

GSM & iFV Alarm System


User Manual



WiFi+GSM/3G+GPRS



Android | App Store
Scan QR code here
download and install APP

Content



Overall state	1~2
Explanation	1
Features	1
Identification for daily operation	2
Alarm host appearance and accessories	3~7
Top view	3
Bottom view	3
Side view	4
Keys of side face	4
Main interface	4
Description for main interface	5
Menu structure	6~7
Initial usage	8
Start	8
System initialization	8
Menu operation	8
Phone number setup	8
Add/Delete remote control	9
Add/Delete wireless detector(included doorbell alarm)	9
Add/Delete RFID card	10
Synchronization with external wireless siren	10
Record	11
Timer	11
 Mobile phone APP	12~18
Install	12
APP configuration with alarm host	12
Unbind mobile phone APP with alarm host	13
Add remote control via APP	13
Add detector via APP	14~15
Delete remote control via APP	16
Delete detector via APP	17

Synchronize external wireless siren via APP	17
Inquire/set parameter: Set function switch, Set alarm phone, Set delay alarm	18
Remote SMS	19~21
Parameter setup	19
Alarm host name setup	19
Parameter inquiry	20
Inquire system setting	20
Inquire system setting2	20
Alarm phone setup inquiry	21
Delay setup inquiry	21
Switch setup inquiry	21
Remote control/detector/RFID card inquiry	21
Phone function	22
Daily operation	23~25
Out Arm	23
Stay Arm	24
Disarm	24
SOS	25
SMS notification feedback	25
Alarm and remote monitoring	26~27
SMS alarm	26
Voice alarm and remote monitoring	26
Automatic dialing preset phone number when the alarm host alarms	26
Preset phone number to call alarm host	26
 Alarm receiving procedure via APP	26
 Receiving alarm by Intranet monitoring center	27
Specification	28
Packing list	29

Overall state

Explanation

For all the issues stated in this manual:

-  The icon is only valid for the corresponding alarm host which is configured with WiFi module.
-  The icon is only valid for the user who has applied alarm service from local intranet alarm center.

Features

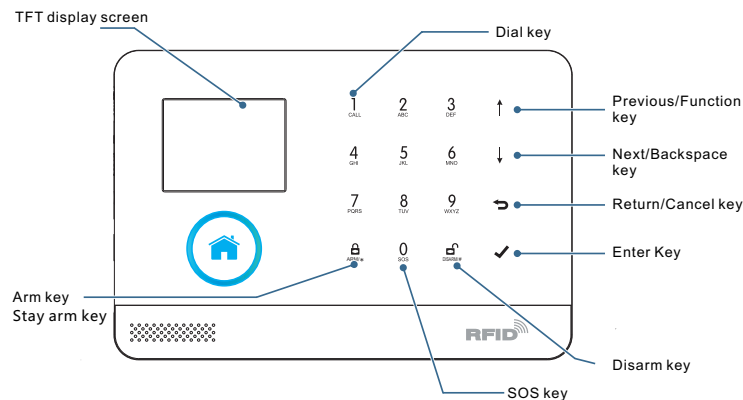
- 2.4 inch TFT display screen, concise user interface and menu hint design.
- Main interface status bar, date/clock indication, fairly obvious alarm host status.
- Built-in powerful performance CPU master based on 32-bit Cortex-M3 core.
- Based on uCOS - III operating system with multitasking design, great user operation experience.
- WIFI/GSM/3G/GPRS intranet alarm system, support different alarm channels, like APP push/SMS/voice monitoring/intranet center etc. to ensure the alarm performance stable and reliable.
- Support SMS arm/disarm and voice arm/disarm
- Support up to 100 learning/storage location for remote control, RFID cards and wireless detector.
- Support many defense zones, such as gate, SOS, bedroom, window, balcony, perimeter, smoke, gas, carbon monoxide, water leaking, etc.
- Support the main power malfunction, backup power shortage, tamper alarm and other extended alarm.
- Support entry/exit zone, indoor zone, perimeter zone, 24-hour zone..etc.
- Up to 5 groups preset alarm phone numbers, SMS on/off and dial on/off can be set respectively.
- Support external wireless siren.
- Support timing arm and disarm
- Can store and inquire daily operation records and alarm records.
- GSM network clock synchronization, to ensure accurate clock, and support country time zone setting.
- Support multi-language menu display, voice prompts and alarm SMS setting.
- Can record 20 seconds voice message and alarm voice.
- Telephone function, support 5 groups re-dial number.
- User-friendly APP operation experience and user interface.
- Push Arm/disarm message to APP
- Support APP remote arm/disarm, parameter setting and accessory management.
- Online GPRS to obtain equipment status, automatic alarm when offline.
- Reserved remote GPRS TCP / UDP protocol channel, compatible with multiple alarm center networking protocol to facilitate network alarm.
- Center remote control.

