Working Principle

Security alarm system includes the main unit, one PIR detector, one door sensor and 2 remote controls. When the sensor detects some intruder, it will immediately transmit the wireless signals to the host and then the host will alarm at once, autodial the phones number preset.

Security alarm system adapts high technology of microcomputer control system with far detection distance and fashionable sculpt. AC/DC power is interchangeable for safety.

Application range:
House, building, courtyard, factory, garage, offices, finance room, stores, etc.

Main Function.
1. 100 wireless zone, 6 wired zone, 2 standard outlet, one relay.
2. Big LCD display, and keyboard with a cover.
3. Intelligent voice prompt.
4. Checking for past 60 arm, disarm, alarm records.
5. Indoor/outdoor of arm or disarm setting.
6. Connected with phone landline
7. Advanced learning code function.
8. Auto-dial 6 group telephone number which is pre-set
9. With super password, engineer password, common user password, easy to operate.
10. Snatch the phone line at first priority when alarming.
11. To control the host by phone call to alarm or disarm.

System introduction
1. The set includes:
  - One host, remote control, one detector, and one door sensor.
2. The installation of main unit
   - Insert outline into the outlet “LINE” on the top of the host.
   - For two RJ45 of spare telephone line, please insert one RJ45 into outlet “PHONE”, another RJ45 to be connected with telephone.

   - If wired detectors and external electrical devices are used, please connect them with corresponding ports.
   - If using external siren, connect it with siren interface in main unit. (Note: ports ” + ” - “ - ”)
   - 7 pieces of 1.2V rechargeable battery to be used while AC power fails.
   - Turn on the power switch (if there is a long time not to use, please shut off the switch)
   - Install the antenna.
   - Hang up the host onto one suitable place.
   - Connect with AC power.

3. The installation of detector
The installation of PIR detector
Unscrew the detector, install battery, turn on the power supply, and put the detector 2m from ground. Its lens should face the detection area. While somebody walks into detection area, the indicator light will flash and emit signals to host.

Attentions:
A. It will achieve one better effect while the angle is 90° between sensor and the direction of person walking.
B. Keep the sensor away from the heat object, such as heating apparatus, air conditioning, micro-wave oven
C. The detector will work normally in 2 minutes after initially starting. The installation of door detector
Put the door sensor onto the door frame or window frame, and magnetic strip to be installed on the door or window. When the distance is over 5mm between the door sensor and magnetic strip, the sensor will be triggered and emit signals to the host. When light fades, please change the battery inside timely.
4. Diagram of the host
Operation Guidance

1) User setting:
Following operation must run under disarm status, please note.

(1) Common User
A. To change password
Press the key "S", host prompts “input password”, then input password (initial password is 8888), press "#", host prompt “input right”, then input 00, the host prompt “input password”, then input 4 digits password, press “#”, the host prompt “input right”, then press “*”, the host prompt “exit setting”.

(2) If wired detectors and external electrical devices are used, please connected them with corresponding ports.
(3) If using external siren, connect it with siren interface in main unit. (Note: ports “+” “-”)
(4) 7 pieces of 1.2V rechargeable battery to be used while AC power fails.
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4. Diagram of the host
3. Connection point sketch map

-3-

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B. To set telephone numbers (store 6 groups of number)
The first group: pressing “S” ---- “input password” ---- input password ---- # ---- “input right” ---- 01 ---- “input alarm telephone” ---- (telephone number “less than 14 digits”) ---- # ---- “input right” ---- “exit setting”

The sixth group: pressing “S” ---- “input password” ---- input password ---- # ---- “input right” ---- 06 ---- “input alarm telephone number” ---- (telephone number “less than 14 digits”) ---- # ---- “input right” ---- # ---- “exit setting”

To delete telephone number, users need to input “000” instead of telephone number while inputting phone numbers.

