988821001
123456#16#13988821002#	Call the 2nd phone number 13988821002
123456#17#13988821003#	Call the 3rd phone number 13988821003
123456#18#13988821004#	Call the 4th phone number 13988821004
123456#19#13988821005#	Call the 5th phone number 13988821005

### 3. Defense zones setting (can be set only by SMS)

Users can set the status of the defense zones according to their requirements.

#### a. Wireless zones setting

zone serial number: 50~65, total: 16 zones (zone: 00-15).

**SMS commands: password# zone serial number # zone status #**

**Message content #**

Zone status: 0: disarm; 1: arm; 2: 24-hour arm (system default: arm)

E.g.:123456#50#1#hall# means set wireless zone 1 arm

50 indicates: wireless zone1; the name of the zone (hall) can be set according to your actual situation.

#### **b. Wired zones setting**

zone serial number: 66~70, total: 5 zones (zone: 16-20).

**SMS commands: password# zone serial number # Zone status # Message content #Trigger type#**

Zone status: 0: disarm; 1: arm; 2: 24-hour arm (system default: arm)

Trigger type: 1: open circuit trigger to alarm, 0: short circuit trigger to alarm (system default: 0: shorted alarm)

E.g.: 123456#66#1#hall# means set wired zone 1 arm and open circuit alarm

**NOTE:** The host has 16 solidified SMS of the wireless detectors, (wireless zone 0-15), the first SMS corresponds the first zone of wireless detectors, other detectors are the same. The host also has 5 solidified messages of the wired detectors, (wired zone 1-5), the first message corresponds the first zone of wired detectors, other detectors are the same. Users can send SMS and change its contents.

#### **4. Function settings**

Taking original password 123456 as examples:

**The following functions can be set by SMS commands or phone.**

<b>Command</b>	<b>SMS Content</b>	<b>Function Description</b>
1#0#	123456#1#0#	Disarm
1#1#	123456#1#1#	Arm
1#2#	123456#1#2#	Home Arm
2#0#	123456#2#0#	Close scene siren sound

2#1#	123456#2#1#	Open scene siren sound
3#0#	123456#3#0#	Close monitor scene function
3#1#	123456#3#1#	Open monitor scene function
4#0#	123456#4#0#	Close intercom function
4#1#	123456#4#1#	Open intercom function
5#0#	123456#5#0#	Relay disconnected
5#1#	123456#5#0#	Relay connected

When you do the above settings by phone call, press password 12345#, if you hear a long “di”, it means the operation is successful; if there’s “di” twice, it means the operation is wrong, you should re-input. Press “\*” to clear if the input is wrong.

**The following functions can be set only by SMS commands.**

Function Setting	Command	SMS Content	Function Description
Set the time of timing arm/ disarm	31#	123456#31#	18:00 auto-arm;
	Arm time#	1800#0800#	08:00 auto-disarm
	disarm time#	123456# 31###	Close auto-arm/disarm function
Siren sound (default: on)	32#0#	123456# 32#0#	No siren sound when alarming
	32#1#	123456# 32#1#	With siren sound when alarming
Relay linkage	33#0#	123456# 33#0#	Link the relay for 3 minutes when alarming

(default: link)	33#1#	123456# 33#1#	Don't link the relay when alarming
Set the time of delay arm/disarm	37#delay arm time#	123456# 37# [00-99]#	00-99 seconds, default: 10 seconds
	38#delay alarm time#	123456# 38# [00-99]#	00-99 seconds, default: 00, no delay when alarming.
Language (default: Chinese)	39#0#	123456# 39#0#	English version
	39#1#	123456# 39#1#	Chinese version

#### **Addition:**

#### **set the system time**

Under normal working status, send SMS: password#31#.

Thus the system time will be the same as the time of GSM base station.

### **5. Audio message recording**

Users can record geographical location, home address information as alarm audio message, which will be played when alarming.

#### **Recording operation:**

Press the record key for 2 seconds until the light RECORD on, and then speak to the microphone which embedded at the left part of the host. 10 seconds later the light RECORD will be off, the system exits recording status automatically.

## V. Add or delete detectors

### 1. Add new detectors

The PIR, door sensor and the remote controller in the standard kit have been coded to the main unit. If you want to add more wireless sensors, please refer to the following instructions.

- a. **Internal zone detectors:** In normal working status, press “RESET” key for 2 seconds, the STATUS LED turns red; then trigger the new detector. If the LED flashes one time, it means the operation is confirmed. 20 seconds later, the host will exit automatically and turns to normal working status.
- b. **External zone detectors:** In normal working status, press “RESET” key for 2 seconds, the light turns red; then press “RESET” key again, the light turns from red to orange, trigger the sensors. If the LED flashes one time, it means the operation is confirmed. 20 seconds later, the host will exit automatically.

If there are 3 detectors stored, they represent wireless zones 1-3; if you add a new detector, this detector represents zone 4.

How to trigger the detectors:

Door sensor: separate the two parts; PIR detector: move across the detector; remote controller: press any key on it.

