HEXA

HWAS-290G,GR, GN

CENTRAL MONITORED

GSM/Landline Auto Switch

ALARM & CARE SYSTEM

Table of Contents

1. OVERVIEW

1.1 Introduction

This security system uses advanced technology and brings together reliable, yet simple products that offer state-of-the-art security options. These options enable you to customize many of the advanced features through a straightforward keypad interface. Simple menu-driven commands eliminate the need for user manuals thus reducing training time to a minimum. Our system was developed in collaboration with end users resulting in a keypad that is intuitive and that guides the user through every procedure.
All of the actions performed in your security system will be executed and displayed through the keypad. We recommend that you read this manual thoroughly and have your installer explain basic system operation to you.

Functions:
1. Blue backup LCD display everything you want to know about the panel.
2. 85 event log about arming, disarming, and alarming (with time and date stamp), viewable directly on the panel LCD
3. 12 seconds voice message, in case of alarming, automatically playing after you pick up your phone .
4. Any of the detector can be door bell when disarmed; any detector can be local siren when disarmed
5. Monitor the old, the sick and the important place: when the old doesn't move, or the important warehouse hasn't human presence for a period of time, the panel will alarm.
6. Any zone type programmable (including: watchdog zone, exit/entry delay, 24 hours zone, sounder/silent when alarming, armed/part armed zone, sensor/no sensor in the zone)
7. Panel can receive the detector low voltage signal and display zone number and detector number on the LCD and sound a beep
8. 7 wired terminals and 50pcs detectors in all
10. 6 time points of timed Auto-Arming/disarming (24 hour mode)
11. Wireless detector installing test
12.Listen in and speak funtion
13. Away arming with sounder ON
14. Built-in high capacity rechargeable battery, auto charge/discharge, provide backup when main fails.

1.2 Basic Principle of Operation

Figure1:Basic principle of operation

Fig 1. Basic principle of operating

The above chart shows the basic principle of operation of the system. The security system contains alarm panel, remote Key Fob's, PIR detectors, Door/Window magnetic contact and high decibel integral siren.

Also available are some optional devices such as wired/wireless Smoke detectors, Gas detector, Flood detector, Temperature detector. The wireless detector communicates to the Control Panel by radio on 433 MHz frequency and each detector has an approximate range of 50 metres dependent on the local enviroment. The wired detector are also workable.

1.3 Component Parts

The wired/Wireless Alarm panel:

This 8 Zone Alarm panel is the central information processor of the system, receiving and dealing with all the alarm signals from the various detectors. It also contains the Central Station communicator and By-directional Audio Verification mechanisum.

Everything you need to know about the security system is displayed on the panel keypad LCD. The zones, 24 hour, Armed, Part Armed, Disarmed and the important messages regarding system status are displayed on the LCD screen. See section 2.1 and 2.2

Wireless Remote Key Fob:

The remote Key Fob is used to Arm, Part Arm, Disarm the system or to Request Assistance from the C.S. This could mean the sumoning of the Emergency Services such as Police, Fire, Ambulance or just a member of the family. It is also used in the programming and device registration for system access.

1.4 Optional Extra Detectors available

Wired/Wireless Magnetic Door / Window contact: (option)

The Magnetic Door contact is used to detect the opening of doors or windows. When activated it will transmit an alarm signal to the Control Panel to indicate a door or window has been compromised. It consists of detector with an itegrated wireless transmitter and magnet.

Wired/Wireless PIR detector: (option)

The Passive Infrared detector responds to mobile body heat immissions. If anyone enters the area of an armed zone, once the infrared detector in that armed zone detects their presence it will transmit an alarm signal to the Control Panel.

Wired/Wireless Smoke detector: (option)

The Smoke detector is used to detect potentially dangerious smoke emmissions in the home. Once the detector detects the presence of smoke as a danger and possible Fire Risk it will transmit an alarm signal to the control panel and also activate its own integral local sounder.

Wired/Wireless Combustible Gas detector: (option)

The combutiable gas detector will detect potentially dangerious gas emmissions within its location. It should be fitted in any area where there is a possibility or risk of gas leaks or emmissions.
Once The Combustible Gas detector detects unaceptable levels of combutible gas it will transmit an alarm signal to the Control Panel and also activate its own integral local sounder.

Wired/wiredless Flood detector: (option)

The Flood detector should be placed in an area susceptible to possible flooding such as near a dish washer or washing machine. The probe of the unit is to be placed close to the floor, when moisture reaches the prodes the Flood detector will transmit an alarm signal to the control panel.

Glass Break detector: (option)

The glass break detector should be placed at home where close to glass. When the glass is broken, the detector could detect the particular frequency and then transmitting an alarm signal to the control panel.

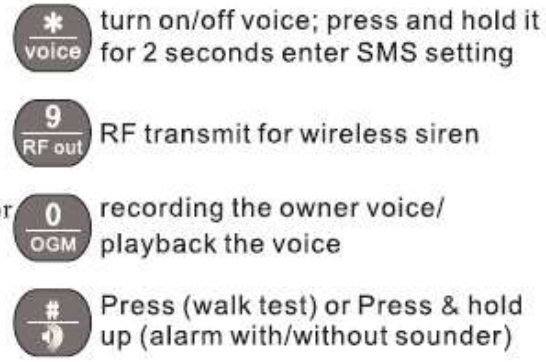
2 DESCRIPTION

2. 1 The Keypad

2. 1 The Keypad

ARMED ON	= ARMED
PART ARMED ON	= PART ARMED
ALARM ON	= NEW ALARM LOG
ALARM FLASH	= ALARM OR COMMUNICATION
POWER ON	=AC POWER
POWER OFF	=BATTERY USING
Event/Disarm	Event LOG/Disarm; Press and hold it for 2 seconds, check the SMS information
Prog	Program
Del/Sensor	Delete/Sensor check
Arm	Manual ARM or PART ARM

Model A



Model B

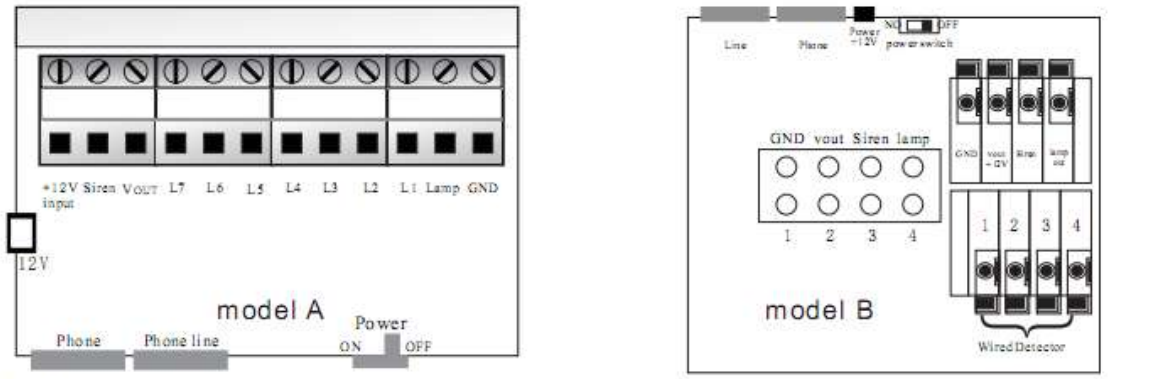
Figure 2: Keypad description

Model B has an extra ESC key and Bell key, press this key in any status and it can immediately return to standby status.