Identification for daily operation

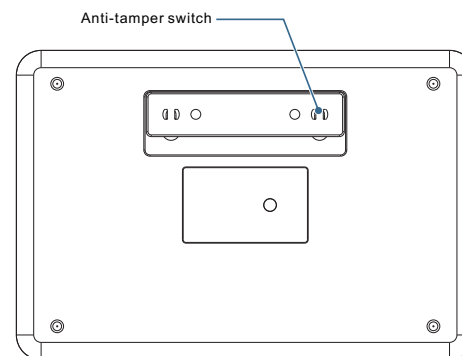
- **Arm**
set security task (i.e. Anti-burglar), make the host into alert state, also known as Arming, Alert or Booting. Designate security guard mission(i.e. Anti burglar), set the alarm host into on-guard status, also called Arming, Alert or Power on.
- **Stay Arm**
In case the user is at home, only set alert to entrance/exit or perimeter, also called home alert.
- **Disarm**
Withdraw security task(i.e. Anti-burglar), also called Withdraw alert or Power off.
- **Trigger**
Under Arm state, detector detects someone or door is opened, it will trigger the detectors and make alarms.
- **Exit delay**
After setting the host to be Arm state, in order to avoid making alarms for the users leaving and passing the Arm zones, delay the alarm time.
- **Entrance delay**
When user comes back and pass the Arm zones, the host will not immediately make alarms. It will allow user to Disarm the host with some time; the host will make alarms if time out beyond the Disarm.
- **Alarm**
When the host create alarm action, acousto -optical alarm signal arises. The host will send SMS message to the preset mobile phone, dial the preset user telephone number, create push to mobile phone APP, or send alarm information to intranet security center.

Alarm host appearance and accessories

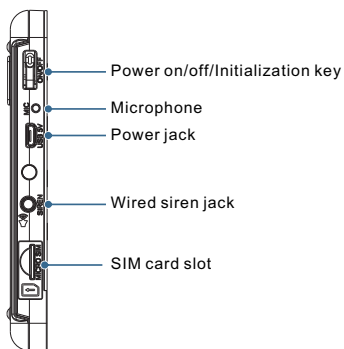
• Top view



• Bottom view



• Side view



• Key of side face

Function	Description
Power on	Press this key, "Welcome" appears in the screen, it means power on.
Power off	Press and hold this key for 3 seconds to power off.
Initialization	Press this key for 5 times to initialize parameters

• Main interface




• Description for main interface


Status bar	1	3	GSM signal		No SIM card	
					GPRS networking indication	
					GSM signal indication Gray color means no signal, 1-5 level stands for GSM signal strength	
		4	WiFi wireless network		1-5 level stands for WiFi signal strength, Gray color means no signal	
					Device already connected to cloud. The white dot on right corner means the binding mobile phone is online.	
		5	GSM task status		Sending SMS	
		6	Keyboard status		Keyboard is locked. There is 5- seconds countdown hint.	
		7	Power status		Powered by main power	
	Powered by back up battery, 0-3 level stands for remaining battery capacity.					
8	Time	08:45	Current time			
Main status zone	2	9	Delay status of clock panel		Clock panel shows current time	
					Exit delay status. After armed, the user should leave the site before countdown time ends. When countdown time ends, it enters into arm mode.	
					Entry delay status. The user should disarm after entrance into the site before countdown time ends. If the user don't disarm, it will trigger alarm when countdown time ends.	
		10	Arm/Disarm status		Arm	
			Stay arm			
			Disarm			
11	On alarm		No alarm			
			Alarm status			
12	Date		Current date			
Keyboard quick hint	13	Keypad		CALL		
				ARM/STAY		
				SOS		
				DISARM		
				MENU		

