

PH-G-3E & PH-G-3EA

**GSM INDUSTRIAL
ALARM SYSTEM**

USER MANUAL

Rev1230 2007-12-30

Dear users,

Thank you for purchasing our products. Please read through this manual before using this product so as to operate the product properly.

The GSM alarm system adopts the GSM network and Digital Signal Processing technology, and is widely used in security field. With SMS data transmission and voice platform of GSM network, it really realizes wireless alarm control and remote managements and solves the limitation of wired data transmission in telephone and wired network.

Perfect structure, convenient installation, easy operation with wireless control keyboard are designed for the idea of people-oriented, which will make you feel easy and comfortable while use this system.

“People is center, technology is first” is our company’s action rule. Customer Satisfaction is our consistent pursuit. Perfect system, excellent services, sincere attitudes will bring you a new enjoyment.

Professional designer and manufacturer of GSM Alarm Systems

SHENZHEN SINDA TECHNOLOGY CO.,LTD

ADDRESS: NO.11 Building,Tongfuyu Industrial Zone, Xili Town, Nanshan District, Shenzhen,CHINA

TEL: +86-755-26498270, 26498273 FAX: +86-755-26498273

Website: <http://www.alarmsystemsinc.com> <http://www.gsmalarmsystems.com>

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I . Instruction

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The alarm system adopts SMS data transmission and voice platform of GSM network to send control command and receive alarm remotely. When a signal is detected by detectors, the detectors will send alarm signal to host immediately, then the host sends alarm SMS to its preset mobile phone numbers, and meanwhile auto-dials its preset telephone/mobile phone numbers and enter into monitoring automatically.

Following are the specific function

1. With WAVECOME double frequency GSM module.
2. 8 digital inputs and 2 wireless zones.
3. Can program open/closed alarm of digital inputs.
4. Digital inputs are adopted optical-coupled isolators, which can prevent external high voltage from destroying internal components.
5. Send SMS automatically to report the state of digital input when it returns normal status.
7. Send SMS to 3 preset mobile phone numbers while alarming.
8. Auto-dial 3 preset phone numbers while alarming and monitor the sound at site.
9. Modify zone name and enquire status of alarm host by SMS demand.
10. With standby rechargeable battery and external power failure alarm.
11. Aluminum alloy casing.
12. Connect with alarm centre through GSM network.

II .System Installation

2.1 Front of the alarm host

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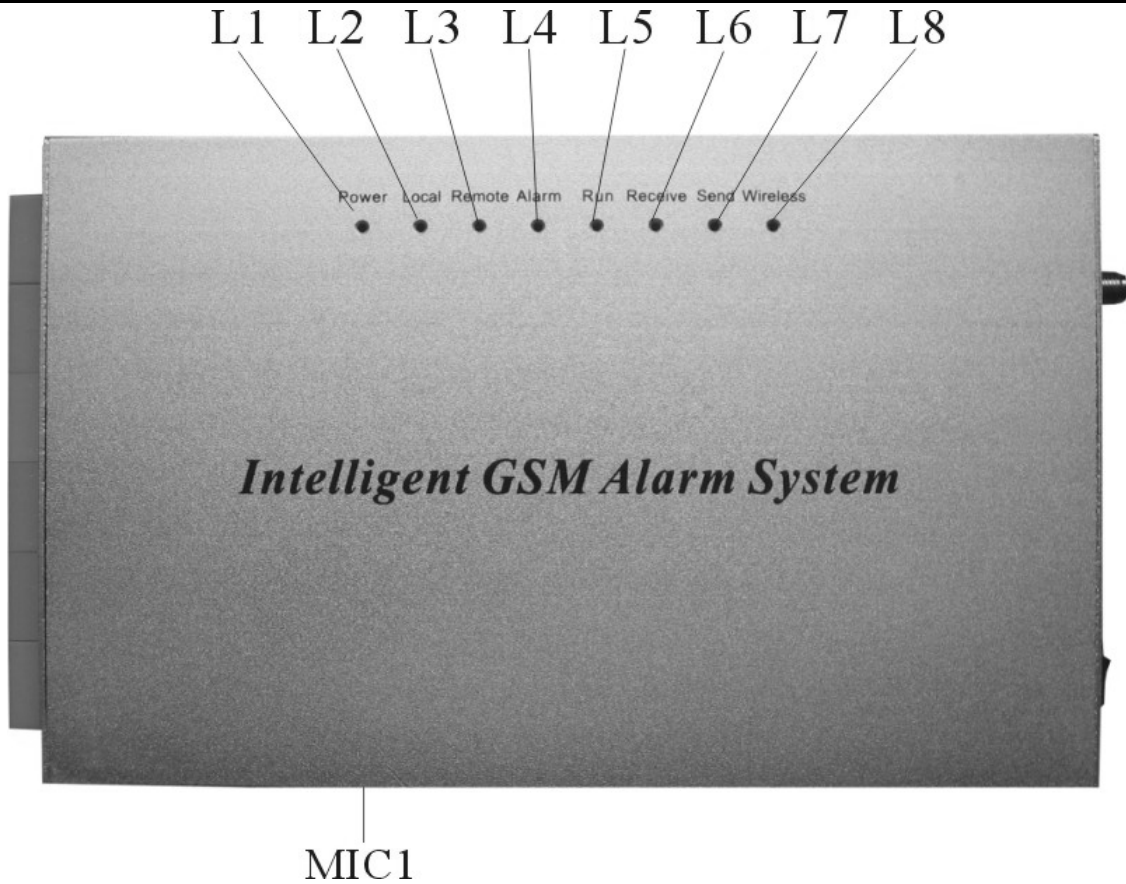
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- L1: Power External power LED
- L2: Local Arm LED
- L3: Remote Arm LED
- L4: Alarm Alarm LED
- L5: Run Run LED
- L6: Receive GSM receiving Signal LED
- L7: Send GSM Sending signal LED
- L8: Wireless 315mhz or 433mhz wireless receiving signal LED
- MIC1: Record MIC