Changes: a lot of customers complain the english voice is a big bother, so we plan to make the panel, no voice when turning on, then press and hold key prog to turn on/off the english voice

So the */voice key is no long turn on/off voice

Figure 3: The back view of the panel



Note:

GND: the negative electrode of the power supply , siren , wired detector and alarm output

L1.L2.L3.L4.L5.L6 (wired detector): The signal wire of the wired detector

L7 with GND for wired arm/disarm. open is disarm/close is arm

Lamp: output control signal when alarm

+12v: power input

siren: output 12V for the wired siren or other accessories when alarm

vout: 12v output power for wired accessories

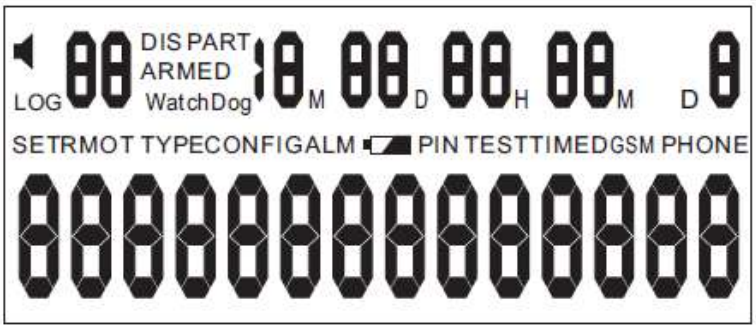
Figure 3: The back view of the panel

L7 is changed to wired arm/disarm

Everything you need to know about your security system is displayed on the panel keypad. The zones armed or disarmed and the important messages regarding system status appear on the LCD screen.

2. 2 The LCD Character details and description

The panel LCD screen whole information shows as follows:



ON=Sounder as alarm OFF=Silent as alarm	
ARMED	Panel armed
DIS ARMED	Panel disarmed
PART ARMED	Panel part armed
Watchdog	Avaible
LOG	Event log
M	Month
D	Day
H	Hour
M	Minute
D	Weekday
SET	Set program
RMOT	Remot
TYPE	Zone type
CONFIG	System config
ALM	Alarm
	Wireless sensor battery low voltage
PIN	Pin code
TEST	Walk test
TIMED	Timed auto arm or disarm
GSM	flahsing: group sending SMS on gsm is dialing
PHONE	C.S. Phone or user owner phone

Figure 4: All the info. the LCD displays

If no action has been performed on the keypad and the panel is in the DISARMED mode, the panel LCD screen will show as following:

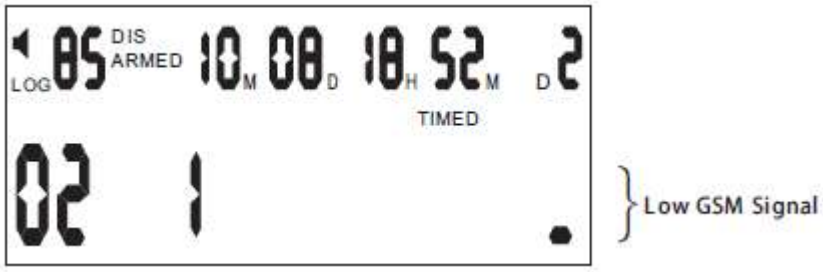


Figure5 : LCD display when disarmed

The meaning of the characters in the above figure as follows:

: it means that the panel has been setted to sounder alarm

85 : It means there are 84 items of information (including alarm information, armed / disarmed information and others).

10_M 8_D : It means the date: November 8th.

18_H 52_M : It means the time: 18:52

$_D$ 2 : It Means weekday Tuesday.

Timed: It means timed auto arming/disarming has been programmed

02 : It means there are 2 items of alarms which have not been viewed. After viewing the information, the display "02" will disappear.

1 : It means that the No. 1 zone armed within 8 zones from No.1 to No.1 8 zone.

When the panel is set in the Away Armed mode, the LCD screen will show the following :

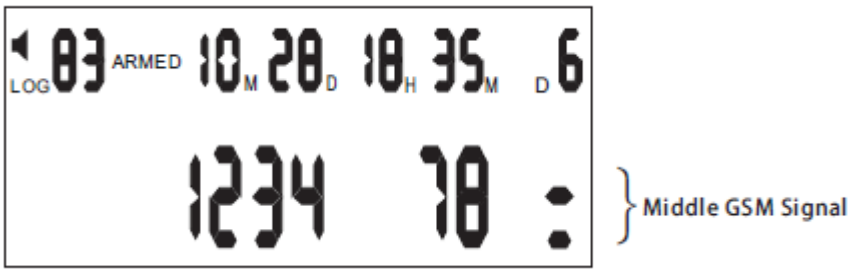


Figure 6: LCD display when part armed

The meaning of the characters as follows:

83 : Means there are 83 items of information (including alarm information, Armed/ Disarmed information and others).

1234…78 : Means that Zone No. 1, 2, 3, 4,7and 8 zones are armed.
Zones 5 & 6 are Un-Armed as there are no sensors in the two zones

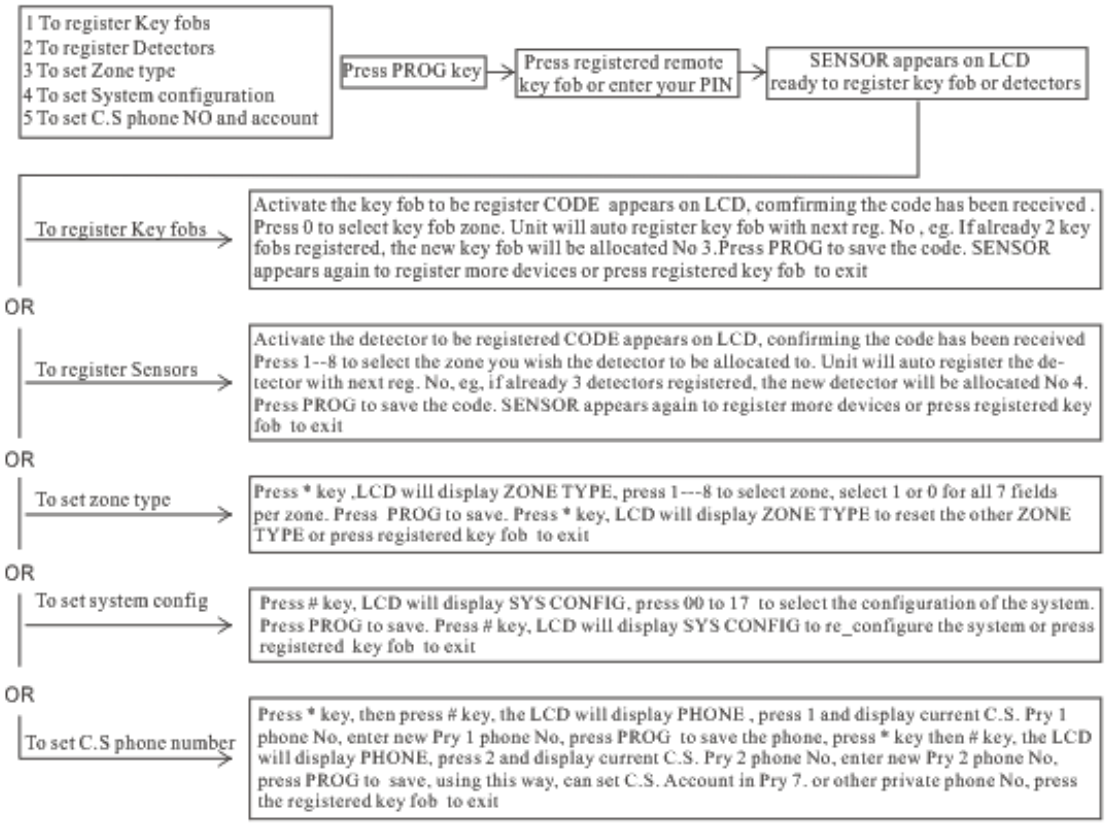
When there is an alarm, the panel LCD will show as following:

Figure7 : LCD display when alarmed

The figure shows that Zone 3 detector No2 has generated the Alarm signal at 6:10 on 18th, Oct.

