GSM SMS Alarm & Dialer

-- Ultra Version!

An Advanced Programmable Multifunctional GSM Auto-Dialer GSM Alarm Panel In The Worldwide!

SafeBox

User Manual

Ver 1.0

Date Issued: 2013-02-01

SafeBox —GSM SMS Alarm & Dialer -- Ultra Version!

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This handbook has been designed as a guide to the installation and operation of SafeBox GSM Alarm&Dialer. Statements contained in the handbook are general guidelines only and in no way are designed to supersede the instructions contained with other products.

We recommend that the advice of a registered electrician be sought before any Installation work commences.

The manufacturer, its employees and distributors, accept no liability for any loss or damage including consequential damage due to reliance on any material contained in this handbook.

The manufacturer, its employees and distributors, accept no liability for GSM Network upgrading or SIMCard upgrading due to the technology specifications contained in this handbook.

SMS Command List

SMS COMMAND	Functions & Actions	Very Important! Please fill the Installation Schedule at Page 26 before programming it.
AA	To arm the SafeBox, in this mode, any detector triggered will alarm.	
BB	To disarm the SafeBox, in this mode, detector triggered will not alarm.	
CC	To switch ON the Siren output.	
DD	To switch OFF the Siren output	
EE	Inquiry the SafeBox Status and GSM Module IMEI Code.	

The commands should plus Password, the format is Password+SMS Command. i.e.: if the password is 1234, then you can send 1234AA to arm, 1234BB to disarm, the AA~EE must be Caps Lock.

1. Brief introduction

The GSM Alarm & Dialer SafeBox is an Ultra Version of GSM Alarm, includes multi-functions and ultra low cost and high reliability special for Residential areas, business area, commercial area, office, factory, industrial area and other Varity applications. It integrated high performance GSM Module and MCU inside, and with innovative and experienced functions and features to meet the required and potential demands in the worldwide markets.

The user can receive SMS Text and calling from the SafeBox once the alarm occurrence immediately. Also, the user can remotely armed or disarmed and switch on or off the siren by SMS Commands, or remotely switch the SafeBox to arm or disarm with free call from mobile phone, or remotely call in the SafeBox to listen in on-site, or send SMS Command to request the SafeBox call back.

Moreover, the SafeBox supports Android Apps and iOS, though the Android and iOS Apps, the user can quickly to Arm, Disarm, Inquiry Status and Switch ON or OFF Siren, armed or disarmed with free call, no need to program the SMS commands every time.

The SafeBox equips 1 wired inputs for IP Camera Alarm Output, other alarm panel output to transfer alarm message by SMS over GSM Network.

2.Safety Directions

Safe Startup
Do not use SafeBox when using GSM equipment is prohibited or might bring disturbance or danger.

Interference
All wireless equipment might interfere network signals of SafeBox and influence its performance.

Avoid Use at Gas Station
Do not use SafeBox at a gas station. Power off SafeBox when it near fuels or chemicals.

Power it off near Blasting Places
Please follow relevant restrictive regulations. Avoid using the device in blasting places.

Reasonable Use
Please install the product at suitable places as described in the product documentation. Avoid signal shielded by covering the mainframe.

Use Qualified Maintenance Service
Maintenance can be carried out only by qualified maintainer.

3. Standard Packing List

SafeBoxX1
AC/DC Adaptor X1
Remote Control X1
Wireless Door Contact X1
User Manual X1
*The Android Apps please contact the distributors , the iKeypad please download from Apple Store for iPhone.

Optional Accessories: (Wired Sensors or wireless detectors)
PIR Motion Sensor, Glass Break Sensor, Magnetic Window Sensor, Temperature Sensor, Infrared Beam Fence, Vibration sensor, Siren.

4. Mainly Features

- ✓ Supports Away Armed, Partial Armed(At House or Stay) or Disarmed by Remote Control, Wireless Buttons, Wired Buttons, SMS Commands, Call in with free charge, Android Apps and iOS apps;
- ✓ Supports Android Apps and iPhone iOS apps, quickly to Arm, Disarm, Inquiry Status, Switch ON or OFF Siren, Call in to arm/stay, Call in to listen in;
- ✓ Supports 6 Authorized Numbers, each number can be setup as receive SMS or receive call or both of them, also, each number can be setup authorized to call in to listen or call in to arm or stay the system;
- ✓ Supports listen on-site through internal sensitive microphone and call back according to SMS request;
- ✓ Automatically send SMS Alert Alarm Message and dial to the authorized numbers when alarm occurrence;
- ✓ Learning code, more safe and easy to add new wireless remote keys and wireless detectors;
- ✓ Supports 16 Wireless Zones, can accept one learning code wireless detector in each zone, and accept unlimited PT2262/2272 fixed code wireless detectors in each zone;
- ✓ Supports 1 wired zones(Dry Contact Type), the input can be Normal Close(NC), Normal Open(NO), special for IP Camera alarm output or other wired sensor connection;
- ✓ Supports verity programmable zone attributes, includes Away(normal), At House or Stay, Entrance Zone, 24 Hours Sound Zone, 24 Hours Silent Zone, Local Zone, SOS Zone, Door Bell Zone;
- ✓ The SMS Alarm Content of each zone is programmable by user through SMS Commands;

- ✓ Supports 3 Remote Keys, each Remote Key includes one SOS Panic Button for emergency condition to ask for help;
- ✓ Supports Armed delay to give enough time to leave the home, the delay time is programmable by user;
- ✓ Supports Alarm Delay to give enough time to Disarm it when you come back home, the delay time is programmable by user;
- ✓ Equips one siren output for sounding while alarm occurrence to warning;
- ✓ The external AC power failure & recovery alert function supports 2 optional: Immediately Send SMS to user, after 30 minutes if not recovery then send SMS to user;
- ✓ Standby internal large capacity rechargeable battery which can standby upto 8hours after AC Power failure, also can provide power to wired siren after AC power failure;
- ✓ Secure - Using caller ID for identification, unknown callers are ignored;
- ✓ Supports Password to increase the security of the whole system;
- ✓ Based on the GSM communication network, no distance limitation.

5. Installation and Connection Diagram

Tips:

a. The backup battery was disconnected, please contact it firstly according to 5.6.

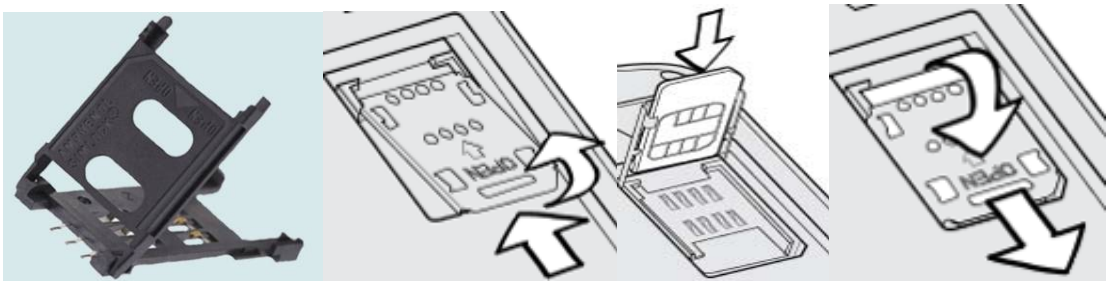
b. After switched on the SafeBox, will indicate by a long Di sound,all zones' LED will turn on once, and the zones which registered wireless sensors, wireless remote control or wireless buttons will turn on once more.

In the backside of the SafeBox, please remove all of the 3 screws, and take the back cover off, then you can see the PCB. See below:

5.1 Inserting the SIMCard

Important: Make sure to switch off SafeBox before inserting or removing your SIM card.