2.2 Two side of the alarm host

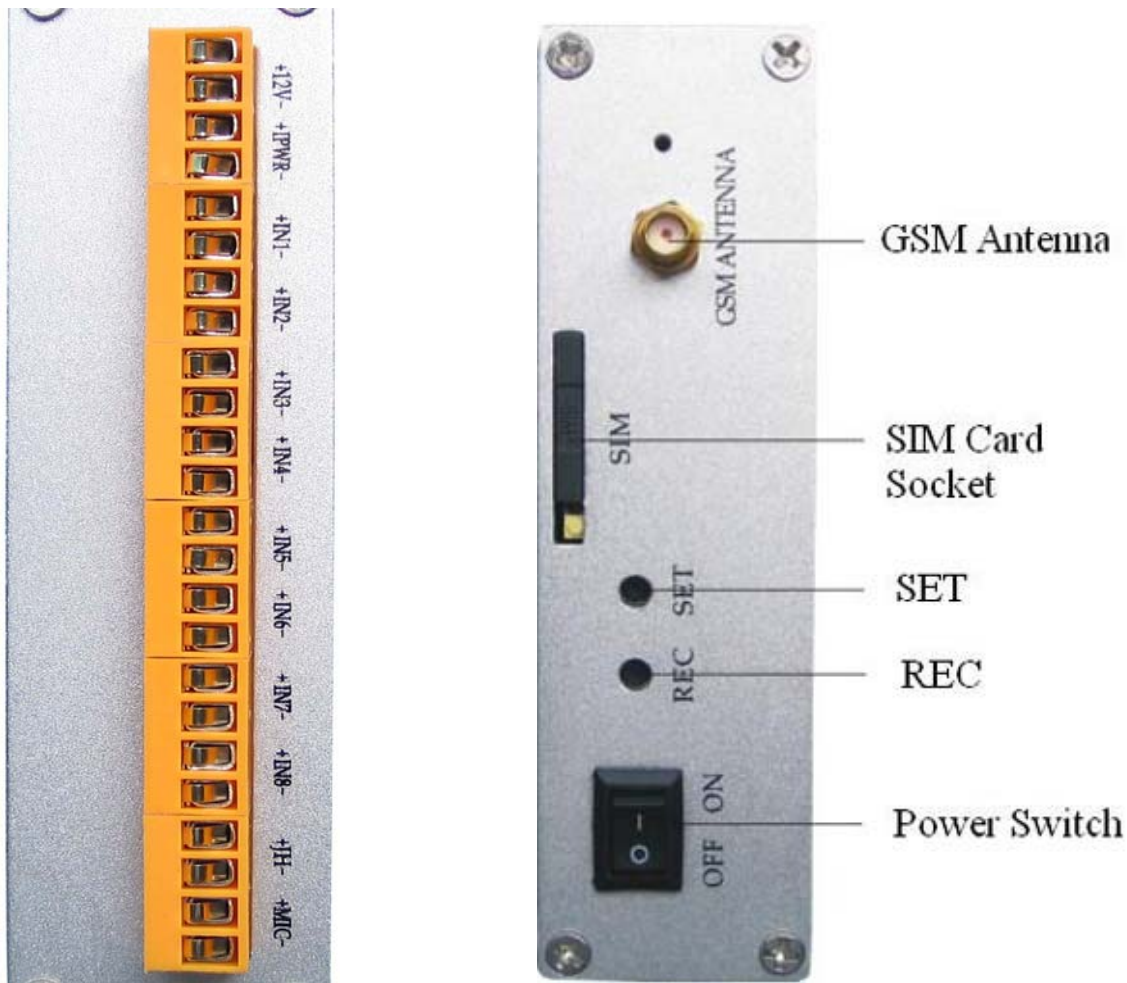
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Connection Terminal

