

STS-408

Intelligent Safety Alarm System

USER MANUAL





Components list

Before installation please check if the whole set including the components as follow:



Brief

Dear customer:

Congratulations on purchasing your new FOCUS security system and thank you for the confidence you have shown in us. You have chosen a high-quality product that has been produced, tested and packed with the greatest care.

Please familiarize yourself with these instructions before attempting to install the FOCUS security system because prolonged reliable and trouble-free operation will only be sure if it is fitted properly. We hope your new FOCUS security system will bring you lasting pleasure.



Chapter I Introduction

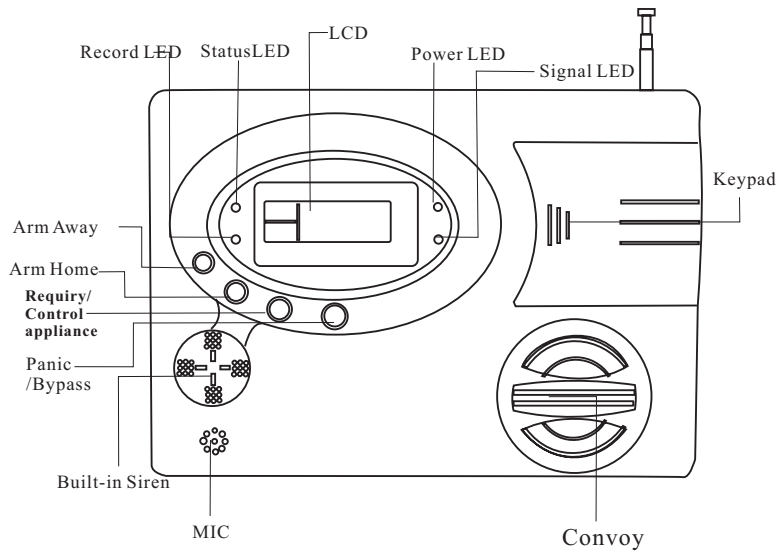
1.1 Features

- ☆ Voice prompt and report: all operation, alarm message, and record have voice instruction, very convenient for operation.
- ☆ LCD Screen Indication: operation process, working status and alarm process can be showed.
- ☆ 16 Wireless Zones: auto register of every zones, and can also register through the keyboard.
- ☆ 8 wired Zones: compatible with various kinds of detectors.
- ☆ Zones Programmable: The device is pre-set with alerts types and delay time code. Users can modify the zones type and alerts delay time by keypad according to their requirement.
- ☆ Wireless Accessories Register: all wireless accessories, including detectors, door contacts, remote controllers etc can be registered into control panel automatically or through keyboard. User can delete them one by one or delete them all one time.
- ☆ Ten Seconds Alarm information Record.
- ☆ 6 Alarm Telephone Numbers: 2 for CMS and 4 for common telephones. If the control panel does not connect with CMS, the total 6 numbers can be set for common telephones.
- ☆ Record of clock and alarms: built-in automatic calendar and clock can help to make record or view 45 alerts and arming/disarming affairs and their time.
- ☆ Alerts/alarm process mode: alarm process can be operated by common phone and the voice record independently; self recognition and compatibility for alarm centre and common phone alert.
- ☆ Compatible with other CMS: ADEMCO contact ID alarm protocol. Operations of arming/ disarming to alarm centre can be selected.
- ☆ Alarm Message Display: when alarming, the alarm zones, alarming types and other information will be displayed on the LCD. If the control panel is connected to an alarm center station, the panel can send detailed alarm information to the center station.



- ☆ Siren on/off Selectable When Alarming: user can set the siren broadcast or not for different alarms.
- ☆ Anti-Tamper Alarm: when the wires connected the wired detectors and control panels are cut off, the control panel alarms. When the telephone line connected to the control panel is cut off, the siren starts to broadcast.
- ☆ Long Distance Control: user can conduct arm, disarm, listen-in, electronic switch control and do other functions by calling.
- ☆ CMS Timely Test Setting: 4 times auto arm and disarm function, can arm and disarm on time. And users can also set a auto alarm time, the control panel can timely report to the CMS to check its status.
- ☆ Wireless Zones supervising : tamper alarm, low power alarm and status self-check.
- ☆ System Password and User Password protection: there are two types of password, system password and user password. The system password is mainly for system manager to do the system setting. User password is mainly for user to do arm, disarm, long distance and other operation. Both the system password and user password can be changed.

1.2 Get familiar with the panel



1.3

[#] OR **1**

Keypad for operation



LCD display



Voice prompt



Caution



Hint



Chapter 2 Installation and Connection

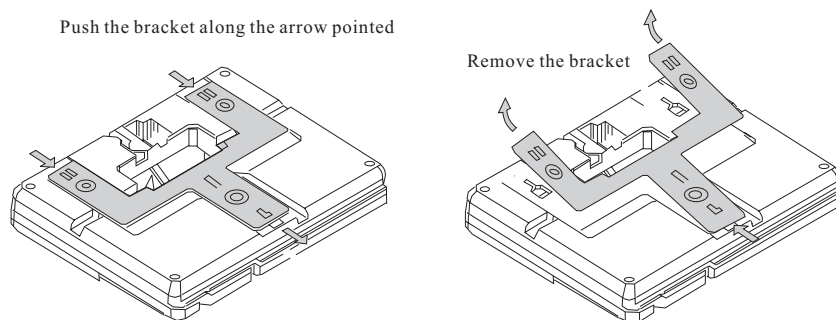
2.1 Opening the Box

Open the package to check the contents as per the list. If the accessories are not integrated, please contact the distributor.

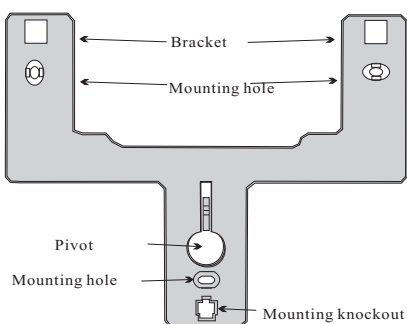
2.2 Installation of control panel

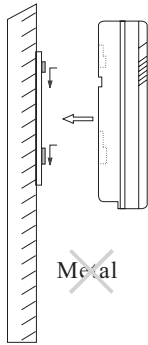
An obvious feature of the alarm is that it can be installed without open it. User just need to connect several wires on the back of the panel.

1. Debus the bracket on the back of the panel.



2. Make a hole on the wall according to the hole distance on the bottom cover.

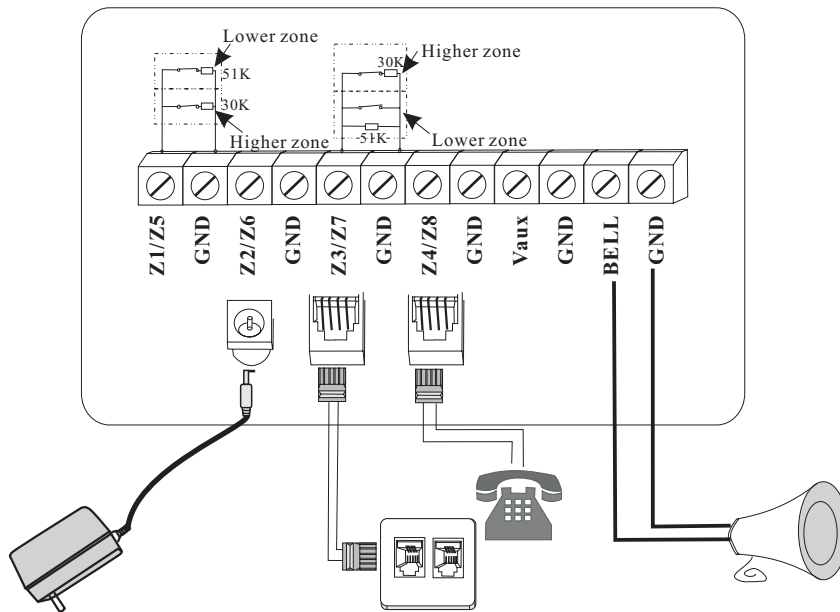




1. There should be no large metal goods around the control
2. Make sure the distance between the control panels and detectors is valid. And it is better to put the control panel in a covert place.

