GSM/GPRS Alarm System

User Manual

Ver 1201 2011-12-1
Dear Customers,

Thank you so much for using GSM/GPRS alarm system, for better and proper using, kindly advise you to read the user manual before installation.

The GSM/GPRS alarm system adopts latest wireless mobile communication networking and interrelated digital processing technology. It’s a remotely monitoring alarm system for the security of home, shops, offices, electrical control and private cars, etc.

The system takes advantage of wireless mobile communication SMS data transmission and voice platform of GSM/GPRS; it really realizes wireless alarm, remote control 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. Customers’ satisfaction is our consistent pursuit. Perfect system, excellent services, sincere attitudes will bring you a new enjoyment.
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1. Brief introduction

The alarm system adopts SMS data transmission and voice platform of GSM/GPRS network to archive transmitting and remotely control the alarm data when a signal is detected by detectors, the detectors will send alarm signal to host immediately, then the host sends alarm SMS to its pre-set mobile phone numbers, and meanwhile dials its pre-set telephone/mobile phone numbers automatically and drive wiretap. In addition, users can dial the system and set it in arm/disarm mode by any remote phones.

Following are the specific functions:

- 10 wireless zones, 1 wired zone, 1 emergency alarm zone and 1 wireless fire alarm zone
- The system will automatically send 3 alarm short messages (SMS), 3 MMS, 3 emails & make calls to 3 pre-programmed phone numbers for alarming, total can set 12 groups.
- Can capture spot photos, 6 images once a time, shooting interval less than 180ms between two images.
- Multi-4 language: English, Simplified Chinese, Russian, Spanish.
- Can control the alarm panel with wireless keypad, remote controllers and Short message (SMS).
- Can program the system by wireless keypad, by phone, by SMS control command.
- Can modify the name for the 10 wireless zones with sms command.
- Can inquiry the status of host with sms command
- 10 wireless alarm zones can be programmed to activate/cancel photo shooting function and sending MMS or not.
2. Technical index

- Alarm mode: GPRS image alarm, GSM short message alarm and voice calling alarm.
- Camera pixel: 0.3 mega
- Size of images: 320*240 alarm images, 640*480 requested shooting photograph
- SD card volume: 2GB
- Alarm respond time: ≤8S (GSM working normally)
- Standby power consumption: ≤0.8W
- Siren volume: ≥110DB
- Backup battery: DC8.4V/800mA (lithium battery)
- Backup batter working time: ≥10H
- Working environment: temperature -25℃ ~+65℃
- Humidity: ≤95%
- Dimension: 133mm (L) × 71mm (W) × 66mm (H)
3. Brief introduction

Internal structure image

Show as above photo:

1. Alarm LED light
   It will be on when alarming or get into setting status
2. Wireless accessories signal indicator light
   When the wireless accessories are triggered, the light will flash
3. Arm indicator light
   Get into arm status, this light will be on, in disarm status, the light is off.
4. Power indicator light
   After connecting the AC power, the LED light is on, it will off when disconnect AC power.
**Show as above photo:**

1. Wire connecting terminal
The connection way from left to right is:

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wired input</td>
<td>+Siren-</td>
<td>+12V output-</td>
<td>-power input+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** about the power input, **red wire is connected to** anode and black wire is connected to cathode

2. Setting button

Press this button, when setting the alarm numbers.
3. Power on/off switch

Turn to left is off, turn to right is on

4. SD card storage socket.

The insert direction should be up.

5. SIM card socket

The insert direction should be up.

4. Operate guide

4.1. Restoration

Before starting, you should confirm that if the system is power off. Keep pressing SET button, as well as switch on power, you can release the SET button until you hear two “di di” beep sounds, it means that the restoration is
successful.
After the restoration, the system entered into reset status:
1. All of existed SMS phone numbers, MMS phone numbers, calling phone numbers have been deleted.
2. Email address deleted
3. Recover the initial password, 123456.
4. When alarming, the system will send 3 images via mms
5. The default language is English
6. The storage file name of SD card from PIC001*.JPG
7. The system will take photos and alarm by MMS when any of alarm zones triggered.
8. The learning code of the detectors and remote controllers will be kept.
9. The system in disarmed status.

