HB-BJQ-560A/B

User Manual for Intelligent Burglar Alarm Hosts

SAFERHOMEE

Ningbo Saferhome Electronics Co., Ltd.

Table of Contents

Introduction

HB-BJQ-560A/B intelligent burglar alarm host is an intelligent equipment which uses phone line or GSM module to transfer alarm information, which is a new product updated based on previous features. This system adopts advanced microprocessor as control core, easy to install and operate, with voice prompt. It can learn code with 5 remote controllers and 560 HB-T001 Series solar-powered active wireless infrared detectors, all of which constitute a complete set of wireless alarm system covering a large area. Defense zones 1-4 are mixed wired/wireless defense zones, and defense zone 1 is defaulted to emergency defense zone. When a transmitting detector is triggered in certain zone, it will transmit alarm information immediately to the alarm host via wireless technology. After receiving alarm information, the host will give out a siren, and display defense zone number and dial pre-set telephone numbers or inform users of alarm information via SMS at the same time. Besides, this system can also execute remote control over the alarm host via telephone or SMS and arm/disarm defense zones. This system requires no wires and covers a large defense area, which is widely applied in workshops, enterprises and business units, schools and other large and medium-scale places.

We have two types of intelligent burglar alarm hosts, namely HB-BJQ-560A and HB-BJQ-560B. The primary difference is that HB-BJQ-560A has no GSM module and can not operate under MP alarm mode and SMS alarm mode, while HB-BJQ-560B has GSM module and can operate under MP alarm mode and SMS alarm mode.

I. Operating Precautions

Please carefully read this User Manual and pay more attention to labels and directions on the alarm host before operation. Check whether all wire connections are correct and then turn the host on so as to avoid any damage to the host.

The alarm host has no explosion-proof function, which cannot be directly installed in Class I, II or III hazardous locations (i.e. locations where ignitable concentration of flammable, explosive vapour/gas, dust or fibre exists), otherwise, it may cause any hazard.

- **Please don't disassemble the alarm host at will so as not to cause accidents or damage the apparatus.**
- **If failure occurs during operation, please hold the warranty card to approach our client service centre or agents timely.**
- **Please periodically perform test to identify and debug failures in time so as to avoid system failure.**
- **This host works at a frequency of 433MHz, which is only used together with 433MHz detectors. An external wireless receiver module manufactured by our company is required to make this host work together with other detectors.**

II. Main Characteristics and Functions

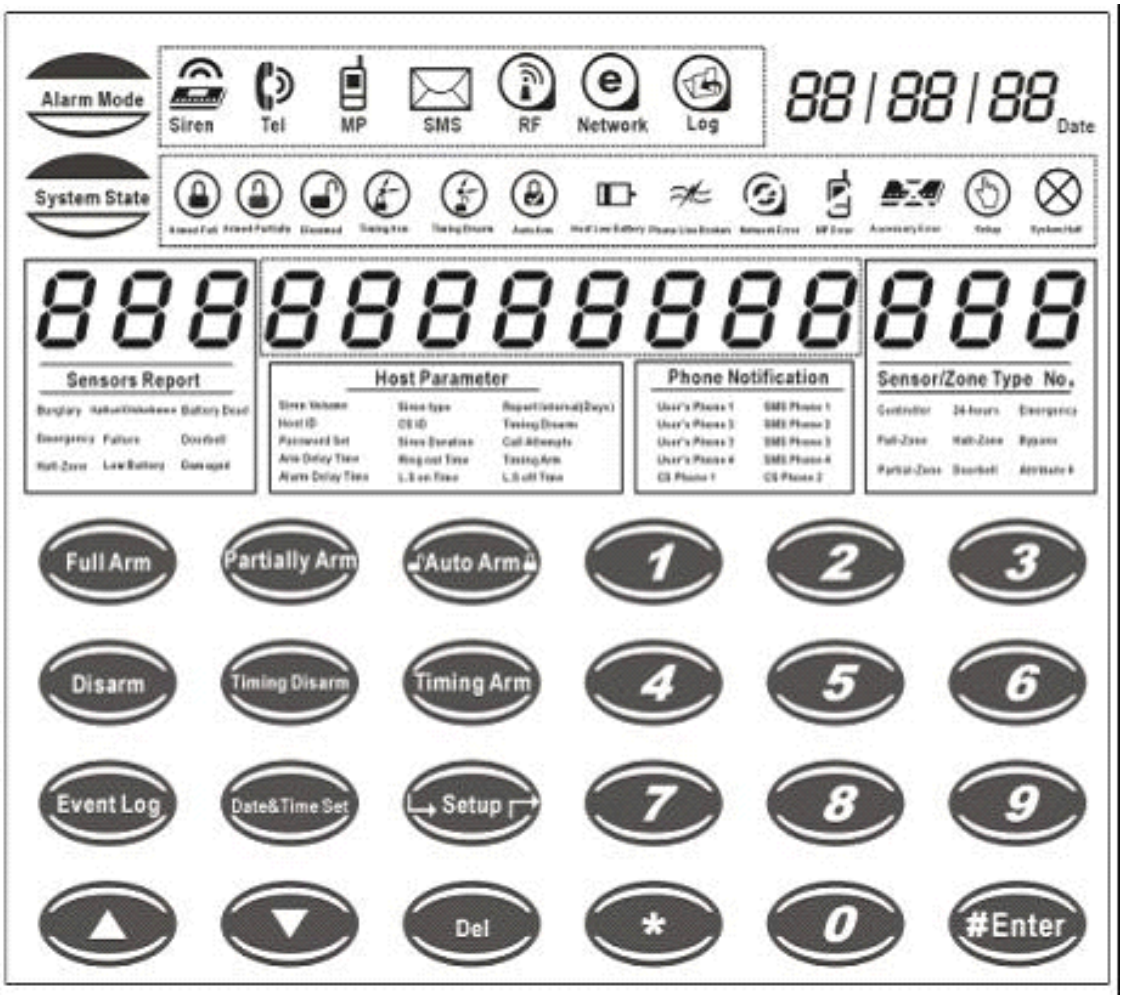
The wireless defense zone can automatically learn codes with remote controllers. And it is easy and fast to expand system capacity. There are 560 defense zones in total, which are numbered 000-559. Each defense zone can learn code with a detector. Defense zones 1-4 （numbered 000-003） are mixed wired/wireless defense zones, and defense zone 1（000）is defaulted to emergency defense zone.

Touch screen, LCD display, voice prompt, elegant appearance, easy to operate, set-up requiring password authentication ensures stable and reliable operation.

- Compatible with CONTACT.ID and ADEMCO4+2 communication protocol, support internet access through GSM SMS (N/A) and SMS alarm (N/A).
- The system can preset 4 groups of user telephone numbers, 4 groups of SMS telephone numbers, 2 groups of telephone numbers of the alarm receiving centre. The telephones of the alarm receiving centre must be fixed telephones which can be dialled preferably.
- Disturbance-proof wireless FSK communication
- Support several arm/disarm modes, namely Timing Arm, Timing Disarm, Armed Full, Armed Partially, Auto Arm.
- There are several alarm modes for user selection, namely Siren, Tel Alarm Mode, MP Alarm Mode, SMS Alarm Mode, RF Alarm Mode and Network Alarm Mode
- Support several arm/disarm ways, namely arm/disarm through password keyboard, arm/disarm through wireless remote controller, remote arm/disarm, arm/disarm through receiving alarm call, arm/disarm via SMS.
- There is sound prompt or the indicator lamp will give an indication when telephone line is broken, the voltage of the battery of the detector or host is too low, the system is subject to strong optical disturbance or any detector fails.
- Event Log serves to record and inquire the information of detector alarm, system failure and arm/disarm.
- Real-time clock display, automatic switching between odd months and small months.
- All settings are stored in a memory unit, so they can not be lost when power failure occurs.
- Adopt 10 No.5 rechargeable Ni-MH backup batteries as input power
- Call Pickup: Whether or not the telephone device is being used, the alarm host will take up the line and send alarm information to users in an accurate and timely way.
- It is compatible with Dual-tone multi-frequency signaling, and can dial 14-digit telephone numbers.
- DL 12V 0.5A output for external siren
- 485 bus interface for various auxiliary devices
- State parameter display, voice prompt during operation
- 4 siren tones for selection; Siren volume can be adjusted.
- The wireless signals transmitted by the host when the host gives out an alarm can interlock the wireless lamp control switch so that the lamp connected to the lamp control switch can be automatically turned on when an alarm occurs.
- Several defense zone attributes for selection, namely Fully armed zone, partially armed zone, emergency zone, shielded zone, doorbell zone. Defense zone attribute can be set according to different demands to achieve desired effects.
- Wireless FM signal can be compatible with OOK wireless signal, which avoids mutual disturbance between these two wireless signals.

III. Name and Usage of Main Parts

1. Control Panel



1) Alarm Mode:Alarm mode refers to the mode in which alarm information is delivered when the host gives out an alarm.

When the alarm host is powered on, the alarm mode indicator will light up, and display Siren, Tel, MP, SMS, RF, Network, Log etc. When users activate a function, the corresponding icon indicator will light up; otherwise, the corresponding icon indicator does not light up.

a. Siren: Siren refers to on-site alarm mode in which the host gives out a siren to indicate an alarm occurs through the built-in siren.

b. Tel: Tel refers to fixed phone alarm mode in which the host dials pre-set informed fixed telephone numbers through fixed telephones which are connected with the host to indicate an alarm occurs.

c. MP: MP refers to mobile phone alarm mode in which the host dials pre-set informed mobile phone numbers through optional GSM module for the host to indicate an alarm occurs（HB-BJQ-560B）.

d. SMS: SMS refers to SMS alarm mode in which the host sends SMS to pre-set informed phone numbers through optional GSM module for the host to indicate an alarm occurs. SMS is editable（HB-BJQ-560B）.

e. RF: RF refers to wireless alarm mode in which the wireless lamp control switch is triggered by wireless signals transmitted by the host to turn on the relevant lamps or trigger devices compatible with auxiliary devices of the company to enable the host to achieve wireless interlocking function when an alarm occurs (N/A).

f. Network: Network refers to network alarm mode in which the host delivers alarm and failure information through RS485 interface to the computer network module to ensure alarm and failure information is give out. The company provides the secondarily developed receiver software to deliver SMS and OPERATE function for the third party device (N/A).

g. Log: Log refers to event log inquiry through which the host can record and store max. 128 records of arm/disarm, alarm information and failure indications. All information can be inquired thoroughly.

2) Date: Once the alarm host is powered on, it will display present day, month, year, and date can be adjusted at any time.

3) System Condition: When the alarm host is powered on, the system status indicator will light up, and display Armed Full, Armed Partially, Disarmed, Timing Arm, Timing Disarm, Auto Arm, Host Low Battery, Phone Line Broken, Network Error, MP Error, Accessory Error, Setup, System Halt etc. When users activate a function, the corresponding icon indicator will light up; otherwise, the corresponding icon indicator does not light up.

a. Armed Full: Armed Full (also called alert enabled) refers to the mode in which the host gets ready for receiving all alarm signals.

b. Armed Partially: Armed Partially refers to the mode in which the host can receive alarm signals from all detectors in partially armed defense zone (including signals from detectors in emergency zone, shielded zone or doorbell zone).

c. Disarmed: Disarmed (also called alert disabled) refers to the mode in which the host can not receive any common alarm signals (except signals from detectors in emergency zone, shielded zone or doorbell zone).

d. Timing Arm: Timing Arm refers to the mode in which the host will be automatically armed when the host clock reaches the pre-set arm time.

e. Timing Disarm: Timing Disarm refers to the mode in which the host will be automatically disarmed when the host clock reaches the pre-set disarm time.

f. Auto Arm: Auto Arm refers to the mode in which the host will automatically enter into Auto Arm mode when the host works under disarm mode for several minutes (time can be set).

g. Host Low Battery: Host Low Battery refers to the mode in which AC power of the host is cut off, or the voltage of the backup battery is too low.

h. Phone Line Broken: Phone Line Broken refers to the mode that the local phone line connected to the

host suffers failure or is not connected to the host under Tel alarm mode.

i. Network Error: Network Error refers to the mode that the network cable connected to the host suffers failure or the network line is not connected to the host (N/A).

j. MP Error: MP Error refers to the mode that the host GSM module can not work normally under MP alarm mode（HB-BJQ-560B）.

k. Accessory Error: (Undefined)

l. Setup: Setup refers to the mode in which the host can be set.

m. System Halt: System Halt refers to the mode in which the host can not receive any common alarm signals temporarily.

4) **Detector State: Detector State refers to the state of detectors when detectors are interlocked with the host. When the alarm host is powered on, it does not display detector state. The corresponding icon indicator lights up only when the detector learned by the alarm host gives out a siren or failure prompt. Detector states include Burglary, Optical Disturbance, Battery Dead, Emergency, Failure, Doorbell, Halt-Zone, Low Battery, Damaged etc. Optical Disturbance, Battery Dead, Failure, Doorbell and Low Battery are indications for detector failures.**

a. Burglary: This report will be given when the host is giving out alarm information.

b. Optical Disturbance: This report will be given when any detector added to the host can not work normally due to strong optical disturbance.

c. Battery Dead: This report will be given when the built-in battery of any detector added to the host is damaged.

d. Emergency: This report will be given when any detector in emergency zone added to the host gives out an alarm.

【Note】This indicator will only be lit when Event Log is enabled.

e. Failure: This report will be given when any infrared detector (active wireless infrared detector) added to the host can not work properly due to non-calibration or damage.

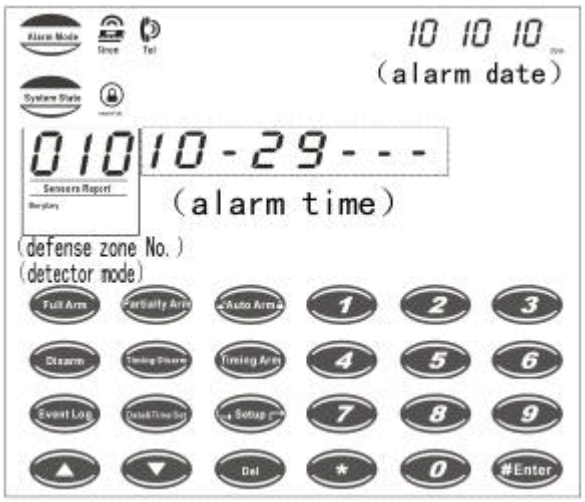
This report will be given when any detector (magnetic door detector) added to the host can not work properly due to failure to close for a long time or damage.

f. Doorbell: The host will sound “Ding Dong” doorbell when any detector added to the host in doorbell zone transmits a signal.

g. Halt-Zone: This report will be given when any detector added to the host in halt zone transmits a signal. When the host is in Halt mode, it can not receive wireless signals (except for signals from emergency zone and doorbell zone).

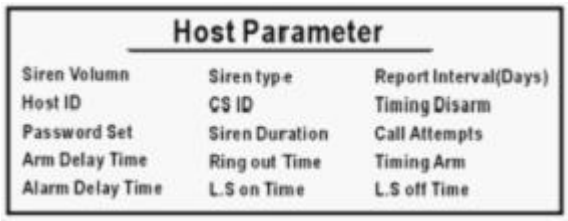
h. Low Battery: This report will be given when the voltage of the built-in battery of any detector added to the host is too low.

i. Damaged: Undefined.



5) Set Parameters:Users can set various parameters for the host.