Menu structure

MENU	Setting	Delay	Exit Delay	Set Exit delay, refer to "Identification for daily operation" Unit: second, Range: 0~65535, Default: 40 seconds	
			Entry Delay	Set Entry delay, refer to "Identification for daily operation" Unit: second, Range: 0~65535, Default: 30 seconds	
			Siren Duration	Set siren duration Unit: minute, Range: 0~65535, Default: 3 minutes	
		Switch	Arm Beep	Set arm beep Select: On/Off, Default: Off	
			Siren	Set Siren Select: On/Off, Default: On	
			Arm SMS	Set Arm/Disarm SMS Select: On/Off, Default: Off	
			Keypad Lock	Set keypad to be locked or not ⁽¹⁾ Select: On/Off, Default: Off	
			Backlight	Set keypad backlight to be on or off ⁽²⁾ Select: On/Off, Default: Off	
			O-Password	System	Set system password Range: 0000-9999, 4 digits, default: 6666
				User	Set user password Range: 0000-9999, 4 digits, default: 1234
		Language ⁽³⁾	简体中文	Simplified Chinese (Default)	
			English	English	
			Deutsch	Deutsch	
		Initialization	Set system Initialization, refer to "Initialization"		
		Reset	Restart alarm host		
		Phone	1st Phone	Set 1st phone number, Dial on/off, SMS on/off	Refer to "Phone number setup"
			2nd Phone	Set 2nd phone number, Dial on/off, SMS on/off	
			3rd Phone	Set 3rd phone number, Dial on/off, SMS on/off	
			4th Phone	Set 4th phone number, Dial on/off, SMS on/off	
			5th Phone	Set 5th phone number, Dial on/off, SMS on/off	

Main menu	Log	Alarm Log	Inquire alarm log history		
		Arm Log	Inquire arm/disarm log history		
	Parts	Add Remoter	Learning new remote control	Refer to "Add/Delete remote control"	
		Del Remoter	Delete all remote control		
		Add Detector	Learning new wireless detector	Refer to "Add/Delete wireless detector"	
		Del Detector	Delete all wireless detectors		
		Add RFID	Learning new RFID card	Refer to "Add/Delete RFID card"	
		Del RFID	Delete all RFID cards		
		Siren Learn	Send 1-second wireless learning signal to external wireless siren.	Refer to "Synchronization with external wireless siren"	
	WiFi	Airlink	WiFi	Set alarm host into wireless network configuration (via APP)	
		Unbind		Unbind alarm host with mobile phone APP	
	Record	Record	Record and playback		Refer to "Voice record"
		Play	Play current recorded voice		
		Delete	Delete current recorded voice		
	Timer	Arm Timer	Set daily arm time and switch on/off		Refer to "Clock/Timing"
Disarm Timer		Set daily disarm time and switch on/off			
Version	Zone & Sync	Set the country or region's standard Greenwich time difference, which is synchronous to internet time. Default time zone: +08:00.			
	Inquire firmware version, serial number, server.				

*Note: 1. When the main keyboard is unlocked, if the user does not do any action or directly press  Key, then the keyboard is locked. After the keyboard is locked, the user needs to input password before using the keyboard.

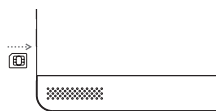
2. When keyboard backlight is off, if the user does not do any action under main interface, or directly press  key, then the backlight is off to save power.

3. When certain language is selected, then the operation voice reminder, display and alarm SMS all are converted to this language. The alarm host will restart when language selection is confirmed.