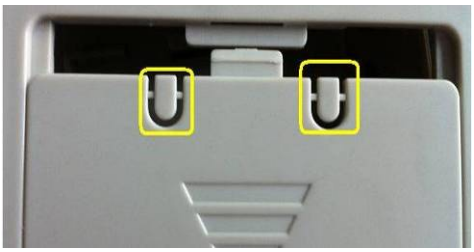
1) Slide the SIM card holder in the direction of “OPEN” (etched on the SIM card holder), and then flip it open.



2) Insert the SIM card with its gold contacts facing down and its cut-off corner facing out the SIM card slot. See above photo.
3) Slide the SIM card completely into the slot. Make sure the SIM card goes through the 2 “guides” on the SIM card slot.
4) Close the SIM card holder and then slide it in the opposite direction of “OPEN” to lock it. See above photo.

5.2 Making the Outlets for wires

The SafeBox reserved 4 outlets for wires at backside outlets and bottom outlets. The user can choose the suitable one for different installation requirements. Please use a knife or other tool to remove the obstacle plastics. Usually, the siren and power supply wires were in one outlets, and the signal control wires in another outlet to avoid the interference.



Backside Wires Outlet

Bottom Wires Outlet

5.3 Contacting the Wired Sensor or IP Camera or Other Alarm Panel to the SafeBox

The SafeBox equips one dry contact (Normal Close or Normal Open type) digital input port, the user can connect the IP Camera or CCTV DVR or wired detector or other alarm panel to this port. When the digital input triggered by IP Camera or CCTV DVR or wired detectors or other alarm panel, it will alarm.

1) Contacting the wired Detector to SafeBox

The wired detector has two connectors, please contact one of them to the DIN port, another contact to the GND port. And setup the Digital input be the correct NC or NO type by SMS Commands. (Tips: if you don't know the NC or NO type of the Detector, please try to change the setting to NC or NO type by SMS Commands to after you finished connections.)

Wired Scroll Door Contact

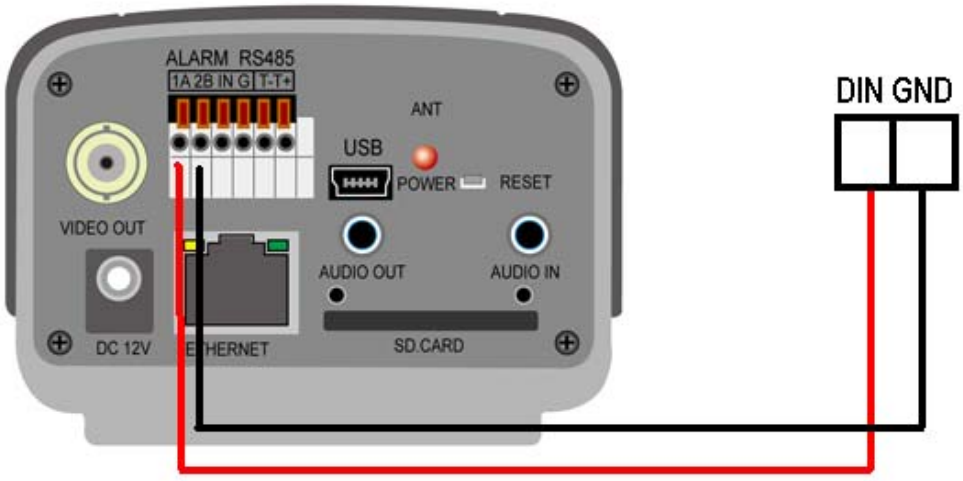
If you need to contact more than one wired to the SafeBox, please ensure all of the wired detectors are the same output type (Normal Close or Normal Open Types), any one of these detectors triggered, the SafeBox will alarm.

If the wired detectors are NC type, then the connection must be in series, see below:

if the wired detectors are NO type, then the connection must be in parallel, see above.

2) Contacting the IP Camera or CCTV DVR to SafeBox

The user can connect the IP Camera or CCTV DVR Alarm Output to the SafeBox's digital input as a wired detector, once the IP camera detected intrusion or CCTV DVR alarming, the SafeBox will send SMS to the preset numbers and dial the preset number and make sounds by the siren. This is very useful for lots of application that need IP Camera and Alarm immediately by SMS or Dialing. The connection is below:



1A,2B is Alarm Output from IP Camera, DIN and GND are Alarm Input in SafeBox.

The DVR with Alarm Output(NC/NO), contact to DIN and GND in the SafeBox.

3) Contacting the other alarm panel output to SafeBox

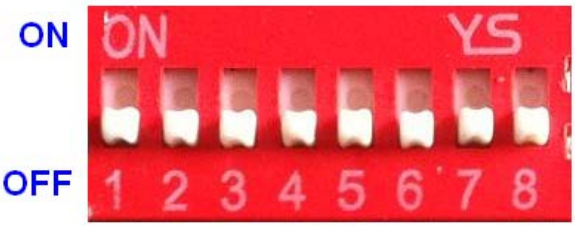
The user can connect the other Alarm panel's digital output to the SafeBox's Digital Input as a wired detector, so the user can update its alarm panel as GSM SMS Alarm. The connection please reference the DVR or IP Camera.

5.4 Contacting the Wired Arm or Stay or Disarm Buttons or Access Control & RFID Card Reader

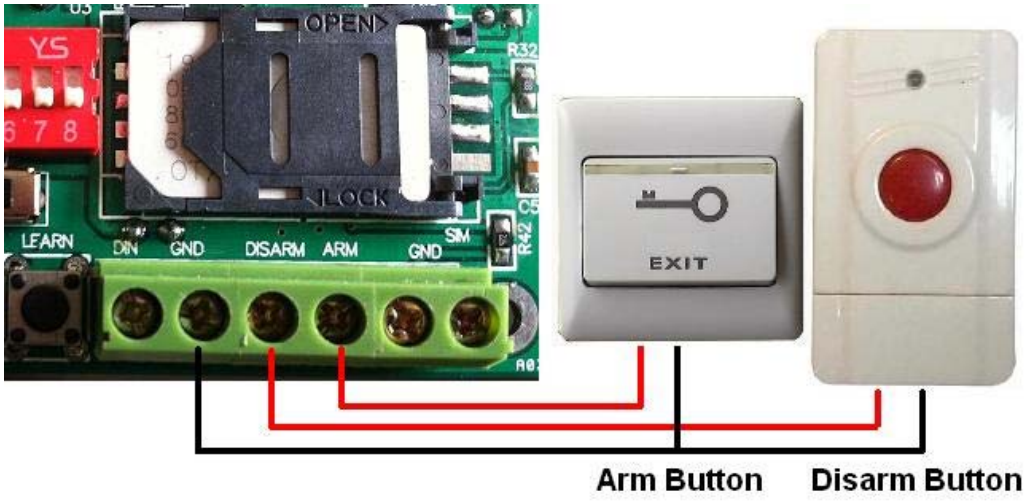
The SafeBox equips ports for Arm, Disarmed by wired buttons or RFID Card Reader for user convenience. The user can install a NO type button for armed it at the entrance, and through a separately button to disarm it in the place will not be discovered. Or in office and store and shop where many people with RFID card, then can connect the RFID Card Reader output signal to the disarmed port, so once somebody open the gate, will automatically disarmed it by RFID Card Reader, no need any other operations.