When the alarm host is powered on, "Host Parameter" is not displayed. The corresponding icon indicator lights up only when the alarm host sets parameters. Once set-up is completed or exits, the corresponding icon indicator will go out. The pre-set parameters include Siren Volume, Siren Type, Report Interval (Days), Host ID, CS ID, Timing Disarm, Password Set, Siren Duration, Call Attempts, Arm Delay Time, Ring-out Times, Timing Arm, Alarm Delay Time, L.S on Time, L.S off Time etc.



a. Siren Volume: Siren Volume refers to the alarm volume of the built-in siren of the host.
b. Siren Type: Siren Type refers to the type of the alarm volume of the built-in siren of the host.
c. Report Interval (Days): Undefined
d. Host ID: Host ID refers to the parameter set for binding the auxiliary device to the alarm host.
e. CS ID: CS ID refers to the parameter set for binding the alarm host to the device of the upper level alarm centre.
f. Timing Disarm: The host will be automatically disarmed when the host clock reaches the pre-set disarm time.
g. Timing Arm: The host will be automatically armed when the host clock reaches the pre-set arm time.
h. Password Set: It is used for modifying the pre-set password for operating the host.
i. Siren Duration: Siren Duration refers to the duration of the siren of the host.
j. Call Attempts: Call Attempts refers to the number of attempts of calling the pre-set informed user phones when the host gives out an alarm under Tel or MP alarm mode.
k. Arm Delay Time: Arm Delay Time refers to the time you want to set to delay the arm.
l. Alarm Delay Time: Alarm Delay Time refers to the time you want to set to delay giving out the siren or calling informed phones.
m. Ring-out Times: Ring-out Times refers to the ring-out times of the fixed phone numbers or SIM card numbers added to the host you call for remote set-up.
n. L.S on Time: L.S on Time refers to the On-time of the host lamp control switch, namely the

time you set to allow the auxiliary lamp control switch of the host to begin receiving wireless signals transmitted by the alarm host (Undefined).

o: L.S off Time: L.S on Time refers to the Off-time of the host lamp control switch, namely the time you set to allow the auxiliary lamp control switch of the host to stop receiving wireless signals transmitted by the alarm host (Undefined).

6) Telephone Directory: Telephone Directory refers to the list of user's informed telephone numbers added to the host.

When the alarm host is powered on, it does not display "Telephone Directory". The corresponding icon indicator lights up only when users set informed telephone numbers or SMS. Once set-up is completed or exits, the corresponding icon indicator will go out. Telephone directory includes user's phones (1-4), SMS phones (1-4) and CS Phones (1-2) etc.

a. User's Phones 1-4: User's Phone 1-4 refers to user's informed phone numbers added to the host (fixed phone or mobile phone numbers).

b. SMS Phones 1-4: SMS Phones 1-4 refers to user's SMS phone numbers (mobile phone numbers) added to the host（HB-BJQ-560B）.

c. CS Phones 1-2: CS Phones 1-2 refers to CS phone numbers added to the host (additionally charged for CS phone access to 110 network).

7) **Detector Attribute: Detector Attribute refers to the attribute of the role any detector added to the host plays in the host.**

When the alarm host is powered on, it does not display "Detector Attributes". The corresponding icon indicator lights up only when users set detector attributes. Once set-up is completed or exits, the corresponding icon indicator will go out. This function involves Controller, 24-Hours, Emergency, Full-Zone, Halt-Zone, Bypass, Partial-Zone, Doorbell and Attribute 9 etc.

a. Controller: (Undefined)

b. 24-hours: The host can receive all alarm signals transmitted by detectors (24-hour service zone).

c. Emergency: The host can receive all alarm input signals transmitted by detectors, and informs users which zone is generating an alarm by calling user's phones or sending SMS alarm information, but does not provide siren output or display the defense zone No. after receiving these types of signals.

d. Full-Zone: The host can receive all alarm signals transmitted by detectors when it is fully armed.

e. Partial-Zone: The host can receive all alarm signals transmitted by detectors when it is fully or partially armed.

f. Halt-Zone: When the host receives the signals from this type of detector, it will not receive alarm signals from other types of detectors, except for signals from emergency zone and doorbell zone.

g. Bypass: The host can not receive any signal from this type of detector (The host only records which the defense zone this detector is installed in.).

h. Doorbell: When the host receives alarm signals from this type of detector, it will give out "Ding Dong" doorbell.

i. Attribute 9: (Undefined)

8) Armed Full: When pressed, the corresponding indicator lights up to indicate the host is being fully armed. Once fully armed, the alarm host can receive alarm signals from all defense zones within the system and give out an alarm.

9) Armed Partially: When pressed, the corresponding indicator lights up to indicate the host is being partially armed. Once partially armed, the alarm host can receive alarm signals from partially armed zones within the system and give out an alarm (including signals from emergency zone and doorbell zone).

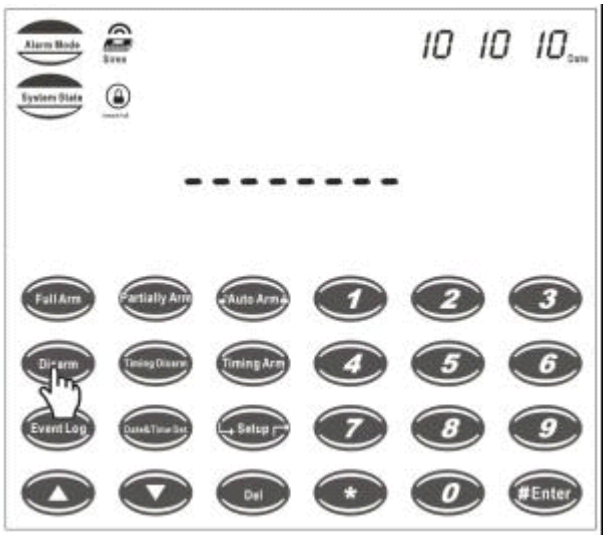
【Note】When the host works in full arm mode, disarm the host and then press "Armed Partially" to enter into partial arm mode. When the host works in partial arm mode, press "Armed Full" to enter into full arm mode.

10) Auto Arm: When pressed, the corresponding indicator lights up to indicate "Auto Arm" is being enabled. After a timed arm delay, the host will be automatically armed.

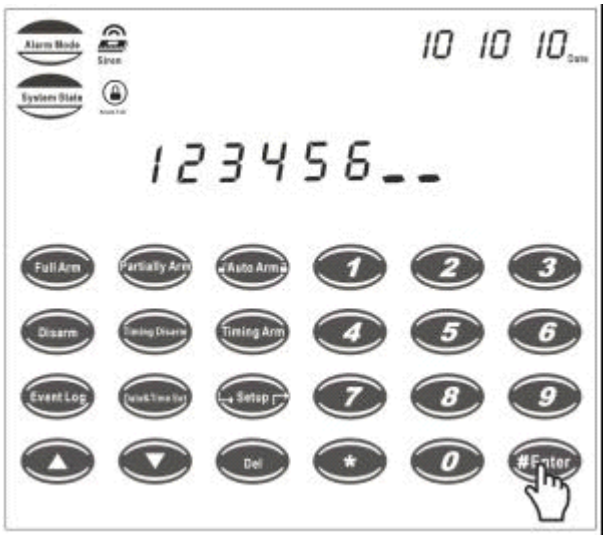
When pressed again, this function will be shut down, and the corresponding indicator goes out to indicate "Auto Arm" key is being disabled.

11) Disarm: When any detector is giving out an alarm, press "Disarm" key, and then enter the pre-set password and # to disarm the host. Once the host is disarmed, the corresponding indicator will light up.

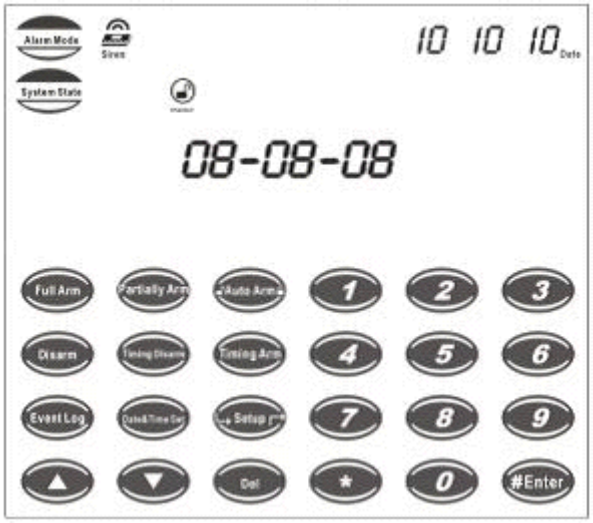
Step 1: Press "Disarm" key, and then the host gives out a voice prompt "Please enter your password".



Step 2: Enter the password "123456" and "#" (The factory default password of the host is 123456).



Step 3: Then the host indicates the host is being disarmed, and the corresponding indicator lights up. Once disarmed, the host will return to the main interface.



12) Timing Disarm: When pressed, the corresponding indicator lights up to indicate "Timing Disarm" key is being enabled. After the host clock reaches the pre-set disarm time, the host will be automatically disarmed.

When pressed again, this function will be shut down, and the corresponding indicator goes out to indicate "Auto Disarm" key is being disabled.

13) Timing Arm: When pressed, the corresponding indicator lights up to indicate "Timing Arm" key is being enabled. After the host clock reaches the pre-set arm time, the host will be automatically armed.

When pressed again, this function will be shut down, and the corresponding indicator goes out to indicate "Auto Arm" key is being disabled.

14) Event Log: When pressed, 6 types of event logs including arm/disarm, alarm mode selection, alarm indication, system failure indication and detector failure indication will be inquired.

Detailed Operation:

When pressed, the corresponding indicator is lit to indicate "Event Log" key is being enabled. When the host enters into the event log interface, event logs including defense zone No., detector mode, alarm time & date, serial No. are displayed on the panel. When "Event Log" key is pressed again, the corresponding indicator goes out to indicate exiting the event log interface.

【Note】a. Event 001 means the latest event. Press "△" to inquire upward the events. Press "▽" to inquire downward the events. Max 128 events can be inquired.

b. Event 000 means the events occurring in defense zones, including host arm/disarm, alarm mode selection, system failure (Phone Line Broken, Network Error, MP Error, Accessory Error) .

c. If no event log is stored in the host or the event log is cleared, defense zone No., alarm date or time will be displayed in the format of "0".

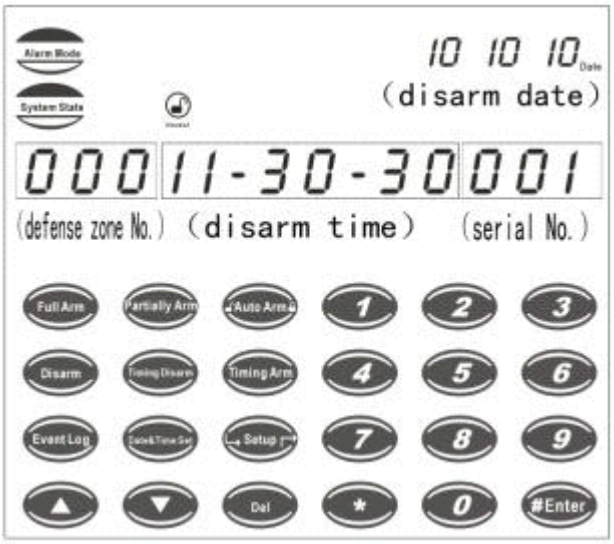
d. The host and detector failure indicators light up, and the corresponding failure recovery indicators blink.

e. The alarm and failure indication events can be displayed together with detector mode, while arm/disarm and alarm mode selection events can not be displayed together with detector mode.

For example:

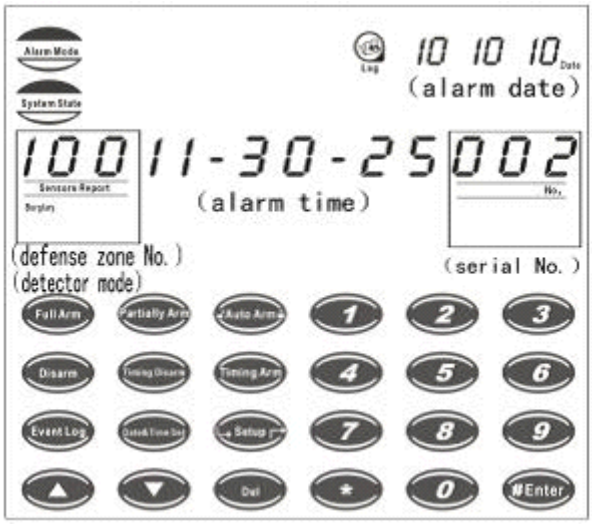
Event 001: Disarm Log

The information displayed on the panel (see Figure below) shows a disarm event occurred at 11：30：30, October 10, 2010.



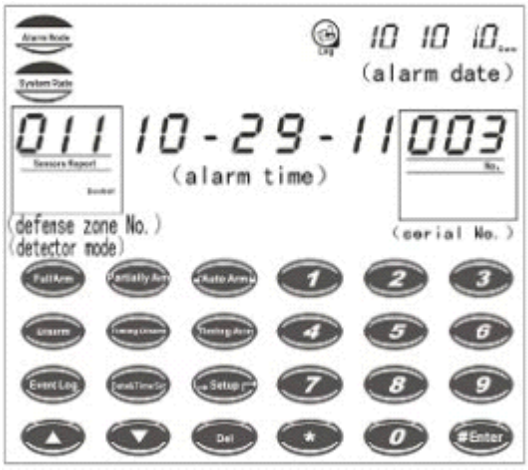
Event 002: Alarm Log

The information displayed on the panel (see Figure below) shows the detector in defense zone 100 gave out an alarm at 11：30：25, October 10, 2010.



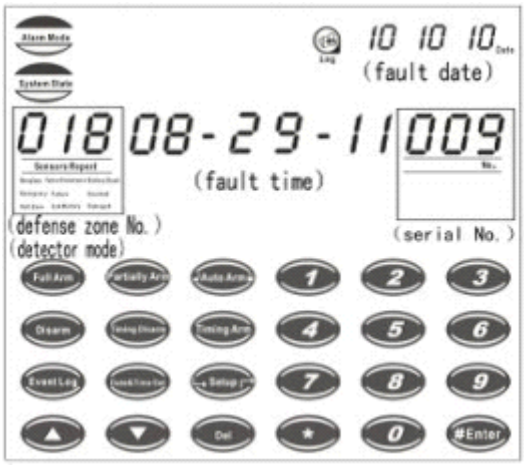
Event 003: Alarm Log

The information displayed on the panel (see Figure below) shows the detector in doorbell zone 010 gave out an alarm at 10：29：11, October 10, 2010.



Event 009: Failure Log

The information displayed on the panel (see Figure below) shows the detector in defense zone 018 failed at 08：29：11, October 10, 2010, indicating failure.