**【Note】** : *door/ window sensor is for external zone, PIR sensor is for inner zone*

Press **Out Arm** key, all detectors in external and internal zones will be in arm status.

Press **Home Arm** key, only the detectors in external zones will be in arm status.

## 2. Delete detectors

If wireless detector (eg: remote controller) is lost, you need to delete the lost detector for your home security. Press “RESET” key then power on, 10 seconds later the STATUS LED changes from orange to red, and then from red to orange again. At this time, the system restore to original status (password is 123456; all the detectors are deleted).

For normal use, the wireless detectors must be code to the host according to adding detectors methods.

If you want to delete wireless sensors in a certain zones, you can send SMS: password#defense zone serial number50-65#\*\*

For example: 123456#50#\*\*, it means deleting the sensors in zone 50

## VI. Operation instruction

When the host is powered on and disarmed, users can use remote controller (**Out Arm, Home Arm** key) or send message (123456#1#1#) to arm. Under arming status, the green light flashes. Triggering any wired or wireless detectors, the host will make alarm.

1. If there are phone numbers stored to receive SMS, the host will send the corresponding SMS to the number and then make alarm call. Answering the call, the user can hear the recorded message; press “\*” to hear it again.
2. When alarming, user can listen-in by pressing 3#1#.
3. When alarming, user can talk to people at the alarm scene by pressing 4#1#.

**【Note】** : *For normal use, if there is built-in battery, when external power fails or recovers, the host will send messages to inform users.*

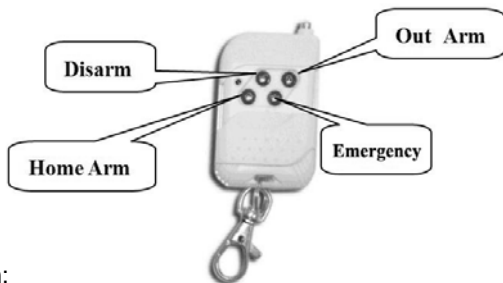


**The message content: power change off/on (year/month/day, hour/minute/second)**


## **Control the host with remote controller**

The remote controller has 4 keys:


**Out Arm, Home Arm, Disarm, Emergency**



### **1. Out Arm:**

Press the “Out Arm”  button on the remote controller, the STATUS indicator on the main panel flashes in orange; 10 seconds later, it will turn green with slow flash. The system enters Out Arm mode, and all the detectors will be in working status.


### **2. Home Arm:**

Press the “Home Arm”  button, the STATUS indicator on the main panel flashes in orange; 10 seconds later, it will turn green with fast flash.


Detectors inside the house (in inner defense zone) will not work, only the detectors outside the house (in outside defense zone) will work, so

that people inside can move freely, but others who break in from outside will trigger the alarm.

### 3. **Disarm:**

Press “Disarm ” button, the system will enter into disarmed status, the STATUS indicator on the main panel is green.

### 4. **Emergency:**

When there is an emergency, press the “Emergency ” button on the remote controller, the system will alarm immediately no matter it is in arm or disarm status.

## **V. Components list**

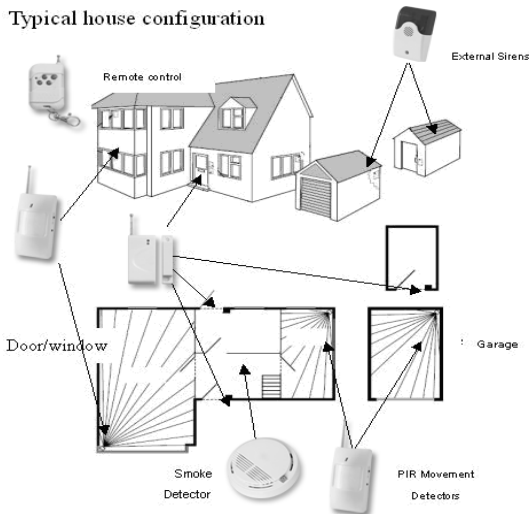
### 1. **Basic kit**

Main panel	1 pc,
Remote controller	2 pcs,
PIR sensor	1 pc,
Door sensor	1 pc,
Siren	1 pc,
Power adapter	1 pc,
Antenna	1 pc,
User manual	1 pc.

## 2. Additional sensors



Optional sensors/detectors are packed separately. You can choose according to your specific requirements.