3 INSTALLATION INFORMATION

3.1 The Basic Flow Chart for Registering Devices, Set Zone Type, Set System Configuration and Program C.S. phone numbers and Site Code in Disarmed mode.



3.2 Registering Key Fobs

Logging in Key Fob: Press the PROG key on the Keypad, a series of - - - will appear on the LCD. Enter the PIN code or Press the Disarm key on a current registered Key Fob and the word 'Sensor' will appear on the LCD. Using the Key Fob you wish to register, press the "Disarm" key on the Key Fob, the panel will receive the Key Fob code and the LCD will show the word 'CODE' (refer to below figure 8). Press 0 key on the Keypad to identify you are registering a Key Fob. The LCD will now display the Key Fob number that it has allocated to that Key Fob. Press the PROG key to complete and save the information. The Key Fob is now registered and recognised by the control panel.

(when logging in the first key fob, the pin code is needed, the factory default pin code is 123456)

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds. Otherwise at the end, press the Dis-Arm key on a registered Key Fob to return the panel to normal state.

Figure 8

3.3 Registering Sensors

Logging in Sensors: Press the PROG key on the Keypad, a series of - - - will appear on the LCD. Enter the PIN code or Press the Disarm key on a current registered Key Fob and the word 'Sensor' will appear on the LCD. Trigger the detector you wish to register, the panel will receive the detectors code and the word 'CODE' will appear on the LCD(refer to figure 8). Pressing a numeric key 1 to 8 on the Keypad will select the Zone you wish to allocate the detector. e.g. Pressing No 3 on the Keypad will allocate the detector to Zone 3. The control panel will then automatically allocate the detector with the next available detector number in that Zone. So, if there are no detectors allocated in Zone 3 the control panel will allocate it as detector No 1 and the next detector to be registered in Zone 3 will be allocated detector No 2 etc. To complete and save the information press PROG key.

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds.Otherwise at the end, press the Dis-Arm key on a registered Key Fob to return the panel to normal state.

3.4 Installing wired detector and its zone setting:

Various wired detector could be connected to the panel via the N.C contact. Four wired connection in all, and the contacts for connection are terminals L1-L7…GND is the common terminal.

Zone setting: After connecting well the wired detector to the panel, press the PROG key on the keypad, a series of ----- appear on the LCD. Enter the PIN code or press the Disarm key on a registered key fob and the word 'Sensor' will appear on the LCD. Trigger the detector you wish to register, the panel will receive the detectors code and the word 'CODE' will appear on the LCD. Pressing a numeric key 1 to 8 on the Keypad will select the Zone you wish to allocate the detector. e.g. Pressing No 3 on the Keypad will allocate the detector to Zone 3. The control panel will then automatically allocate the detector with the next available detector number in that Zone. So, if there are no detectors allocated in Zone 3 the control panel will allocate it as detector No 1 and the next

detector to be registered in Zone 3 will be allocated detector No 2 etc. To complete and save the information press PROG key.

(Also you could first fix two leads to L1 to L7 and GND, then connect them together. Disconnect them when triggered. It is ok then to replace with a wired detector after registration.)

3.5 Checking Registration

Checking Key Fob and Sensor Registration: Press the # key on the keypad, the LCD displays word TEST, Acivate a detector, a bleep noise will be heard confirming the control panel has received the signal from the detector and the LCD will display the Detector registration No and its Zone allocation e.g. Acivate Detector No 2 in Zone 3 the LCD will display Zone 3 2. Refer to the below figure 9

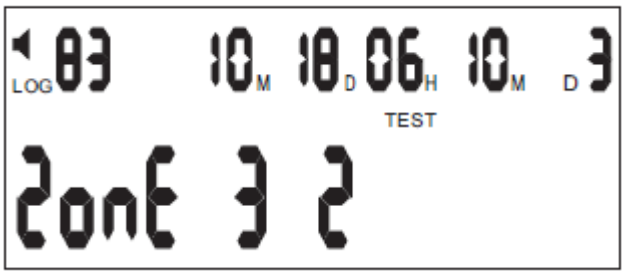


Figure 9

Press the key fob Disarm key will return the control panel back to normal status. Otherwise the Walk Test will Auto extinguish approximately 30 seconds after last test signal was received.

3.6 Deleting Registered Key Fobs

Deleting Registered Key Fob: Press the DELETE key on the Keypad, a series of - - - will appear on the LCD. Press the Arming key on a current registered Key Fob or entering the preprogrammed PIN code, and the word 'DEL Sensor' will appear on the LCD. Press '0' on the numeric Keypad to select the Key Fob Zone and the LCD will display Zone 0, press the registered No of the Key Fob you wish to delete. e.g. Key Fob No 2, the LCD will now display Zone 0 2. Press DELETE key to delete No 2 Key Fob.

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds. Otherwise at the end, press Dis-Arm key on a registered Key Fob to return the panel to normal state.

3.7 Deleting Registered Sensors

Deleting Registered Sensors: Press the DEL key on the Keypad, a series of - - - will appear on the LCD. Press the Arming key on a current registered Key Fob or entering the preprogrammed PIN code, and the word 'DEL Sensor' will appear on the LCD. Press 1 to 8 on the numeric Keypad to select the Zone the detector to be deleted is allocated to. e.g. Zone 3 and the LCD will display Zone 3, press the registered No of the detector you wish to delete. e.g. detector No 2, the LCD will now read Zone 3 2. Press DELETE key to delete No 2 detector in Zone 3. Press Disarm button on a registered Key Fob to return the panel to normal state.

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds. Otherwise at the end, press Dis-Arm key on a registered Key Fob to return the panel to normal state.

3.8 The Zone Setting and Allocation

The alarm system has 8 zones which can be configured depending on your requirements. The

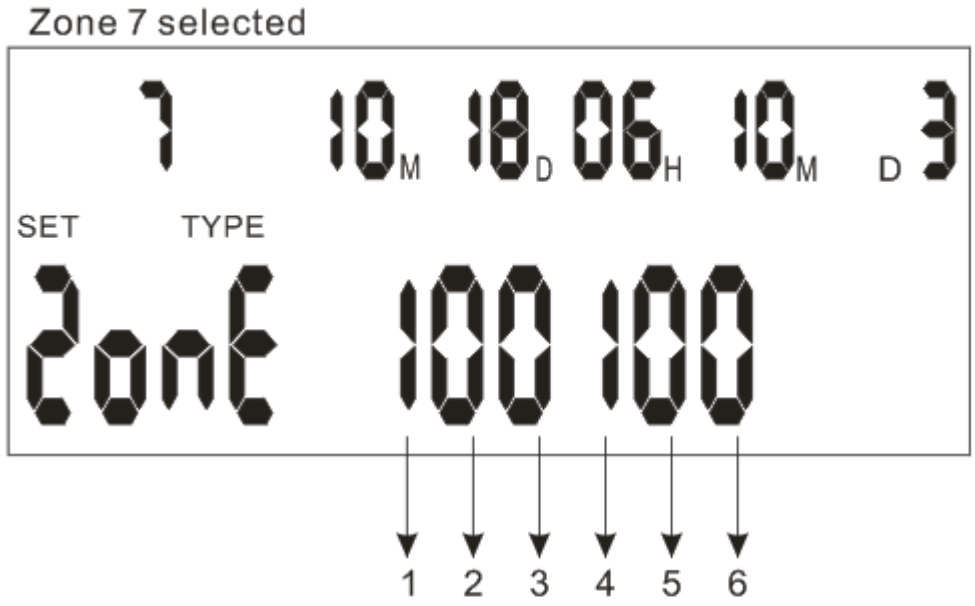
Factory Default Zone configuration settings are as follows:

No 1 Zone Fire(24 hours); No 2 Zone Panic(24hours) No 3 Zone entry/exit ; No 4.5.6 Zone exterior intruder ; No 7 Interior Zone; No.8 zone watchdog

How To Allocate and Set Zones: Press the PROG key on the Keypad, a series of - - - will appear on the LCD. Press the Arming key on any current registered Key Fob or entering the preprogrammed PIN code, and the word 'Sensor' will appear on the LCD. Pressing the * key on the Keypad, the LCD will show the words 'Zone type', pressing No1 to 8 numeric key to select correspongding zone, then pressing the 0 or 1 numeric Keypad to configure all the fields in this zone.

By way of example, below is configured as follows:

Zone 7 selected is a Watchdog Zone programmed without entry or exit time, it's a 24 hour Zone with silent when alarming, its an internal detector and there are sensors allocated to it.



1	1:watchdog zone	0:not a watchdog zone
2	1:exit delay	0:no exit delay
3	1:entry delay	0:no entry delay
4	1:24 hours zone	0:not 24 hours zone
5	1:sounder when alarming	0:silent when alarming
6	1:armed zone/exterior zone	0:part armed/interior zone

Figure 10: zone type configuration

At the end, press the PROG key to complete and save operating.

N.B. For a more detailed example refer to section 5. Zone Configuration and Explanation.

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds. Otherwise at the end, press the Dis-Arm key on a registered Key Fob to return the panel to normal state.

3.9 The System Configuration Setting

How To Set System Configuration: Press the PROG key on the Keypad, a series of - - - will appear on the LCD. Press the Arming key on any current registered Key Fob or entering the preprogrammed PIN code, and the word 'Sensor' will appear on the LCD. Pressing the **#** key on the Keypad, the LCD will show the words 'SYS Config', pressing 0 to 9 on the numeric Keypad to select each Configuration Field Code from 00 to 17 in succession and configure each field as required. At the end, press the PROG key to save, store the information and exit.

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds. Otherwise at the end, press the Dis-Arm key on a registered Key Fob to return the panel to normal state.

Configuration Codes

00: C.S. Comms. 11= send out information about arming, disarming and alarms; 10 = only send out the alarm information; 00= not net work.

01: Exit delay time. The time is double-digit (XX). The actual time is the product of XX times 5. The initialization value is 04 = 20 seconds.

02: Entry delay time (delay alarm). The time is double-digit (XX). The actual time is the product of XX times 5. The initialization value is 06 = 30 seconds.

03: Sounder run time. The time is double-digit (XX). The actual time is the product of XX times 20. The initialization value is 06 = 120 seconds.

04: Watchdog time. The unit time is hours. The factory default value is 12hours.

05: Watchdog start and stop time window. Default setting is from 8:00 to 20:00.

06: Set time to Arm. Press * or #, select the time point(6 time points in all) enter the time desired. To cancel this set, press Delete key. Refer to figure 11.

07: Set time to Dis-Arm. Press * or #, select the time point(6 time points in all) enter the time desired. To cancel this set, press Delete key. Refer to figure 12.

08: Setting time and date. The system time should be set with Year-Month-Date
Hour-Minute - Day using the numeric keypad of the panel.
7 = Sunday; 1 = Monday; 2 = Tuesday; 3 = Wednesday;
4 = Thursday; 5 = Friday; 6 = Saturday. (a 24 hour mode)

09: PIN code set, this a 6 digit code for the remote access, Keypad Dis-Arm. Enter the required PIN No using the numeric keypad on the panel.Cancel the PIN No using the Delete key on the panel.

10: Set number of ringing in times before answer. Cancel this set using Delete key on the panel.

When the PIN code or the number of ringing is not set, the panel couldn't have remote access; The panel could still dial the preprogrammed phone numbers when alarming.

11. Arming with sounder ON/OFF 0: no sounder when arming 1: sounder when arming

12: Speak (one way): 0: No 1: YES

When SPEAK is required, within 2.5 seconds after transmitting data to the C.S, the panel would receive the SPEAK request from C.S. If it is not required, the panel hangs up automatically after sending data to the C.S.

13: Engineer Option. Listen to dial out DTMF. 0 = NO : 1 = YES. This option will automatically extinguish after one hour.

14: Mains Fail alarm. The panel will alarm when mains power fails 0 = NO ; 1 = YES.

15: Exit Delay timer with beep ON/OFF 0: ON 1: OFF

16: Phone line cut alarm: The panel will automatically check the line and alarm when it detects it is not ok. 0: NO 1: YES

17. Periodical test to monitor center (once every 24 hours) 0: No 1: Yes

18. Low voltage transmitting with Beep or not 0: no beep 1: beep (default is 1. But default no beep during 8pm to 8am)

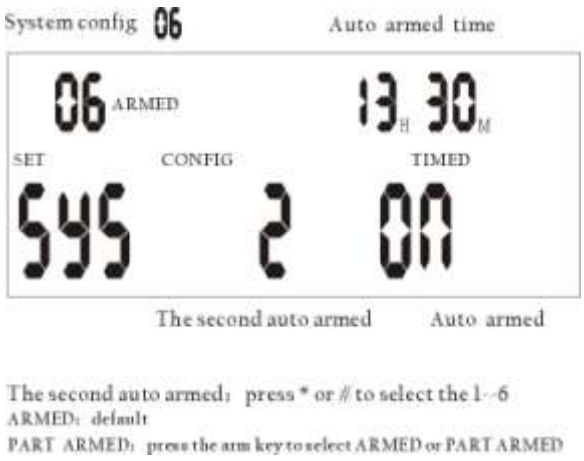


Figure11: The second auto armed time is at 13:30

Figure12: The first auto disarmed time is at 17:35.

3.10 The Phone Numbers Setting

How To Set Phone Number: Press the PROG key on the Keypad, a series of - - - will appear on the LCD. Press the Arming key on any current registered Key Fob or entering the preprogrammed PIN code, and the word 'Sensor' will appear on the LCD. Pressing the * key on the Keypad, the LCD will show the words 'Zone type'. Pressing the # key on the Keypad, the LCD will show the words 'SYS phone'. Press No 1 on the numeric Keypad. Enter the full phone number of the Central Station Comms.and press PROG to store this number. Pressing * then # scole back down to 'SYS phone' Press No2 on the numeric Keypad. Enter the full phone number of the Central Station secondary number for Comms using the numeric keypad on the panel, then press PROG to store this number.

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds. Otherwise at the end, press the Dis-Arm key on a registered Key Fob to return the panel to normal state.

3.11 The C.S. Account Code Setting

How To Set C. S. Code: Press the PROG key on the numeric Keypad, a series of - - - will appear on the LCD. Press the Arming key on any current registered Key Fob or entering the preprogrammed PIN code, and the word 'Sensor' will appear on the LCD. Pressing the * key on the Keypad, the LCD will show the words 'Zone type'. Pressing the # key on the Keypad, the LCD will show the words 'SYS phone'. Press No 7 key on the keypad, the panel will access the the location of the C.S. account code. Enter the account code using the numeric keypad on the panel, this is normally a 4 digit code called site code. Press 'Prog' key to store the programmed number.