2.3 Wiring Diagram

As the picture:





2.4 Installation of Wired Detector

The wired zone is given 12 V from the main panel. The connections are given to eight zones based on the diagram with end of line resistance. For NC detector resistance is connected in parallel and for NO detector, resistance is connected in series. Matching the resistor in lower zone is 30 K Ohm, while that in higher zone is 51K Ohm.

Caution: Control panel can supply 12V to detector. It can't exceed its current more than 100mA. If it exceeds, another 12V back up power is necessary for detector operation.



Chapter III Simple Setting and Operation

This chapter gives an example to show the simple operation. User can follow it and to simple test.

3.1 Operation Preparation

3.1.1 Connect the telephone line and power correctly.

3.1.2 Wireless Siren Register: When the power is on, input 1111 to disarm the control panel. If the red light on the control panel is still on, input 1111 again. Then press the "save" key on the siren, hold on and press the "alarm". If the siren starts to whistling, the register is successful. And lose the "save" key. The distance of the siren and the control panel can be about 50m.

3.1.3 Alarm Telephone Number Setting: press * for 3 seconds, →9999→2→1→alarm telephone number→#

3.1.4 Record Alarm Location: press * for 3 seconds, →9999→2→7→face the speaker and speak the location→press#. 10 seconds later, the panel will replay the recorded voice. If user does not satisfy it, user can record again.

3.1.5 Register Remote Controller: press * for 3 seconds, →9999→6→1→1, and then press any key on the remote controller, if 2 beeps comes out from the panel, the register is successful.

3.1.6 Register Wireless Detector: press * for 3 seconds, →9999→6→3→1→then let the detector emit signal, if 2 beeps comes from the panel, the register is successful.

Above are the simple operation processes. Chapter IV gives shows more detailed operation processes.

Note: the user password we mention is the defaults 1111, if user changes the password, please use the new password.



3.2 Daily operation

☆ Arm Away

Press the key for arm away on controller, it will sound "DeeDee" from control panel; or press "AWAY" on panel, there will be 10 sounds "Dee" to show you arm the system successfully

☆ Arm Home

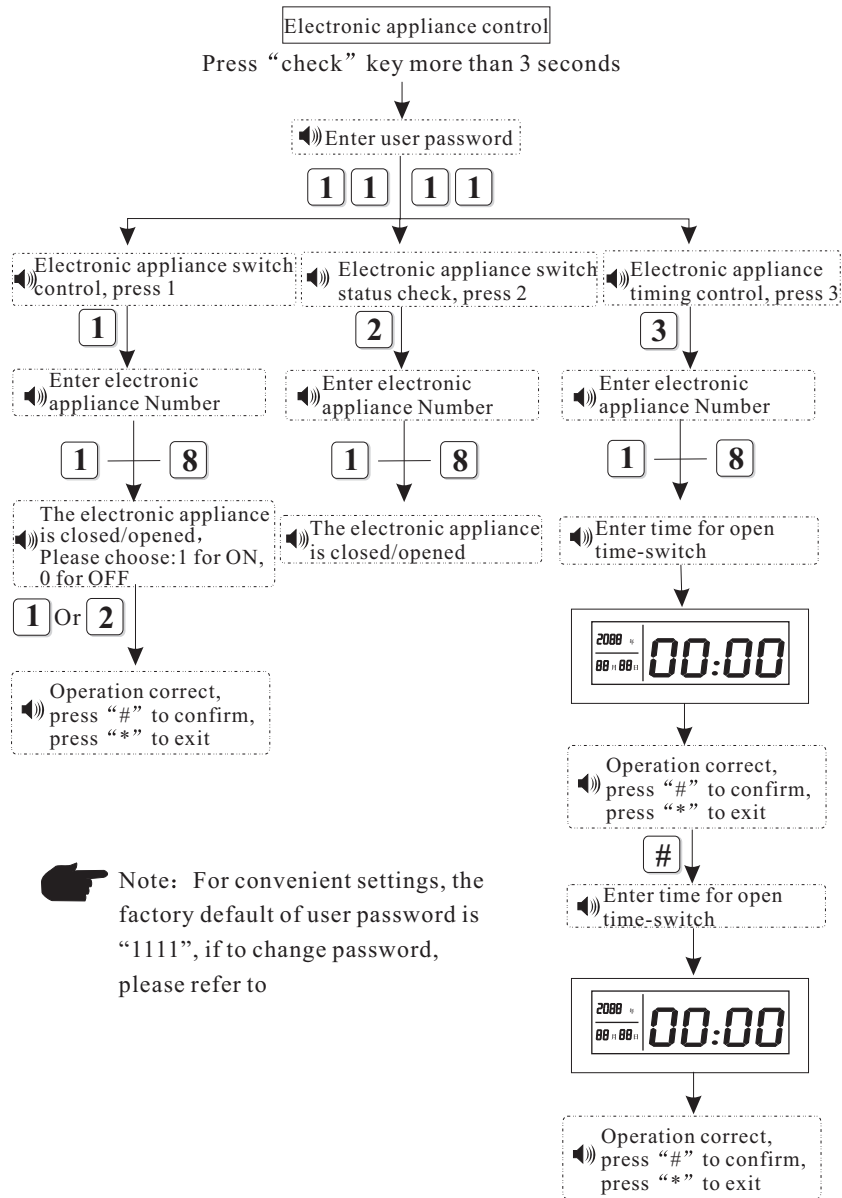
Press the key for arm home on controller, or press the key "HOME" on panel, there will be "Dee Dee" to show you arm the system successfully.


☆ Panic

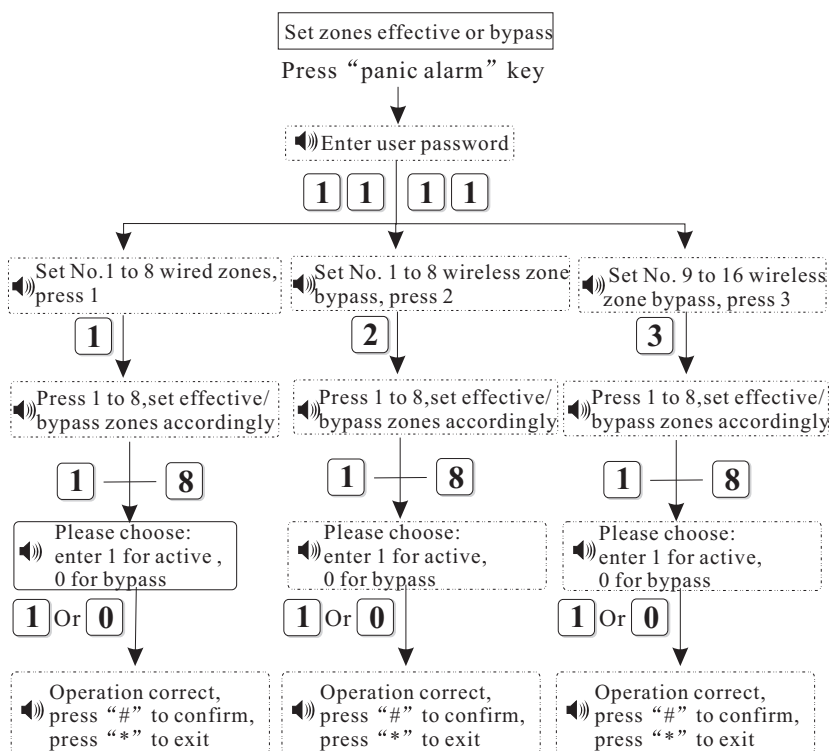
Press the panic button "HELP" on controller, or press "ALARM" on panel both could send out information for seeking help, and there will be two "Dee Dee" and auto dial the preset phone number to ask for assistant.

☆ Disarm

To disarm press "DISARM" on keyboard or remote control, you will hear 2 "tick, tick" sounds if mand is successful .