Initial usage

Start


- ↓ **Insert SIM card** : According to below diagram, insert MICRO SIM card. When a ticking voice is heard, it means the SIM card is inserted properly.



- ↓ **Power on** : Plug power adaptor into **USB 5V** jack to turn on power.
- ↓ **Turn on the alarm host** : Press Power On/Off key, a "welcome" window appears, then the alarm host is turned on.
- ↓ **Turn off the alarm host** : Press and hold Power On/Off key for 3 seconds until the screen is off, then the alarm host is turned off.

System initialization

Continuously press Power On/Off key for 5 times, the alarm host will restart, then system initialization is finished. After system initialization, all the data including remote control, wireless detector, RFID card, language and time zone and other setting are reset to factory default all. IP address is cleared and the alarm host is offline GPRS. The IP address needs to be set again to assure the alarm host to go online and connect with intranet center.

 Please be cautious to use this function. Normally it is only used when user forgets password, or alarm host malfunction, or the parameter is wrongly set, or unknown detector, remote control or RFID card are learnt.

Menu operation

Description for operation keys

Press Previous **[←]** and Next key **[→]** to select menu,

Press Return key **[↵]** to last menu.

Press Enter key **[↵]** to next menu,

1. When **[←]** is used as backspace key, long press **[←]** to delete all input information.
2. For the other function which is not mentioned in this paragraph, please refer to the description in the "Menu Structure".
3. Some operation in this paragraph like phone number setup, add/delete remote control, add/delete wireless detector and Synchronization with external wireless siren also can be realized via APP.

Phone number setup

The host can set up to maximum 5 groups of alarm numbers, each set of numbers can be set independently of their dial-up switch and SMS switch.

Take example as phone number 1:

- ↓ Operation Keyboard: Main Menu → Phone → 1st Phone, enter into phone number setup menu.



- ↓ Press **[*]** to select **##** Number, input the alarm number (up to 18 digits), and press **[←]** to backspace in case of error
- ↓ Press **[*]** to select **%** Dial, press **[*]** to select On or Off. If "On" is selected, the panel will dial the alarm number when an alarm occurs.
- ↓ Press **[*]** to select **SMS**, press **[*]** to select On or Off. If "On" is selected, the alarm host will send SMS to this phone when an alarm occurs.

- ↓ Press **[↵]** to confirm, the alarm host will display "Setting OK".

Add/Delete remote control

Add

- ↓ Operation Keyboard: Main Menu → Parts → Add Remoter → Enter.
- ↓ The alarm host displays "Synchronize" and enters into the 20- seconds countdown dialog window waiting for the remote control synchronization.
- ↓ Press any key of the remote control to send signal to the alarm host.
- ↓ The alarm host displays "Learning OK", then the remote control is successfully added.
- ↓ If the alarm host displays "Device code has been learnt", it means this remote control is already added to this alarm host, please use other remote control to try again.

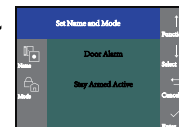
Delete

- ↓ Operation Keyboard: Main Menu → Parts → Del Remoter → Enter.
- ↓ The alarm host displays "Delete Remoter all", meanwhile all stored remote control's number is displayed in the dialog window.
- ↓ Press **[↵]** to confirm, the alarm host displays "Operation OK", all remote control is deleted.

Add/Delete wireless detector(included doorbell alarm)

Add

- ↓ Operation keyboard: Main Menu → Parts → Add Detector → Enter
- ↓ It enters into "Set Name and Mode" dialog window



- ↓ Press **[*]** to select **%** Name, and press **[*]** to select the corresponding name of the zone where the wireless detector is to be added.
- ↓ Press **[*]** to select **%**, and then press **[*]** to select the mode of zone where the wireless detector is located.
 Select "Stay armed Active", When the alarm host is armed or Stay armed, the detector will always alarm if triggered. Suggest to set this mode of detector in the main door, window, balcony, perimeter area.
 Select "Out Armed Active", when the alarm host is Out armed, the detector will not alarm if triggered. Suggest to set this type of detector in hall, bedroom area.
 Select "24 hours Active", the host will alarm at any time once triggered. Suggest emergency, smoke, gas, carbon monoxide, water leaks and other detectors to be set to this mode.
 Selecting "Close", the alarm host will not alarm at any time if triggered.
 For doorbell, please select "Doorbell", then a tinkling sound arises from the alarm host whenever the doorbell is pressed.