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds. Otherwise at the end, press ESC on the keypad or the Dis-Arm key on a registered Key Fob to return the panel to normal state.

3.12 Deleting Zones

How To Delete a Zone: There are two ways to delete zones

A: Delete all the detectors within the zone.

Press the DELETE key on the keypad, , a series of **- - -** will appear on the LCD. Press the Arming key on any current registered Key Fob or entering the preprogrammed PIN code and the word 'DEL Sensor' will appear on the LCD. Pressing the 0, 1…8 key on the Keypad to select the Zone number of the detector or Key Fob that needs to be deleted. e.g. select 3 on Keypad, the LCD will display 'Zone 3'. Using the numeric Keypad select the number of the detector requiring to be deleted. e.g. Detector No 4 in Zone 3. The LCD will now display 'Zone 3 4'. Press DELETE and the detector will be deleted from memory.

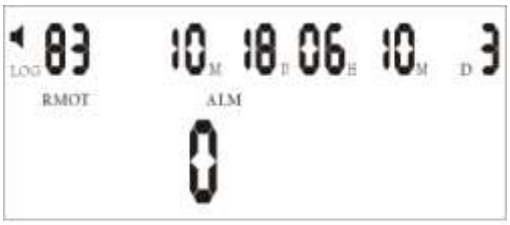
B: Enter the location of zone type setting, set the No 7 field to 0, refer to 3.7.

3.13 Viewing The Recording Event Log

Events refer to occurrences taking place within your system, such as, which key Fob Armed or Dis-Armed the system and when. If an Alarm occured which detector in which Zone activated the alarm and when.

How To View The Event Record: Press the **event** key on the keypad, the panel LCD will show the latest event, using the **event** key more times to look over previous events, times and information.

Note: the top line always shows the latest event information.

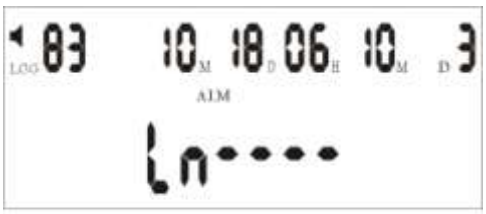


RMOT 0 ALM : keypad panic alarm

Figure13: The LCD display when there is a panic alarm from the keypad

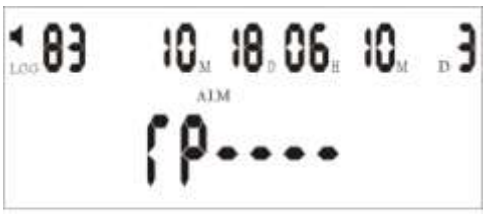
RMOT 1 ALM : remote panic alarm

Figure14: The LCD display when the key fob is alarming



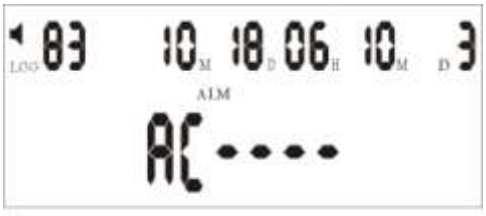
Ln---- ALM : phone line cut_off alarm

Figure15: The LCD display when the phone line is cut



rP---- ALM : tamper alarm

Figure16: The LCD display when there is a tampered alarm



AC---- ALM : main power fail alarm

Figure17: The LCD display when the power fails

Figure18: The LCD display when the wireless detector is alarming

Figure19: The LCD display when the wired detector is alarming

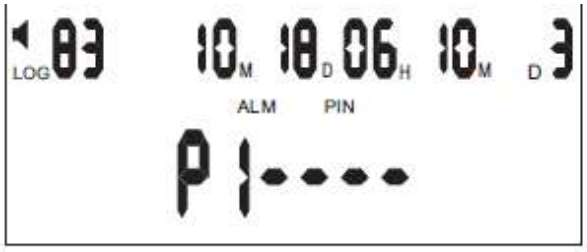


Figure 20:The LCD display when the PIN code is entered wrong for 3 times.

3.14 Setting Entry and Exit delay timer

Exit Delay Timer: In order to provide a user with enough time to leave the premises, an EXIT DELAY TIMER will comence timimg when a user arms the system, The timer will last anywhere from 1 to 255 seconds depending on time selected when configuring the system.

How to set the Exit delay time: Press the PROG key on the Keypad, a series of **- - -** will appear on the LCD. Press the Arming key on any current registered Key Fob or entering the preprogrammed PIN code, and the word 'Sensor' will appear on the LCD. Pressing the **#** key on the Keypad, the LCD will show the words 'SYS config'. Press 0 then 1 on the numeric Keypad. 01 will appear in the top left hand corner of the LCD (refer to section 3. 9 for the configuration codes). Enter the required exit time using the configuration code. The selected code will be displayed in the bottom right hand corner of the LCD. Press PROG to store this number.

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds. Otherwise at the end, press the Dis-Arm key on a registered Key Fob to return the panel to normal state.

Entry Delay Timer: Designated entry points (i.e. front door and may be back door) are subject to an Entry Delay Time anywhere from 1 to 255 seconds depending on time selected when configuring the system.

This delay provides a user with enough time to enter the armed premises and disarm the system before an alarm is triggered.

How To Set Entry Delay Timer: Press the PROG key on the keypad, a series of **- - -** will appear on the LCD. Press the Arming key on any current registered Key Fob or entering the preprogrammed PIN code, and the word 'Sensor' will appear on the LCD. Pressing the **#** key on the Keypad, the LCD will show the words 'SYS config'. Press 0 then 2 on the numeric Keypad. 02 will appear in the top left hand corner of the LCD (refer to section 3. 9 for the configuration codes). Enter the required entry time using the configuration code. The selected code will be displayed in the bottom right hand corner of the LCD. Press PROG to store this number.

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds. Otherwise at the end, press Dis-Arm key on a registered Key Fob to return the panel to normal state.

3.15 Sounder cut off time

The sounder cut off time is the the time permitted for the sounder to sound when an alarm activation takes place. This can be from 1 to 1980 seconds, or do not stop until the C.s or user confirm it, depending on time selected when configuring the system.

Setting the sounder cut off time: Press the PROG key on the Keypad, a series of - - - will appear on the LCD. Press the Arming key on any current registered Key Fob or entering the preprogrammed PIN code, then the word 'Sensor' will appear on the LCD. Pressing the **#** key on the Keypad, the LCD will show the words 'SYS config'. Press 0 then 3 on the numeric Keypad. 03 will appear in the top left hand corner of the LCD (refer to section 3.9 for the configuration codes). Enter the required cut off time using the configuration code. The selected code will be displayed in the bottom right hand corner of the LCD. Press PROG to store this number.

If no further actions take place the panel will automatically return to normal state after approximately 30 seconds. Otherwise at the end, press the ESC on the keypad or Dis-Arm key on a registered Key Fob to return the panel to normal state.

3.16 View detector's total in every zone

How To View The Detector's total In a Zone: Press the Delete key on the keypad, a series of **- - -** will appear on the LCD. Press the Arming key on any current registered Key Fob or enter the preprogrammed PIN code, and the word 'DEL Sensor' will appear on the LCD. Using the *****and **#** keys scrole through the Zones and their registered detectors. e.g. If the LCD displays: Zone 0 2 this means 2 key fobs are registerd. If the LCD displays Zone 5 3 means 3 detectors are registered in the Zone 5 etc.