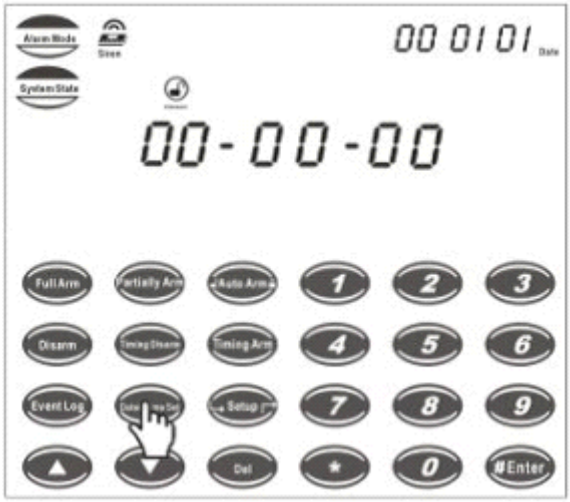
Note: a. The detector mode information in event log depends on detector attribute. When detector attribute is set to Armed Full or Armed Partially, five types of detector modes, namely Alarm, Optical Disturbance, Battery Dead, Failure, Low Battery, can be indicated. When Optical Disturbance, Battery Dead, Failure or Low Battery, is indicated, that means the detector once suffered Optical Disturbance, Battery Dead, Failure or Low Battery, so the detector shall be readjusted to ensure its normal operation. If a detector does not suffer any failure, alarm message can be indicated if an alarm is triggered in the corresponding defense zone.

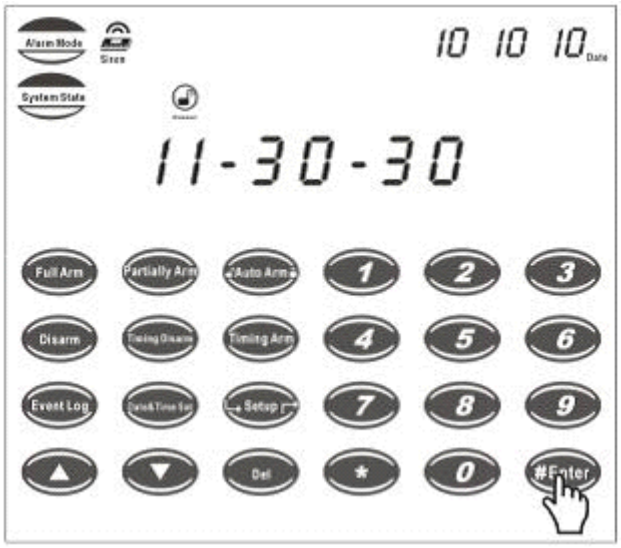
b. When detector attribute is set to Emergency, if a detector suffers any failure, Halt-Zone or Doorbell, Optical Battery Dead, Failure or Low Battery will be indicated, and the detector shall be checked to ensure its normal operation. If a detector does not suffer any failure, Emergency, Halt-Zone or Doorbell can be indicated if an alarm is triggered in the corresponding defense zone.

15) Date & Time Set: Press "Date& Time Set-up" key, and then press "#Enter" to adjust the date and time displayed on the host panel. If you have wrongly typed a letter during operation, press "Del"key to delete the letter, and then retype the right letter and press "#Enter" to finish set-up.

Detailed Operation Procedure:

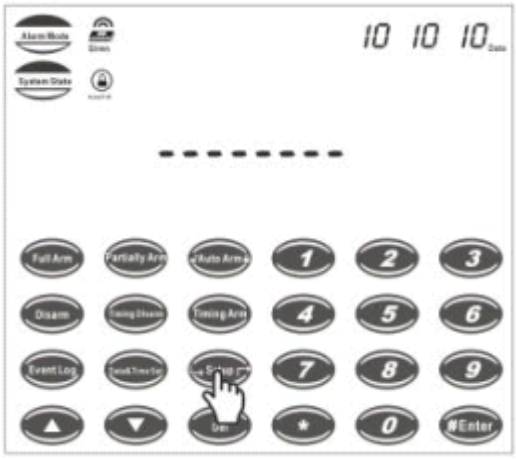
For example: Press "Date& Time Set-up" key, and then the host indicates you can adjust the date and time. Press "0—9" key to input the date and time, and then press "#" to finish set-up.



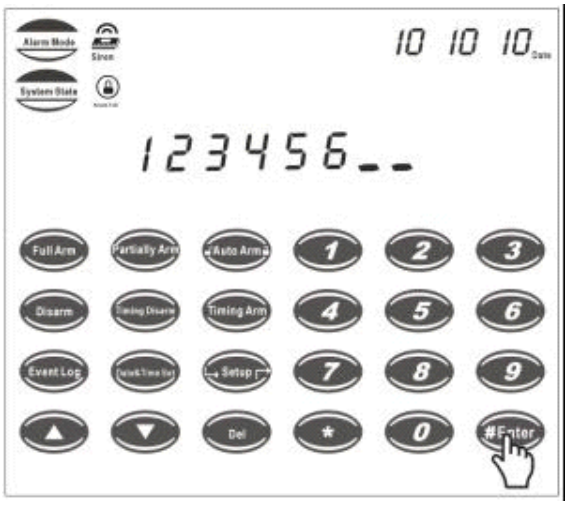


16) Setup: When pressed ("Setup"key has the same function as "###"), the host will give out a voice prompt "Please enter your password". Enter your password and #, and then the corresponding indicator lights up to indicate the host is entering set-up mode. Press "Setup"key again, or enter"0#0#", and then the corresponding indicator goes out to indicate the host has exited set-up mode (See Figure below).

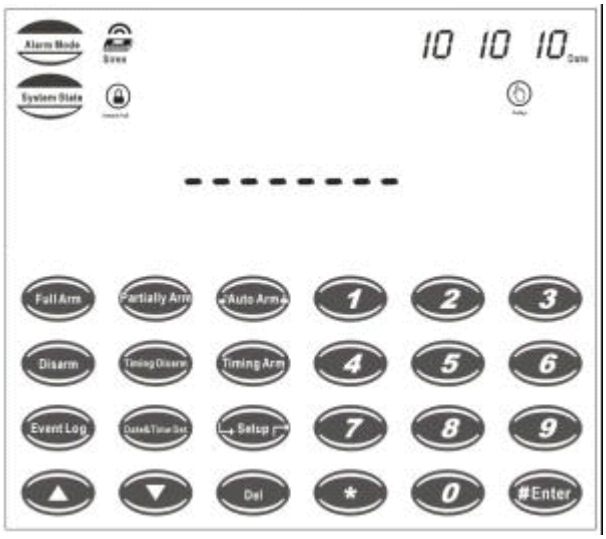
Step 1: Press "Setup" key, and then the host gives out a voice prompt "Please enter the pre-set password".



Step 2: Enter password "123456" and "#", and then the alarm host gives out a voice prompt"The alarm host is entering into set-up mode".



Step 3: Do other settings when "Setup" indicator of the host lights up. (To exit set-up mode, press "Setup" key or enter"0#0#")



17) 0~9 Number Key: 0~9 Number Key is used to enter items, parameters and user password when the alarm host is under set-up mode or signal learning mode.

18) # (Confirm Key): The "#" key is equal to "ENTER" key under input mode or used for confirmation.

19) *: Set defense zone attribute.

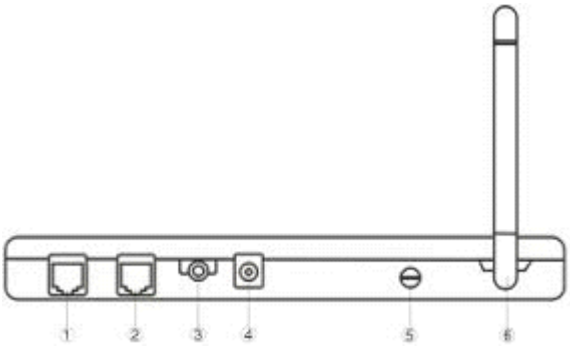
20) △: Page up

21) ▽: Page down

22) Del: Delete a letter you have typed, defense zones or alarm informed phone numbers.

【Note】If the host has no backup battery, the date and time will be reset to factory default settings if the host suffers power failure.

2. Back Panel of Alarm Host (See Figure below)



Installation Wiring Diagram of Engineering Host

① User Phone Socket: User phone shall be connected with user phone socket by a double-ended phone line. To take up phone line, user phone machine must be led out from user phone socket of the alarm host.

② Local Call Phone Line Socket: It is used to connect with local call phone line (also called outside line). The local call phone line connected with this socket is not allowed to connect with phone or other communication device in parallel.

③ External Siren Output: A DC 12V siren (current: <0.6A) is accessible to the alarm host.

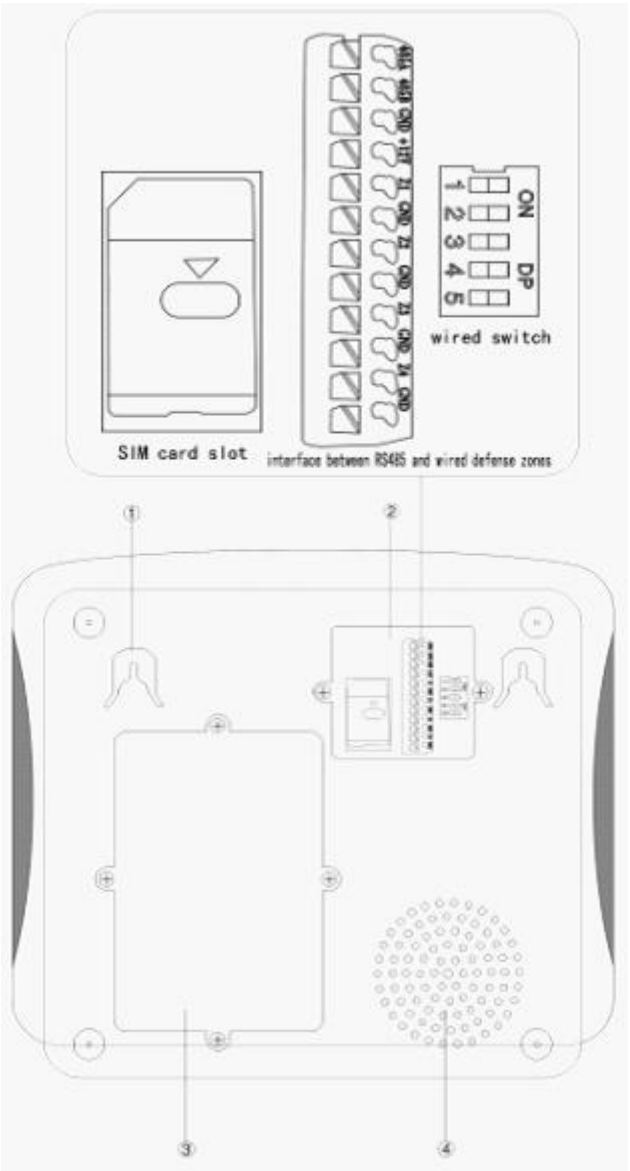
④ Power Interface: Transformer interface (auxiliary) (When powered on, the host panel will light up.

This host has no independent power switch button. If the host panel is not operated within 1 minute, it will enter into standby mode. Press any key on the host panel to have the host panel light up.)

⑤ Through Holes: They are used as through holes of wireless detectors and RS485 bus. When used, they shall be tunnelled for connecting cables.

⑥ Alarm Host Antenna

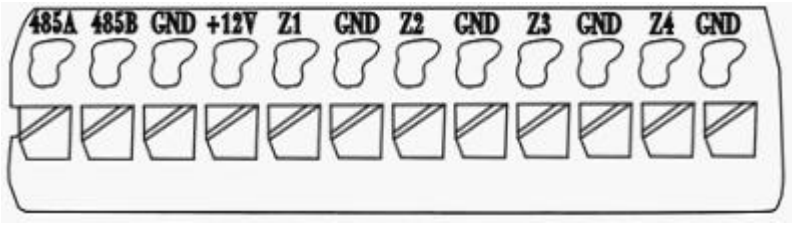
3. Bottom Panel of Alarm Host (See Figure below)



① Hanger: Fasten the alarm host to wall with hangers.

② SIM Card Slot, Interface between RS485 and Wired Defense Zones, Wired Switch

- Safe Deposit Box for SIM Card
- **Interface between RS485 and Wired Defense Zones**

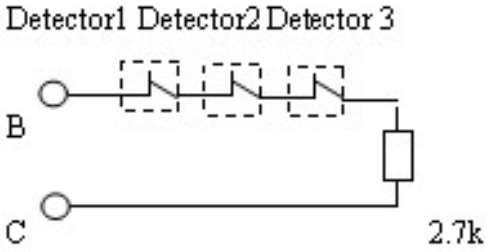


RS485: The head and end of line of the devices adopting RS485 communication shall have 120 ohm resistor to achieve reliable communication. This host has a built-in 120 ohm resistor. For more details, refer to "Wired Switch".

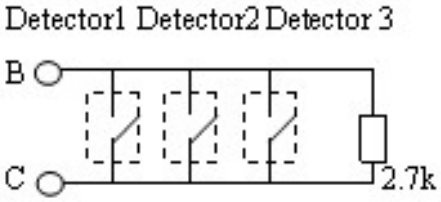
Wired Defense Zone Input: Z1~Z4 represents input of defense zone 1-4, which respectively corresponds to zone number 001~004.

Several Connections of Wired Detector: Z terminal is the positive terminal of alarm signal return from wired defense zone. GND is the negative terminal of alarm signal return. Wired defense zones can be used together with wired detectors to achieve short circuit/cut-off alarm functions. If a wired detector is operating under open circuit conditions, its loop shall be connected in parallel with a 2.7KΩ resistor. If a wired detector is operating under short circuit conditions, its loop shall be connected in series with a 2.7KΩ resistor. If the defense zone loop is not used, it shall be connected in parallel with a 2.7KΩ EOL (End of Line) resistor. If several wired detectors are required, they can be connected in series, in parallel, or combination of both.

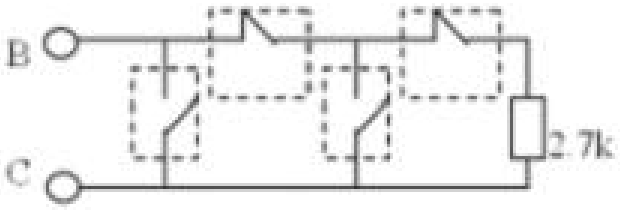
Connection Principle: The normally open detector shall be connected in parallel with a 2.7KΩ resistor, while the normally closed detector shall be connected in series with a 2.7KΩ resistor.



Connection of several normally closed detectors

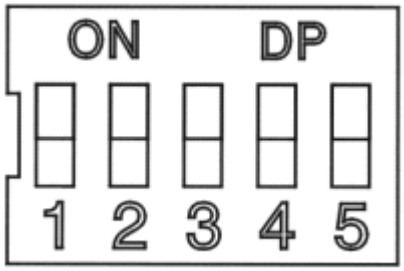


Connection of several normally open detectors



Mixed connection of normally open detectors and normally closed detectors

- Wired Switch (Wired Dip Switch)



1) Our wireless receiver module is connected to the host via RS485 bus. Several wireless receiver modules can be connected in series via RS485 bus interface. When a 120 ohm resistor is used at the head and end of line, turn Key 1 to ON position, otherwise, turn Key 1 to Number position.

2) **Keys 2-5 are linked with mixed wired/wireless defense zones （Z1, Z2, Z3, Z4）. No. 2, No. 3, No. 4, No. 5 key correspond to Z1, Z2, Z3, Z4 defense zone respectively. If any wired defense zone requires a wired detector, an external 2.7KΩ resistor shall be connected with the host in series or parallel (depending on normally open/closed contact). A 2.7KΩ resistor is connected in parallel with the host. If it is required to connect a 2.7KΩ resistor in parallel with the host, the wired DIP switch in the corresponding defense zone shall be turned to ON position. If it is required to connect a 2.7KΩ resistor in series with the host, the wired DIP switch in the corresponding defense zone shall be turned to Number position, and an additional DIP switch is required.**

③ Backup Power Box: 10 batteries, 2000 mAH, No.5 Ni-MH battery (Once charged up, it can work for 10-24 hours).