- ↓ Press confirm The alarm host displays "Synchronize" and enters into the 20- seconds countdown dialog window waiting for the wireless detector synchronization.
 - ↓ Trigger the wireless detector to launch wireless signal to the alarm host.
 - ↓ The alarm host displays "Learning OK", then the wireless detector is successfully added.
- If the alarm host displays "Device code has been learnt", it means this wireless detector is already added to this alarm host , please use other wireless detector to try again.

Delete

- ↓ Operation keyboard: Main Menu → Parts → Delete Detector → Enter
- ↓ The alarm host displays "Delete detector all", meanwhile all stored detector's number is displayed in the dialog window.
- ↓ Press to confirm, the alarm host displays "Operation OK", all wireless detector and doorbell are deleted.

Add/Delete RFID card

Add

- ↓ Operation keyboard: Main Menu → Parts → Add RFID → Enter
 - ↓ The alarm host displays "Synchronize" and enters into the 20- seconds countdown dialog window waiting for the RFID card synchronization. Put the RFID card close to the sensitive area on the down-right corner of the alarm host.
 - ↓ The alarm host displays "Learning OK", then the RFID card is successfully added.
- If the alarm host displays "Device code has been learnt", it means this RFID card is already added to this alarm host.


Delete

- ↓ Operation keyboard: Main Menu → Parts → Del RFID → Enter
- ↓ The alarm host displays "Delete RFID all", meanwhile all stored RFID card's number is displayed in the dialog window.
- ↓ Press to confirm, the alarm host displays "Setting OK", all RFID cards are deleted.

Synchronization with external wireless siren

This operation instruction is subject to our company model PE-519 wireless siren.

- ↓ Operation keyboard: Main Menu → Parts → Siren Learn → Enter
- ↓ Press and hold the Set button on the siren until 2 sound is heard. The siren's indicator will flash quickly, then it enters into synchronization status.
- ↓ Press to confirm, the alarm host displays "Learn Signal Sent" and send wireless signal to the siren.
- ↓ A long and a short sound arise from the siren, which means successful synchronization.

 After the wireless siren is synchronized with the alarm host, if the alarm host triggers alarm, alarm sound will arises from the siren at the same time.

Record

Record alarm voice

The user can record 20-seconds voice. If alarm occurs, the alarm host will dial preset phone number and play this record alarm voice.

- ↓ Operation keyboard: Main Menu → Record → Record and Play
- ↓ At first the alarm host will display "Busy and waiting please", when it changes to "Recording", it means start to record voice.
- ↓ After recording is finished, the alarm host displays "Playing"and starts automatic playback.
- ↓ After playback is finished, press to save. The alarm host displays "Please wait saving". After a few seconds, "Setting OK" appears, then recorded voice is saved.



Timer

The users can set automatic arm/disarm time according to their own routine time, avoiding repeated operation or missed arm/disarm.

Arm Timer

- ↓ Operation keyboard: Main Menu → Timer → Arm Timer





- ↓ Press to select  Timer, then press the backspace key to delete the original time.
- ↓ Input the 4-digit scheduled arm time (Hour: Minute).
- ↓ Press to select  Switch, and press to select "On/Off".
- ↓ Press to confirm, the alarm host displays "Setting OK" to complete the setting.

Disarm Timer

- ↓ Operation keyboard: Main Menu → Timer → Disarm Timer



- ↓ Press to select  Timer, then press the backspace key to delete the original time.
- ↓ Input the 4-digit scheduled disarm time (Hour: Minute).
- ↓ Press to select  Switch, and press to select "On/Off".
- ↓ Press to confirm, the alarm host displays "Setting OK" to complete the setting.