3.17. Record/Play the alarming Message

Function: When the panel alarms, it will auto dial the user's telephone numbers. When the user picks up the phone, he can listen to the recorded alarming message, which informs the user what happens. The user can press 9 to replay the message.

How to record/play the message: In the disarmed status, press the 0 and hold it for 2 seconds. The panel LCD will display COPY. At this time, you can record the alarming message now. The recording time is 12 seconds.

Press 0, you can hear the recorded message.

4 USER INFORMATION:

4.1 Methods of Arming and Disarming

Arming: Arming is used to Arm the whole Alarm system. All detectors in the zones within the protected area must be closed (not in alarm) in order for you to arm the system successfully.

Part Arming: Part Arming is used to partially arm your system by arming the selected zones in the protected area, which permits persons to remain in the premises while the system is Part Armed.

Disarming: Disarms the system and deactivates any alarms in progress and disarms all the zones other than the 24 hour Zones.

4.11. Arming and Disarming through the Keypad on the panel

How To Arm: Pressing the ARM key on the keypad to arm the system.

How To Part Arm: Pressing the ARM key on the keypad for 2 seconds to Part Arm the system.
How To Disarm: Press the DISARM key on the keypad then using the Keypad again enter the pre-programmed 6 digit PIN code to complete the disarming operating.

4.12. Arming and Disarming through the Key Fob Remote Device

How To Arm: Press the Arm key on the Key Fob to Arm the system.

How To Part Arm: Pressing the Part Arm key on the key Fob to Part Arm the system.

How To Disarm: Press the DISARM key on the key Fob to Dis-Arm the system.

Note: The armed LED flashes to show that the delay timer is being activated for those zones with delayed time. The zones without a delayed timer is armed. When the armed LED light, it shows arming has completed. All the exterior zones arm immediately when part armed, the delay timer will not work under such circumstances.

4.2 24 Hours Arming

24 hours arming is used for the detectors (i.e. smoke detector and gas detector etc), These zones are armed 24 hours whether the system is armed or disarmed. They can at no time be omitted or disarmed.

4.3 Selectable Zone Arming

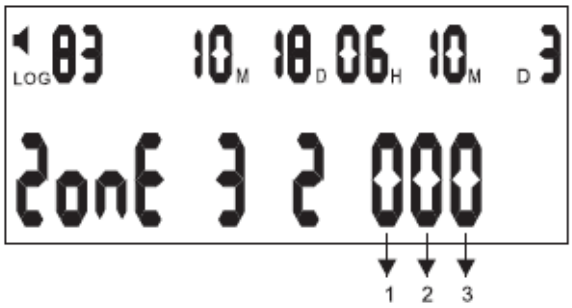
This facility allows only a particular selected zone or only a particular selection of zones to be armed. This is of great use when requiring temporary protection in a selected area while the premises is occupied.

How to action Selectable Zone Arming: Using the numeric Keypad on the panel, press the number key of the Zone you wish to arm (refer to 1 to 8 zone), then press the ARM key to arm. When both the Armed and Disarmed lights illuminate arming is completed. The armed zones will be displayed on the LCD alongside with the 24 hour zones.

4.4Selectable Detector Alarming Local only or Local and C.S.

This facility allows particular detectors in each Zone to be local alarm only or local alarm and transmit alarm information to the C.S. Each detector can be configured differently e.g. local Alarm only or local Alarm and C.S. function, door bell function or in the case of Key Fob, Request Assistance with / without sounder.

To program Selectctable Detector Arming: Press 'Delete' key and - - - appears on the LCD. Press registered Key Fob or entering the preprogrammed PIN code, LCD will display 'DEL Sensor' Use Key pad to select Zone(s) 1 to 8. Use Key pad to select detector(s) 1 to 9. Program each of the 3 fields of the detector with 0 or 1 to suit. Press Key Fob to save and exit.



1	1= local alarm only, when disarmed;	0=Normal detector
2	1= detector will be door bell, when disarmed;	0=not door bell
3	1= key fob request assistance with sounder;	0=key fob request assistance no sounder

Note: field 1,2 are for detector; field 3 is for Key fob

Figure 24: Detector features setting

1, **2** are programmable detector features; Number **3** is a programmable Key Fob feature.

1 : 1 = Local alarm only, when Disarmed; 0 = Transmit alarm to the CS.

2 : 1 = Detector will be Door Bell when disarmed; 0 = Normal alarm when armed.

3 : 1 = Key Fob Request assistance with sounder; 0 = Key fob Request assistance no sounder.

4.5 Selectable key fob require assistance with/without sounder

How to set the function: Press 'Delete' key and - - - appears on the LCD. Press the disaem key on the registered Key Fob or entering the preprogrammed PIN code, LCD will display 'DEL Sensor' Use Key pad to select Zone(s) 0, then select key fob number 1 to 9. Program the character of the key fob with 0 or 1 to suit. Press keyfob save and exit.

4.6 Omitting a Zone

It may be a requirement to temporarily omit a selected Zone or a number of Zones when the system is armed. When a zone is selected to be omitted it will only be omitted for current operation. When next time your system is armed, the omitted zone or zones will be re-enstated into the system.

Note: The function is suitable for the armed zone or zones. But 24 hour zone can never be omitted.

How to Omit a zone or zones: Press Arm button on the panel, then using the numeric keypad on the panel press the number of the zone want to be omitted, then press the Disarm key, enter the PIN code to complete the operation.

4.8 Sounder or Silent alarm setting:

How to set the function: Press the # key for 2 seconds when the panel is in disarmed mode, the symbol of speaker displays or disappears; When it displays, the panel would alarm with sounder ON, while when it disppears, the panel will alarm silently.

Note: Whether the key fob alarms with/without sounder subiects to its own configuration. When the panel is set with silent alarm, the key fob will still be sounder alarm if it is set with sounder alarm.

4.9 Access the Control Panel from a remote telephone (mobile or land line)

The remote control enables the use of the land line phone or mobile phone to remotely control panel. Call the phone number of the line connected to the alarm panel, the panel will answer the call after 1 to 8 rings (programmable). When the panel answers the call enter the pre-programmed 6 digit PIN code on the phone keypad to gain access to the Panel. If the correct 6 digit PIN code is entered a long tone will be emitted from the panel. If the PIN code is incorrect, three short tones will be emitted from the panel. You must try again and enter the correct PIN code.

After entering correct PIN code the panel will follow the instructions given using the DTMF tones from the keypad of the remote phone.

Press 1 to tell the panel to switch to listen in mode
Press 2 to tell the panel to switch to speak mode
Press 3 to tell the panel to switch its sounder ON
Press 4 to tell the panel to switch listening in OFF
Press 5 to tell the panel to terminate the call, dis-engage the phone line and re-Arm the system
Press 6 to tell the panel to switch its sounder OFF
Press 7 to tell the panel to ARM
Press 8 to tell the panel to DIS ARM

4.10 Alarm confirming

When the panel alarms and dials the user phone number and the user answers the telephone, he can hear the recorded voice message, he presses the * key on USER hand set to confirm the alarm, on doing so, he can hear which zone which detector is alarming and then user can press 1 to listen in, press 4 to turn off the listen in, 2 to speak, 3 to turn on the siren 5 to hang up, 6 to turn off the siren 7 to arm, and 8 to disarm. (same as 4.9)

If after 15 seconds the user does not press the * key to confirm the alarm, the panel will auto-dial next phone number.

4.11 Detector Battery Low Voltage Display On the Panel And Introduction

When detector has been in the low voltage state, it will not run correctly. Panel can receive the detector low voltage signal and display on the LCD and sound a “di” to indicate user to replace detector’s battery in time.