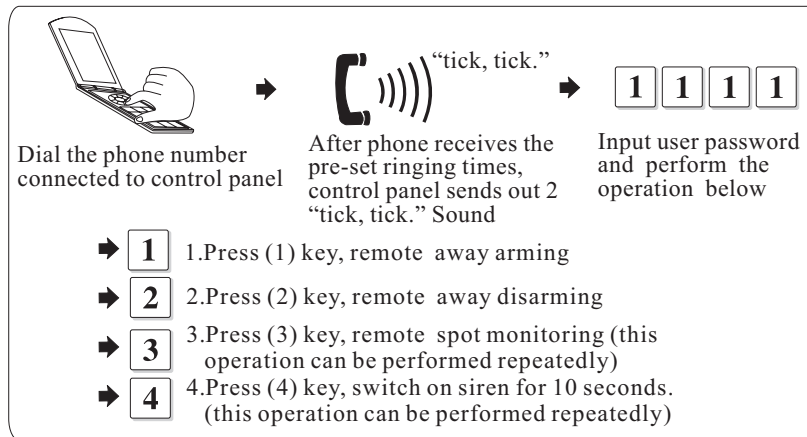


 **Note:** For convenient settings, the factory default of user password is "1111", if to change password, please refer to



3.3 Operation through a Long Distance Call

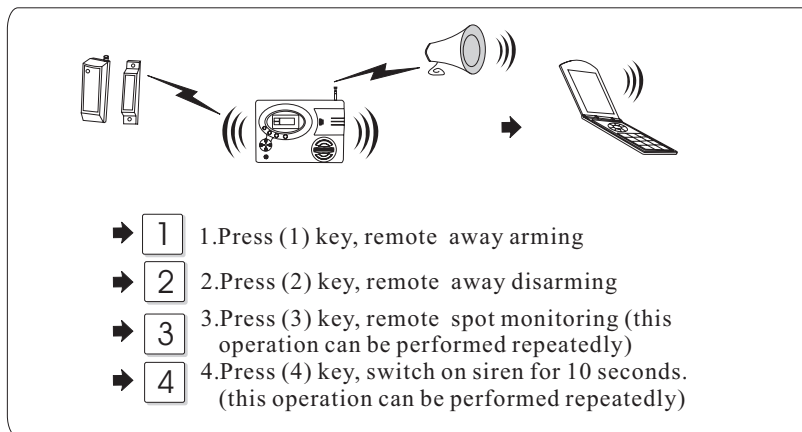
When receiving an external call, after 7 rings, the panel takes order. Two low tick sounds will be heard. Enter 4-digital user code through phone keys. If password is correct, the panel replies by 2 low tick sounds; if it is wrong, there will be 4 tick sounds and control panel hangs up automatically.



- 1.the first and second operation can not be repeated.
- 2.After the first setting, the telephone will cut off automatically.

3.4 Simple Alarm Test

Separate the two parts of the door contact to a certain distance to let it emits alarm signals. The wireless siren will whistle and later, the inside siren in the control panel will whistle 4 times. Then user can receive the alarm call. If user recorded voice, user can hear it through the call. Then user can listen in. Press 4 on the telephone can let the wireless siren and inside siren in the control panel to whistle 10 seconds. Press 3 can re-listen in. Press 1 can re-listen the recorded message. Press 2 can stop the alarm.





Chapter 4 System Setting

4.1 Default Setting

Below are the default settings, user can change them

- ☆System password:9999
- ☆User password:1111
- ☆Entry/exit delay time:10 seconds
- ☆Audio monitoring time:10 seconds
- ☆Cycle Dial times: 2
- ☆No of telephone rings before connection:7
- ☆Telephone line testing function: effective
- ☆Function of arming/disarming message sent to alarm center station: off
- ☆Auto arm and disarm function: off
- ☆Auto arm/disarm, test with the center station value: 0
- ☆Siren whistling alarm types: burglar alarm, perimeter alarm, fire alarm, gas alarm and other alarm user sets.
- ☆All telephone numbers and user codes are empty
- ☆All wireless zones are in effective status, all wired zones are in ineffective status
- ☆Please view attached NO.1 and NO.2 forms to see the types of zones and delay and instant codes.

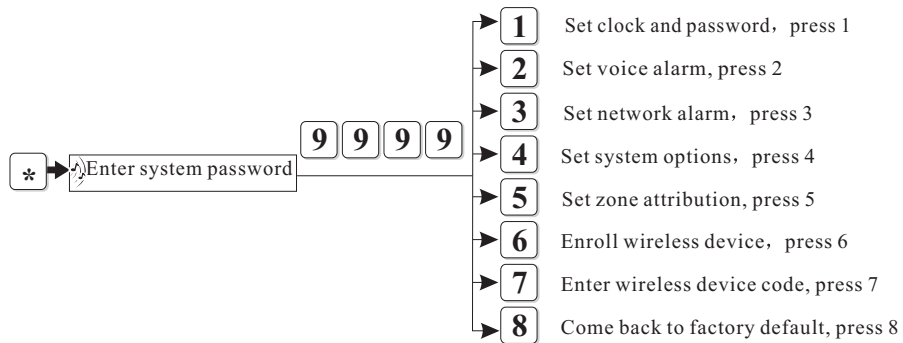
4.2

- ★Use the keypad [*] for “setting” and “canceling” and [#] for “confirmation”.
The control panel will sound a brief sound once you press the keypad effectively. When the operation is completed correctly, the control panel will sound two “ticks” to indicate the successful programming. Otherwise, one long sound indicates wrong operation. The [*] key has return function, after one setting, press the [*] twice can return to upper menu.
- ★Enter setting status: press the [*] key more than 3 seconds, enter the system password, and then follow the voice instruction, enter the items you want to modify. The LCD on the panel can show default setting or previous setting, which can help user to choose whether to change the setting or not. Then user can change the setting and press # to confirm. If user does not change the setting and press the # directly, the panel keeps the current setting. After one setting finished, the panel returns to upper menu automatically and user can do other setting. When all the settings are finished, press [*] key to exit. If user does not do any settings in 20 seconds, the panel returns to upper menu automatically.
- ★If any wrong input is made, press [*] to return the previous steps



4.3 Basic Setting

Below are the steps to enter system setting and other function setting. Every time enters system setting needs to do this operation.