Tips: *The Button or output signal from Access Control or RFID Card Reader must be NO type.*

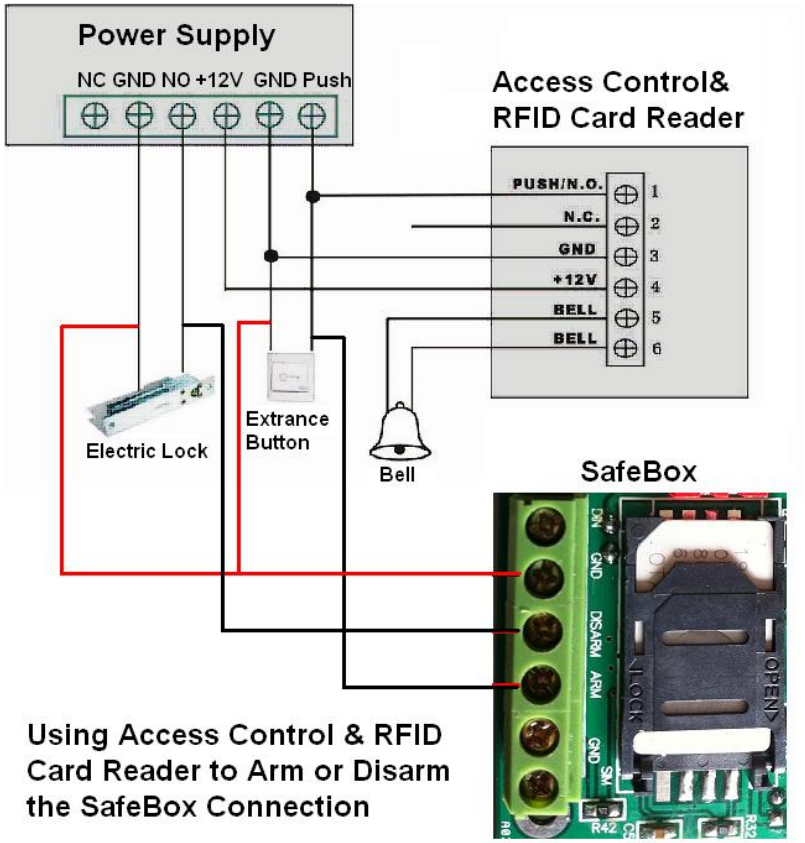
The user can setup the Arm port as Arm function or Stay function by the 1st PIN of the 8PIN Switch, when the 1st PIN at ON side, it is Stay function, if the 1st PIN at the OFF Side, then it is Arm function, default is at the OFF Side, see below:



The connections for wired buttons please see below:

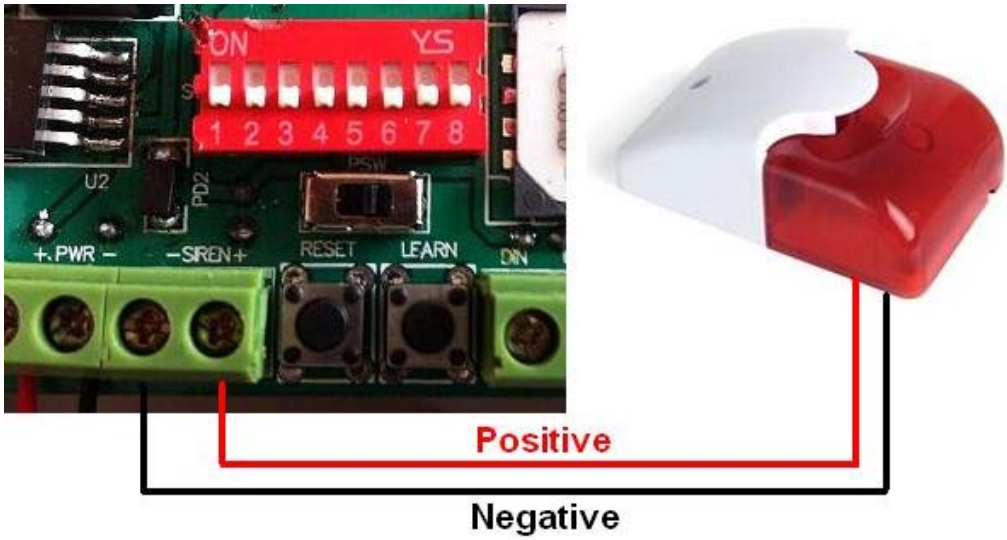


The connections for Access Control & RFID Card Reader please see below:



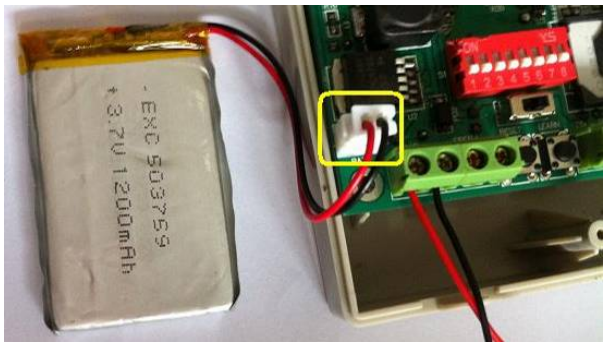
5.5 Contacting the Siren, hooter

The user can connect one 9~12V rated siren, or hooter to the SafeBox's siren output, once alarm occurrence, this output ports will start the siren or hooter to make sounds. The positive of the siren connect to the Siren+ port, and the negative of the siren contact to the Siren – port. Generally, the siren wire marked red color and black color, the red color is positive and the black color wire is negative. See below:



5.6 Contacting the Rechargeable Backup Battery

The SafeBox equips one rechargeable backup lithium battery that can power on the SafeBox for about 8hours while AC Power goes off. The SafeBox will automatically detect the voltage of the battery, once the voltage lower will charge it automatically. If you are not use the SafeBox for lone time, please remember to disconnect the backup battery. Please install the battery connector to the socket, please see below:



Notice: *Must open the backside cover then you can contact the battery. Once the backup battery turn over, the SafeBox cannot work properly, please contact the external 12VDC to charge it firstly. If you want to replace the battery by a new one, please note the specification of the backup battery is: 3.7V lithium battery 900~ 1200mA. If long time not use the SafeBox, please disconnect the backup battery to save its lifetime.*

5.7 Registering the wireless sensor, remote control, wireless buttons to the SafeBox

Tips: *a. After registered the wireless sensor,remote control or wireless buttons, must restart the SafeBox;*

b. After your registered a wireless sensor or remote control or button to the position, must switch back the DIP to OFF Side except the 1st position.

c. The package wireless detectors registered in the SafeBox already, no need to relearn it again.

The SafeBox is learning code, more safe and easy to add new wireless remote keys and wireless detectors, it supports 3 remote controls and 16 Wireless Zones, it can accept one learning code wireless detector in each zone, and accept unlimited PT2262/2272 fixed code wireless detectors in each zone. The SafeBox integrated verity programmable zone attributes, includes Away(normal), At House or Stay, Entrance Zone, 24 Hours Sound Zone, 24 Hours Silent Zone, Local Zone, SOS Zone, Door Bell Zone. The SMS Alarm Content of each zone is programmable by user through SMS Commands.

Please follow below step by step to learning the wireless detectors or remote controls or wireless buttons to the expected zones.

1) **Writing Installation Schedule**

Please write down your schedule in below table, it will make you clearly what sensor in which zone and with what attribute, e.g.: using a wireless door contact for entrance, using the photoelectric beams for wired zone in outdoor fence, and using a wireless smoke detector for fire alarm and so on. Please see the Affix table.

2) **Read the Switch-Combination-Zone Number Corresponding Table**

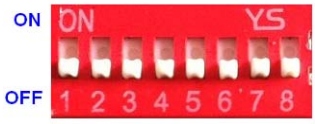
The SafeBox with fixed switch-combination positions for different wireless detectors and wireless remote controls, please see Switch Positions-Zone Number Corresponding Table Structure and Switch-Combination -Remote Control Corresponding Table.