④ Horn: The alarm host has a built-in horn.

IV. System Installation

1. Basic Requirements of System Installation

① During installation, suitable types and models of detectors should be adopted according to user ' s requirements for defense areas.

② The installation location, angle and height of detectors shall be determined according to the effective defense zone of detectors and site conditions. The detectors shall be installed in hidden locations as much as possible which must be in compliance with defense requirements and installation specifications.

③ The wire shall be hidden from normal view as much as possible to prevent trace wire from being damaged. Open wire shall be fed into a wire duct to prevent wire from damaged by mouse or other rodents.

④ The type and specification of detectors in each zone should be labeled on the orientation drawing.

⑤ The orientation drawing should be archived for system maintenance.

2、System Installation and Precautions

Installation of Alarm Host

——The alarm host shall be installed in a hidden position, and its external siren shall not be covered with any materials to ensure an audible siren.

——The alarm host has no explosion-proof function, which cannot be directly installed in Class I, II or III hazardous locations (i.e. locations where ignitable concentration of flammable, explosive vapor/gas, dust or fiber exists), otherwise, it may cause any hazard.

——The alarm host shall not be close to devices with high electromagnetic radiation such as TV, air conditioner, computer and microwave oven to avoid influencing receiving effect.

——To ensure reliable operation of the alarm host, batteries with larger capacity are recommended as backup power if power failure often occurs or power failure takes a long time in some areas.

V. How to Add/Delete Detectors and Remote Controllers

This alarm host adopts code matching technology to add detectors and remote controllers. The host can learn codes with 5 remote controllers and 560 detectors. There are 560 defense zones, among which defense zone (000) is a tamper zone intended for the host, and defense zones (001-004) are mixed wired/wireless defense zones in which it is not recommended to install wireless detectors.

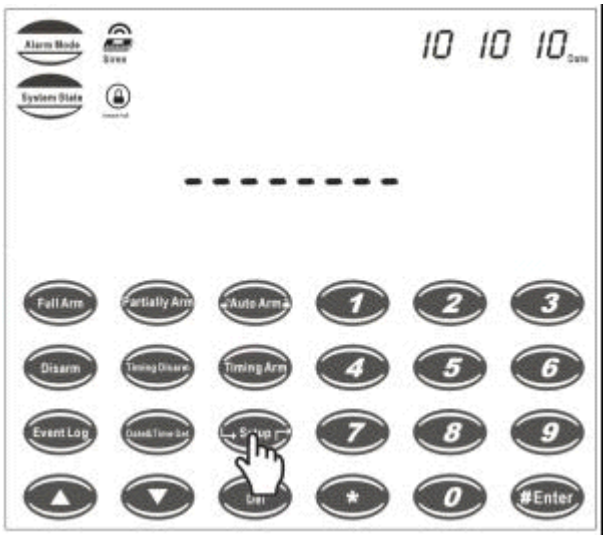
(I) Add/Delete Remote Controllers

The host can learn codes with 5 remote controllers, which are numbered 10，11，12，13，14 respectively.

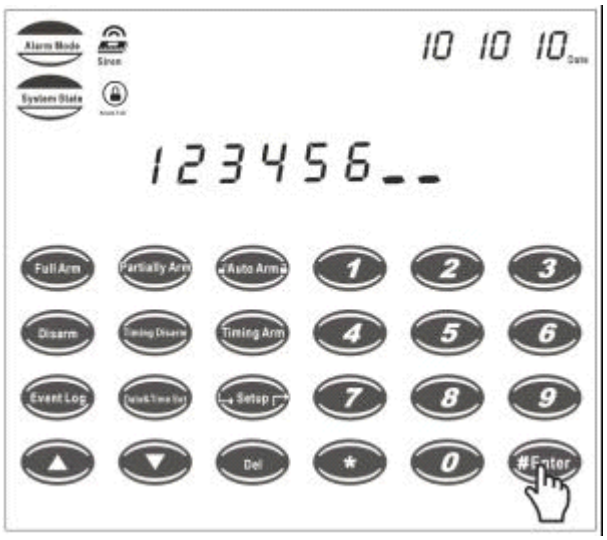
To add/delete remote controllers, please follow the following procedures:

1. Add Remote Controller

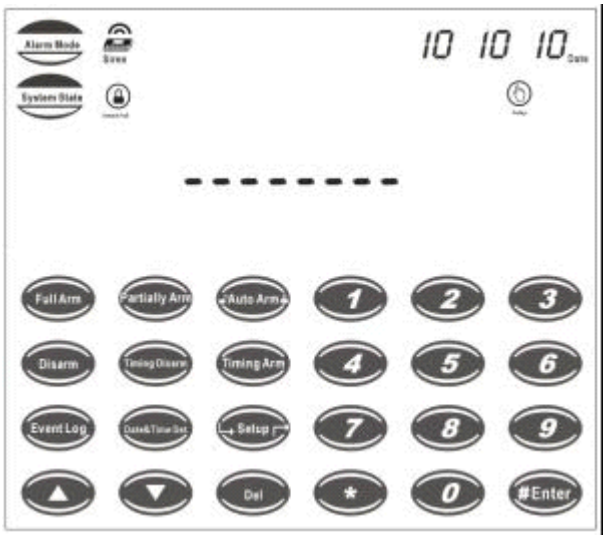
Step 1: Press "Setup" key or Enter "# # #", and then the alarm host gives out a voice prompt that "Please enter the pre-set password".



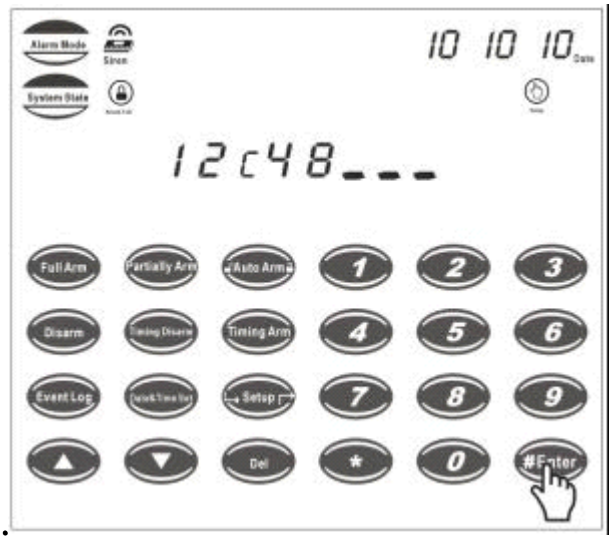
Step 2: Enter password "123456" and "#", and then the alarm host gives out a voice prompt that "The alarm host is entering into set-up mode" ("123456" is a factory default password for the host and can be modified.).



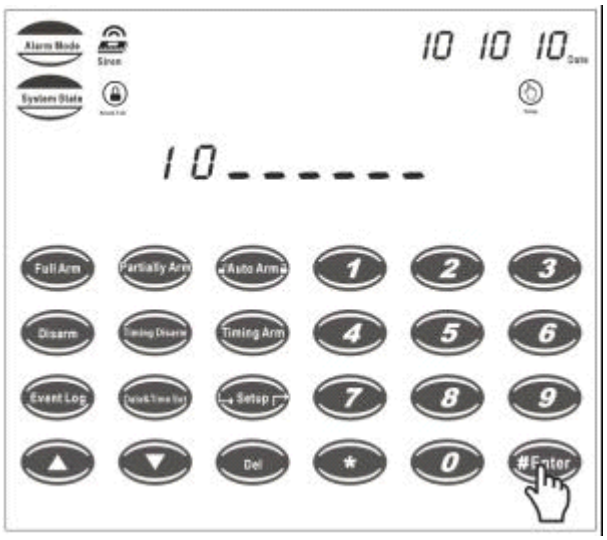
Step 3: Set the host when the "Setup" indicator of the host lights up.



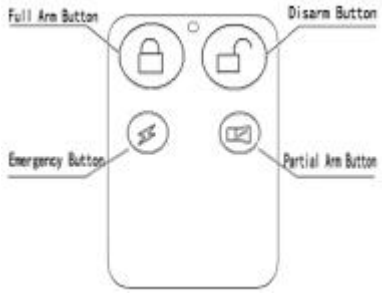
Step 4: Enter "12*48 " and "#", and then the alarm host gives out a voice prompt "The alarm host is entering into code learning mode" (Note: The host screen will display "C" when entering "*".)



Step 5: Enter "10" (remote controller No.) and "#", and then the host gives out a voice prompt "Please press remote controller "Arm"key ".



Step 6: Press remote controller "Full Arm" button, and then the host gives a voice prompt, which means the host have successfully learnt code with the remote controller.



- **Full Arm Button: Press Full Arm Button to enter into Full Arm mode. The function of Full Arm Button is the same as that of "Armed Full" shortcut key on the panel of the host.**
- **Disarm Button: Press Disarm Button to disarm the host (except for halt-zone, doorbell zone and emergency zone). The function of Disarm Button is the same as that of "Disarm" shortcut key on the panel of the host.**
- **Emergency Button: Press Emergency Button to activate emergency alarm whether the host is in Arm mode or Disarm mode.**
- **Partial Arm Button: Press Partial Arm Button to enter into Partial Arm mode. The function of Partial Arm Button is the same as that of "Armed Partially" shortcut key on the panel of the host.**

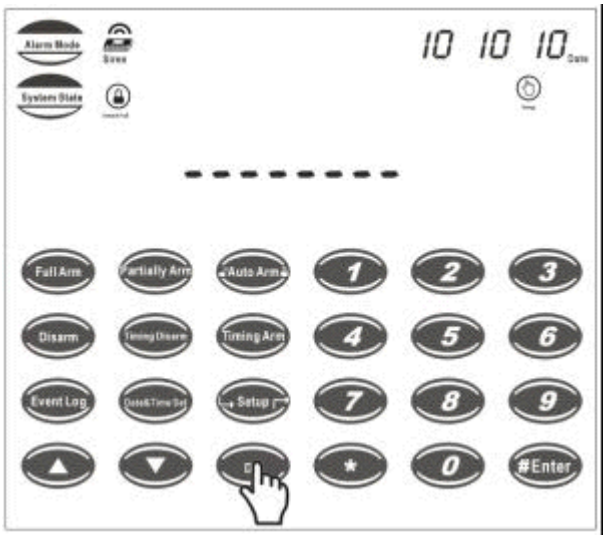
【Note】a. Remote controllers shall be added in accordance with the same procedure.

b. To let the host learn codes of remote controllers continuously, enter 11 and # after 11 when the host completes learning the code of the first remote controller, and then press "Arm" key to let the host learn the code of the next remote controller until the host completes learning codes of all remote controllers.

2. Delete Remote Controllers

The first five steps of deleting a remote controller are the same as those of adding a remote controller (Take Remote Controller 10 for example).

Step 6: Press "Del" key, and the host gives out a voice prompt "The remote controller is being successfully deleted".



【Note】a. Detectors (numbered 000-559) shall be added in accordance with the same procedure.

b. To delete codes of detectors continuously, enter 011 and # after the code of the first detector is deleted, and then the host will give out a voice prompt"This defense zone has exited", and finally press "Del" key to delete the detector until all detectors are deleted.

c. To delete all detectors in a shortcut way, please follow the following steps:

The first four steps of deleting a detector are the same as those of adding a remote controller, so please refer to the first four steps of the procedure for adding a remote controller.

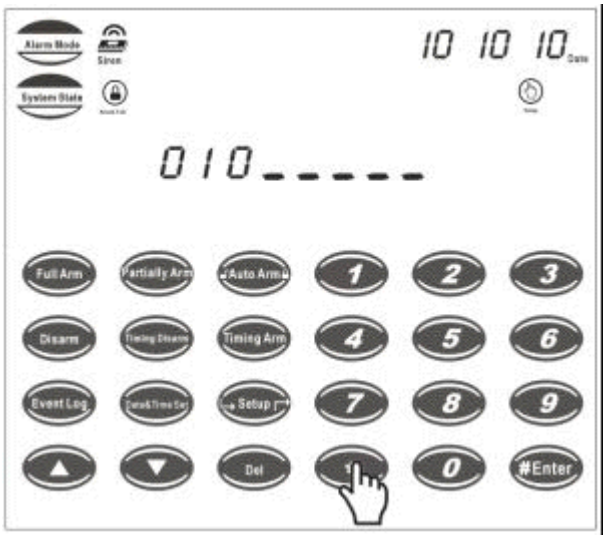
Step 5: Enter "909" and "#", and then the host will give out a voice prompt "Delete all detectors".

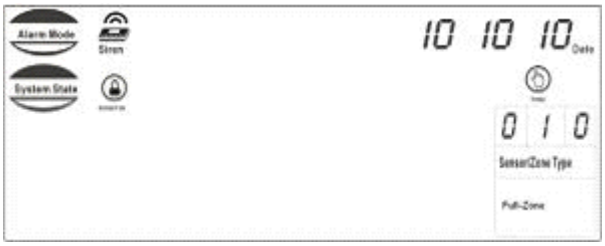
Step 6: Press "Del" key on the panel, and then the key indicator is on for about 10 seconds. Then the host gives out a voice prompt and the key indicator goes out, which means all detectors are deleted.

3. Modify Attribute of Defense Zones Corresponding to Detectors

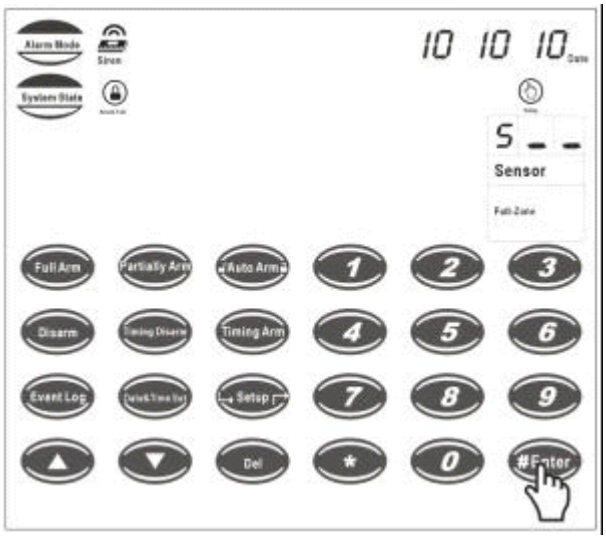
The first four steps of modifying the attribute of a defense zone are the same as those of adding a remote controller, so please refer to the first four steps of the procedure for adding a remote controller.

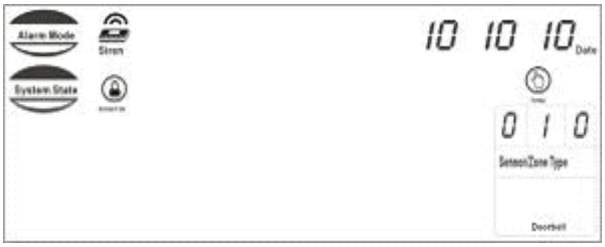
Step 5: Enter "010" and "*", and then the host will give out a voice prompt "Please enter the attribute of the defense zone".





Step 6: Enter"5" and "#", and then the host will give out a voice prompt "Now, the host is serving a doorbell zone" (1# fully armed zone, 2# partially armed zone, 3# emergency zone, 4# halt zone, 5# doorbell zone, 6# call zone, 7# bypass zone).