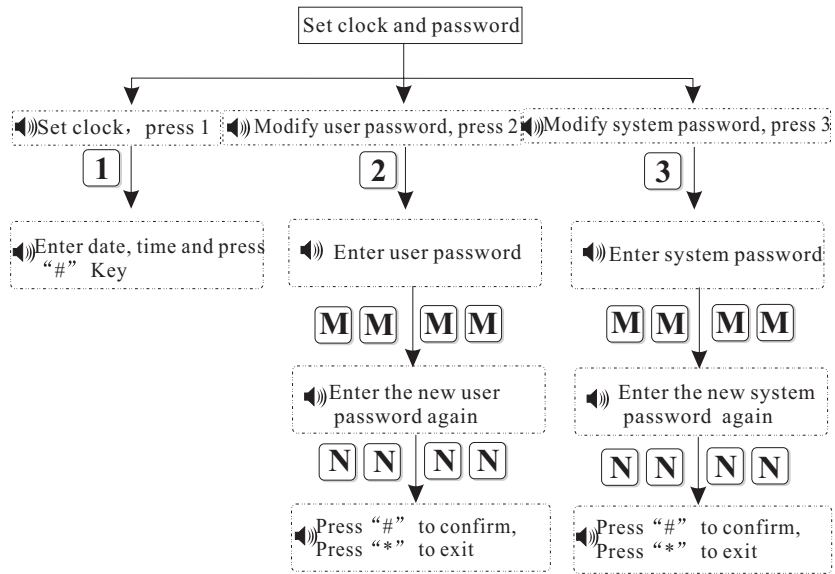
4.4 Clock and password setting

★ Clock setting

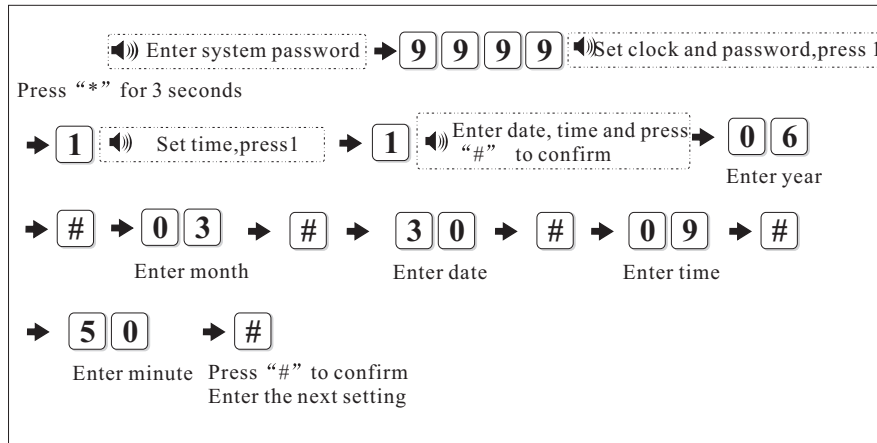
The time of the panel can be set to the local time, which is important for automatic arming / disarming, and for recording of alarms and time.

★ Password setting

There are user password and system password. The user password the key for user to do the arm, disarm and long distance control. For the safety of the system, we recommend user use 4 digit password. The system password is very important, it is the unique password to enter system setting.

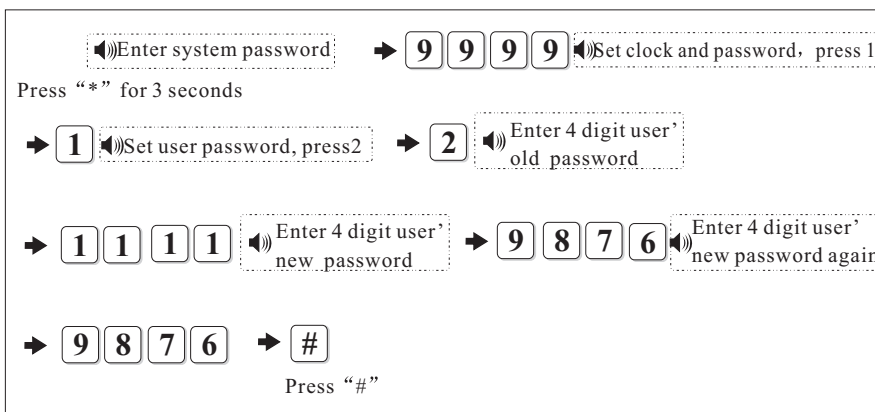


Example to show how to modify the time to “9: 50 am on 30th March, 2006” is given below.



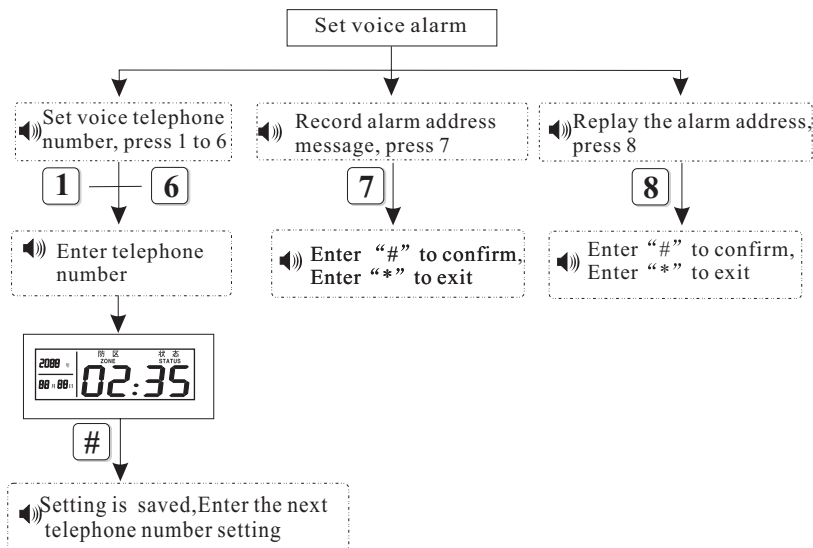


For Example: We want to change the user password to 9876



Caution: if user do false operation, press * return to upper step
The default system password is 9999, if user changes the password, please use the new one.

4.5 Voice alarming setting





The main control panel can be programmed for 6 telephones. The maximum digit for the telephone is 15.

For example 1: If your ST main panel is connected with single line, you can set the cell phone “13686867520” in the second line

🔊 Enter system password → 9 9 9 9 🔊 Set voice alarm, press 1 to 6
Press “*” for 3 seconds

→ 2 🔊 Set voice telephone, press 1 to 6 → 2 🔊 Enter telephone number

→ 0 1 3 6 8 6 8 6 7 5 2 0 → #

Press “#” to confirm,
Enter the next setting

For example: If ST main panel is connected with a extension line, then for transferring from the internal line to external line needs to dial “9” or “9” If the receiving phone is “987654321”, in line ‘5’ the setting is as shown

🔊 Enter system password → 9 9 9 9 🔊 Set voice alarm, press 1 to 6
Press “*” for 3 seconds

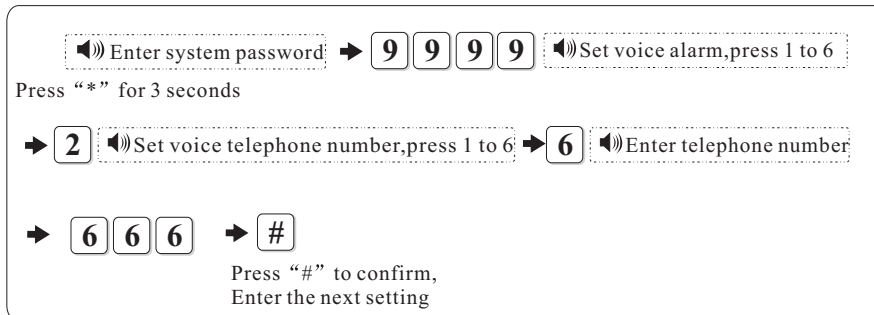
→ 2 🔊 Set voice telephone, press 1 to 6 → 5 🔊 Enter telephone number

→ 9 8 7 6 5 4 3 2 1 → #

Press “#” to confirm,
Enter the next setting

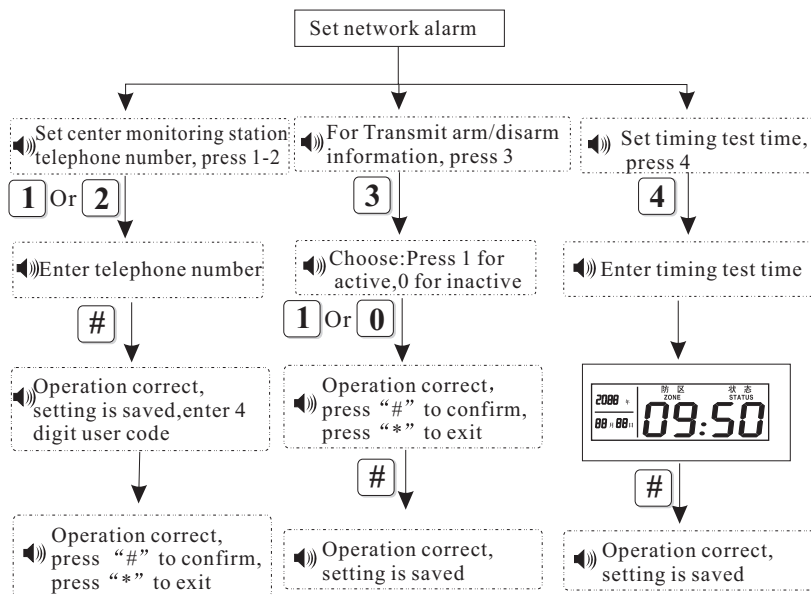


Example 3: if your ST main control panel is connected with an extension number, you can set another extension “666” as the sixth receiving phone number, the procedure is as follows;



If user wants to delete the recorded alarm telephone number, follow the instruction and enter the sequence number user wants to delete, and the press 00 can delete it.