- +12V-: external power 12V
- +IPWR-: Power of hardwire zones
- +IN1- to +IN8-: 8 digital input (hardwire zones)
- +JH-: output interface of siren
- +MIC-: input interface of monitor MIC

2.3 Insert SIM card

Turn off the power, press the yellow button in *SIM* card socket with a hard thin object, then insert a SIM card. Have installed it, turn on the power and dial the number of SIM card. If the ringing is normal that means it is installed successfully.

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III. Operation steps

3.1 Record alarm voice messages

Press *REC* with a hard thin object, the host will voice “di ”, and then it begins to record alarm messages for 10s. The host will make “di,di” sound when it finishes the recording.

Note: The leave message should be brief!

For example: “This is 6th floor, NO.11 building, ABC Road. Please help, there is illegal intrusion! ”

3.2 Set by wireless keyboard

3.2.1 Set/delete three mobile phone number for SMS alarm

a) Set the mobile phone number

Press SET button with a hard thin object on the right side of host. When you hear “di” sound and see *Alarm LED* on,

Input: serial number + mobile phone number + #

Example: Set 13688888888 as the first mobile phone numbers for SMS alarm, input: 1 + 13688888888 + #, then you will hear “di,di” sound for confirmation.

Repeat the process to set the other two mobile phone numbers.

Note: serial number can be 1, 2, 3 and the number “1” is the first mobile phone numbers for SMS alarm.

b) Delete mobile phone number

Input: serial number + #, then you can cancel it.

3.2.2 Set/delete three phone numbers for auto-dialing alarm.

a) Set the mobile phone number

Press *SET* on the right side of the host, when you hear “di” sound and see Alarm LED on,

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Input: serial number + phone number + #

Example: Set 13688888888 as the first phone number for auto-dialing alarm, input: 5 + 13688888888 + #, then you will hear “di,di” sound for confirmation.

Repeat the process to set the other two.

Note: Serial number can only be 4, 5, 6 and the number “4” is the first phone number for auto-dialing alarm.

b) Delete mobile phone number

Input: serial number + #, then you can cancel it.

3.2.3 Change password of the host

In setting status, Input: 7 + new password + #, then you will hear “di,di” sound for confirmation.

Example: set 4321 as the new password

Input: 7 + 4321 + #.

Note: The initial password is 1234 (must be four numbers)

3.2.4 Set new ID of the alarm host

In setting status, input: 0 + new ID number + #, then you will hear “di,di” sound for confirmation.

Example: set 123456 as the new ID

Input: 0 + 123456 + #.

Note: The initial ID is 000000 (must be six numbers)

3.2.5 Set the host whether send “arm/disarm” SMS or not

When operate the host by remote controller, if you want to let the host send “arm/disarm” SMS to mobile phone, please follow up the steps as below. In setting status, input “9 + #” on wireless keyboard, then you will hear “di,di” sound for

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confirmation.

Repeat the operation, you can cancel this function.

3.2.6 Exit setting status

The alarm host will exit the set status automatically in 15 seconds after completing the set. The **ALARM LED** is off and make “di, di” for confirmation, and then alarm host will send setting message to the first SMS alarm mobile phone.

IV. SMS Control Command

4.1 Set three mobile phone numbers for SMS alarm

Input SMS: 4 numbers for password + DD + serial number + mobile phone number.

Example: Set 13888888888 as the first mobile phone numbers for SMS alarm. The alarm host's password is 1234.

Send SMS: 1234DD113888888888

Note: The serial number shows alarm sequence (must be 1, 2, 3,).

4.2 Set three phone numbers for auto-dialing alarm

Input SMS: 4 numbers for password + DD + serial number + phone number (can be mobile phone or telephone number).

Example: Set 01088888888 as the first phone number for auto-dialing alarm. The password is 1234.

Send SMS: 1234DD401088888888

Note: The serial number shows alarm sequence (must be 4, 5, 6)

4.3 Delete alarm phone numbers

Input SMS: 4 numbers for password + DD + serial number

Example: The password is 1234. If you want to delete the first alarm phone number,

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Send SMS: 1234DD1.