C. Record Voice (usually it will show information about users’ address)
   pressing “S” ---- “input password” ---- input password ---- # ---- “input right” ---- 07 ---- “record” ---- # ---- “announce to the host automatically playback your voice” ---- “input right” ---- # ---- “exit setting”

D. Time setting
   pressing “S” ---- “input password” ---- input password correctly ---- # ---- “input right” ---- 14 ---- “before” ---- input month (2digits) & date (2digits) & hour (2digits) & minute (2digits) ---- # ---- “input right” ---- # ---- “exit setting”
E. Check records of arm, disarm.
Pressing "S" ------- "input password" ------- "input password"
# ------- "input right" ------- 18 ------- "checking arm & disarm"
------press # (can show 00--60 messages of arm and disarm)
-------"exit setting"

F. Check records of alarming
Pressing "S" ------- "input password" ------- "input password"
# ------- "input right" ------- 18 ------- "checking alarm issue"
------press # (can show 00--60 alarm message) -------"exit setting"

G. Learn remote control
This system can learn 8 remote controls. (01--08 for option)
Pressing "S" ------- "input password" ------- "input password"
# ------- "input right" ------- 18 ------- "learn remote control"
-------input remote control number (01--08) -------press the key of remote control
-------"input right" -------"exit setting"
If users want to delete any number remote control, just need to
omit the process "press the key of remote control", then press
# to confirm.

H. Learn detectors
Press the key "S" ------- "input password" ------- "input password"
-------"input right" ------- 19 ------- "learn detector"
-------input number of detector (00--99) -------input the zone number of
detector (00--99)
-------make the detector to emission 2 seconds ------- "input right"
-------"exit setting"
For example: There is a detector number is 01. zone number
is 66, alarm type of detector is 12. so the learning process as follows:
The key "S" ------- "input password" ------- "input new password"
-------"input right" ------- 19 ------- "learn detector"
-------01 ------- "input right" ------- 12 -------make the detector to emit about 2 seconds
-------"input right" ------- "exit setting"
The way to delete one detector number as following:
The key "S" ------- "input password" ------- "input new password"
-------"input right" ------- 19 ------- "detector number (00--99)"
-------"input right" ------- "exit setting".

(2) General user
A. "Visitor reported": (1 available, 0 unavailable).
Press the key "S" ------- "input password" ------- "input password"
-------"input right" ------- 08 ------- "input right"
------"exit setting"
When this function of "visitor reported" is available, in the
"disarm" status, if sensors detect signals, it will function as a
doorbell. (factory default is 1.)

B. Ringing frequency/times.
It means the ringing numbers after picking up the phone while
users call the host's phone to operate the system. System default
is 07, it means user could operate the system after listening
7 times of ringing.
Press key “S” ---- “input password” ---- input password
---------#---------“input right” ---------09
“ring times” ---------input two digits ---------“input right”* -------“exit setting”

C. “high Voice” or Mute (1 is “high voice”, 0 is mute, factory default is 1).
Press the key “S” ---- “input password” ---- input password
---------#---------“input right” ---------10 “high voice loud speaker”
---------#---------“input right” ---------# “input right”* -------“exit setting”

D. Arm/Disarm tone by althorn or host
It means that the prompt voice of arm and disarm is announced by external althorn or by the host. 1 is external althorn, 0 stands for the host, default is 0.
Press the key “S” ---- “input password” ---- input new password
---------#---------“input right” ---------11 “high voice arm, disarm
---------#---------“input right” ---------# “exit setting”

Press key “S” ---- “input password” ---- input password
---------#---------“input right” ---------09 “ring times”
---------input two digits ---------# “input right”* -------“exit setting”

E. To Arm, disarm the zones separately
It means to arm and disarm zones separately.
Press the key “S” ---- “input password” ---- input password
---------#---------“input right” ---------17 “set defensive zone”
---------#---------“input right” ---------2 digits (00-99) or 1 (arm) or # (disarm)
---------#---------“input right”* -------“exit setting”

When one zone setting is 0, although the host is in arm status, this zone will not alarm although it is triggered.

F. Eliminate all learning code of detectors.
Press the key “S” ---- “input password” ---- input new password
---------#---------“input right” ---------20 “delete learning code”
---------#---------“input right”* -------“exit setting”

G. Arm and disarm timer (1)
Press the key “S” ---- “input password” ---- input password
---------#---------“input right” ---------21 “arm,
Disarm timely” ---------4digits of arm time ---------4digits of disarm
---------#---------“input right”* -------“exit setting”

For one example:
One company to be on duty is on 8:30, off duty is on 12:00 in
the morning, then on duty is on 13:30, off duty is on 17:30 in
the afternoon, according to this situation, it should disarm
on duty time, arm in off duty time.
So, G: Arm, disarm 1 timely, 4digits arm time is 1200, 4digits
disarm time is 1330.
H: Arm, disarm 2 timely, 4digits arm time is 1730, 4digits
disarm time is 0830.
1. Arm Time
   It means a postponed time duration after the starting of arm. The system will take effect after the duration. Default duration is 7 seconds, the max. is 255 seconds.
   Press the key "S"----"input password"----"input right"----"arm time"----(0000----0255)----"input right"----"exit setting"

J. Disarm Time
   It is the postponed time duration to alarm after the host is triggered. The default is 0 second.
   Press the key "S"----"input password"----"input right"----"disarm time"----two digits time(second)----"input right"----"exit setting".