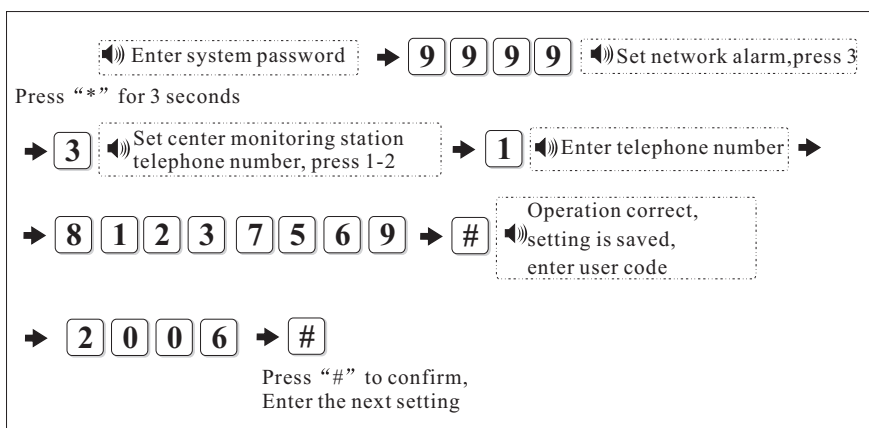
4.6 Work with the CMS



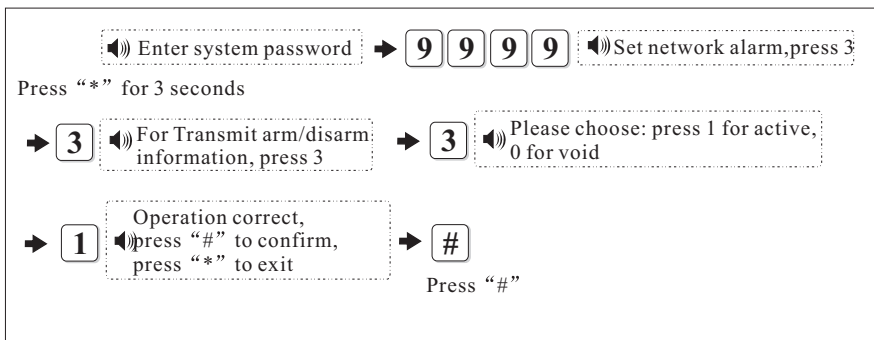


Note: user code is the ID in the alarm center station

For example: set 81237569 as the first alarm center station telephone number. The process is the same as set alarm telephone number. Set 2006 as the user code.



For example: sent the arm/disarm message to the alarm center station, the process is below:

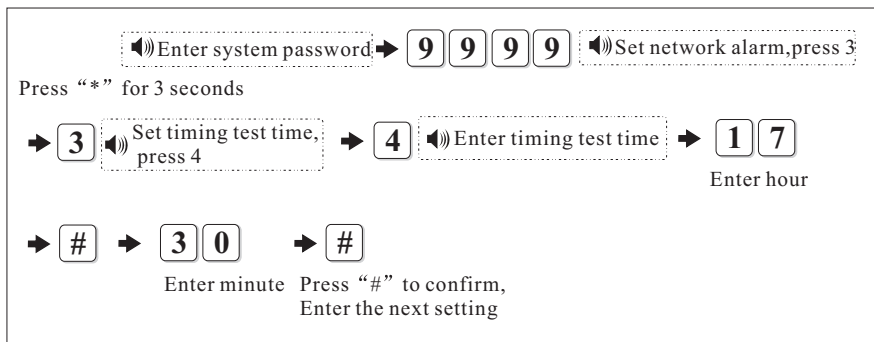


Notice: the control panel does not send message to the CMS every time when it is armed or disarmed. If last time, the panel sent arm message to the CMS, it sends disarm message only next time. If last time, the panel sent disarm message to the CMS, it sends arm message only next time. The panel does not send the same types messages repeatedly.



User can set a timely test time and the panel will send message to the CMS at the same time everyday to test the status.

For Example: set 17:30 as the test time, the processes are below:



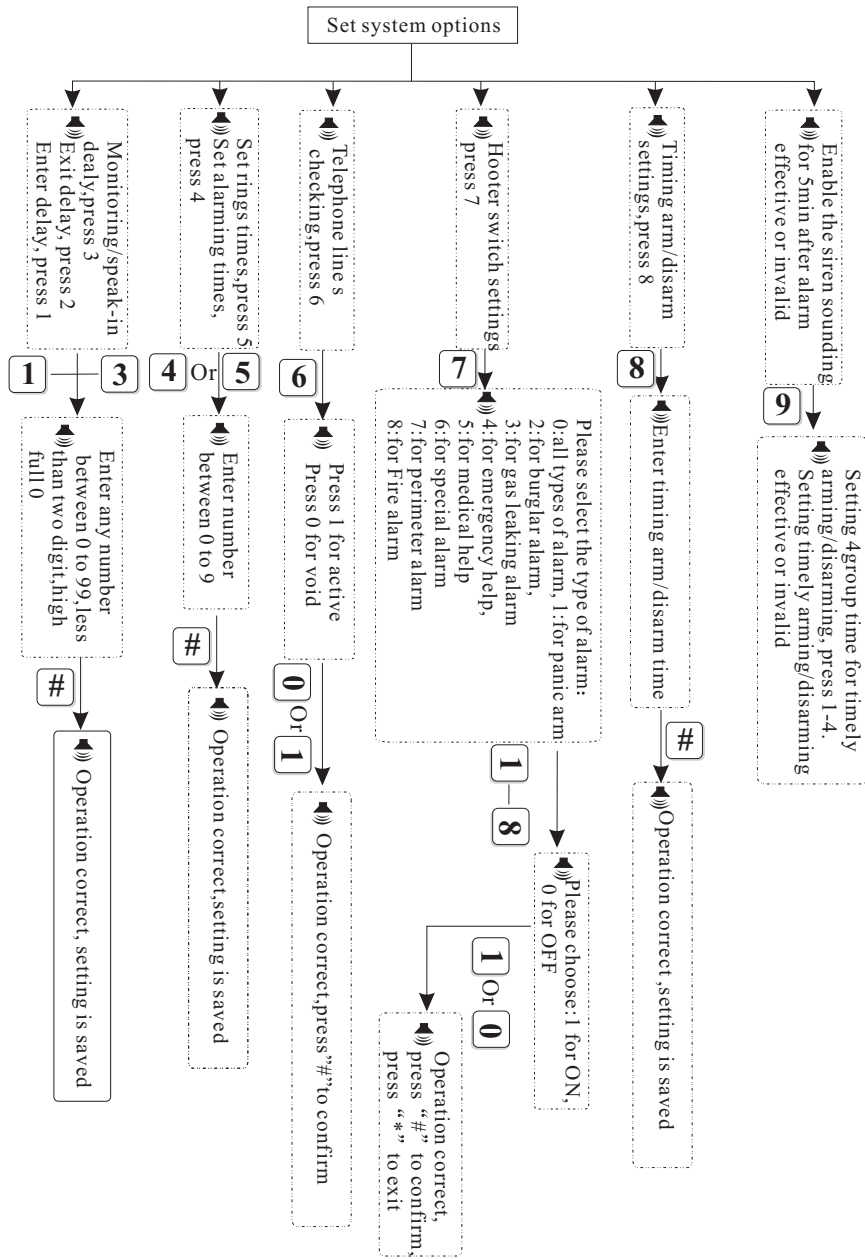
When the hour and the minute are all 0, it means cancel the test.