Switch-combination-Zone Number Corresponding Table

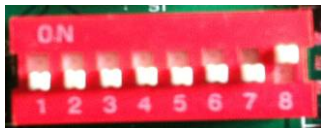
Zone Number	Switch Position(4-8)				
	SWTICH 4	SWTICH 5	SWTICH 6	SWTICH 7	SWTICH 8
01	0	0	0	0	1
02	0	0	0	1	0
03	0	0	0	1	1
04	0	0	1	0	0
05	0	0	1	0	1
06	0	0	1	1	0
07	0	0	1	1	1
08	0	1	0	0	0
09	0	1	0	0	1
10	0	1	0	1	0
11	0	1	0	1	1
12	0	1	1	0	0
13	0	1	1	0	1
14	0	1	1	1	0
15	0	1	1	1	1
16	1	0	0	0	0

Notice:

The value in the table for each zone corresponding the position of the switch, 0 stands for OFF side, 1 stands for ON side.

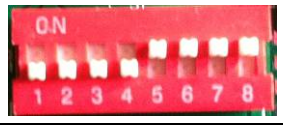


So the 01 zone should setup as

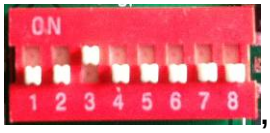
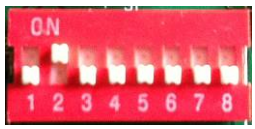
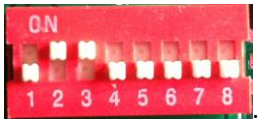


the 02 zone should be setup as.

The 15 zone should be setup as



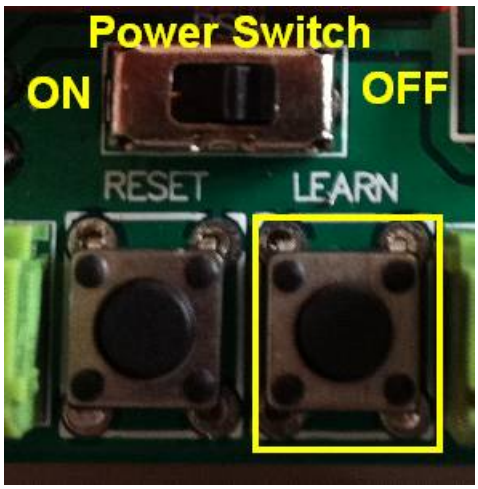
Switch-combination - Remote Control Corresponding Table

Switch-combination - Remote Control Corresponding Table			
Serial Number	**Switch Position(2-3)**		
	SWTICH 2	SWTICH 3	The value is same as above-mentioned. So 01 should be setup as:  , 02 should be setup as  ,03 should be setup as:  .
01	0	1	
02	1	0	
03	1	1	

3) Enter Leaning Mode

Please press the Learn button, and switch on the SafeBox, after switch on the SafeBox, will alert Di once, then after enter learning mode, will alert Di—Di two sounds, total 3 Di sounds(about 5 Seconds), it being learning mode, then loose the button. The learning Button under Pressed status before switching on the SafeBox till heard total 3 “Di” sound .

The LED of each zone which registered wireless detector or remote control or button will turn on.



Notice:

1) The SafeBox cannot exit the learning mode automatically, must switch off the unit then switch on again to enter the normally mode. The Switch-Combinations for each zone must be active by at least one switch to learning mode by switch the buttons from OFF to ON, and after learned the correct detector into this position, please switch the button back to OFF, otherwise the zone will in learning mode all the time.

2) When learning one detector to the SafeBox, the other wireless detectors must be in OFF status, otherwise will confuse the learning operation.

4) Learning the Wireless Detector or Remote Control to SafeBox.

When the SafeBox in the learning mode, then switch the **corresponding switch-combinations** from OFF to ON one by one, and trigger the wireless detector(see Notice), the SafeBox will learn the code from the wireless detector automatically. When alert by long “Di----” sounds, means the wireless detector was learned to the zone position, **please switch the switches back to OFF.** Meanwhile, please switch off the wireless detector, otherwise will alert by “Di Di” two sounds after you switch the switch back to OFF. If before switch the switch to OFF then alert by “Di Di” two

sounds, then means the operation failure, please switch them back to OFF then retry again. Switching the other switch-combinations from OFF to ON one by one to learn the wireless detectors to other zones..

Notice:

a) Remote Control and Wireless Detectors activated method:

For remote control, press any key then can activate it, no need to press all of them.

The wireless door contact can be triggered by dispatch the two parts when installed battery inside;

The wireless PIR Motion Detectors can be triggered by pass though its front when switched on;

The wireless panic buttons can be triggered by press its button;

The wireless gas leakage or wireless water leakage and wireless smoke detector equips Test Button, press the Test Button then can trigger them.

The other wireless detectors please reference its user instructions.

*b) When the wireless PIR Motion detection is PIR-100B, please remember setup the PIR-100B to **Test Mode** while learning to the SafeBox, after learned to the SafeBox, then please setup to **Normal Mode** by change the Black PIN Jumpers in the PCB, please see the PIR-100B user manual.*

c) The differences of PIR Motion Curtain Motion and Ceiling motion detector are the detection direction areas.

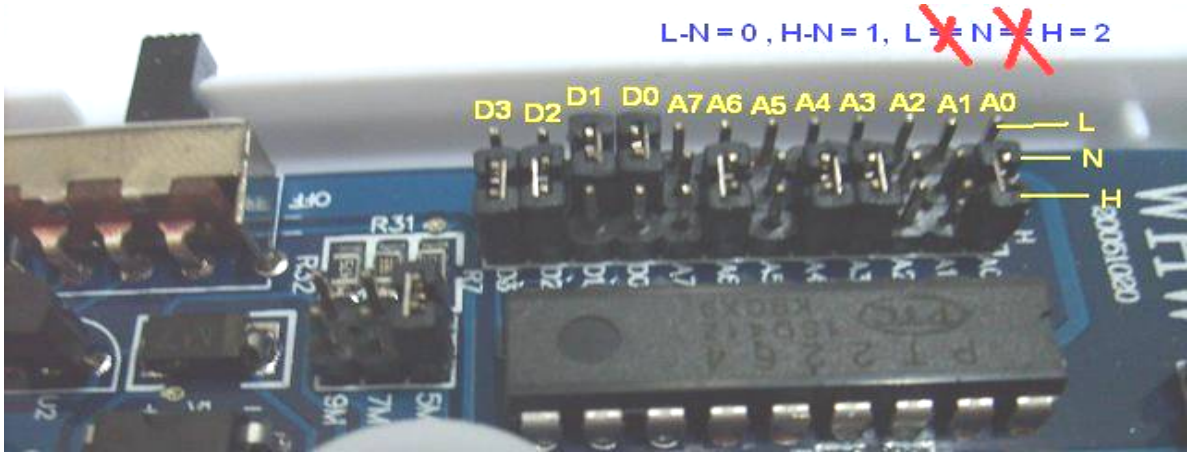
d) When the wireless Detectors is PT2262 fixed IC code, please setup its wireless code by use some Jumpers to configured it randomly, recommend 4~6 jumpers, see below:

1) Removing the back cover carefully;

2) Locate the IC boards black jumpers, labeled A0-A7 and D0-D3, please see below figure.

3) Configured the A0~A7 and D0~D3 different from each wireless detectors. If configured the A0~A7 and D0~D3 are the same, the system will treat them as the same one sensor. So if you want to add more than one wireless detector to any zone, please configure the jumpers as the same in the wireless detectors.

4) Also, please check the Resistors value is 3.3M Ohm, there're 3 Jumpers, 1.5M, 3.3M, and 4.7M. if you select incorrect value, the wireless distance usually very short or cannot learn to the SafeBox.



5) Removing wireless accessories.