## **VI. Technical Parameters**

### **Main Panel**

Power: 9V-12V DC

GSM frequency: 900/1800/1900MHz

Receiving code: ASK

Receiving frequency: 315/433MHz

Wireless distance: no obstacle 100m

Wireless detectors: 16

Wire detectors: 3

Working temperature: -10℃~ +40℃

### **Wireless Door/ Window Detector**

Power Supply: DC12V (built-in 12V battery)

Static Current:  $\leq 20\mu\text{A}$

Transmission Current:  $\leq 15\text{mA}$

Transmission Frequency: 315/433MHz $\pm 0.5\text{MHz}$

Transmission Distance: No obstacle 80m

Alarm Distance: 15mm

Working Condition: Temperature -10℃~+40℃

Humidity  $\leq 90\%$  rh

### **Wireless PIR Detector**

Power Supply: DC9V (built-in 9V battery)

Static Current:  $\leq 100\mu\text{A}$

Transmission Current:  $\leq 20\text{mA}$

Transmission Frequency: 315/433MHz $\pm 0.5\text{MHz}$

Transmission Distance: No obstacle 80m

Detective Speed: 0.3~3m/s

Detective Distance: 5~12m

Detective Range: Horizontal 110° Vertical 60°

Working Condition: Temperature -10 °C~+40 °C

Humidity  $\leq$  90% rh

### **Remote Controller**

Power Supply: DC 12V (built-in 12V battery)

Static Current: 0

Transmission Current: 15mA

Transmission Frequency: 315/433 $\pm$ 0.5 MHz

Transmission Distance: No obstacle 80m

Working Condition: Temperature -10°C~+40°C

Relative Humidity $\leq$ 90%

## **VII. Care and Maintenance**

The alarm system has excellent design and used advanced technologies. It shall be used with care. The following suggestions are required to maintain your obligations under the warranty terms, and for prolonging the service life of the system.

- ✧ Place the control panel and all parts and accessories out of children's reach.
- ✧ Keep the alarm system dry. Rain, humidity and various fluids or moisture all will corrupt the electronic circuit.
- ✧ Do not use or place the alarm system in dirty locations, otherwise the electronic elements will be damaged.

- ✧ Do not place the system in excessively hot locations. High temperature will shorten the service life of electronic equipment, damage batteries, deform or even melt some plastic parts.
- ✧ Do not place the system in excessively cold locations. Otherwise condensation may occur and damage the circuit board of the alarm system.
- ✧ It is recommended that you check and test the alarm system periodically:

Check the main unit every three months:

1. Whether it can arm/disarm normally.
2. Whether it can dial the number for alarm normally.
3. Whether it can receive wireless detectors' signal normally.
4. Whether the back-up battery can work normally.

Check the wireless detectors once a month:

1. Trigger wireless detectors to see if system can alarm normally.
2. Check all detectors' batteries to see if it's in low voltage.
3. Check whether wireless detectors can send signal to the main unit normally.

Check the SIM card:

1. Check the use of SIM card, such as network signal, balance, etc.
  2. Make sure the PIN code verification of the SIM card is closed.
  3. Please keep the password and SIM card number safe, in case that other people remote control the system illegally.
- ✧ Since the alarm system is continuously in operation or standby mode, the supply adaptor of the control panel shall be connected to a safe and reliable socket.

- ✧ Do not place the system near your bedroom or office table, because the siren will make high-loudness sound in the case of alarm, which may adversely affect your rest or work.
- ✧ If the alarm system will not be used for a long time, please disconnect the system from the power supply.
- ✧ Please do not disassemble, repair and alter the products without permission, or it may cause accidents and faults.
- ✧ Do not drop this product on the ground or on hard objects, as it may lead to massive impact to cause faults and damages.
- ✧ Without approval and consent of relevant authorities, please do not set “110”, “119” or the alarm phone number of police station for this main unit.

Please read the suggestions above carefully and follow the instructions herein. If any of the equipment does not work properly, please send it to the dealer or authorized service point for repair. We will try our best to solve the problem for you as soon as possible.

## FAQ

Problems	Causes	Solutions
Cannot alarm by phone	<ol style="list-style-type: none"> <li>Hasn't armed</li> <li>Less than 30 seconds after arming</li> <li>Set wrong phone number</li> <li>The two parts of door/window sensor is installed too far from each other</li> <li>Haven't activated PIR</li> <li>Hasn't checked code</li> </ol>	<ol style="list-style-type: none"> <li>Arm the unit</li> <li>Operate after 30 seconds</li> <li>Set the number again according to the manual</li> <li>Adjust the installation place of the door sensor</li> <li>Activate the PIR</li> <li>Check code again</li> </ol>
Remote controlling distance is too short and the light indicator is not on bright enough	<ol style="list-style-type: none"> <li>The battery of remote controller is rusty</li> <li>Low battery</li> </ol>	<ol style="list-style-type: none"> <li>Clean the rust</li> <li>Change battery</li> </ol>
Light indicator of door sensor and PIR is always on.	Low power battery	Change battery
Dial alarm number slowly	The main panel has stored other numbers	Set it again according to the operation manual
The main panel cannot receive signals from the accessory	<ol style="list-style-type: none"> <li>Low power battery in the accessory</li> <li>There is block between the control panel and the wireless accessory or the distance between them is too far</li> <li>The accessory has not been coded to the panel</li> </ol>	<ol style="list-style-type: none"> <li>Replace the battery</li> <li>Pull out the antenna of the accessory and the main panel, and adjust the position</li> <li>Code it to the main panel</li> </ol>