【Note】a. The attributes of other defense zones shall be modified in accordance with the same procedure.

b. To modify the attributes of defense zones continuously, enter 011* after the attribute of the first defense zone is modified, and then the host will give out a voice prompt "Please enter the attribute of the defense zone" .

c. 1# fully armed zone, 2# partially armed zone, 3# emergency zone, 4# halt zone, 5# doorbell zone, 6# call zone, 7# bypass zone.

Other Precautions

1. Each wireless code (including remote controller code and detector code) is not learned twice by the same alarm host. For changing the first defense zone into the second defense zone, delete the code for the first defense zone first.

2. Once the remote controllers or detectors transmit alarm signals, the alarm host will give out sound prompt, which signifies code learning is successfully completed. After code learning is successfully completed, necessary recheck shall be performed to check if code learning is successfully completed.

3. If all operations are wrong for successive 30 minutes, the system will automatically exit set-up mode.

Reasons for Failing to Learn Codes

Coding Redundancy: If the wireless code currently required to be learned by the alarm host has exited in the alarm host, that is, this code has been learned by the alarm host, it can not be learned again by the alarm host. If the alarm host requires learning this code, the existing code in the alarm host shall be deleted.

Wrong type of wireless code: Any of the following cases would lead to failure to learn code: The codes of detectors are transmitted when the alarm host learns codes with remote controllers, or the codes of remote controllers are transmitted when the alarm host learns codes with detectors. Besides, detectors generally can transmit 7 types of special codes respectively related to Low Voltage, Low Voltage Recovery, Anti-tamper, Invalid Operation, Invalid Operation Recovery, Light Disturbance, Light Disturbance Recovery. Before detectors transmit any code, please confirm if codes transmitted by detectors are normal codes, because special codes are not learned by the alarm host.

VI. How to Program Alarm Host

1. Programming Precautions

① When operating in set-up mode, the host can not receive any alarm signal.

② At every step of set-up, the alarm host will give out voice prompt.

During voice prompt, any input is invalid. Please enter a command after voice prompt. During set-up, if any input is wrong, please enter "0#" to cancel operation and return to the previous step.

2. Factory Default Settings

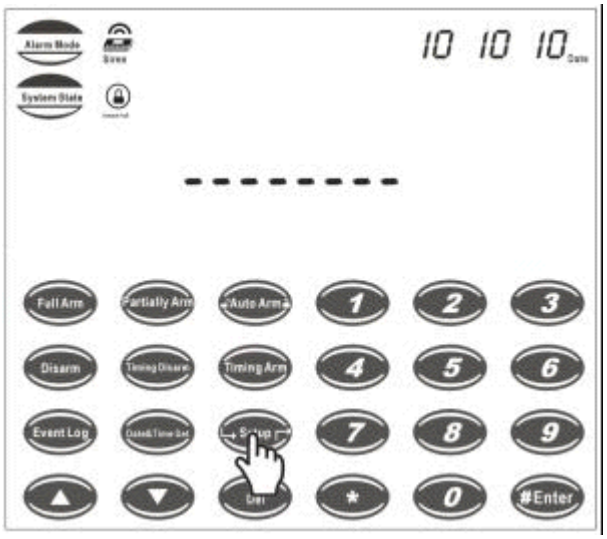
1) **User Password: 123456**
2) **Alarm Mode: Siren**
3) **Siren Volume: 10.**
4) **Alarm Playing Item: Siren**
5) **Call Attempts: 5**
6) **Siren Duration: 10 minutes**
7) **Arm Delay Time: 5 seconds**
8) **Alarm Delay Time: 0 second**
9) **Ring-out Times Set by Remote Control: 9 times**
10) **Defense Zone Attribute: Full-Zone**
11) Timing Arm: 21：00
12) Timing Disarm: 07：00
13) L. S off Time: 06：00
14) L.S on Time: 18：00

3. Detailed Programming Operation of Alarm Host

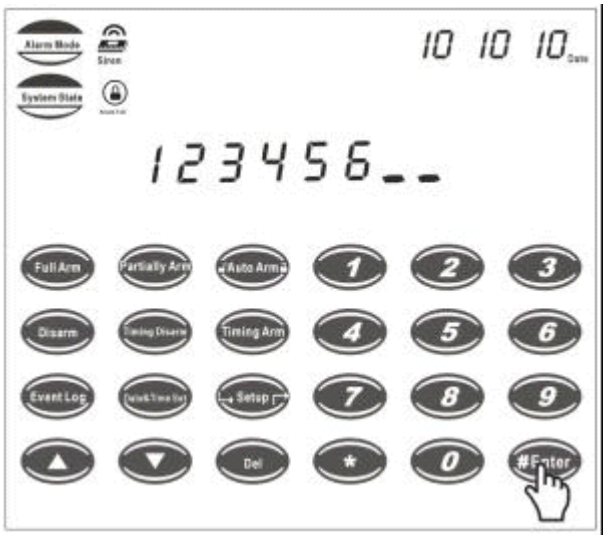
All programming operations below shall be performed in set-up mode.

The Procedure for Entering into Set-up Mode:

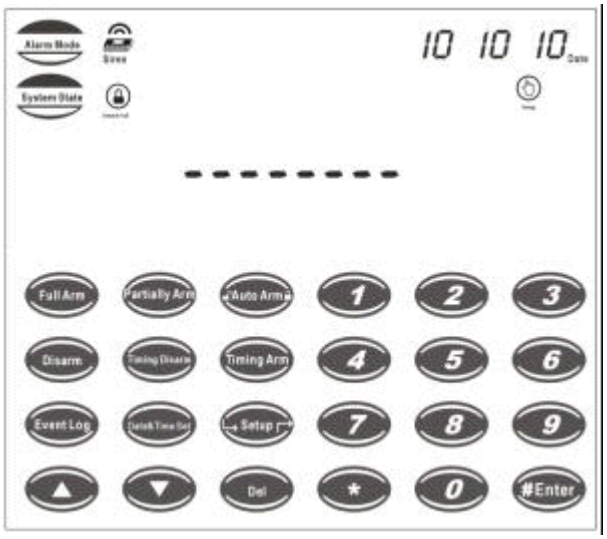
Step 1: Press "Setup" key or enter "# # #", and then the alarm host gives out a voice prompt "Please enter the pre-set password".



Step 2: Enter password "123456" and "#", and then the alarm host gives out a voice prompt "The alarm host is entering into set-up mode" ("123456" is a factory default password for the host and can be modified.).



Step 3: Set the host when "Setup" indicator of the host lights up.



1) Alarm Mode Selection

① Command Function: Tel Alarm Mode

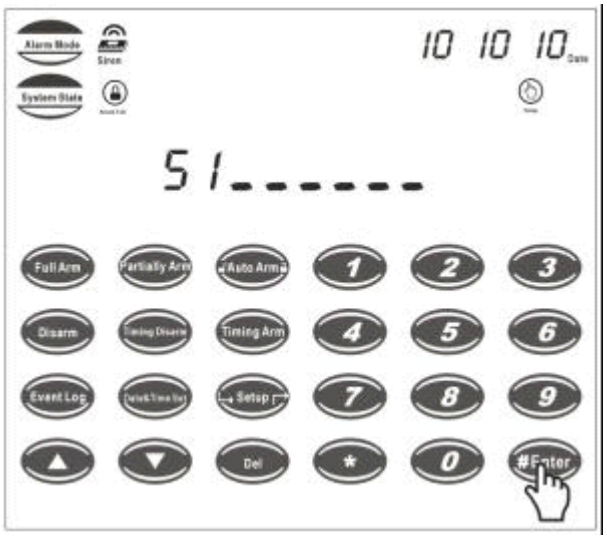
Command Grammar: 51#1 #，51##

Function Description: 51#1 # is used to enable Tel alarm mode, and 51## is used to disable Tel alarm mode.

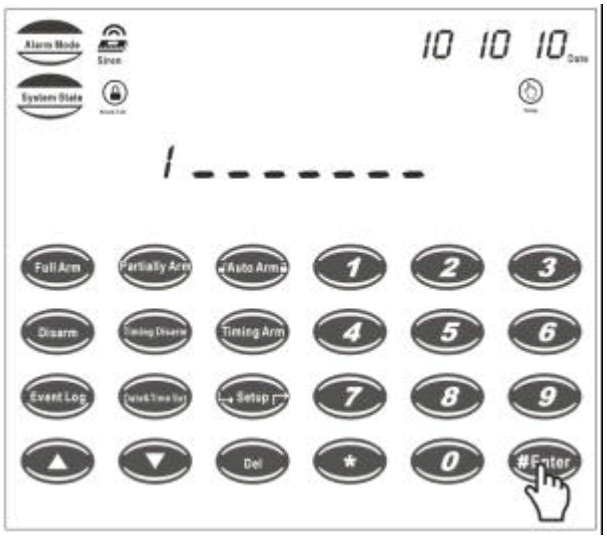
See the operation example shown in Figure below

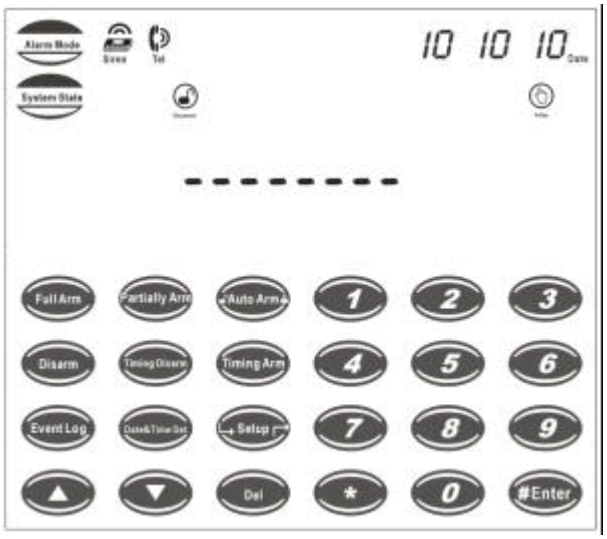
For the first three steps of the set-up of Tel alarm mode, please refer to the Procedure for Entering into Set-up Mode.

Step 4: Enter"51" and "#", and then the host gives out a voice prompt "Please enter into Tel alarm mode".



Step 5: Enter"1"and"#", and then the host gives out a voice prompt "Tel alarm mode is enabled" and the corresponding indicator lights up (Press"#", and the host gives out a voice prompt "Tel alarm mode is disabled" and the corresponding indicator goes out).





② Command Function: Siren

Command Grammar: 50#1#，50##

Function Description: 50#1# is used to enable on-site alarm mode, and 50## is used to disable on-site alarm mode.

【Note】The factory default setting is on-site alarm mode (If on-site alarm mode is disabled, the host can not give out a siren).

③ Command Function: MP Alarm Mode（HB-BJQ-560B）

Command Grammar: 52#1 #，52##

Function Description: Command 52#1# serves to enable MP Alarm Mode, while Command 52## serves to disable MP Alarm Mode.

【Note】An optional GSM module and SIM card are necessary to enable MP alarm mode and transmit alarm signal via a SIM card.

④ Command Function: SMS Alarm Mode（HB-BJQ-560B）

Command Grammar: 53#1 #，53##

Function Description: Command 53#1# serves to enable SMS Alarm Mode, while Command 53## serves to disable SMS Alarm Mode.

【Note】 The MP alarm mode and SMS alarm mode can be enabled simultaneously to ensure the host can inform users about alarm event through SMS messages when an alarm occurs.

⑤ Command Function: RF Alarm Mode (N/A)

Command Grammar: 54#1#, 54##

Function Description: 54#1# serves to enable transmission mode. 54## serves to disable transmission mode.

【Note】This function is used together with our lamp interlock control device to ensure the lamp connected with the lamp control switch can be lit when an alarm occurs.

2) Clear Failure Information

Command Function: Clear Failure Information

Command Grammar: 4# #

Function Description: This command serves to clear failure information, which is mainly applicable to manually clear troubleshooting information.

Operation Example: Press "Setup" key or enter "###" (Please enter the preset password) + "123456#"

（The host enters into set-up mode）+4# (Clear indications of abnormality) +# (The host indicates"Setup completed")

3) Clear Event Log

Command Function: Clear All Event Logs

Command Grammar: 5 # #

Function Description: This command serves to manually clear all event logs.

Operation Example: Press "Setup" key or enter "###" (Please enter the preset password) + "123456#" （The host enters into set-up mode）+5# (Clear event log) +# (The host indicates"Setup completed").

4) How to Modify Password

Command Grammar: 9 # A A A A A A # B B B B B B # B B B B B B #; "A A A A A A" is an old 6-digit password, and "B B B B B B" is a new 6-digit password. Once password is modified, the old password will be automatically invalid. To enter into set-up mode again, should enter the new password.

If you have forgotten password, you shall contact our customer service centre or your local distributor to ask for help.

Operation Example: Press "Setup" key or enter "###"（Please enter the preset password）+"123456#" （The host enters into set-up mode）+"9#"（Please enter user password）+"123456#"（Please enter a new password）+"000000#"（Please enter the new password again）+"000000#"(The host indicates"Setup completed").

5) Set Alarm Informed Phones

①Command Function:

Operation Code:

4 groups of user's phone numbers (fixed or mobile phone numbers) represented by 10, 11, 12,13 respectively can be set.

4 groups of SMS phone numbers (mobile phone numbers) represented by 14, 15, 16,17 respectively can be set.

2 groups of CS phone numbers (fixed phone numbers) represented by 18, 19 respectively can be set (charged for access to 110 network).

Function Description: Set/delete informed phone numbers to ensure alarm information can be transmitted by dialling the preset fixed phone numbers or optional GSM module when the host gives out an alarm.

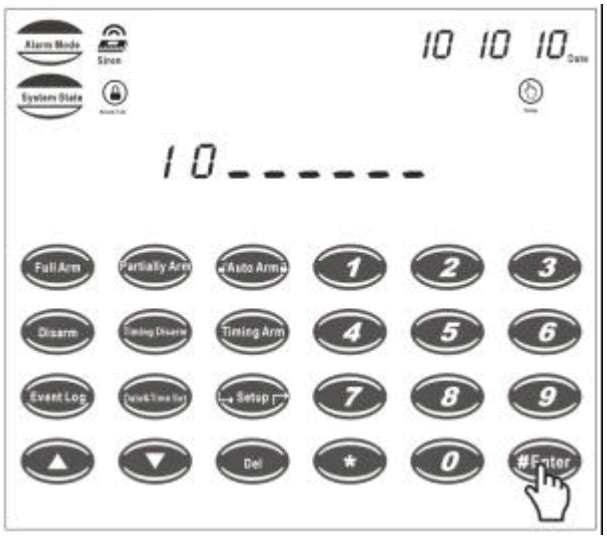
【Note】If the informed phone numbers are local fixed phone numbers, a local area code is not required for dialling informed phone numbers.

1. Set Informed Phone Numbers

See the operation example shown in Figure below: Set the first group of informed user's phone number

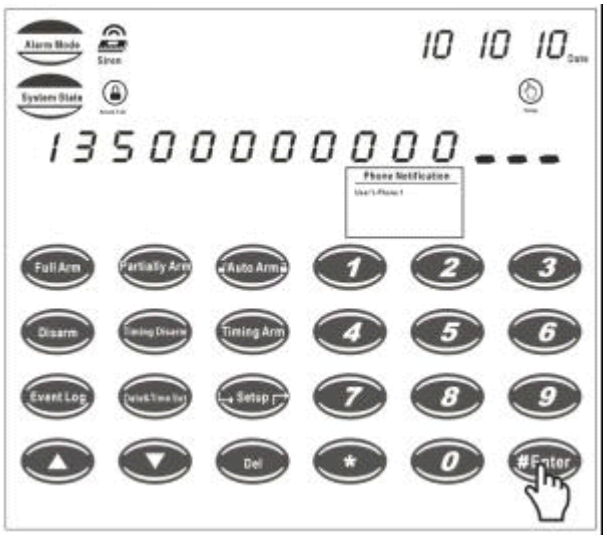
For the first three steps, please refer to the above mentioned procedure for entering into set-up mode.