After learned the wireless accessories to the SafeBox, it can be replaced by learning a new wireless detector to its position to in stand of it. If you want to remove the wireless detector in specified position, then please reset to remove all wireless detectors and re-learn the other wireless detectors again.

6) Some popular wireless detectors

PIR Motion Detector

Dual-Element PIR Motion Detector

Ceiling PIR Motion Detector

Door Contact

Door Contact

Garage Door Contact

Photoelectric Beams Detector

Microwave Dual PIR Detector

Gas Leakage Detector

Smoke Detector

Water leakage overflow detector

Necklace Waterproof Panic Button

Emergency Button

Wireless Signal Repeater

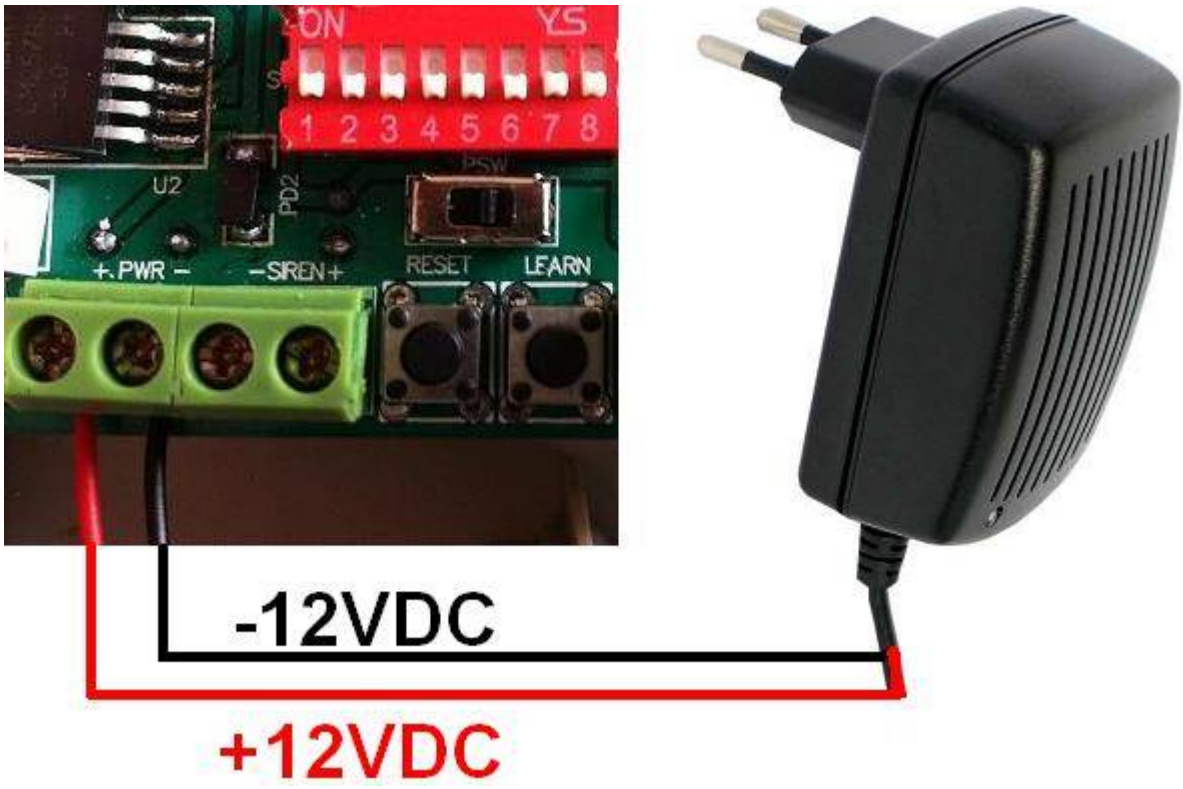
5.8 Contacting the External GSM Antenna

The SafeBox equips internal GSM Antenna, usually the GSM Signal is enough to register gsm network properly. But if the GSM signal is not enough, please replace it by external GSM Antenna from your distributors or agents. Or take the external GSM Antenna and its connectors to ask any electronic engineer to replace it, please don't replace it by yourself, otherwise will damage the SafeBox, the enclosure

reserved one hole at the top side, please remove it and fix the external GSM Antenna through this hole.

5.9 Contacting the AC/DC Power Supply

Please contact the +12VDC to the SafeBox, the Positive of the +12VDC connect to the PWR+, the negative of the 12VDC please contact to PWR - . Generally, the red color from the AC/DC Adaptor is Positive, and the black color is negative. The AC/DC Adaptor is 12V1A or 12V2A. see below:



5.10 Switching on/off the SafeBox

After finished all of the connections, please plus the AC/DC Adaptor to external AC Power socket, and switch the PSW Switch to ON side to switch on the SafeBox. See below:

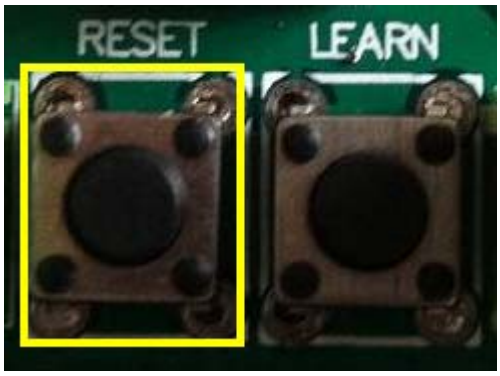
5.11 Amounting the SafeBox

The SafeBox should be installed in a place where the intruders cannot discover it. And the GSM Signal covered well. Also, the user can see the LED easily to know what happened and what is the status of the SafeBox.

5.12 Reset the SafeBox to Factory Default

The SafeBox can be reset to the factory default by following operation: Switch off the SafeBox, then press the Reset Button (See below), Switch on the SafeBox, about 3Seconds later, the SafeBox will make “Di Di”

2 sounds, then loose the RESET button, means the reset operation successful. **And please restart the SafeBox.**



After this operation, all the registered wireless detectors and wireless panic buttons and Remote Controls will be removed from the SafeBox, and all of the settings will be reset to the factory default.

6. Settings

The SafeBox is an advanced multifunctional programmable controller. The user can program it by SMS Commands for various application requirements.

Notice:

1. *The default Password is **1234**.*
2. *All the settings are through SMS commands, please edit the below SMS commands in your cell phone, then send to the SafeBox. (Tips: The SafeBox cannot support PIN Code Protected SIMCard. Please ensure you have disabled the PIN Code of the SIMCard, otherwise can not register GSM Network successful.)*
3. *You can program the GSM Alarm & Dialer SafeBox with SMS commands using your phone. It is safe to do so because in addition to the fact that other people may not know the number of the SIM inserted in it, we also use a Password that makes it impossible for anybody, who doesn't know it, to access the system by chance.*
4. *Remember that commands must be **CAPITAL LETTERS**. It is PWD not pwd, CAP not Cap etc. Don't add spaces or any other character.*
5. *The **pwd** in the commands is means the password, when you use it, please in stand of it by the digital number.*
6. *In some GSM operators, they use different SMS parameter, the units can't return the SMS confirmation is normally. It is not product problem. Also, you can try to add the country code before the number, because of every GSM Operator will automatically plus the country code while send SMS or receive SMS or dialing, the format is not the same for dial and SMS. if some functions can not work, then please setup include country code or remove country code for different functions. see the below settings:*

For example:

In China, the country code is **0086**, or **+86**.

The user cell phone number is **13500001111** and has been assigned as a SMS Alert number, the simcard number in the panel is **13512345678**.

Problem 1: Alarm but the user hasn't received the SMS Alert.

Solution: Please plus the country code while you setup the 13500001111 as SMS Alert number, means setup **008613500001111** or **8613500001111** to instead of the **13500001111**.