Note: The serial number shows alarm sequence (must be 1, 2, 3, 4, 5, 6).

4.4 Change password of alarm host

Input SMS: 4 numbers for password + DD + 7 + 4 numbers for new password

Example: The initial password is 1234. If you want to set 5678 as the new password

Send SMS: 1234DD75678

4.5 Arm/disarm

Arm: four numbers for password + A1

Disarm: four numbers for password + A2

Example: The password of alarm host is 1234. If you want to set the alarm host in arm mode,

Send SMS: 1234A1

4.6 Change zone's name

Input SMS: 4 numbers for password + DM + zone's code (2 numbers) + changed name

Reply SMS: Changed zone's name

Example: The password is 1234. If you want to change zone 06's name to be "Factory gate alarm"

Send SMS: 1234DM06 factory gate alarm

Note: Changed name should be less than 24 characters.

Zone's code: 01 to 10, each code with two numbers.

4.7 Choose open/closed alarm of hardwire zone contact

The default mode: When the hardwire zone is closed, the host will alarm. If you want

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to change it, please follow up the step as below.

Input SMS: 4 numbers for password + NC + zone's code

Example: The host's password is 1234, if you want to set zone2, zone3, zone5, zone 6 to alarm when the hardwire zone contact is open.

Send SMS: 1234NC2356.

4.8 Inquire host's arm/disarm status

Input SMS: 4 numbers for password + W1

Reply SMS: The host's arm/disarm status


4.9 Inquire host's external power status


Input SMS: 4 numbers for password + W2

Reply SMS: The host's external power status

V. Usage

5.1 Arm/disarm by remote controller

a. Arm: Press “” on remote controller, the host will make “di” sound, **Local LED** and **Remote LED** flash. When the two lights stop twinkling and keep on, it means it is armed successfully.

b. Disarm: Press “” on the remote controller, the host will make “di” sound. **Local LED** and **Remote LED** are off. Then it is disarmed.

5.2 Open/closed alarm of hardwire zones.

There are 8 hardwire zones(digital input). When the host is in arm status, if the hardwire zone is open/closed, it will alarm immediately.

5.3 External power failure alarm

When the system checks out that there is something wrong with the external power or

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the external power is off for more than 2 seconds, it will enter into alarm status immediately. At the same time, the system will automatically dial the preset phone numbers cycled for three times and send the SMS of “External power failed”.

When the power supply is on, the system will stop alarming immediately and send the SMS of “External power is OK”.

5.4 Alarm and Handle

When an alarm occurs, the siren will alarm for 90 seconds to inform the neighbors. At the same time, the system will automatically send SMS to report the zones and dial the preset phone numbers. When any phone is answered, you can hear the alarm voice messages and monitor the alarm site. If the phone line is busy or can't put through, the system will auto-dial the next phone number circularly till one of them is answered. If nobody answers the phone, the system will stop dialing after auto-dialing circularly for three times.

5.5 Jumping code

There are two wireless zones (zone 09 and zone 10) with alarm host. If you want to add wireless sensors/detectors to wireless zones of alarm host, please do it as per the follow form.

Example: If you want to add the wireless smoke detectors to wireless zone 09 of alarm host, please see the following steps.

Step 1: Please open the cover of your wireless smoke detector by screwdriver, then you can see the code A0~A7 and D0~D3 from PCB.

Step 2: Please note there is a label with wireless address code on the back of alarm host. Please correspond the wireless code to A0-A7 from right to left.

“ 1 “-----request high level (N jump with H)

“ 0 ”-----request low level (N jump with L)

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“ 2”-----no request (needn't jump)

Eg. the wireless address code of alarm host is 02102101

A0 → 1 (N jump with H)

A1 → 0 (N jump with L)

A2 → 1 (N jump with H)

A3 → 2 (Needn't jump)

A4 → 0 (N jump with L)

A5 → 1 (N jump with H)

A6 → 2 (Needn't jump)

A7 → 0 (N jump with L)