Step 4: Enter "10" (10 represents informed phone number) and "#", and then the host will give out a voice prompt "Please enter an informed phone number"



Step 5: Enter a preset phone number and then enter "#" to finish the set-up.

(If you have wrongly typed a phone number, delete the number by pressing "Del" key and then enter 10# and a correct phone number).



【Note】a. To add the next group of phone number, please enter "11 #", and then the phone number and "#" until all informed phone numbers have been added (User's phone numbers are represented by 10-13, SMS phone numbers are represented by 14-17, and CS phone numbers are represented by 18-19.).

b. If you want to add a SMS phone number, the precondition is that the host must be HB-BJQ-560B type host (with GSM module), and that MP alarm mode and SMS alarm mode enabled.

2. Delete informed phone numbers

Operation Example: Press "Setup" key or "###"（Please enter the preset password）+"123456#"（The host enters into set-up mode）+"10#"（Please enter an informed phone number）+"Del" key (Delete the phone number).

【Note】a. All other informed phone numbers shall be deleted in accordance with the above mentioned

procedure (The informed phone numbers are represented by 10-19.).

b. To continue to delete other informed phone numbers, please enter 11 and # after the first informed phone number is deleted, and then the host screen displays the next pre-set phone number, and then press "Del" key to delete the phone number until all informed phone numbers are deleted.

c. To delete all informed phone numbers in a shortcut way, please follow the following steps:

For the first three steps, please refer to the above mentioned operating procedure for entering into set-up mode.

Step 4: Enter 20 and #, and then the host will warn users through voice message to delete all informed phone numbers".

Step 5: Press "Del" key, and then the host will indicate all pre-set informed phone numbers have been successfully deleted.

② Command Function: Set Ringing Times

Command Grammar: 3 7 # D D #

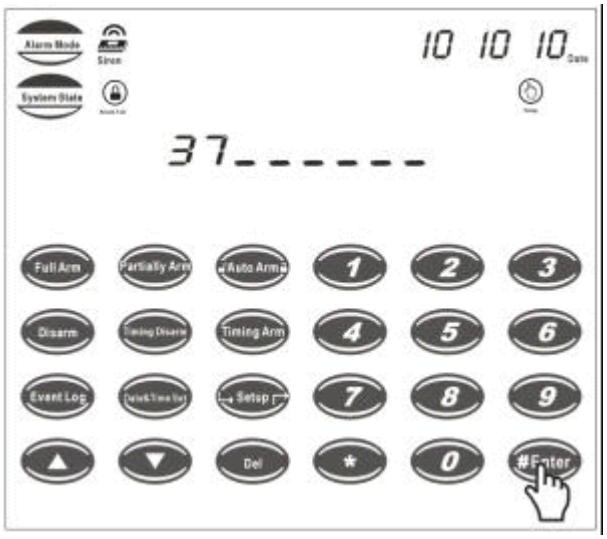
Function Description: "D D" is ringing times (05-15) set to determine when the alarm host will enter into long distance set-up mode. "D D" must be a 2-digit number. If the pre-set parameter value is less than 10, a 1-digit number will be displayed on the host screen. If the pre-set parameter value is more than 10, a 2-digit number will be displayed on the host screen.

When ring-out times reaches a pre-set value, the alarm host will enter into long-distance set-up mode. Set-up shall be done according to long distance set-up table.

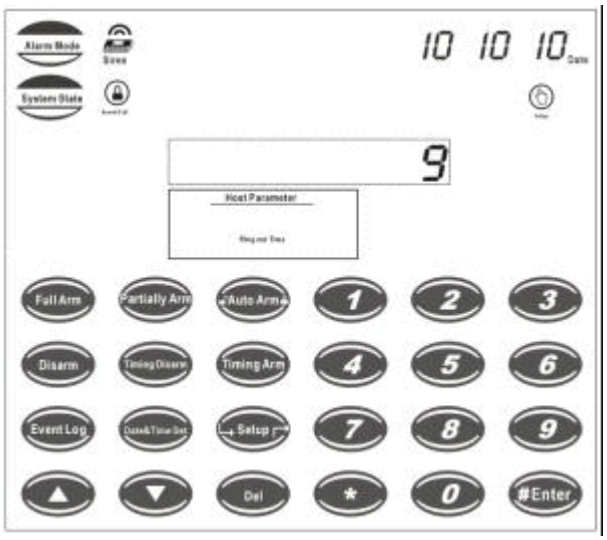
See the operation example shown in Figure below: Set ring-out times to 10.

For the first three steps, please refer to the above mentioned operating procedure for entering into set-up mode.

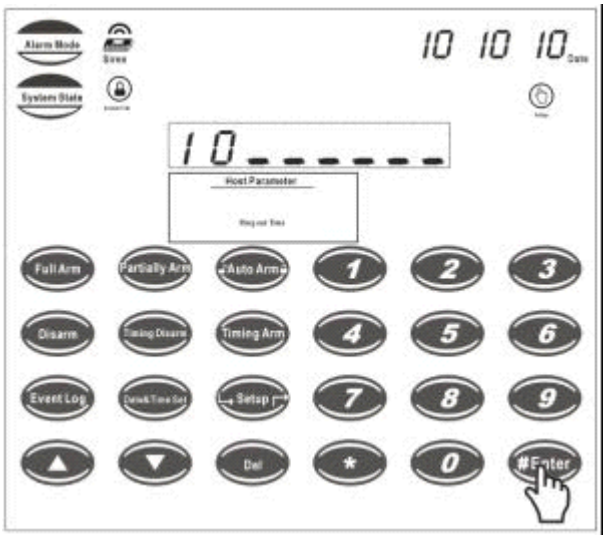
Step 4: Enter 37 and #, and then the host will give out a voice prompt "Please enter ring-out times".



Step 5: Then the host screen displays the last set value, and "Ring-out Times" indicator lights up.



Step 6: Enter"10"and "#" to finish set-up.



③ Command Function: Set Call Attempt

Command Grammar: 3 8 # D D #

Function Description: "D D" is call attempts (01-99) and must be a 2-digit number. If the pre-set parameter value is less than 10, a 1-digit number will be displayed on the host screen. If the pre-set parameter value is more than 10, a 2-digit number will be displayed on the host screen. A call attempt refers to a cycle during which the alarm host dials phone numbers from the first to the last when an alarm occurs or the host receives alarm reports.

Operation Example: Press "Setup" key or "###"（Please enter the preset password）+"123456#"（The host enters into set-up mode）+38#（Please enter call attempts） (The last set parameter value is displayed)+05# (The host gives out a voice prompt) (The corresponding icon is displayed).

④Command Function: Enable or disable SMS status report （HB-BJQ-560B）

Command Grammar: 60#1#，60##；61#1#，61##；62#1#，62##；63#1#，63##

Function Description: 60-63 represents SMS status report of 4 groups of mobile phone numbers. #1# serves to enable SMS status report, and ## serves to disable SMS status report. If SMS status report is enabled, the host will transmit alarm information to the appropriate SMS mobile phone when an alarm occurs. If SMS status report is disabled, the host will not transmit alarm information to the appropriate SMS mobile phone when an alarm occurs.

For example: 60#1# serves to enable SMS status report of the first group of mobile phone number. 60## serves to disable SMS status report of the first group of mobile phone number.

Operation Example: Press "Setup" key or enter"###" （Please enter the pre-set password）+123456# (The host enters into set-up mode) +60# (SMS status report) +1#（Enable SMS status report）/+#（Disable SMS status report）.

6) How to Set Time Parameters

① Command Function: Set Auto Arm Time

Command Grammar: 3 3 # D D #

Function Description: "D D" is Auto Arm Time (01-99 minutes) and must be a 2-digit number. If the pre-set parameter value is less than 10, a 1-digit number will be displayed on the host screen. If the pre-set parameter value is more than 10, a 2-digit number will be displayed on the host screen.

After users disarm the alarm host, if users do not arm the alarm host, the system will automatically arm the host once the preset ARM time expires.

Operation Example: Press "Setup" key or enter"###" （Please enter the pre-set password）+123456# (The host enters into set-up mode) +33# (Please enter auto arm time)（Display the last set parameter value) +01#（The host indicates set-up is completed）.

② Command Function: Set Siren Duration

Command Grammar: 3 4 # D D #

Function Description: "D D" is siren duration (01-99 minutes) and must be a 2-digit number. If the pre-set parameter value is less than 10, a 1-digit number will be displayed on the host screen. If the pre-set parameter value is more than 10, a 2-digit number will be displayed on the host screen.

After the alarm host gives out a siren, the system will automatically disable siren and siren output once the siren duration reaches a preset value.

Operation Example: Press "Setup" key or enter"###" （Please enter the pre-set password）+123456# (The host enters into set-up mode) +34# (Please enter siren duration)（Display the last set parameter value) +10#（The host indicates set-up is completed）(The corresponding icon is displayed).

③ Command Function: Set Arm Delay Time

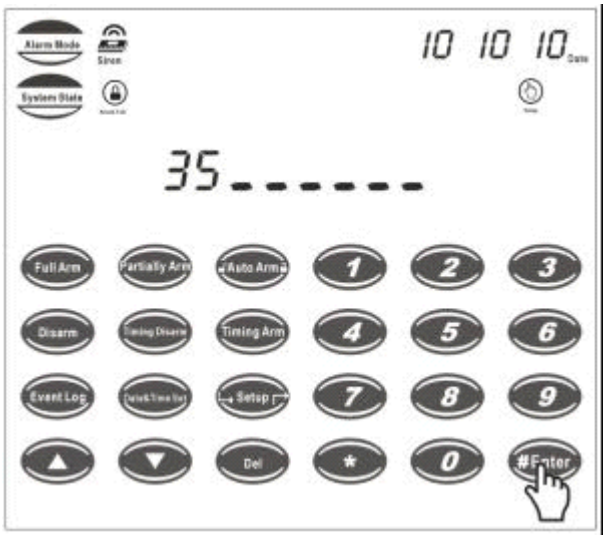
Command Grammar: 3 5 # D D #

Function Description: "D D" is arm delay time (00-99 minutes) and must be a 2-digit number. If the pre-set parameter value is less than 10, a 1-digit number will be displayed on the host screen. If the pre-set parameter value is more than 10, a 2-digit number will be displayed on the host screen. Within the arm delay time, the alarm host gives out a short "Ding" sound every 1 second, and you must leave the defense zone during the time period.

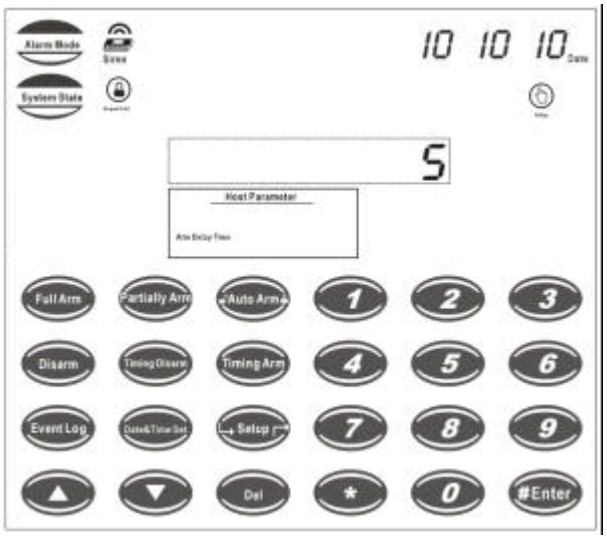
See the operation example shown in Figure below: Set arm delay time to 6 seconds.

For the first three steps, please refer to the above mentioned operating procedure for entering into set-up mode.

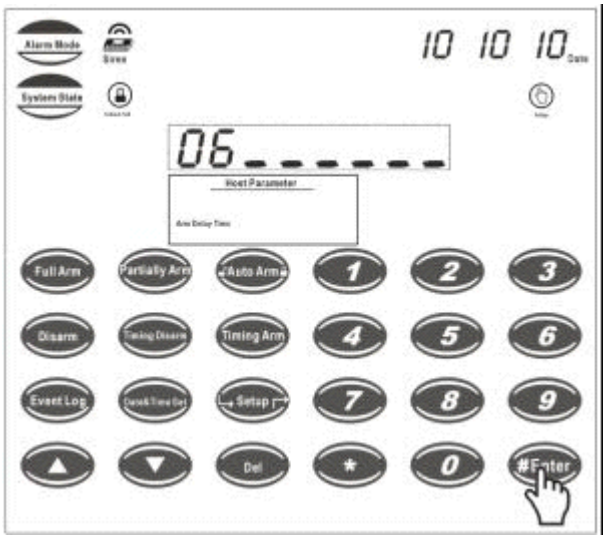
Step 4: Enter 35 and #, and then the host will give out a voice prompt "Please enter arm delay time".



Step 5: Then the host screen displays the last set value, and "Arm Delay Time" indicator lights up.



Step 6: Enter"06"and "#" to finish set-up.



④ Command Function: Set Entry Time

Command Grammar: 3 6 # D D #

Function Description: "D D" is entry time, also called delayed alarm time (00-99 seconds) and must be a 2-digit number. If the pre-set parameter value is less than 10, a 1-digit number will be displayed on the host screen. If the pre-set parameter value is more than 10, a 2-digit number will be displayed on the host screen.

If you break into an armed defense zone, the alarm host does not sound an alarm when you disarm the defense zone within the alarm delay time. If you do not disarm the defense zone within this time, the alarm host will automatically sound an alarm once the pre-set time expires. Within the alarm delay time, the alarm host gives out a voice prompt "Be Careful! You have broken into an armed defense zone".

Operation Example: Press "Setup" key or enter"###" （Please enter the pre-set password）+123456# (The host enters into set-up mode) +36# (Please enter alarm delay time)（Display the last set parameter value）+00#（The host indicates set-up is completed）(The corresponding icon is displayed).

⑤ Command Function: Set Timing Arm

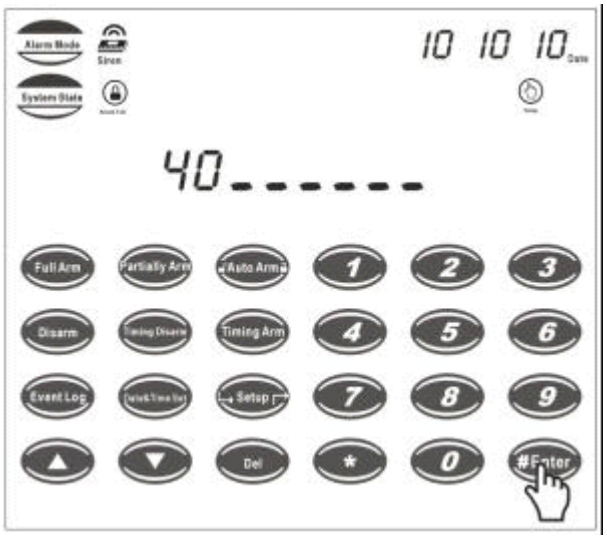
Command Grammar: 4 0 # D D D D #

Function Description: "D D D D" is Timing Arm and must be a 4-digit number (expressed in hours and minutes). Timing Arm refers to a preset time at which the intelligent alarm host will automatically enter into Arm mode and begin to receive wireless alarm signals.