WiFi Mobile phone APP

The concerned APP description is based on Android system, some description may differ due to APP version or iOS system. All description is subject to installed APP in mobile phone.

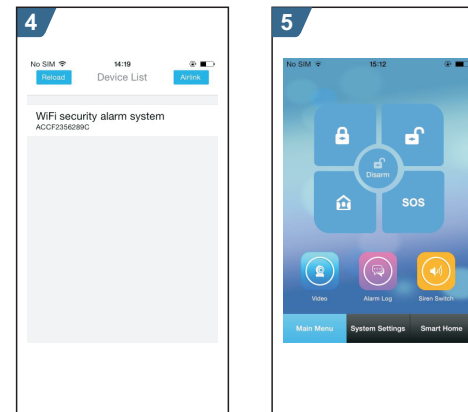
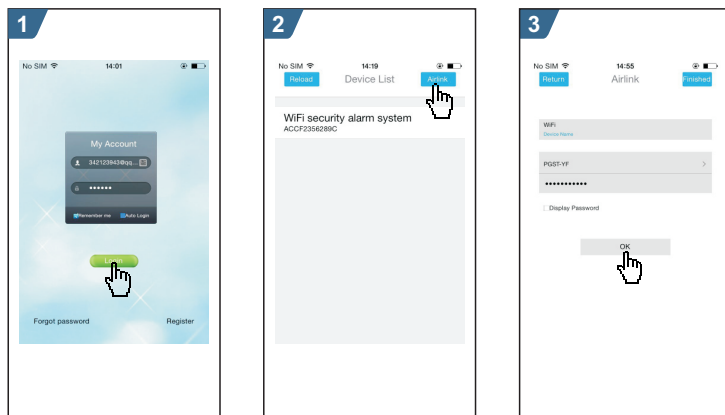
Install

Using mobile phone's browser to scan QR code, then download the APP and install.

APP configuration with alarm host

- ↓ Ensure the alarm host and mobile phone to be in the same WiFi network.
- ↓ Run APP software, and login at the user login interface (new user is required to register ID at first).
- ↓ In "Device List" interface, press "Airlink" button on top right corner to enter into the intelligent configuration interface.
- ↓ Operate alarm host: Main Menu → WiFi → Airlink → Enter, the alarm host displays "Airlinking", and enters into the 60- seconds countdown waiting interface.
- ↓ Select WiFi network listed in the APP and input password, press "OK" to start configuration.
- ↓ The alarm host displays "Airlink OK" to complete configuration. The MAC address of the alarm host will appear in the APP "Device List". One mobile phone can be configured with several alarm hosts. Select the corresponding MAC address of the alarm host, then the mobile can control the alarm host.

Refer to below diagram:



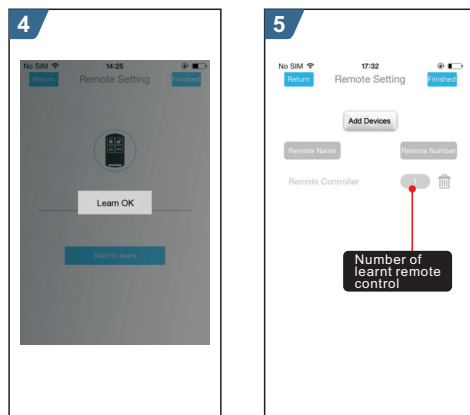
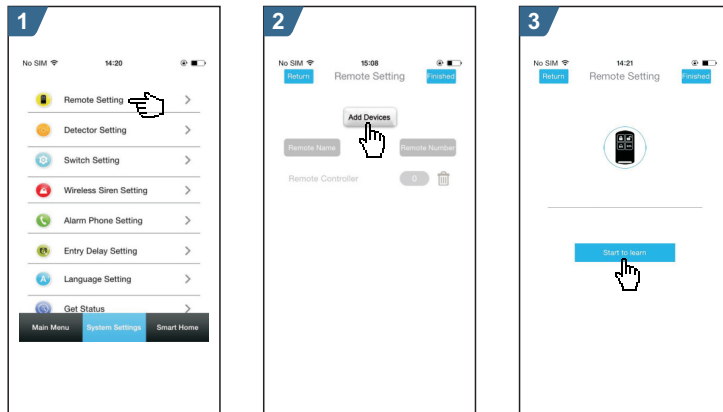
Unbind mobile phone APP with alarm host