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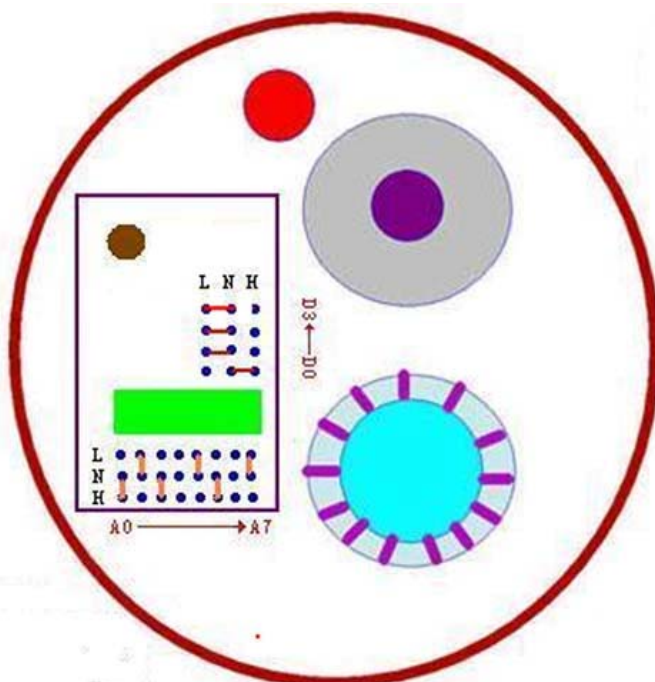
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Name		Wireless address code	Data Code			
		A0 to A7 (1-8) Note: You can see the code A0-A7 from PCB in the products	D0 (12)	D1 (11)	D2 (10)	D3 (9)
Alarm Host		There is a label with wireless address code on the back of alarm host. It is corresponded to A0-A7 from right to left.	NC	NC	NC	NC
Remote Controller		A0~A7: The same as the wireless address code of alarm host.	NC	NC	NC	NC
Wireless Keyboard			NC	NC	NC	NC
Wireless Detectors	Zone 09	A0~A7: The same as the wireless address code of alarm host.	1	0	0	0
	Zone 10		0	0	0	1
Remark: "1".....Request High level N jump with H "0".....Request Low level N jump with L "2".....needn't jump "NC".....No request						

Please see the following picture for your further understanding.



Profes
SHEN

ADDRI
Shenzhen, China

TEL: +86-755-26498270, 26498273 FAX: +86-755-26498273 Ext 13

Website: <http://www.sdph.com>

Alarm Systems

Town, Nanshan District,

Step 3: You can know the data code (D0~D3) of wireless zone 09 is 1000 from the form above. Please correspond the data code 1000 of smoke detector to D0, D1, D2, D3.

D0 —————> 1 (N jump with H)

D1 —————> 0 (N jump with L)

D2 —————> 0 (N jump with L)

D3 —————> 0 (N jump with L)

VI. Operation cautions

1. It will enter into running status in 25s after the host is turned on.
2. Check the status of SIM card regularly (eg. Network signal, adding money to it in time etc.)
3. Turn off the power supply before insert/take out the SIM card.
4. Check system's work status timely.
5. Check detectors in time and change the battery when the voltage is low.
6. Make sure the detectors and control switches must be installed by professional person.

VII. FAQ

Q 1: While the remote controller is pressed or the wireless detectors alarm, does the Wireless LED twinkle?

A: Yes. When host receives the alarm signal, the Wireless LED is twinkling. If not, there is something wrong with wireless receiving.

Q2: Should the sequence for the SMS and auto dial alarm phone number follow 1, 2, and 3?

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A: When there is illegal intrusion, the host will send SMS and auto dial for alarm as the sequence of 1, 2, 3 one by one. The first phone number will be the earliest to receive alarm information.

Q3: Why I can't do the next step immediately after setting the host by SMS demand?

A: When you finish relevant set by SMS demand, it will take 6 to 20 seconds for the host replies SMS to the preset mobile phone.

Q4: How to know whether the alarm host works normally or not when you are out of town?

A: You can dial the phone number of alarm host. If you can hear the regular ring that means the GSM signal is OK. If you want to get more information, you can send SMS to the host for inquiry.

Q5: Why it doesn't work when I send SMS of **no password verification according to the manual?**

A: Please check whether your phone number has been set for SMS alarm or not. If not, the host can not deal with this command.

Q6: How to prevent external high voltage with digital inputs from destroying the main board?

A: You must open the panel case, and connect the jumper 'IPWR' and jumper 'IGND' of the main board to 'Y' side, then get ready a DC12V power supply and connect it to a pair of 'IPWR' terminals.

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Appendix

Operation Guideline

By following steps, you can operate it easily though it is the first time to use this product.

1. Turn off the power, insert a SIM card.
2. Install the alarm host and detectors correctly
3. Turn on the power, press *SET* after ALARM LED is off. Then set the mobile phone/telephone numbers for SMS alarm and auto-dialing alarm. (For details, please see the 3.2.1,3.2.2, 4.1, 4.2).
4. Change password of the host.(Please see 3.2.3 & 4.4)
5. Set open/closed alarm of hardware zones (Please see 4.7 for more details.
6. Arm the alarm host by remote.

For specific operation, please read this manual carefully.

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