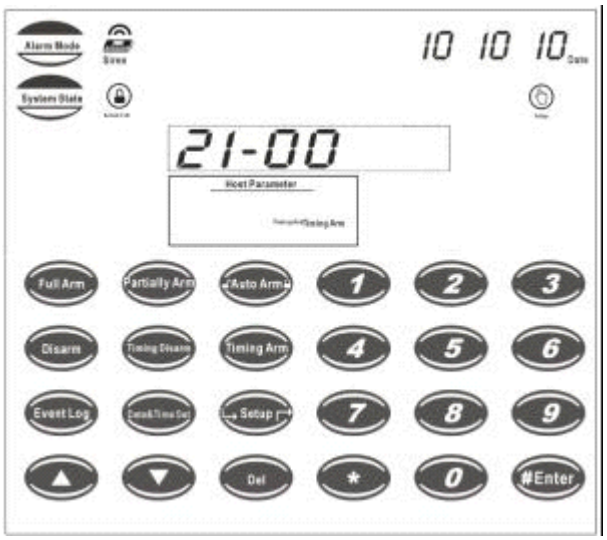
For example: Set the arm time to 20：00.

For the first three steps, please refer to the above mentioned operating procedure for entering into set-up mode.

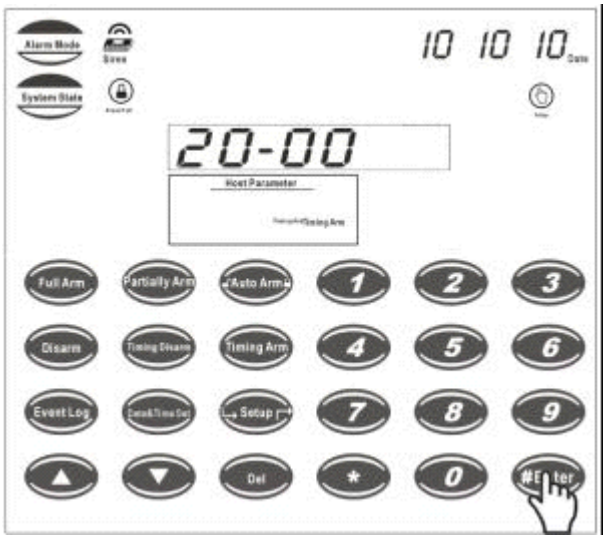
Step 4: Enter 40 and #, and then the host will give out a voice prompt "Please enter arm time".



Step 5: Then the host screen displays the last set value, and "Timing Arm" indicator lights up.



Step 6: Enter"2000"and "#" to finish set-up.



⑥ Command Function: Set Timing Disarm

Command Grammar: 4 1 # D D D D #

Function Description: "D D D D" is Timing Disarm and must be a 4-digit number (expressed in hours and minutes). Timing Disarm refers to a preset time at which the intelligent alarm host will automatically enter into DISARM mode and refuse to receive wireless alarm signals.

Operation Example: Press "Setup" key or enter"###"（Please enter the pre-set password）+123456# (The host enters into set-up mode) +41# (Please enter disarm time)（Display the last set parameter value）+0700#（The host indicates set-up is completed）(The corresponding icon is displayed).

⑦ Command Function: Set LS on Time

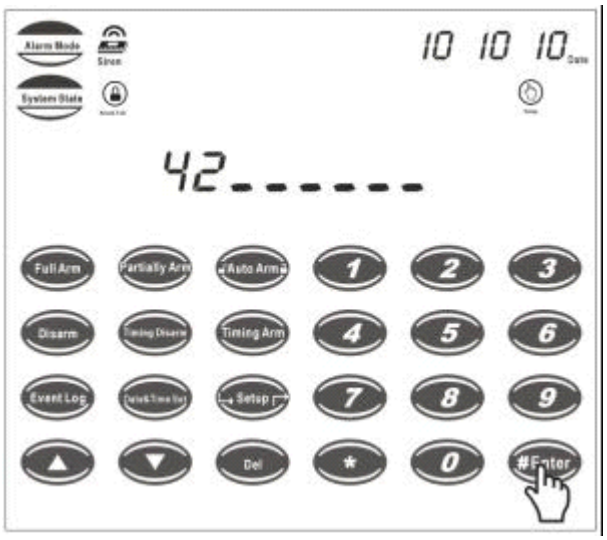
Command Grammar: 4 2# D D D D #

Function Description: Activate the joint control device for lamps.

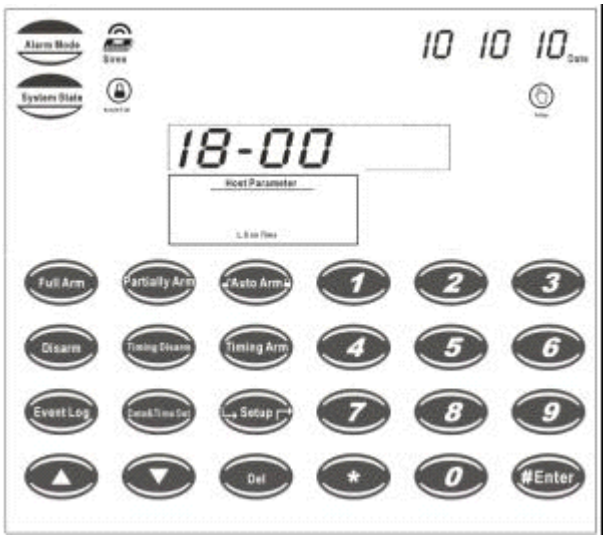
For example: Set LS on Time to 19：00.

For the first three steps, please refer to the above mentioned operating procedure for entering into set-up mode.

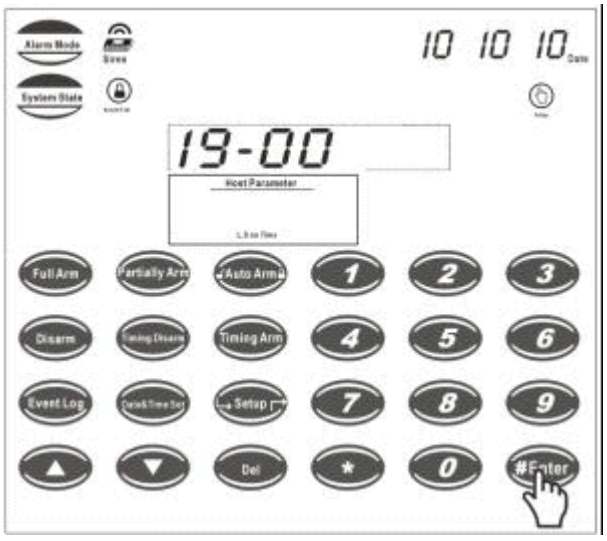
Step 4: Enter 42 and #, and then the host will give out a voice prompt "Please enter LS on Time".



Step 5: Then the host screen displays the last set value, and "LS on Time" indicator lights up.



Step 6: Enter"1900"and "#" to finish set-up.



⑧ Command Function: Set L.S off Time

Command Grammar: 4 3# D D D D #

Function Description: Deactivate the joint control device for lamps.

Operation Example: Press "Setup" key or enter"###"（Please enter the pre-set password）+123456# (The host enters into set-up mode) +41# (Please enter LS on Time)（Display the last set parameter value）+0600#（The host indicates set-up is completed）(The corresponding icon is displayed).

7) How to Set Siren Type and Volume

① Command Function: Siren Type

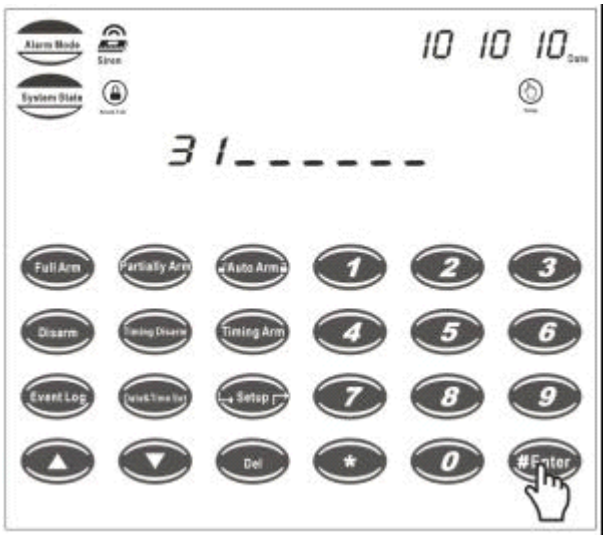
Command Grammar: 3 1# D #

Function Description: For D, there are four siren types available. D ranges from 1 to 4 (siren type code).

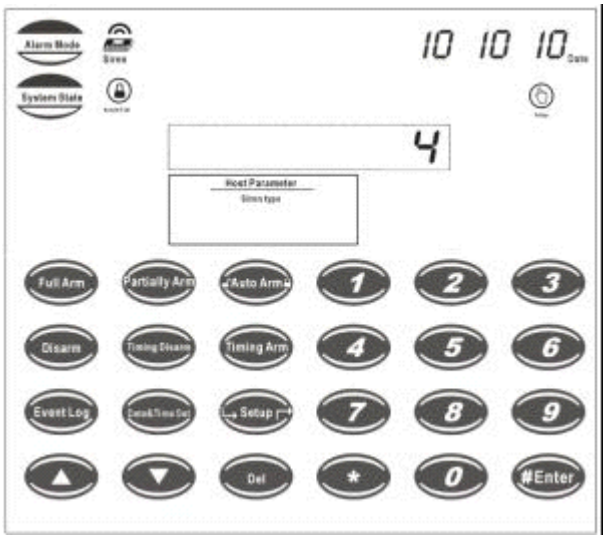
For example: Set siren type code to 1

For the first three steps, please refer to the above mentioned operating procedure for entering into set-up mode.

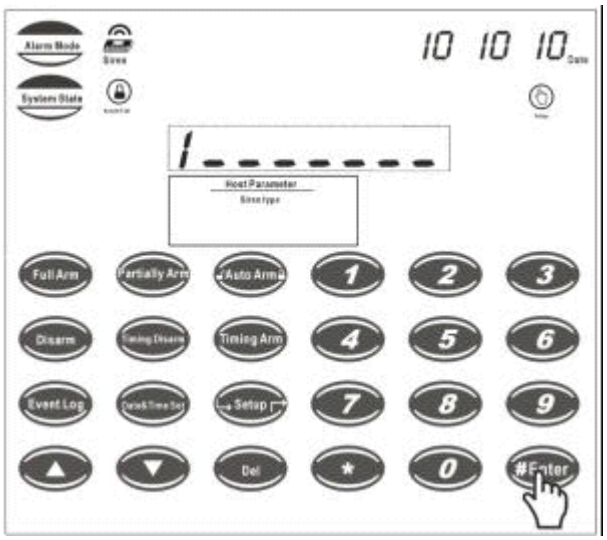
Step 4: Enter 31 and #, and then the host will give out a voice prompt "Please enter siren type".



Step 5: Then the host screen displays the last set value, and "Siren Type" indicator lights up (Siren type can be auditioned).



Step 6: Enter"1" and press "#" (Siren type can be auditioned), and then press "#" to finish setup.



② Command Function: Siren Volume

Command Grammar: 3 2# D D#

Function Description: For DD, there are 16 siren volumes (00-15) available. DD must be a 2-digit number. If the pre-set parameter value is less than 10, a 1-digit number will be displayed on the host screen. If the pre-set parameter value is more than 10, a 2-digit number will be displayed on the host screen.

Operation Example: Press "Setup" key or enter"###" (Please enter the pre-set password) +123456# (The host enters into set-up mode) +32# (Please enter siren volume) (Display the last set parameter value) +10# (The host provides a siren volume for choice) +# Verify the operation.

8) How to Set Security ID

① Command Grammar: 44 # D DDD #

Function Description: This alarm host will transmit alarm information to the alarm receiving centre when an alarm is triggered under phone alarm mode. The alarm host adopts Ademco Contact ID protocol to transmit information. XXXX is a 4-digit host ID set for users. The host has an auxiliary lamp interlock device manufactured by our company.

Operation Example: Press "Setup" key or enter"###" (Please enter the pre-set password) +123456# (The host enters into set-up mode) +33# (Please enter Host ID) (Display the last set parameter value) +1111# (The host indicates set-up is completed) (The corresponding icon is displayed).

② Command Grammar: 45 # D DDD #

Function Description: Receiving Centre ID represents ID of the upper-level receiving centre, which is used for wireless internet access.

Operation Example: Press "Setup" key or enter"###" (Please enter the pre-set password) +123456# (The host enters into set-up mode) +33# (Please enter Host ID) (Display the last set parameter value) +3333# (The host indicates set-up is completed) (The corresponding icon is displayed).

9) Re-register add-in devices

Command Function: Re-register add-in devices

Command Grammar: This command serves to re-register add-in devices (This command is used to install an external wireless receiver module in the host to ensure the receiver module is compatible with the host.).

Operation Example: Press "Setup" key or enter"###"（Please enter the pre-set password）+123456# (The host enters into set-up mode) +59# (Re-register RS485 add-in devices)（After several seconds, the host indicates set-up is completed）.

VII. Operating Instructions

1. Arm/Disarm

1: Arm/Disarm by LCD touch screen of intelligent alarm host

Press the "Armed Partially" key on LCD touch screen to enter into part arm mode, or press the "Armed Full" key on LCD touch screen to enter into full arm mode. Note: If a transition from full arm mode to part arm mode is required, users must press the "Armed Partially" key to enter into part arm mode after disarming the alarm host. Press the "Disarmed" key on LCD touch screen, and then enter correct user password to disarm the alarm host.

2: Arm/Disarm in Set-up Mode

Press "Setup"key or enter # # # A A A A A A # on the LCD screen to enter into set-up mode. In set-up mode, enter 1# to fully arm the host, and enter 3# to partially arm the host, and enter 2# to disarm the alarm host. A A A A A A is a 6-digit user password.

3: Arm/Disarm User Alarm Host by Remote Control through Fixed Phone or Mobile Phone

Please refer to relevant operating instructions in "Alarm Receiving Operation and Remote Set-up".

4: Arm/Disarm through Remote Controllers

Press the Full Arm Button on the remote controller panel, and then the user alarm host will indicate the host is being fully armed, which signifies the alarm host is entering into full arm mode.

Press the "Part Arm" key on the remote controller panel, and then the user alarm host will give out a "Part Arm" voice prompt, which signifies the alarm host is entering into part arm mode.

Press the "Disarm" key on the remote controller panel, and then the user alarm host will give out a "Disarm" voice prompt, which signifies the alarm host is entering into disarm mode.

2. Alarm

Anti-theft Setting:

Before you leave your residence or work place, please follow any of arm/disarm methods in "Arm/Disarm" to arm the alarm host and to ensure the system is on alert.

The alarm host will automatically alarm according to pre-set alarm procedures as soon as someone breaks into a defense area.

Emergency Alarm (or Help) Trigger

If any emergency circumstance such as robbery occurs in your residence or workplace, the system will enter into alarm mode whether the alarm host is in arm mode or in disarm mode when pressing the "Emergency Button" key on the remote controller panel (Siren can be activated and phone numbers can be dialed) or pressing corresponding alarm switch (Call function can be activated and phone numbers can be dialed, but siren can not be activated).