- ↓ Operate alarm host: Main Menu → WiFi → Unbind → Enter, the alarm host displays "Unbinding".
- ↓ Waiting for 10-20 seconds, the alarm host unbinds with mobile phone automatically. After unbinding, the mobile phone can not control the alarm host until being configured again.

Add remote control via APP

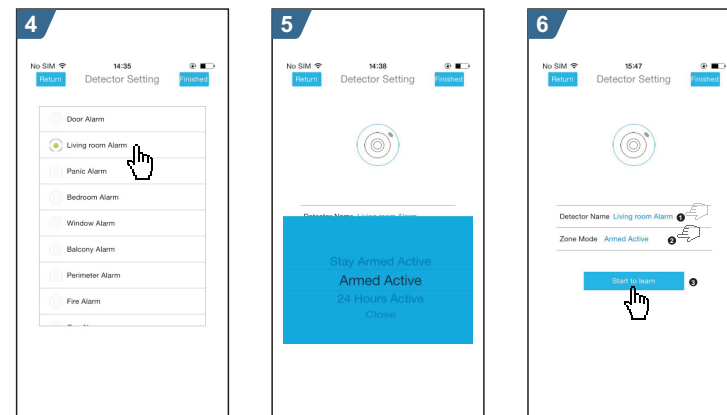
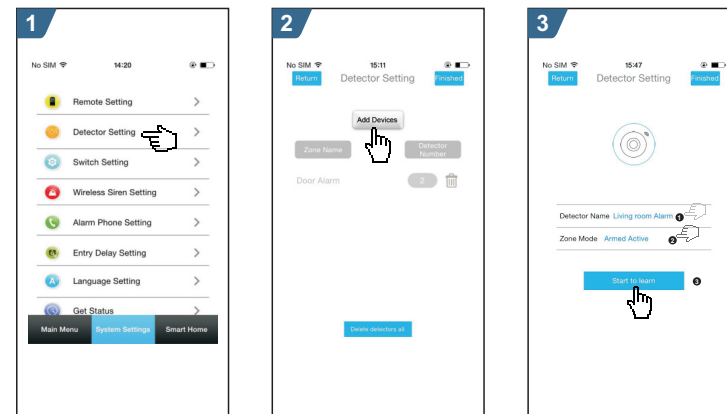
- ↓ Enter into "System Settings" menu.
- ↓ Select "Remote Setting", all remote control is listed in this interface.
- ↓ Select "Add Devices".
- ↓ Select "Start to learn".
- ↓ Press any key in the remote control, the alarm host will send successful information to APP, then learning is completed.
- ↓ "Learn OK" appears in APP.
- ↓ Return to "Remote Setting" to add more remote control.

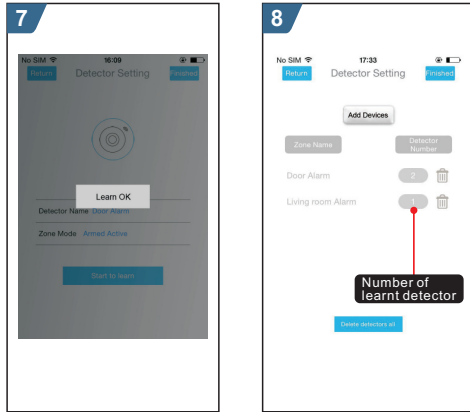
Refer to below diagram:



Add detector via APP

- ↓ Enter into "System Settings" menu.
- ↓ Select "Detector Setting", all detectors are listed in this interface.
- ↓ Select "Add Devices".
- ↓ Press "Detector Name" to select the added detector name.
- ↓ Press "Zone Mode" to select the arm mode.
- ↓ Select "Start to learn".
- ↓ The alarm host will send successful information to APP, the learning is completed.
- ↓ "Learn OK" appears in APP.
- ↓ Return to "Detector Setting" to add more detectors.