Caution: the panel do not conduct the test when the time is 00:00:00

4.7 System Setting

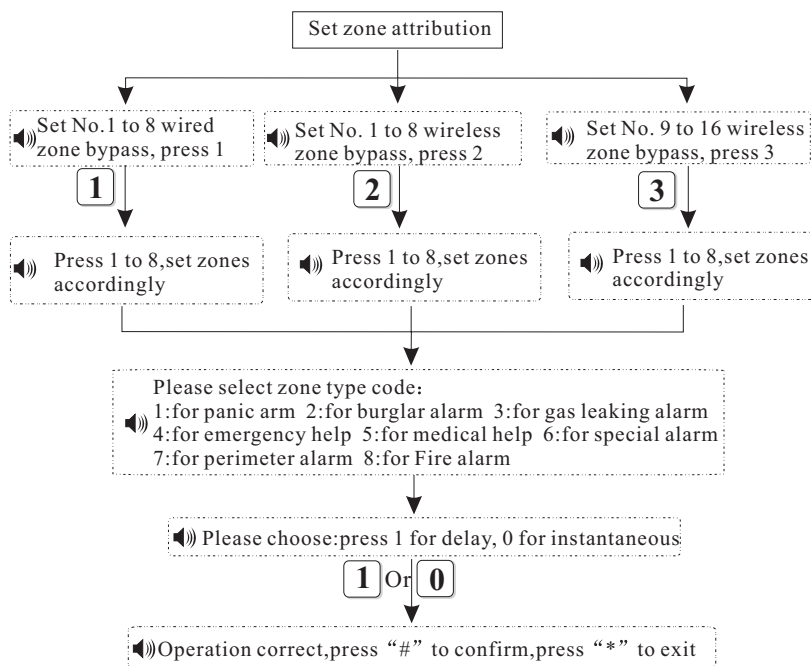
This is a personal setting, including time delay of enter and exit, listen in time, cycle alarm times, siren on/off setting, telephone test setting, defense zones setting etc.

1. When the clock of timely arm/disarm is 0:0:0, it means cancel this timely arm/disarm set.
2. The 4 periods of time should not be superposed, or some time period may be invalid.
3. If in one time period, the first superpose is larger than the second one, the period extends to the next day. For Example: if the time period is from "17:30---8:00", the period is from 17:30 to the next morning 8:00
4. The 4 arm/disarm time period is just for burglar arm and perimeter alarm.





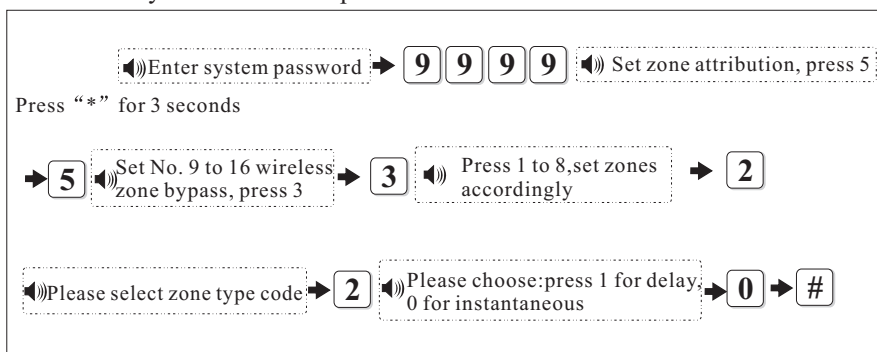
4.8 Defense zones' property setting



The property of defense zones means the type of alarms the detector can send to the CMS. Once it alarms, the panel will send signals as the certain type to the CMS. Otherwise, when the type of the defense zone has been set, no matter what type of the alarm is, the panel will send signals as the certain type set before to the CMS. Time delay means when the detector alarms, the panel reacts to the signal immediately or later. User can program the type and time delay according to its needs. Please view the table 1 to see the type code of defense zones.



For example: set the NO.10 defense zones as burglar alarm zone and alarm immediately. Below are the processes.



Type code	1	2	3	5	6	7	8
Alarm	panic alarm	burglar alarm	gas leak alarm	medical help	definition	perimeter alarm	fire alarm
Away arm	✓	✓	✓	✓	✓	✓	✓
Home arm	✓	×	✓	✓	✓	✓	✓
Disarm	✓	×	✓	✓	✓	×	✓

Chart 1

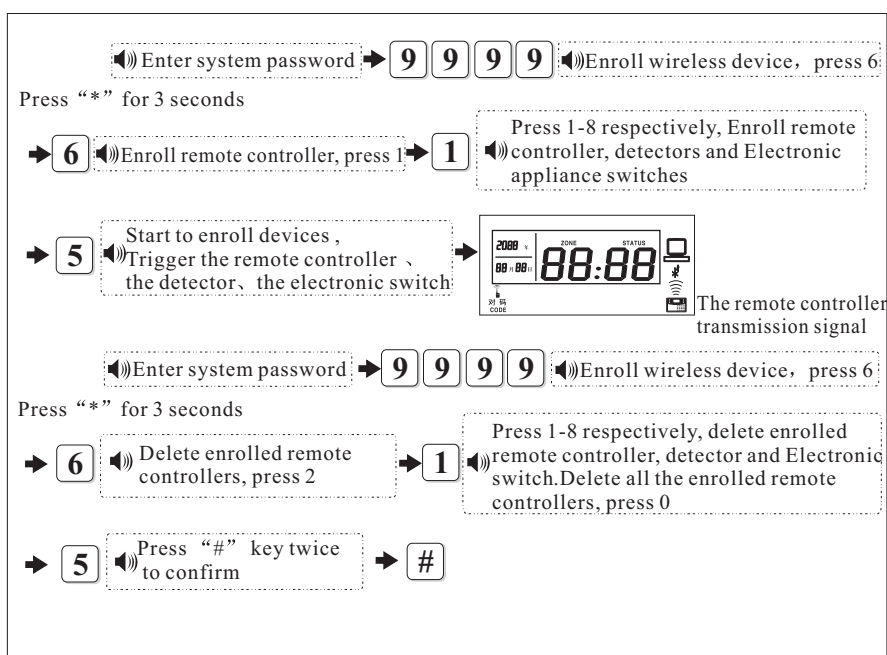
Note: “ ✓ ” means effective
“ × ” means noneffective

4.9 Registration of wireless products

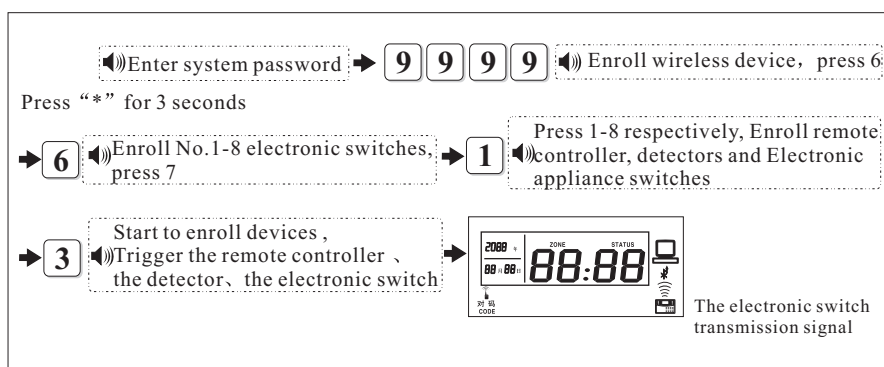
All the accessories of this panel such as wired/wireless detectors and remote controller are compatible and registered with main panel before delivery. If user needs to expand detector or remote controller, they can register as following process:

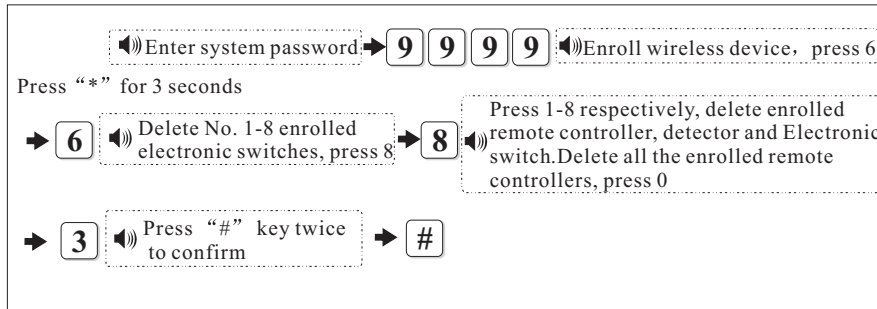


For example: register a remote controller as the fifth of a control panel and then delete it.