Halt-Zone

When any defense zone is set to halt zone, if this zone triggers an alarm, all defense zones except for emergency zones and doorbell zones will be halted, and the alarm host does not alarm when other defense zones trigger an alarm.

The halt zone is mainly used for identification friend or foe. If you have installed a solar-powered wireless active detector outside windows of a house, you can install a wireless curtain-type detector and set this detector to Halt. When a theft breaks into the house through the window, the solar-powered wireless active detector will transmit an alarm signal to the host, and the host gives out an alarm. When the house owner leans out of the window, the wireless curtain-type detector set to Halt does not trigger an alarm.

3. Alarm Receipt

1) In Tel or MP alarm mode, upon receipt of alarm phone, users can hear 5-second siren after picking up the phone, and then hear a"beep" sound prompt. At this time, users can selectively enter the following commands:

1 #	**Arm (Armed Full)**
2 #	**Disarm**
3 #	**Activate siren at the maximum volume**
4 #	**Monitor the phone on site**
5 #	Play siren
6 #	Terminate an ongoing call attempt
0 # 0 #	**Exit Alarm Receipt Mode**

For example: Upon receipt of alarm phone, you can hear siren after picking up the phone. After 5-second siren, enter 4 # through the keyboard of the alarm receiving phone (The host indicates you are monitoring) for monitoring for 20 seconds. Then the alarm will indicate you have completed monitoring the phone, and you have another 20 seconds to wait for receiving command. **If you want to continue to monitor the phone, enter 4 # again. Enter 1 # to arm the alarm host. If you enter 2 #, the alarm host will stop sounding a siren, and then enter into disarm mode, and does not dial other informed phone numbers. If you enter 3 #, the alarm host will activate siren at the maximum volume. Enter 0 # 0 # to exit alarm receiving mode, and then the alarm host will cut off phone line. If users can not perform any valid operation within 30-second wait time, the alarm host will automatically cut off phone line and continue to dial other groups of informed phone numbers.**

2) SMS Alarm Mode (HB-BJQ-560B Type)

a. The host will send SMS alarm messages to SMS phone numbers connected to the host when an alarm occurs.

SMS Message Format: SMS message format is "123456Address: ×××××". After Address, max. 22 words can be edited (SMS message content is set by users themselves. If SMS message content exceeds 22 words, or no SMS message is saved, SMS alarm function of the host can not be activated. If users want to modify SMS message, reedit new SMS message to replace the previously saved SMS alarm message.).

For example: Edit SMS message "123456Address: Zhengxue East Road, Ninghai, Ningbo, Zhejiang (Huashan Industrial Zone)**" and send it to Host SIM Card ID (See Figure below).**

b. Edit SMS message through mobile phone to remotely control the host, for example, arm/fully arm/partially arm etc.

SMS message vs. alarm host state:

SMS Message	Host Mode

123456Disarm Host	Disarmed
123456 Fully Arm Host	Armed Full
123456 Partially Arm Host	Armed Partial
123456Enable Timing Arm	Timing Arm Enabled
123456Disable Timing Arm	Timing Arm Disabled

123456Enable Timing Disarm	Timing Disarm Enabled
123456Disable Timing Disarm	Timing Disarm Disabled
123456 Enable Auto Arm	Auto Arm Enabled
123456 Disable Auto Arm	Auto Arm Disabled
123456 Emergency Alarm	Emergency Alarm

For Example: Edit SMS message "123456 Disarm Host" and send it to Host SIM Card ID to disarm the host.

Note: 123456 is the factory-set password of the alarm host. If the factory set password is modified by users, 123456 will be automatically replaced with new password. The phone numbers receiving SMS alarm messages are the pre-set SMS phone numbers (SMS phone numbers 1-4). If mobile phone numbers are not set as SMS phone numbers, you can not operate the host by editing SMS messages through these phone numbers.

4. Set by Remote Control

1）Call fixed or mobile phones which are connected with the user alarm host through fixed or mobile phone in other areas,and then the user alarm host will automatically pick up the phone after receiving several rings (program default: 9 times) and at the same time you can hear a voice prompt "Welcome to Use Saferhome Security Products". **And then you can enter # # # through the keyboard of fixed phone or mobile phone, and then you can hear a voice prompt "Please enter user password". Enter A A A A A A #. "A A A A A A " is a 6-digit user password. If user password is wrong, the system will automatically cut off phone line and exit set-up mode. If user password is correct, please selectively enter the following commands after 40 seconds.**

1 # **Arm (Full Arm)**

2 # **Disarm**

3 # **Activate siren at the maximum volume**

4 #	**Monitor the phone on site**
5 #	Play siren
6 #	Terminate an ongoing call attempt
0 # 0 #	**Exit Alarm Receiving Mode**

For example: Once user password is correct, you will hear a short "Beep" prompt, and in the next 30 seconds, the system will wait for receiving command. At this time, you can enter operating commands through the keyboard of phone in long distance or mobile phone. Enter 1 # to arm the alarm host. Enter 2 # to disarm the alarm host. If you enter 3 #, the alarm host will activate siren at the maximum volume immediately. Press 4 # (Indicates through voice the phone is being monitored) to monitor the phone for 20 seconds. After 20 seconds, the host will indicated "Monitoring completed". **Enter 0 # 0 # to exit set-up mode. If users can not perform any valid operation within 40-second wait time, the alarm host will automatically cut off phone line.**

2) Users can remotely control the alarm host through SMS.（HB-BJQ-560B Type）

【Note】For more operating commands and precautions, please refer to SMS alarm mode set-up procedure in "Alarm Receiving Operation".

VIII. Main Technical Specifications

1. User Alarm Host

Operating Voltage: AC220V±10%

Operating Current: Standby Current: ≤100mA(one keyboard), Alarm Current: ≤350mA

Operating Conditions: -10—55℃ Relative Humidity: 40—70%

Dial Mode: Double Audio Frequency High Frequency Group Level: -7±2dBm

Low Frequency Group Level: -9±2dBm

Pick-up Resistance: ≤300Ω

Backup Battery: 10 No.5 Ni-MH batteries

Dimension: 265×260×80（mm）

2. Wireless Remote Controller

Operating Voltage: 12V 27mA

Standby Current: ≤ 5uA

Alarm Current: ≤13.5mA

Transmitting Power: ≥10 mW

Dimension: 35×61×14（mm）

IX. Standard Configuration List

I、Standard Configuration List of Alarm Host

User Manual	**1 copy**
Intelligent Alarm Host	**1 set**
12V Power Supply	1 set
Warranty Card	**1 copy**
2.7KΩ External Resistors	4 pieces
120Ω Built-in Resistors	1 piece
Wireless Remote Controllers	2 pieces

II、Optional Parts

1. **Solar-Powered Active Infrared Detector**
2. **Wireless Infrared Detector**
3. **Wireless Receiver Module**
4. Wireless Repeater
5. Lamp Interlock Control Switch

X. Troubleshooting

Failure Symptoms	Reasons	Failure Recovery Methods
The alarm host fails to start when powered on	**Power plug is not properly connected, or socket has no power**	**Check power plug or socket**
Fail to enter into set-up mode	**User password is wrong or forgotten after modification.**	**Enter correct user password or contact local distributor for recovering password.**
The alarm host dials wrongly when alarming.	**Outside line is connected in parallel with telephone extension or phone without internet access is adopted.**	**Telephone extension should be connected in parallel with the telephone output terminal of the alarm host, or enter correct code back to phone arm mode through standard phone device.**
The alarm host alarms immediately when powered on or armed	**The end of line resistors of the alarm host are not installed or become loose.**	**Install end of line resistors according to operating instructions.**
“Invalid” icon indicator lights up and displays defense zone number.	**The detector for this defense zone is not calibrated.**	**Re-calibrate the detector.**
"Low Power” icon indicator lights up and displays defense zone number.	**The battery of the detector for this defense zone is under low power.**	**Charge the battery in sunlight, or replace the battery of the detector.**
“Optical Disturbance” indicator lights up and displays defense zone number	**The detector for this zone is subject to strong optical disturbance.**	**Check if the detector is properly installed and adjust the installation location**
“Phone Cut-off” icon indicator lights up.	**In phone alarm mode, phone line for local calls is not well connected or is cut off.**	**Check phone line for local calls to ensure the line is well connected, or replace the line.**
“Power Failure” icon indicator lights up and displays defense zone number	**The battery of the detector for this defense zone is damaged.**	**Replace the battery.**
The remote distance of the remote controller becomes shorter.	**The voltage of the battery is low.**	**Replace the battery.**
User password is wrong.	**User password is forgotten after modification.**	**Please contact local distributor for recovering password.**
When the ringing times reaches the pre-set value under long-distance operation mode, dialling sound can be heard from the phone.	**The phone picked up by the alarm host has an anti-theft switch, so the system wrongly judges the phone is illegally used when the alarm host simulates picking up the phone.**	**Close the “Anti-theft” function of the phone.**
The host can not achieve appropriate functions when connected with external receiver module.	RS485 add-in devices are not re-registered.	Refer to 59# to re-register RS485 add-in devices.
The host can not work normally when connected with an external wired detector.	The DIP switch can not be adjusted properly.	Refer to set-up procedure for the DIP switch on the back panel.

XI. Programming Set-up and Other Commands

List of Operating Commands for Common Users

Commands	**Interpretation**
###	**Enter into set-up mode (users password required)**
0 # 0 #	**Exit set-up mode**
1 #	**Fully arm the host**
2 #	**Disarm**
3 #	**Partially arm the host**
4 # #	**Clear all failure information**
5 # #	**Clear all event logs**
9 # A A A A A A # B B B B B B # B B B B B B #	**Modify user password (AAAAAA is an old password; BBBBBB is a new password)**
1 0 # C C C C C C #	**Add user phone number 1**
1 1 # C C C C C C #	**Add user phone number 2**
1 2 # C C C C C C #	**Add user phone number 3**
1 3 # C C C C C C #	**Add user phone number 4**
1 0 # “Del” key	**Delete user phone number 1**
1 1 # “Del” key	**Delete user phone number 2**
1 2 # “Del” key	**Delete user phone number 3**
1 3 # “Del” key	**Delete user phone number 4**
1 4 # C C C C C C #	**Add SMS phone number 1**
15 # C C C C C C #	**Add SMS phone number 2**
1 6 # C C C C C C #	**Add SMS phone number 3**
1 7 # C C C C C C #	**Add SMS phone number 4**
1 4 # “Del” key	**Delete SMS phone number 1**
1 5 # “Del” key	**Delete SMS phone number 1**
1 6 # “Del” key	**Delete SMS phone number 1**
1 7 # “Del” key	**Delete SMS phone number 1**
1 8 # C C C C C C #	**Add phone number 1 of alarm receiving centre**
1 9 # C C C C C C #	**Add phone number 1 of alarm receiving centre**
1 8 # “Del” key	**Delete CS phone number 1**
1 9 # “Del” key	**Delete phone number 2 of alarm receiving centre**
2 0 #“Del” key	**Delete all phone numbers**
3 1 # D # #	**Select Siren Type. D represents 1-4 (siren type code)**
3 2 # D D ##	**Siren Volume (00-15)**
3 3 # D D #	**Auto Arm Time (minute)**
3 4 # D D #	**Set Siren Duration（DD=01—99 minutes）**
3 5 # D D #	**Set Arm Delay time（DD=01—99 minutes）**
3 6 # D D #	**Set Alarm Delay time（DD=01—99 minutes）**
3 7 # D D #	**Set Ring-out Times in other areas (DD=05-15)**
3 8 # D D #	**Set Call Attempts (DD=03-99)**
4 0 # D D D D #	**Set Timing Arm**
4 1 # D D D D #	**Set Timing Disarm**
4 2 # D D D D #	**Set LS on Time**
4 3 # D D D D #	**Set LS off Time**
4 4 # D D D D #	**Set host ID**
4 5 # D D D D #	**Set CS ID**
5 0 # 1 # ， 5 0 # #	**Enable or disable on-site alarm mode**

51#1#，51##	**Enable or disable Tel alarm mode**
52#1#，52##	**Enable or disable MP alarm mode**
53#1#，53##	**Enable or disable SMS alarm mode**
54#1#，54##	**Enable or disable transmission mode (315M transmitter or frequency modulation transmitter)**
59#	**Re-register 485 device**
60#1#，60##	**Enable or disable SMS phone number 1 status report mode**
61#1#，61##	**Enable or disable SMS phone number 2 status report mode**
62#1#，62##	**Enable or disable SMS phone number 3 status report mode**
63#1#，63##	**Enable or disable SMS phone number 4 status report mode**

Alarm Receipt

0#0#	**Exit alarm receipt mode**
1#	**Arm the alarm host**
2#	**Disarm the alarm host**
3#	**Enable the alarm host to activate siren at the maximum volume**
4#	**Enable the alarm host to monitor call for 20 seconds**
5#	**Play siren**
6#	**Terminate an ongoing call attempt**

Remote Set-up

0#0#	**Exit set-up mode**
1#	**Arm the host**
2#	**Disarm the alarm host**
3#	**Enable the alarm host to activate siren at the maximum volume**
4#	**Enable the alarm host to monitor the phone for 20 seconds**
5#	**Play siren**
6#	**Terminate an ongoing call attempt**

Warning: Limits of This Security System

As an advanced hi-tech anti-theft system, although this product can reduce and prevent the occurrence of theft and robbery and thus reduce loss, we can not guarantee no above-mentioned accidents happen or no personal casualty and property loss happens.

And we invite you to understand that any alarm system, whether it is used for business or home use, may wrongly alarm or fail to alarm because of different reasons. Therefore, we remind you to pay attention to the following possible reasons:

1. The system is not armed because of carelessness.
2. Users or installation personnel's misunderstanding of user manual or improper operation may result in system failure.
3. An intruder intrudes the place where is beyond the defense areas or has technical capacity to pass by the alarm detector or make it malfunction.
4. The solar-powered active wireless infrared detector is a type of hi-tech, environmentally friendly product which is powered by solar energy and charged using solar panel. If the light intensity under the installation environment fails to meet product specifications, or the alarm times in a certain period of time exceeds that stipulated in product specifications, that may result in detector failure.
5. The detection sensitivity of passive infrared detectors can automatically vary according to ambient temperature. When the ambient temperature of defense areas exceeds 32℃, the detection performance of infrared detectors (detection distance) will reduce as ambient temperature rises. It is recommended to carefully check its operating status of this detector under ambient temperature to confirm if the detector operates according to safety precautions. If necessary, reasonable adjustment shall be done.
6. There is no power supply, or the battery has aged or is damaged.
7. The alarm horn is installed at the other side of the closed door, so it may not be able to warn people or wake up the sleeper.
8. There is something wrong with telephone line which transmits alarm signals to the alarm center, or other lines are busy, so that alarm information can not be transmitted in time.
9. The alarm system does not alarm when someone intrudes or there is an emergency alarm. The most common reason is that the alarm system does not get properly maintained. Like other electrical equipments, this equipment may be subject to electronic component damage. Therefore, users shall routinely check and maintain the system.
10. Other Unpredicted Reasons.

If you do not agree to the above-mentioned terms, you can return the product to us within 3 days from purchase date provided no man-made damage occurs, and we will refund you all money. Otherwise, you will be deemed to have agreed to the above-mentioned terms.

User Notes: The alarm equipment can not substitute for insurance, so you must be careful to insure your life and property.

This user manual is subject to our interpretation and all functions are subject to change without notice.