Problem 2: The user number can receive the SMS Alert message from alarm panel, but the alarm panel can not receive the commands from the user number.

Solution: Please add country code to the simcard number in the alarm panel. Means send sms commands to **008613512345678** or **8613512345678** to instead of **13512345678**.

Solution 3: When you use cell phone dial another one, what number it will be displayed then you can set the displayed number as dial numbers; when you use cell phone send SMS to another cell phone, what number it will be displayed then you can set the displayed number as SMS Alert number, just use the 00 to replace the "+", also, you can try the "+".

7. *Please write down the setting list in a paper for review in further, please see the affix table at the last page, and tear down from this instruction for review.*
8. *If the command is incorrect, the SafeBox will return:* **SMS Format Error, Please check Caps Lock in Command!** *Or other warning message. So please check the Command, or check the input is in ENGLISH INPUT METHOD and CAPS LOCK. If the password incorrect will not return any SMS.*
9. *When power on the SafeBox, will alert Di sound once, and all zones' LED will turn on once, then the LED which registered wireless sensor already will turn on once more.*
10. *If more than 2 minutes the GSM Simcard still register the GSM Network failure, the buzzer will make "Di" once, and every 10 seconds detects the SIMCARD registering status and failure will alert by "Di" once till restart or switch off.*
11. *If the communication between the MCU and GSM Module failure, the buzzer will make "DiDi" twice to warning every 10 seconds till switch off or restart.*
12. *If detect the SafeBox hasn't inserted SIMCard, the Buzzer will only make once di sound to alert. And will not detect the SIMCard again.*
13. *When alarm occurrence and in the delay alarm time, the buzzer will alert by "DiDi" sounds, once the delay timeout the buzzer will stop to sound.*
14. *Reset the SafeBox will alert by a 2seconds "Di" sound by the buzzer.*
15. *After you* ***reset or learning remote control or wireless sensors,*** *please remember to* ***restart*** *it, otherwise, can not work proplerly.*
16. *The SMS commands that you will certainly use in the GSM Alarm & Dialer SafeBox are the following:*

6.1 Setup New Password

pwd+P+newpassword

if successful, the unit will return: **new password,This is the New Password, please remember it carefully.** The password is 4digits.

For example, the original password is 1234, you want change it to 6666, then you can send the command below: **1234P6666**

6.2 Setup Authorized number(If you GSM Operator use different number format for SMS and Dial out, then please see Notice 6, must setup as includes country code and not includes country code two formats.)

Pwd+Serial Number+A+Function 1 Code+#+Function 2 code+#+Telephone Number+#

Serial Number = 1~6.

A is the identification character of this command.

Function 1 Code =1,2,3. It is for alarm receiving attribute setting.

=1 stands for when alarm occurrence, the SafeBox will dial as well as send SMS to this number.(The SMS Number Format must be the Same as the Dial Number Format, include or not includes Country code.)

=2 stands for when alarm occurrence, the SafeBox only send alarm SMS to this number, doesn't dial.

=3 stands for when alarm occurrence, the SafeBox only dial this number, doesn't sends SMS.

Function 2 Code =1,2,3. It is for accessing SafeBox attribute setting.

=1 stands for when this number dial to the SafeBox, will be rejected after the first ring, meanwhile, the SafeBox will be changed to Stay Mode and not return SMS. This is very useful when the user come back home or office to change the SafeBox to Stay mode with a FREE call from its mobile phone! When the user leave the home or store or office, dial the SafeBox again, the SafeBox will be changed to away armed mode and return SMS: **Armed** to ensure the armed operation is successful.

Tips: *When any number with this value call in the SafeBox, the SafeBox will change from Stay to Armed or Armed to Stay, if the SafeBox in Disarmed mode, then the first time call in will change theSafeBox to Stay mode.*

=2 stands for when this number dial to the SafeBox, will be picked up automatically and enter into listen mode, the user can listen on-site sounds or noise immediately through the SafeBox's microphone.

=3 stands for this number cannot access the SafeBox by dial in, will be hang up. Nor listen neither change to Stay or Arm Mode.

Telephone Number: authorized number, max. 18 characters,

E.g.: if you want to setup 13512345678 as the third authorized number, and the password is 1234, country code is 0086, when alarm occurrence this number can receive both SMS and incoming from the SafeBox, when dial to the SafeBox from this number, can change the SafeBox to Stay or Armed mode. Then you can send **12343A1#1#008613512345678#** to the SafeBox. Will return:

Tel1: Empty
Tel2: Empty
Tel3: 008613512345678-1-1 -1-1stands for function 1 code =1 and function 2 code =1 value.
Tel4: Empty
Tel5: Empty
Tel6: Empty

6.3 Inquiry the Authorized number

pwd+A+#

After received this command,the SafeBox will return the SMS as abovementioned.
E.g.: If you want to know the authorized number list, and the password is 1234, then you can send **1234A#** to check it.

6.4 Remove the Authorized Number

pwd+Serialnumber+A+#

Please overwrite it with another number that you wish to change it or removed it by SMS Command.

6.5 Modify the wired zone dry contact digital input type (Default is NC)

pwd+NC+#

Modify the digital input to NC (Normal Close) type, if the sensor you used with this unit is NC, then you should set the unit as NC type.will return : **Zone00 NC**.

Pwd+NO+#

Modify the digital input to NO (Normal Open) type, if the sensor you used with this unit is NO, then you should set the unit as NO type. will return: **Zone00 NO**.

6.6 Modify the SMS Alarm Content

pwd+B+ZoneNumber+# +SMS Alarm Content+#

If setup successful, will return the SMS Alarm Content.
B is the identification character of this command.
Zone Number=00~16, 00 stands for the wired zone. 01~16 stands for the 16 wireless zones.
SMS Alarm Content: When alarm occurrence, the SafeBox will send the SMS Alarm Content to the authorized numbers by SMS. Max. 40 characters.can not be empty, otherwise the SafeBox will return : **SMS Alarm Content cannot be set as empty!**
E,g.: if you want to receive SMS Alarm content of the wireless zone 05 is intruder breaking the windows, and password is 1234, then you can send SMS **1234B05#intruder breaking the windows#**.

6.7 Inquiry the SMS Alarm Content Setting

pwd+B+Zonenumber+#

If setup successful, will return the zone number's SMS Alarm Content.

6.8 Setup the Zone Attribute

pwd+D+Zonenumber+#+Attribute Code+#

If setup successful, will return the zone number's Attribute code.
D is the identification character of this command.
Zone Number=00~16, 00 stands for the wired zone. 01~16 stands for the 16 wireless zones.
Attribute Code=0~9, stands for how does the SafeBox will performance when this zone activated.
=0, stands for entrance, when armed the SafeBox, this zone will delay 30 seconds to enter into Armed mode, for leaving the home or office. When come back the home or office, will delay 20 seconds to alarm in order to the user can change it to Stay or Disarm the SafeBox.

=1, stands for outer zones ，in Armed or Stay mode, when triggered will cause alarm.
=2, stands for inner zones, in Stay mode if triggered will not cause alarm; in Armed mode, if triggered will cause alarm.
=3, stands for spot alarm zone, in Stay mode if triggered only cause the siren to sound. Neither dial out nor send SMS out; in Armed mode if triggered will cause alarm.
=4, stands for 24hours emergency zone with sounds. In any mode if triggered will cause alarm immediately with siren sounds.
=5, stands for 24hours emergency silent zone. In any mode if triggered will cause alarm immediately, the siren will not sound.
=6, stands for Armed Button, trigged it to make the SafeBox change to Arm Mode.
=7, stands for Stay Button, triggered it to make the SafeBox change to Stay Mode.
=8, stands for Disarm Button, triggered it to make the SafeBox change to Disarm mode.
=9, stands for door bell button, triggered it to cause the buzzer to sound 8times.