Low voltage display and introductions:

A: When the panel is in the DISARMED mode, if the detector such as PIR detects itself being low voltage, the panel will sound “di” every seconds and display the signal “ ” on the LCD continually.

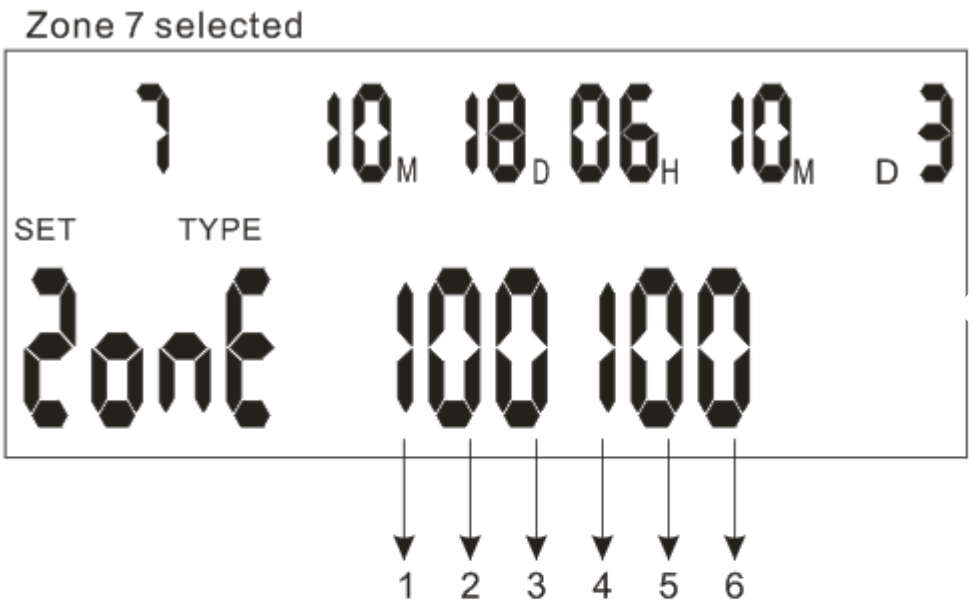
Figure 25: Detector No 2 in zone 3 is low voltage

B: When the panel is in the ARMED/PART ARMED mode, if the detector such as PIR detects itself being low voltage, the panel will sound “di” every seconds and display the signal “ ” vs armed zone and detectors No on the LCD alternately.

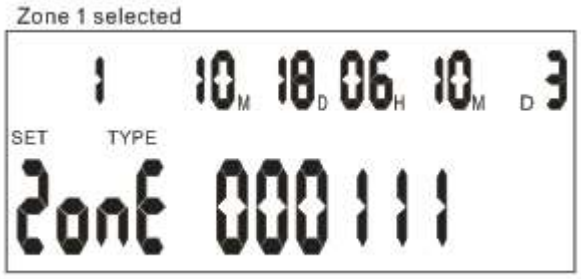
C: Even if the panel LCD displays the detector low voltage, the operation also can be done normally on the panel and stop provisionally low voltage display.

At this time, you can press the key fob, then the di di sould would stop for an hour.

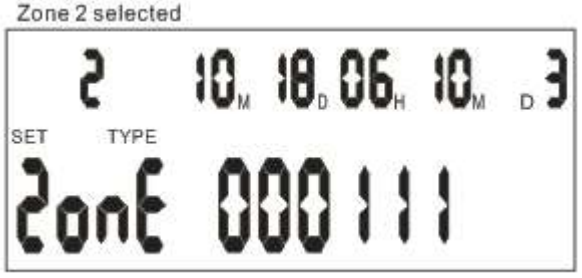
5 ZONE CONFIGURATION AND EXPLANATION



1	1:watchdog zone	0:not a watchdog zone
2	1:exit delay	0:no exit delay
3	1:entry delay	0:no entry delay
4	1:24 hours zone	0:not 24 hours zone
5	1:sounder when alarming	0:silent when alarming
6	1:armed zone/exterior zone	0:part armed/interior zone

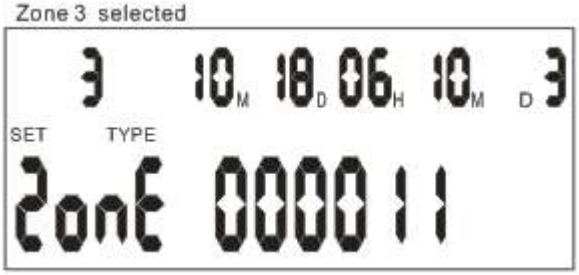


The above shows Zone 1 is configured to be a 24 hour zone, Active Sounder when Alarm and exterior zone



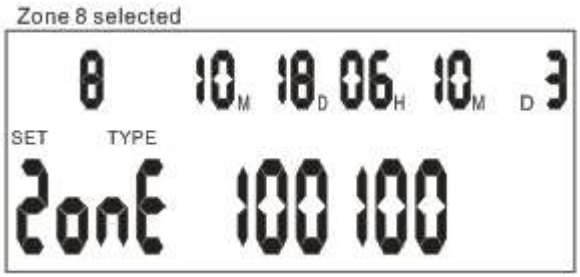
The above shows that the No 2 zone is configured to be 24 hours zone, Active Sounder when Alarm and exterior zone.

Zone 3 selected



The above shows that the No 3 zone configured to be Active Sounder when alarm, and exterior zone.

Zone 8 selected



The above shows No 8 zone is configured to be a watchdog zone and 24 hous zone.

GSM Setting Simple Guide:

1. Insert the GSM SIM card into the panel, Connect the antenna on the top and screw the screw cap. Not too tight. Plug in the adatpor, and turn on the back switch on PCB.
2. After 30 seconds, the panel connect to gsm network, and LCD show the time and gsm signal indicator (3 horizantal bars)
3. connect the phone line (optional) if you connect the phone line, the panel would send sms by gsm sim card first (if the sms is set in the alarming zone) then dial from the telephone line. If there is no telephone line, the the panel would send sms by gsm sim card first (if the sms is set in the alarming zone) then dial from the gsm sim card also.
4. Register the remote: press the PROG key----input the factory default pin code 123456----press the remote key----"code" display in the LCD, indicating the panel receive a wireless signal----press the numeric key 0, 0 stands for remote ----press the PROG key to store the data. Then you can register other remote same as above steps.
5. Register the sensor: press the PROG key----enter the pin code or press the Disarm key on a registered remote ----trigger the sensor----"code" displays in the LCD, indicating the panel receives a wireless signal----press the numeric 1 to 8, select the zone number----press the PROG key to store the data. Then you can register other sensors same as above steps. In any step, you can press the disarm key of the remote to escape.
Note: when you select the zone:

Zone 1 2 are 24 hours zone fire alarm (detectors in the zone also alarms when triggered in disarmed mode)

Zone 3 is entry/exit zone (extry/exit delay timer)

Zone 4.5 6 are normal zones

Zone 7 is interior zone (detectors in this zone do not alarm in stay/part arm)

Zone 8 is watchdog zone (detector alarms when no movement for a programmed period)

6. PROG the number

Press the PROG key--- ---press * then # key---press the1 to 6 for selecting the phone number position---input the phone number---press the PROG to store. Then you can continue to PROG the panel---press * # ---press the 1 to 6 to choose phone position---input the phone number---press the PROG to store.

7. PROG the system configuration code ：

Press PROG key--- enter the pin code or press disarm key of registered remote ---press # key---press the 00 to 16 to select the configuration code---select 0 or 1 ---press the PROG to store. Then you can continue to PROG the panel---press # ---press any Number from 00 to 16--- select 0 or 1 ----press the PROG to store.