4.2. SD card format.
If you use a new SD card, you must use computer to format it in FAT format.

4.3. Set/Delete SMS, MMS and Dial Alarm number
The system cam be programmed 3 SMS phone numbers, 3MMS phone numbers and 3 voice calling phone numbers, All of 9 alarm numbers can be programmed by SMS, wireless keypad and by phone keypad.
The operation as below:

a. Programming by wireless keypad: Press “SET” button in the alarm host, after you hear two “di di” beep sounds, the system auto get into setting status, then input digits on the wireless keypad: “1+phone numbers+#”, Notes: “1” stands for “serial number”, “#” stands for “confirm”, serial number stands for Alarm sequence. The SMS serial number from 1, 2, 3, MMS serial number
from 4, 5, 6, voice calling phone numbers from 7, 8, 9. Notes: series number “1” is the first SMS alarm number, the “4” is the first MMS alarm number, the “7” is first voice calling alarm number. By this way, after hearing 2 “di di” beep confirming sounds, delete the above existed SMS, MMS, voice calling alarm phone number can refer the steps as above, just input digits on the keypad: series number+#

**For example:** you want to program phone number 13677478866 as the first SMS alarm number. So you can input digits on the keypad as: 1+13677478866+#

And if you want to delete the first SMS alarm number, just input digits on the keypad: 1+#

**b. Programming by SMS**

Input SMS by phone: 6 digits password + DD + series number + alarm phone number. The initial password is 123456. Delete the alarm phone number’s format: 6 digits password + DD series number.

**c. Programming by phone keypad:**

Dialing the alarm host by phone, after input password on the phone, press the SET button on the alarm host, the system get into setting status, then use the phone input: series numbers + alarm phone number + #, after that you will hear two di di beep sounds for confirmation.
4.4. MMS parameter setting

**MMS Parameter Setting**: “6digits password+ GG+ HOMEPAGE+ IP ADDRESS+ APN+ IP PORT+ USER NAME+ PASSWORD”

**Notes**: HOMEPAGE, IP ADDRESS, APN are required to fill in. The IP PORT, USER NAME, PASSWORD can be set according to the parameter that offered from local mobile communication operators.

**Notes**: each parameter should be separated by using comma“,”

<table>
<thead>
<tr>
<th>Operators offered</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homepage (MMS message page)</td>
<td>Required</td>
</tr>
<tr>
<td>IP address of MMS proxy</td>
<td>Required</td>
</tr>
<tr>
<td>Access point name (APN)</td>
<td>Required</td>
</tr>
<tr>
<td>IP port of MMS proxy</td>
<td>Optional</td>
</tr>
<tr>
<td>User name (user ID)</td>
<td>Optional</td>
</tr>
<tr>
<td>Password</td>
<td>Optional</td>
</tr>
</tbody>
</table>

For example 1: if you use A SIM card from China Unicom, so the MMS parameter should be set as below:

<table>
<thead>
<tr>
<th>Operators offered</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homepage （MMS message serve）</td>
<td><a href="http://mmsc.myuni.com.cn">http://mmsc.myuni.com.cn</a></td>
</tr>
<tr>
<td>IP address of MMS proxy</td>
<td>10.0.0.172</td>
</tr>
<tr>
<td>Access point name (APN)</td>
<td>UNIWAP</td>
</tr>
<tr>
<td>IP port of MMS proxy</td>
<td></td>
</tr>
<tr>
<td>User name (user ID)</td>
<td></td>
</tr>
<tr>
<td>Password</td>
<td></td>
</tr>
</tbody>
</table>
And if your password is 123456, the edit a SMS to the mms alarm system:
123456GG http://mmsc.myuni.com.cn, 10.0.0.172, UNIWAP

For example 2: if you use a SIM card from SafariCom company from Kenya. The mms parameter should be set as below:

<table>
<thead>
<tr>
<th>MMS setting items</th>
<th>Operator offered</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homepage (MMS message serve)</td>
<td><a href="http://mms.gprs.safaricom.com">http://mms.gprs.safaricom.com</a></td>
<td></td>
</tr>
<tr>
<td>IP address of mms proxy</td>
<td>172.022.02.038</td>
<td></td>
</tr>
<tr>
<td>Access point name (APN)</td>
<td>Safaricom</td>
<td></td>
</tr>
<tr>
<td>IP port of MMS proxy</td>
<td>optional</td>
<td></td>
</tr>
<tr>
<td>User name (user ID)</td>
<td>saf</td>
<td></td>
</tr>
<tr>
<td>Password</td>
<td>data</td>
<td></td>
</tr>
</tbody>
</table>

And if your password is 123456, the edit a sms and send it to mms alarm system:
123456GG http://mms.gprs.safaricom.com, 172.022.02.038, Safaricom, saf, data

4.5. Inquiry the MMS parameter: “6 digits password+ GG”

4.6. How to activate/close appointed zones to take phones and send MMS when alarm.

Activated the appointed zones to take phones and send by MMS: “6 digits password+ AA+ xx”
Close the appointed zones to take phones and alarm by MMS: “6 digits password+ AD+ xx”

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Notes: xx stands for the alarm zones’ number 01 to 10 (must be 2 digits)

4.7. Inquiry the status of the appointed zones

Inquiry the status of activated/closed appointed zones which will take phones and alarm by MMS, the format is: 6 digits password+ AA or 6 digits password+ AD.

4.8. Language selection

Select language format: “6-digits password+ LG+ x”
Notes: “X” refers to digits 1-4
1. English
2. Simplified Chinese
3. Russian
4. Spanish

For example, select Russian language, send a message to alarm host. Message content: 123456LG3

4.9. Inquiry existed of language

Inquiry language command: “6-digit password +LG”

4.10. MMS setting:

Setting the quantities of alarm images when alarming via mms: “6-digit password +“PIC” +x”
Notes: refers to digits 1-6
For example: you want the system to send 4 pieces of images by MMS, then you
can send a SMS to system: “123456PIC 4”

4.11. How to set the MMS Email address

Setting the email address for receiving MMS: “6-digit password” + EMAIL+ x + Email address”
Note: x refers to digits 1-3

4.12. Setting the host’s password

Setting the host’s password: “6-digit old password”+DD+0+6-digit new password”

4.13. Change Zone’s Name

Change zone’s name: 6 digits password + DM +XX+ changed name
Note: XX is zone’s code 01-11, and 01-10 means wireless zones, 11 means emergency zone.
After finish the setting, there is SMS message that will be sent to the first SMS mobile phone. If there is no the first SMS phone number, the message will be sent to the first MMS mobile phone.

4.14. Other Setting Command

Host arm: 6 digits password + A1
Host disarm: 6 digits password + A2
Inquiry the hosts’ arm/disarm status: 6 digits password + W1
Inquiry the host external power status: 6 digits password + W2
Switch on the siren: 6 digits password + M1
Switch off the siren: 6 digits password + M2
Request to take photo and send MMS: 6 digits password + MMS + x
Note: x refers to 1-6, and 1-3 means 3 MMS receiving phone numbers, 4-6 means 3 email addresses.

4.15. Read pictures from SD card

Turn off the power, and take out the SD card from alarm host, then read the pictures with computer.
Picture format: PICxxxxxy. JPG
Note: xxxx refers to the pictures taken from 0000 to 9999, the maximum is 10000. And y refers to the pictures taken from 1 to 6, the maximum is 6. In order to assure the correction of the time while taking picture, please set the time when you use this camera alarm at the first time. If the alarm system has turned off for a long time (more than 7 days), the time need to be set again.