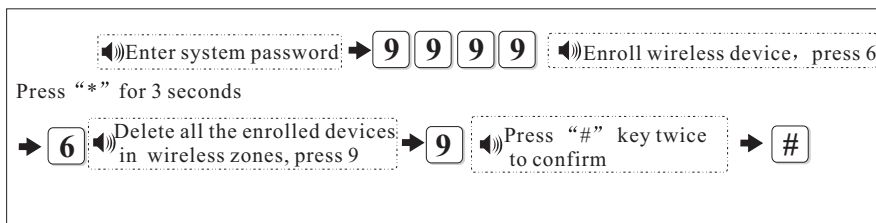


For example: register a switch as the third of the panel and then delete it.

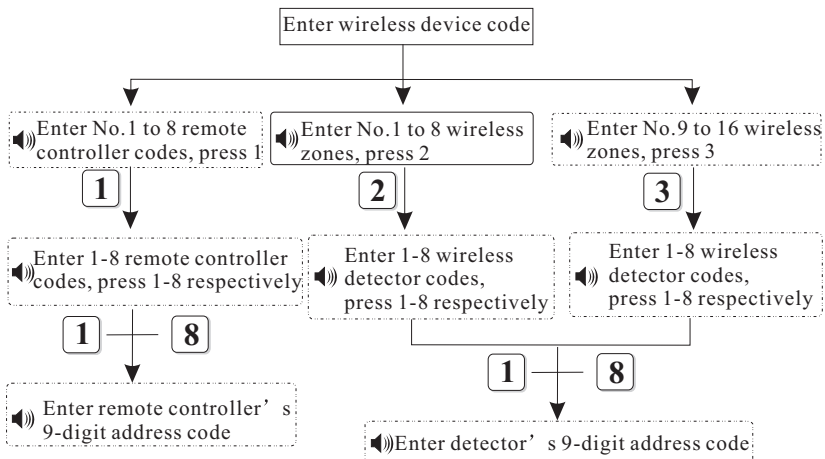




For example: Delete all the enrolled devices, Following is the method:

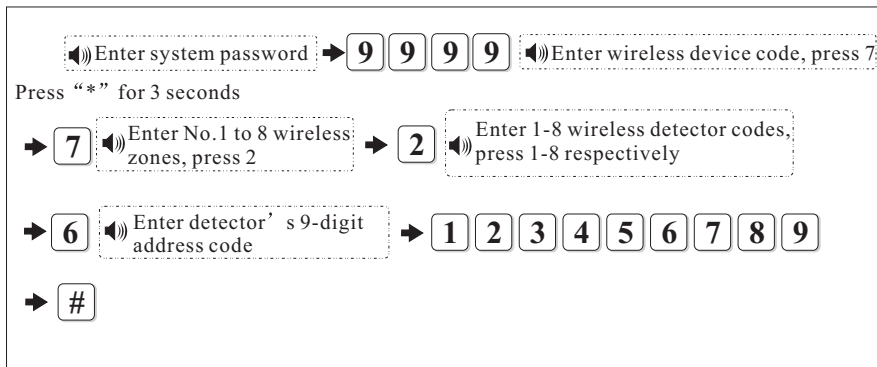


4.10 Input address code of wireless accessories through keyboard

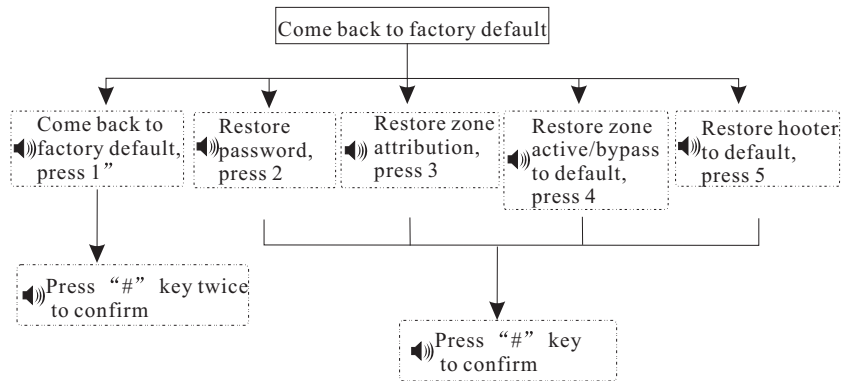


In order to avoid the interference, user can also input the address code of wireless accessories through the keyboard. There is 9-digit code label on the products, what you need to do is to input this number.

For example: register the wireless detector of the address code 123456789 as the sixth wireless zone



4.11 Return to default setting





Chapter 5 Alarming and Receiving alarm

5.1 Validity of activating alarm

Only the stealing alarms, perimeter alarm (such as PIR, magnetic door contact, and beams detector) are controlled by arming/disarming at home or away, the other zones are effective all 24 hours. Once the stealing alarm, perimeter alarm are activated, the alarm will be transferred to CMS based on the delay time.

5.2 Reception of alarm at CMS

The main control panel transfers the alarm information to the CMS in the protocol of Contact ID, if the control panel gets the confirmation signal from CMS, it means the alarm successful; otherwise it will alarm repeatedly. The alarming center has software to display and process the alarm information

5.3 Common telephone alarm and receiving alarm

When answering the alarm call, 3 ticks come from the panel, and then the panel speaks the alarm location and then listens in for 10 seconds. Then 2 beeps from the panel and then comes the voice in struction, user can do long distance control trough the telephone:

Press the key [1]: replay the 10 seconds recording of alarm and listen in for 20 seconds.

Press the key [2]: disarm

Press the key [3]: re-listen in

Press the key [4]: switch on siren for 10 seconds.

Press the key [6]: operate the wireless electronic switches.

If remote telephone does not respond, the alarm process continues. If user does not disarm when answering the phone, the panel stars to dial other alarm telephone numbers.



★means of icon displayed on LCD:

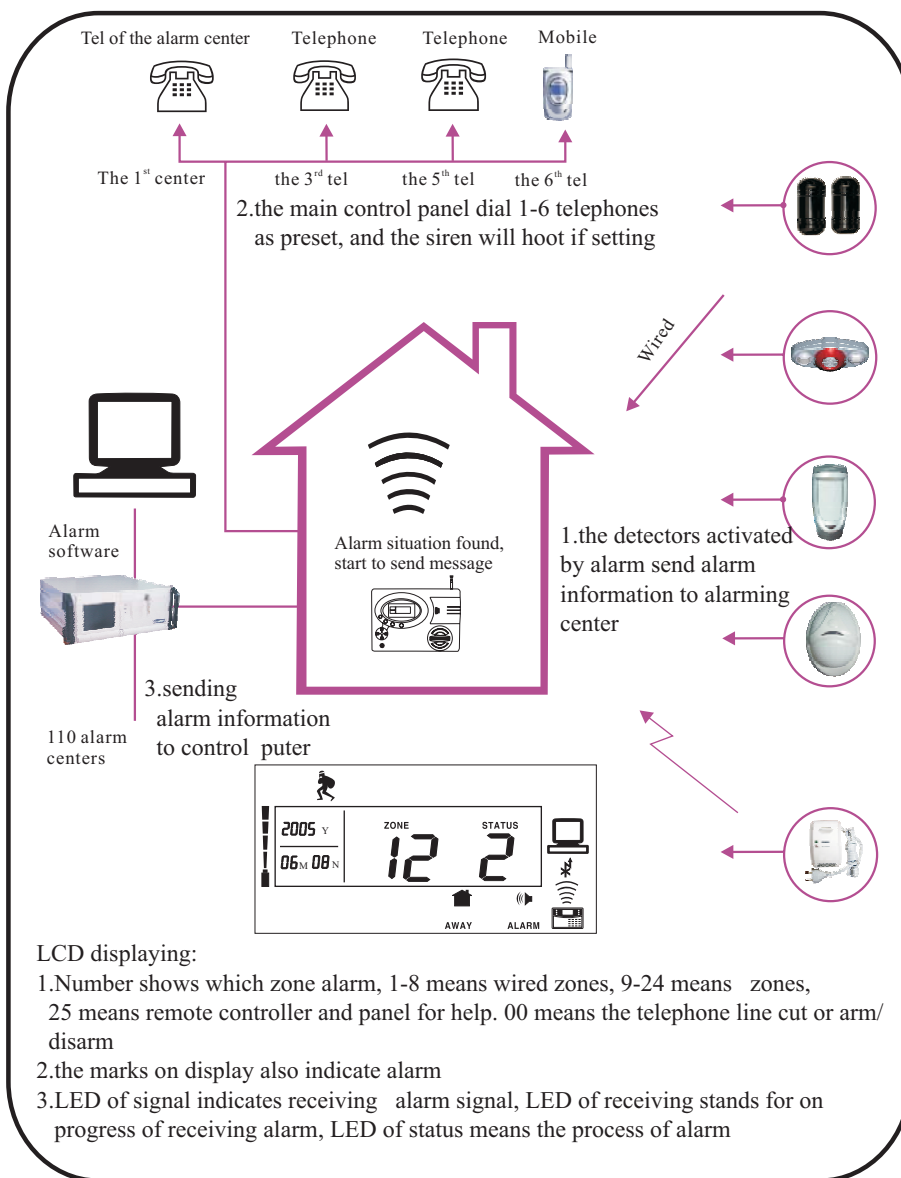
Icon	Meaning	Icon	Meaning
	Perimeter zoon		Enroll devices
	Telephone line fault		Disarm
	Burglar alarm		Home arm
	Panic alarm		Away arm
	Help		Alarm
	Fire alarm		Adequate battery voltage
	Gas leak		Low battery
	Special alarm		
	Center link failure		Alarm information is reporting

Alarm types	State code	Alarm types	State code
Panic alarm	1	Arm	15
Burglar alarm	2	Home arm	16
Gas leak	3	Disarm	17
Medical help	5	Telephone line fault	18
Special alarm	6	Low battery in detector	19
Perimeter alarm	7	Adequate battery voltage in detector	1A
Fire alarm	8		
Tamper	14		

Form 4 Icon means on LCD



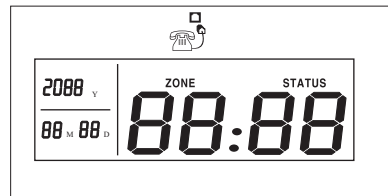
5.4 Alarm Process Diagram





5.5 Telephone line false alarm

When the checking function for phone line cutting is set, on arm status, the siren will hoot for 5 minutes until the phone is cut. On disarm status, the buzzer will sound lasting 60 seconds, during this period, if the phone line comes back or being disarmed, the buzzer will stop sound, otherwise, after finish the sounds, the spot high voice siren will sounds for 5 minutes immediately



5.6 Detector anti- dismantle and alarm

1. If the main control panel receives the signal for detector tamper switch the first time, it will deal it as a stealing alarm. Then the panel must receive the recover signals will it perform the anti- dismantle function.
2. Tamper alarm zone is displayed on the LED. The status shows the tamper alarm code 14, the icon shows burglar alarm icon

5.7 Event recording and checking

5.7.1 Event record

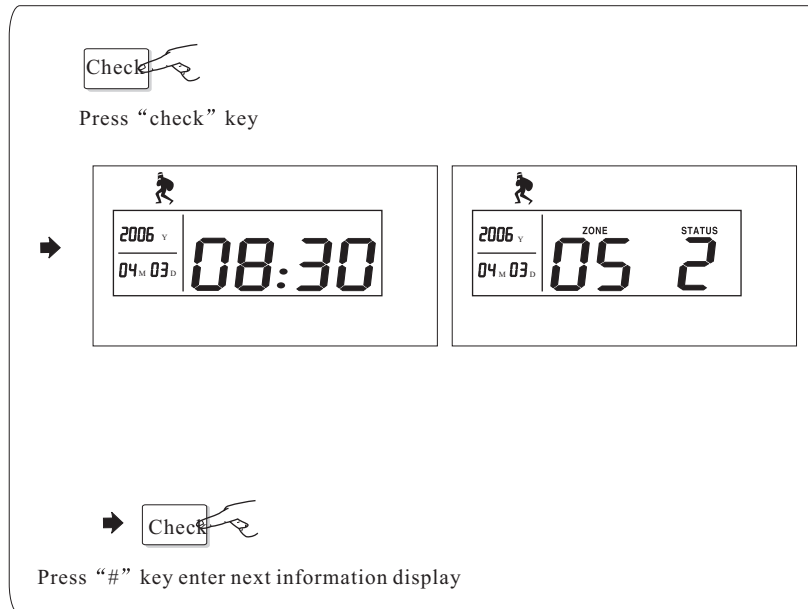
Arm, away arm, home arm, disarm, telephone line false, low battery status and other information can be recorded by the control panel.



5.7.2 Event Check

Presses the check key can the event recorded. Press the # key can check the record one by one.

For example: stealing alarm at the fifth wired zone at 8:30 am 3rd April, 2006





Chapter 7 Technical specification

7.1 General data

A area data: 8 wired defensive areas, 16 wireless zones, 8 remote controllers

B wired area request: 51k and 30 k ohm resistance

C Zone type: robbing alarm, thief alarm, gas leak alarm, ambulance alarm, self-defined alarm, fire alarm and boundary alarm events

D Frequency: 433MHz

E Signal transmit distance: 60 to 80 meters (open area)

7.2 Electric Data

Outer AC power supply: Input: 185~230v Output: 12V/350mA

Charge available power supply: 12V/300mAh

Internal charge available battery: 6V/300mAh

Main machine static current: 35mA /12v (exclude wire detector current)

Main machine alarming current: <250mA /12v (exclude high siren current)

Main machine 12v maximum output current: $\leq 100\text{mA}$ for wired detectors(

Recording time: 10s

The trigger delay of wired zones: $\geq 100\text{ ms}$

Frequency: $433\text{MHz} \pm 0.5\text{MHz}$

The method of alarming dial: DTMF

DTMF dial frequency variation : < 1.5%

Communication Protocol with CMS: Ademco Contact ID

7.3 Physical capability

Operation temperature range: 32F to 120F (0C to 49C)

Storage temperature range: -4F to 140F (-20C to 60C)

Relative humidity: 85% at 30 (86F)

Dimensions: 166*115*30mm

Weight: 550g

Color: white



Chapter 8 Maintenance and protection

8.1 Regular test

Design of components of the system is to reduce maintenance cost, but still it is suggested that periodical check may be carried out.

8.2 The cleanliness of control main machine

Main control panel maybe be stained by fingers or covered by dust after using for a while. Use soft cotton cloth or sponge to clean it. Don't use any lubricant, liquor such as kerosene, acetone and strong gel which will damage appearance and the transparency of top window.

ATTENTION: Don't use any lubricant, liquor such as kerosene, acetone and strong gel which will damage appearance and the top transparency of window.

Chapter 9 Limitation of the Products

Although the products is a high standard products, there is also some limitation of them such as false alarm or no alarm, the reasons may be below:

Lack of Maintenance The system needs maintenance and test regularly test. The sensitive of the detectors may decrease and the siren may not whistle.

Lack of power supply If no power input and the back up power is not enough, the panel can not work normally.

Telephone Line False If the telephone line is cut, the panel could not send alarm signals

Limitation of Smoke Detectors if the smoke is far from the smoke detector, the detector could not alarm

If the intruder break in through some door or window not monitored, or some one knows hot to make the system not work,