8. PROG the panel's time:

GSM panel time is decided by the GSM service. When you send sms to the gsm panel, and panel got it correct, it would auto keep the correct time according to the gsm service.

9. How to programe the SMS of every zone, every alarm:

Sending the SMS to the panel by the mobile phone, program the SMS: "12345601the first zone fire active"（123456 is the factory default pin code, if you have already changed it, use your new pin code），---then press the * key and hold it for about 2 seconds, the U display in the panel---then you send the SMS---the panel will sound 1,3 or 3. 1 means correct, 2 means pin code is wrong, 3 means No is wrong. When panel sounds 1, that means zone 1 sms is sucessfully set. Then when detectors in zone one alarm, you will recive the sms.

Program the sms for other zones:

xxxxxx02 zone two active, panic alarm

xxxxxx03 zone three active, the exit\entry zone alarm

xxxxxx04 zone four alarming

xxxxxx05 zone five alarming

xxxxxx06 zone six alarming

xxxxxx07 zone seven actived, interior zone alarm

xxxxxx08 zone eight activated, watchdog zone alarm

xxxxxx09 remote panic alarm

xxxxxx10 tamper alarm

xxxxxx11 phone line cut alarm

xxxxxx12 main fails alarm

xxxxxx13 pin code input wrong for 3 times

xxxxxx14 main resumes

14. Check the SMS setting status：

Press the event/disarm key and hold it for 2 seconds, the "GSM" on LCD would flash. This indicates the panel is sending all the programme sms to programmed mobile numbers.

If your mobile receives “01 02 03，set sms ok” -----this indicates: the zone 1 2 3 SMS have been set.

If your mobile receives “01 05 13，set sms ok” -----this indicate: the zone 01 05 13 SMS have been set.

If your mobile receives “no sms” --- that means you have not set any SMS

15 Testing the panel：

Press the arm key on the remote---the panel will display the armed zone in the LCD---trigger the sensor in the armed zone---panel will alarm---if the SMS have set, the “GSM” will flash, the panel will send the SMS to the phone number you set. (when gsm is flashing, the panel can not be disarmed)--- when the “GSM” is on, indicating the SMS sent. (if there is no SMS set, the panel will dial the number without sending the SMS) when the user picks up the phone, press * key to confirm the alarm, then the panel will play the voice user recoded, and then told you which zone, which dector is alarming by voice. Press 9 to listen the information again. For other operations, please refer to the manual.

16. SMS to arm/disarm/check

A: When the cell phone No is already preprogarmed into the panel as the alarm No

You could end following sms to the panel

1. arm: to away arm

2.parm: to stay arm

3. disarm: to disarm

4. check: to check whether the panel is armed or disarmed: the panel

Panel would send armed or disarmed information to your cell phone

B: when the cell phone No is not preprogramed into the panel as the alarm No

You could send following sms to the panel:

1.123456 arm: to away arm

2. 123456.parm: to stay arm

3. 123456 disarm: to disarm

4. 123456 check: to check whether the panel is armed or disarmed:

the panel would send armed or disarmed information to your cell phone

Note: 123456 is the default password, if you have new password, use new password.

17. How to delete the sms:

a. Delete the all the sms: Send text 123456 to the panel.

6. Delete a single zone's sms: send password+ zone Number

e.g. if you send 12345605 to the panel, the zone 5's sms would be deleted

if you send 12345605 with new text, the new text would auto replace the old one.

Back to Factory default setting:

Turn off the power switch, then press Del key and hold it, then turn on the power switch, after about 5 seconds, the LCD ligths. You can realease the Key then, and the panel returns to factory default setting

Spcial for the sn2301gsm,

Send sms, OUT1ON is to turn on the first relay

Send sms, OUT1OFFis to turn OFF the first relay

Send sms, OUT2ON is to turn on the second relay

Send sms, OUT2OFF is to turn OFF the second relay

Send sms, CHECK, the panel would rely a sms with the relay status

Call to control the 2 relays:

Press *1 is to turn on the first relay

Press #1 is to turn off the first relay

Press *2 is to turn on the second relay

Press #2 is to turn off the second relay

Quick Reference:

00: C.S. Comms. 11= send out information about arming, disarming and alarms; 10 = only send out the alarm information; 00= not net work.

01: Exit delay time. The time is double-digit (XX). The actual time is the product of XX times 5. The initialization value is 04 = 20 seconds.

02: Entry delay time (delay alarm). The time is double-digit (XX). The actual time is the product of XX times 5. The initialization value is 06 = 30 seconds.

03: Sounder run time. The time is double-digit (XX). The actual time is the product of XX times 20. The initialization value is 06 = 120 seconds.

04: Watchdog time. The unit time is hours. The factory default value is 12hours.

05: Watchdog start and stop time. Default setting is from 8:00 to 20:00.

06: Set time to Arm. Press * or #, select the time point(6 time points in all) enter the time desired. To cancel this set, press Delete key. Refer to figure 11.

07: Set time to Dis-Arm. Press * or #, select the time point(6 time points in all) enter the time desired. To cancel this set, press Delete key. Refer to figure 12.

08: Setting time and date. The system time should be set with Year-Month-Date-Hour-Minute - Day using the numeric keypad of the panel. 7 = Sunday; 1 = Monday; 2 = Tuesday; 3 = Wednesday; 4 = Thursday; 5 = Friday; 6 = Saturday. (a 24 hour mode)

09: PIN code set, this a 6 digit code for the remote access, Keypad Dis-Arm. Enter the required PIN No using the numeric keypad on the panel.Cancel the PIN No using the Delete key on the panel.

10: Set number of ringing in times before answer. Cancel this set using Delete key on the panel. When the PIN code or the number of ringing is not set, the panel couldn't have remote access; The panel could still dial the preprogrammed phone numbers when alarming.

11. Arming with sounder ON/OFF 0: no sounder when arming 1: sounder when arming

12: Speak with monitor center (one way)---Speak: 0: No 1: YEs

13: Engineer Option. Listen to dial out DTMF. 0 = NO : 1 = YES. This option will automatically extinguish when the panel is closed or on the hour.

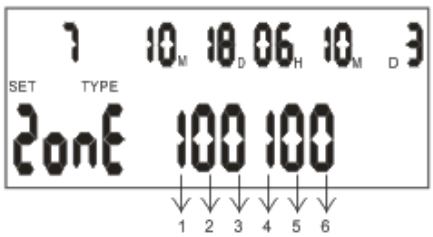
14: Mains Fail alarm. The panel will alarm when mains power fails 0 = NO ; 1 = YES.

15: Exit Delay timer with sounder ON/OFF 0: ON 1: OFF

16: Phone line cut alarm: The panel will automatically check the line and alarm when it detects it is not ok. 0: NO 1: YES

17. Periodical test to monitor center (once every 24 hours) 0: No 1: Yes

18. Low voltage transmitting with Beep or not 0: no beep 1: beep (default is 1. But default no beep during 8pm to 8am)



1	1:watchdog zone	0:not a watchdog zone
2	1:exit delay	0:no exit delay
3	1:entry delay	0:no entry delay
4	1:24 hours zone	0:not 24 hours zone
5	1:sounder when alarming	0:silent when alarming
6	1:armed zone/exterior	0:part armed zone/interior

1 1= local alarm only, when disarmed; 0=Normal detector

2 1= detector will be door bell, when disarmed; 0=not door bell

3 1= key fob request assistance with sounder; 0=key fob request assistance no sounder