2) Engineer User (by engineer password)
   Note: this function is usually used by engineers.
   Press the key "S" for 5s, the host shows "input password", input default password "12345678", then press "#", the host prompt "input right", input 2 digits (00--13 for option), users can do following operation,
   00), ----0----# : initialize the system
   01), ---- telephone number (from police station or public security dept. less than 14 digits)----1----#: setting the first group phone number.
   02), ---- telephone number (from police station or public security dept. less than 14 digits)----2----#: setting the second group phone number.
   03), ---- telephone number (from police station or public security dept. less than 14 digits)----3----#: setting the third group phone number.
   04), ---- telephone number (from police station or public security dept. less than 14 digits)----4----#: setting the fourth group phone number.
   05), ----four digits of user password----#: change common user password (4 digits)
   06), ---- eight digits of system password----#: change engineer password (8 digits).
   07), ----00 (single user) or 01 (FANGAN protocol), or 02 (FANGAN protocol)----#: choose the correct communication type, default is 00 (single user)
   Note: usually it is "Contact ID portocal" if the system needs to be connected with police station or public security dept.
   08), ----four digits address code----#: set the code of user address which is usually assigned by police station or public security dept.
   09), ----1 (with voice prompt) or 1 (without voice prompt)----#: to choose whether the prompt voice is needed while off line. default is 1.
   10), ---- two digits of wired zone number (01--06 for option)---- two digits of zone code (00--99)---- two digits of alarm type (showed in following chart)----#: wired zone setting. For example: set the wired port 3 as type of "fire alarm zone " type (05). the zone code is 88. so the operation is 10----03----88----05----#
   11), ----two digits (hours)----#: it means the self-checking duration to see if the host work normally
   12), ----0 or 1----# : "0" means the host will not inform the "arm/disarm" status to public security dept./police station, "1" mean the host will inform the "arm/disarm" status to public security dept./police station. Default is 0.
   13), ----two digits (minutes)----#: it means the host will inform the "arm/disarm" status to public security dept./police station in the delayed minutes.

2. The operation of host and remote control.
   (1) Arm
   A. When users are out, please press "●" on remote control or the host, the host sounds "di" and last a few seconds, and the host prompts "arm successful" and "arm" indicator lights.
   B. Push down "●" for several seconds on the host panel, the host will runs in the status of peripheral zone arm, in this status, detector of interior zone will not alarm.

   (2) Disarm.
   A. Press "●", on the remote control, the host sounds "disarm successful", and the "arm" indicator dies out.
B. Press "#" on the host, and input 4 "digits password", then press #, the host sounds "disarm successfully".

(2) Emergency alarm with voice
Press "#" on the remote control or the host, host will alarm with sharp noise at once.

(2) Emergency alarm with voiceless
Press "&" on the remote control, the host will alarm without voice. (must connect with outline.)

3. How the host to deal with alarming
When the host alarm, it will auto dial the telephone number pre-stored. When the user receives the alarm phone, he/she can listen to the left message recorded, after playback is finished, press "4", host will have a hint "input right", user can operate as follows:

Input 0. come into disarm status
Input 1. come into arm state
Input 2. open external althorn
Input 3. close external althorn
Input 4. automatically cut off telephone line, and start althorn, and alarm for 5 minutes.
Input 9. come into scene-monitor status, and exit automatically after 20 seconds.
Input *; the host stop alarming

4. Remote operation.
Dial the telephone number which connect with alarm host, ring N times (as per the times user preset) later.
User will listen to the hint sound "input password". After inputting password, user can do the remote operation (if the password input wrong 3 times, the host will auto hangup), if the password input is right, the host will prompt "input right"

Input 0. come into disarm status
Input 1. come into arm state
Input 2. open althorn
Input 3. close althorn
Input 4. auto-cut off telephone line, open althorn, and alarming for 5 minutes.
Input 9. come into scene-monitor status, and exit monitor after 20 seconds automatically.
Input *; exit remote operation. If being without any operate in 30 seconds, host will exit remote operation automatically.