Tips:

1) When the attribute code setup as 6,7,8,9, the siren will not sound.
2) More than one zone attribute can be setup in one SMS Command but don't exceed the SMS character limitation , e.g.: if want to setup the attributes of wired zone, 01 wireless zone, 02wireless zone, 03 wireless zones, 08 wireless zone, the password is 1234, then please send **1234D00#0#D01#1#D02#4#D03#6#D08#9#**

6.9 Inquiry the Zone Attribute

pwd+D+#

If send successful, will return the zone attributes: **00-1;01-0;02-2;……;16-7.**

6.10Setup the Siren Sound time(Default is 180seconds)

pwd+E+xxx+#

If setup successful, will return **Siren ON + xxx + Seconds**
E is the identification character of this command.
Xxx=000~999, unit is second, 3 digits. Default is 180 seconds.
E,g,: if you want to setup the siren sound 60seonds when alarm occurrence, and password is 1234, then please send **1234E060#**

Tips:

Only the zone attribute code setup as 0,1,2,3,4 will cause the siren sound while alarm occurrence. And the siren will sound about 20 seconds then interrupt about 2 seconds,

6.11Setup the Alarm Delay Time(Default is 000second)

pwd+F+xxx+#

If setup successful, will return **Alarm Delay + xxx + Seconds**
F is the identification character of this command.
Xxx=000~999, unit is second, 3digits. Default is 000 second.

Tips: *Only the zone attribute code setup as 1,2,3 will delay to cause alarm while alarm occurrence.*

6.12Setup the Arm Delay Time(Default is 30seconds)

pwd+G+xx+#

If setup successful, will return **Armed Delay + xx + Seconds**

G is the identification character of this command.

Xxx=00~99, unit is second, 2digits. Default is 30 seconds.

Tips:

1) Only the zone attribute code setup as 1,2,3 will delay to enter into Arm mode when Arm the SafeBox;

2) If Armed the SafeBox by remote control, after press the Armed Button, and press its SOS button within 2 Seconds the SafeBox will enter into Armed Mode immediately, will not delay.

6.13 Enable to Alert the first Authorized Number when other number armed or disarmed the SafeBox(Default is Disable)

pwd+H+#

If setup successful, will return **Send Operation Code to 1st Number**

H is the identification character of this command.

Tips: *If enable this function, when the Authorized Number that Function 2 Code=1 (can dial in to change the status from Stay to Arm) call in the SafeBox, will send SMS to the 1st Authorized Number. If any other number armed or disarmed the SafeBox, it will send SMS to the 1st Authorized number. The SMS content is* **Armed By + Telephone number** *or* **Disarmed by +Telephone number.**

Disable this function SMS Command is **pwd+J+#**

6.14 Required the SafeBox callback

pwd+K+#

If send successful, the SafeBox will call back the user immediately. It is special for the Authorized Number that Function 2 Code=1 (can dial in to change the status from Stay to Arm) to listen on-site.

6.15 Setup External Power Status Alert Feature(Default is 30 minutes)

pwd+M+xx+#

If send successful, will return SMS.

M is the identification character of this command.

Xx= 00~99. Default is 30. Unit is minute

Xx=00, stands for when external AC Power goes off will send SMS **AC Power Goes off** to all authorized numbers or send SMS **AC Power Goes ON** when AC Power goes on. If setup successful, will return **AC Power Goes off Send SMS Immediately.**

Xx=01~99, stands for when external AC Power goes off more than 01~99 minutes will send SMS **AC Power Goes off 01~99minutes** to all authorized numbers or send SMS **AC Power Goes ON** when AC Power goes on. If the AC Power goes off less than 01~99 minutes then goes on, will not send SMS. If setup successful, will return **AC Power Goes off Send SMS After 01~99minutes.**

6.16 Setup Siren Response Feature to Arm Operation

pwd+xx+# return SMS.

Xx= ON or xx=OFF. Default is off.

Xx=ON, stands for when armed the SafeBox by remote control successful, the siren will sound 2seconds. If setup successful, will return **Set Ok.**

Xx=OFF, stands for when armed the SafeBox by remote control successful, the siren will NOT sound. If setup successful, will return **Set Ok.**

Tips: *if armed or disarmed by phone call or SMS, the siren will not make sounds to response.*

7. Operating Instructions

Tips!

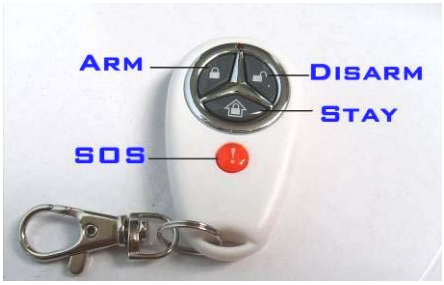
1. *The user can arm/disarm/Stay (Partial armed) by Remote Control, Wired Button, Wireless Button, Access Control System or RFID Card Reader, Dial in, and, SMS, Another, the user can switch on or off the Siren by SMS Commands.*
2. *Mode explanation*

   Armed: Away, In this mode, any detector triggered will cause alarm. It be used for away the home and need to protect all of the home or office or store,etc.

   Stay: Partial armed, at home, in this mode, only the outer zones and emergency zones triggered will cause alarm, the inner zone triggered will not cause alarm. It be used for partial armed, e.g.: some people at home, and need to monitoring the outer security.

   Disarmed: Except the 24 Hours emergency zones triggered will cause alarm, all of the other zones triggered will not cause alarm. Usually for maintain or other special requirements.
3. *Alarm Occurrence*
   1) *When alarm occurrence, the SafeBox will send out Alarm SMS Content firstly, then automatically dial the authorized numbers one by one, if picked up the call, the SafeBox will stop to sound and enter to listen mode, can not speak. If nobody picked up or rejected, the SafeBox will dial all of the authorized numbers 3 times in cycle then stop to dial any more. Meanwhile, the Safebox will enter to previous status.*
   2) *Only the zone attribute code setup as 0,1,2,3,4 will cause the siren sound while alarm occurrence. And the siren will sound about 20 seconds then interrupt about 2 seconds, the time according to the setting.*
   3) *Once any zone triggered, the corresponding LED will always on till Disarm or Restart the SafeBox.*

7.1 Operation by Remote Controls



Press the button "🔒" on the remote key or Press the wireless or wired Arm button, the SafeBox enters arm status (delay time according to the setting), Under this status, any detector triggered, the SafeBox will alarm, if answered the call, the siren will stop and can listen in the alarm area by phone.

Tips: *If you use the remote control to arm the SafeBox, you press the Arm Button, then press the SOS button within 2 Seconds, the SafeBox will enter Armed mode immediately, no delay.*

Press the button "🔓" on the remote control, or press the wireless or wired Disarm button, or access control and RFID Card Reader with authorized access signal, the SafeBox disarms immediately.

Under this status, any detector triggered, the SafeBox will not alarm. Except the zone attribute is the 24-Hour Emergency Zones.

Press the button "⌂" on the remote control or the wireless or wired Stay button, the SafeBox enters Stay(Partial Armed) status, the zones attribute had been set as outer zone and 24 hours emergency zone triggered will cause alarm, but the zone attribute had been set as inner zone triggered will not cause alarm.