4.16. Remote control via phone keypad

Dial the SIM card phone number with your phone, the system will automatically get through the phone, please input password after the system beep with one “du” sounds, if the password is correct, the system will beep with “di” sounds and you may start site listen in, the operation you can do as below:
GSM//GPRS Alarm System

1. arm: 1
2. disarm: 2
3. start siren: 3
4. off siren: 4
5. Start taking photograph and storage: 0
   The system will start taking photo with beeping “du” sounds, and it will stop taking photos with the other “du” sounds. Each shooting the system will automatically storage 2 pieces of images.
6. Taking photograph and sending mms: #
   The system will beep with “du” sounds, and automatically start taking photograph, and then automatically hand up the phone, at this moment, the system will send mms to the first preset mms alarm phone number.

4.17. Control with wireless remote controllers

1) After you going out of the house, please closed the home door then arm the system. After pressing arm button “■”, you will hear a respond sounds “di” from the alarm host, as well as the ARM led indicators of alarm host will be on, that means the system get into arm mode. At this moment, any intruder break in the house, the system will be activated.

2) Back to home, before get into the house, please remember disarm the system by pressing the disarm button “■ ” on the wireless remote controllers. You will hear a respond sounds after press the disarm button, as well as the disarm indicators lights will be off, it means the system has lifted protecting mode.
3) The gas or smoke or emergency zones will be in 24 hours protection mode, any fires or emergency happen, the system will alarm even the system in disarm
or arm mode.

4.18. Emergency alarm
When any emergency happen, press the emergency button “สว” on the wireless remote controllers, the system will get into emergency alarm mode as well as the siren will start and the system will auto dial the preset phone number for alarming.

5. Operation Cautions
1. Keep away from water.
2. Install the system in a hidden place.
3. Turn off the power supply when insert/take out the SIM card.
4. Have a hard connection to the main power supply and provide good heat dissipation.
5. The host will enter into normal running status about 25 seconds later after turn of the system
6. Check all the detectors and their battery in time and change them when battery is low.
7. Don’t install the system close to the objects which generate strong interference, such as TV set and computer.
8. Check the use of the SIM card in the system in time (like GSM signal and the telephone expenses etc).
9. Check the GSM alarm system timely, make sure it’s in good condition.

6. How to add more wireless detectors
Press the learning button, the learning indicator will be on. And then press any button on the controller, so the indicator will be off after learning successfully! If there is no any triggered signal within 6 seconds, the learning indicator will be off automatically which means escape learning status.

**Note:**

1). the alarm host can match at most 10 groups of detectors with different coding. The detector first learned into the alarm host is zone 1, the second is zone 2, so does the next till zone 10. And the host can match 16 groups of remoter controller with different coding.

2). During the process of learning, one twinkle of the learning indicator shows that it matches a repeated coding detector.

3). During the process of learning, twice twinkle of the learning indicator shows that the detector learning is full, it can’t learn any detectors.

5. Delete the learned detector

Pressing the learning button last for more than 10 seconds, the detectors will be delete successfully when the learning indicator is off, and then loose the button.
## Encode table

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Wireless code A0-A7 (1-8)</th>
<th>D0(13)</th>
<th>D1(12)</th>
<th>D2(11)</th>
<th>D3(10)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main panel</strong></td>
<td>Identification number from right to left A0-A7</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td><strong>Product Name</strong></td>
<td>Wireless code A0-A7 (1-8)</td>
<td>D0(13)</td>
<td>D1(12)</td>
<td>D2(11)</td>
<td>D3(10)</td>
</tr>
<tr>
<td>Remote controller</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td></td>
</tr>
<tr>
<td>Zone 01</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Zone 02</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Zone 03</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
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<tr>
<td>Zone 04</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Zone 05</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
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<tr>
<td>Zone 06</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Zone 07</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Zone 08</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Zone 09</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Zone 10</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PIR sensor, Door sensor, Electric beams</td>
<td>Zone 01 Zone 02 Zone 03 Zone 04 Zone 05 Zone 06 Zone 07 Zone 08 Zone 09 Zone 10</td>
<td>1 1 1 0 0 1 1 1 1 0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| *Note:* A0～A7 and D0～D3 is jumped by jumper or tin solder, 1”------connect H and N “0”------connect L and N 2”------NO need to connect “NC”------NO need to connect

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