Note: external control outlet K1, K2 just works like a switch, the load current is less than 5A, the voltage is the safe voltage. When remotely operating the external control outlet, user must assure that he/she listen to "input right", so as to avoid wrong operation.

5. Wired outlet of operation.
This system has 6 wired ports, when alarming, it shows the zone number (01—06). The default alarm type is peripheral arm. User can revise the type according to point 10 of "Engineer user". As below scheme, when K1 disconnected or K2 connected, it means zone 3 and zone 6 alarm. (Attention: 1,2,3,4 are N.C wired outlet, 5, 6 are N.O wired outlet). In addition, it can provide the power supply with 12V and 200mA through V+ and C.

6. The main unit alarm.
When the host alarm, it shows alarm zone in the right corner of the screen, also shows the type of alarm. As below scheme, it shows 18zone of alarming because of harmful gas.

[Diagram of Harmful Gas with zone numbers]

The type of zone alarm definition list
Explanation:
The type of peripheral zone alarm:
After arming, it will not alarm in the duration of postponed arm time. Delay time of arm passed, it will alarm immediately once detector is triggered, even in the delayed alarm time. (it uses in defense house periphery)
The type of in and out alarm zone:
After arming, it will not alarm if detector is triggered in the delayed time of arm. Once the delayed time of arm passed, it will not alarm also if detector have the delayed time of alarm. When the delayed alarm time is over, if the alarming is not removed, it will alarm. (it is used to entry of house. such as door)
The type of interior alarm zone:
Under peripheral zone arm type, host will not alarm if this type of detector is triggered. (suitable for inside of house, such as indoor PIR detector, etc)
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**Main Technique Target**

1. **the Main host**
   - Power supply: AC220V, DC8.4V. (7kts AAA rechargeable Ni-MH battery)
   - Electric current in static state: < 15mA
   - Alarm noise: >100dB
   - Zone: 100 zones
2. **Wireless PIR detector**
   - Detect distance: 8--15 m.
   - Power: DC 9V
   - Electric current in static state: <60uA
   - Emission frequency: 315MHz
   - Wireless emission distance: >500m (open area)
   - Temperature: -30°C--42°C
3. **Wireless door sensor**
   - Power: DC 12V, with 12V/23A battery
   - Power consumption in static state < 5uA
   - Emission frequency: 315MHz
   - Wireless control distance: >100 m (open area)
4. **wireless remote control**
   - Wireless emission distance: >50m . (open area)
   - Power: DC12V, with 12V/23A battery
   - Emission frequency: 315MHz

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Note: external control outlet K1, K2 just works like a switch, the load current is less than 5A, the voltage is the safe voltage. When remotely operating the external control outlet, user must assure that he/she listen to "input right", so as to avoid wrong operation.

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   - Detect distance: 8---15 m.
   - Power: DC 9V
   - Electric current in static state: <60uA
   - Emission frequency: 315MHz
   - Wireless emission distance: >500m (open area).
   - Temperature: -30°C--42°C

3. **Wireless door sensor**
   - Power: DC 12V, with 12V/23A battery
   - Power consumption in static state: <5uA.
   - Emission frequency: 315MHz
   - Wireless control distance: >100 m (open area).

4. **wireless remote control**
   - Wireless emission distance: >50m. (open area)
   - Power: DC12V , with 12V/23A battery
   - Emission frequency: 315MHz

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**Shorthand collate in LCD display:**

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<th>Third row</th>
</tr>
</thead>
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<td>Perimeter: per</td>
<td>Set: set</td>
</tr>
<tr>
<td>Harmful gas: MED</td>
<td>Arm: arm</td>
<td>Record: REC</td>
</tr>
<tr>
<td>Panic: panic</td>
<td>Disarm: disarm</td>
<td>Playback: P.B</td>
</tr>
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<td>Alarm: alarm</td>
<td>Time: T</td>
</tr>
<tr>
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<td>Polling: poll</td>
<td>Telephone: TEL</td>
</tr>
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</tr>
<tr>
<td></td>
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