Press Emergency button (SOS) "**!**" on the **remote control**. The SafeBox will cause emergency alarm. The siren will not sound, but will alert the pre-set phone number immediately. The Alarm SMS Content is **Remote Key SOS Help!**

Tips: *The Alarm SMS Content for the remote control SOS button can not be modified.*

7.2 Armed or Stay WITH a FREE call from authorized phone!

The SafeBox supports armed or Stay by a free call from authorized phone, after you setup the authorized number Function 2 Code as 1, then the user can use this phone number to Arm or Stay the SafeBox by free charge call in. Please reference ***6.2 Setup Authorized Number*** to setup it.
When the SafeBox in **Disarmed** mode, any number with the authorized right call in will change it to Stay mode;
When the SafeBox in **Stay** Mode, any number with the authorized right call in will change it to Armed(Away) mode, and return SMS confirmation **Armed**.
When the SafeBox in **Armed(Away)** Mode, any number with the authorized right call in will change it to Stay Mode.
This function is very useful while you leave or come back home.

7.3 SMS Commands for Arm(Away) or Disarm or Switch On/Off Siren.

The User can Arm/Disarm/Switch on or off the siren by sending SMS to the SafeBox. The SMS Commands are below:

Notice:

The system will carry out the commands immediately (with no delay) after the SafeBox receive this SMS command.

7.3.1 Armed(Away)

xxxxAA "xxxx" stands for the password (4 digits). Return SMS Armed	Example 1234AA When the Password is 1234

7.3.2 Disarm

xxxxBB "xxxx" stands for the password (digits). Return SMS Disarmed	Example 1111BB When the Password is 1111

7.3.3 Switch On the Siren

xxxxCC
"xxxx" stands for the password (4 digits).
Return SMS
Siren ON.

Example
1111CC

When the Password is 1111

7.3.4 Switch OFF the Siren

xxxxDD
"xxxx" stands for the password (4 digits).
Return SMS
Siren OFF.

Example
1111DD

When the Password is 1111

7.4 Inquiry Status and GSM Module IMEI Code

xxxxEE
"xxxx" stands for the password (4 digits).
Return SMS
Armed or Disarmed
AC Power ON or AC Power off.
GSM Value is 17 or other value
IMEI Code: xxxxxxxxxxxxxxxxx

7.5 iOS App and Android Apps Instructions

The user can operate the SafeBox by Android Apps and iOS. Both of them are free charge. For Android Apps, please download from our official website, and download the iKeyPad from Apple Store. The interface of these tools please see below.

8. Technical specifications

Rated Voltage: 12VDC 2 A (12V~14VDC)

Standby Consumption: 30~35mA (Not charging battery)

Working Consumption: 400mA(Siren working)

Working temperature: -10℃～+60℃

Storage temperature: -20℃～+60℃

Relative humidity: 10-90%, No condensation

GSM frequency: 900/1800MHz(Default) or 850/1900Mhz (Optional)

Communication protocol: GSM PHASE 2/2+ (include data service)

Wired Zones: 1 (Dry Contact, NC or NO)

Wired Port For Arm or Stay: 1(Dry Contact, NO)

Wired Port For Disarm: 1(Dry Contact, NO)

Wireless Encode: Learning code, compatibles fixed encode.

Wireless Zone: 16 (can accept one learning code wireless detector in each zone, and accept unlimited PT2262/2272 fixed code wireless detectors in each zone)

Remote Control: 3

Wireless Frequency: 433Mhz

Wireless Distance: 100m in open air.

Backup Rechargable Battery: 3.7V@900~1200mAH lithium batteries

Net Weight: 0.50Kg

9. Maintenance

1) In case of failure, please contact the distributor or manufacturer.
2) If the remote control works, but the SafeBox fails to send SMS texts, switch the power of SafeBox off and switch it on after one minute. Test this system after another minute, or check the settings are correct and the GSM Signals are strong enough.
3) If the SafeBox can run and sensors work, but cannot send SMS texts, please change SIM Card to check it.
4) If the problem cannot be solved, please contact the distributor or manufacturer.

10. Warranty

1) This system is warranted to be free of defects in material and workmanship for one year.
2) This warranty does not extend to any defect, malfunction or failure caused by abuse or misuse by the Operating Instructions. In no event shall the manufacturer be liable for any alarm system altered by purchasers.

11. Affix Table

Table 1. SafeBox Installation Schedule

Before install the Safebox, please write down the installation plan firstly, it is very useful for saving your test and installation time. After installed successful, then tear down this Schedule for review in further.

SafeBox Installation Schedule					
Zone No.	Default Value of Zones		User Defined Value of Zones		Sensor/Place(E.g Windeos) Description
	Name	Attr. Code	SMS Alarm Content	Attr. Code	
00	Wired Zone Alarm!	2			
01	Entrance Alarm!	0			
02	Wireless Zone 2 Alarm!	2			
03	Wireless Zone 3 Alarm!	2			
04	Wireless Zone 4 Alarm!	2			
05	Wireless Zone 5 Alarm!	2			
06	Wireless Zone 6 Alarm!	2			
07	Wireless Zone 7 Alarm!	2			
08	Wireless Zone 8 Alarm!	1			
09	Wireless Zone 9 Alarm!	1			
10	Wireless Zone 10 Alarm!	1			
11	Wireless Zone 11 Spot Alarm!	3			
12	Smoke Detector Alarm!	4			
13	Water Leakage Alarm!	4			
14	Gas Leakage Alarm!	4			
15	Panic Help Alarm!	4			
16	Emergency Silent Alarm!	5			

SafeBox Authorized Number Schedule

SIMCard Number in the SafeBox: _____

Serial Number	User Name	Phone Number	Authorized Type					
			Alert when Alarm Occurrence			Access the SafeBox		
			SMS&Call	SMS	Call	Stay/Arm	listen	Refuse
1								
2								
3								
4								
5								
6								

Notice: Please mark V if for enable and X for disable.

Table 2. SafeBox Program and Operation SMS Command List

SafeBox SMS Command List(Caps Lock)			
S.N.	**Function Description**	**SMS Command Format**	**Example**
1	Arm(Away)	pwd+AA	1234AA (Password is 1234)
2	Disarm	pwd+BB	1234BB (Password is 1234)
3	Switch On The Siren	pwd+CC	1234CC (Password is 1234)
4	Switch OFF the Siren	pwd+DD	1234DD (Password is 1234)
5	Inquiry Status,GSM Signal, IMEI	pwd+EE	1234EE (Password is 1234)
6	Setup New Password	pwd+P+newpassword+#	1234P6666.
7	Setup Authorized number	pwd+Serial Number+A+Function 1 Code+#+Function 2 code#Telephone Number+#	[See 6.2]
8	Inquiry the Authorized number	pwd+A+#	
9	Remove Authorized Number	pwd+SerialNumber+A+#	
10	Modify wired zone type as NC	pwd+NC+#	Default is NC
11	Modify wired zone type as NO	pwd+NO+#	
12	Modify the SMS Alarm Content	pwd+B+ZoneNumber+#+ SMS Alarm Content+#	1234B05#intruder breaking the windows#
13	Inquiry the SMS Alarm Content	pwd+B+Zonenumber+#	1234B01#
14	Setup the Zone Attribute	pwd+D+Zonenumber+#+Attribute Code+#	[See 6.8]
15	Inquiry the Zone Attribute	pwd+D+#	
16	Setup the Siren Sound time	pwd+E+xxx+#	1234E060#,(Default:180S)
17	Setup the Alarm Delay Time	pwd+F+xxx+#	1234F999#,(Default:000S)
18	Setup the Arm Delay Time	pwd+G+xx+#	1234G09#,(Default: 30S)
19	Enable Alert the 1st Authorized No.	pwd+H+#	
20	Disable Alert the 1st Authorized No.	pwd+J+#	Default
21	Required to callback	pwd+K+#	
22	AC Power Goes OFF Alert at once	pwd+M+00+#	
23	AC Power Goes OFF Alert after 01~99 minutes	pwd+M+xx+#	Default is 30minutes
24	Siren Response to Arm Operation	pwd+ON+#	Default
25	Siren NOT Response to Arm Operation	pwd+OFF+#	

The End!