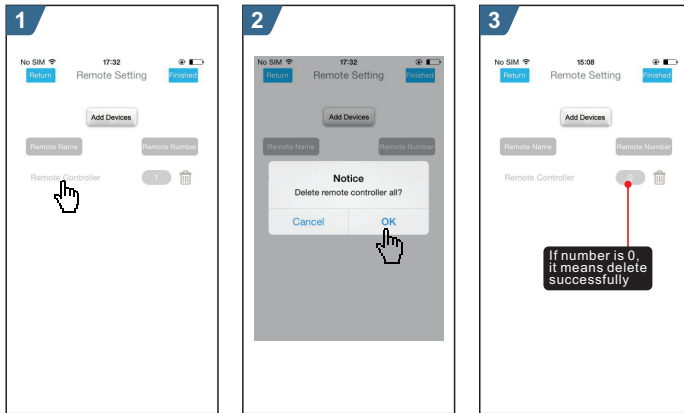




Delete remote control via APP

- ↓ Enter into “Remote Setting” and press “🗑️” icon.
- ↓ Click “OK” to finish deletion in “Delete remote controller all?” popup window.
- ↓ APP returns to “Remote Setting” menu, then remote number will be zero.

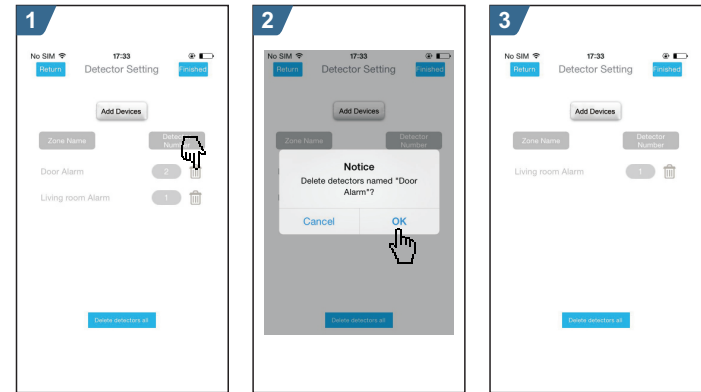
Refer to below diagram:



Delete detector via APP

- ↓ Enter into “Detector Setting” menu, press “🗑️” icon which you want to delete.
- ↓ A window “Delete Detectors named....” appears, click “OK” to finish deletion.
- ↓ APP returns to “Detector Setting” menu, the deleted detectors will not be listed in this interface.

Refer to below diagram:

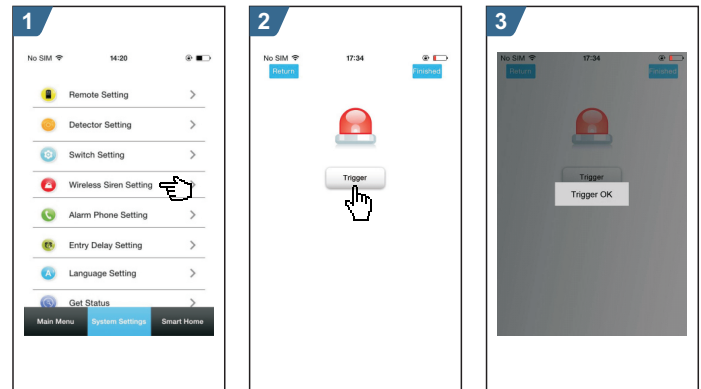


Synchronize external wireless siren via APP

This operation is only to send synchronization signal via APP to external wireless siren which is being learnt. Refer to “Synchronization with external wireless siren”.

- ↓ Enter into “system settings”, and select “Wireless Siren Setting”.
- ↓ Click “Trigger”, APP will send wireless signal to the alarm host.
- ↓ “Trigger OK” appears, the synchronization is finished.

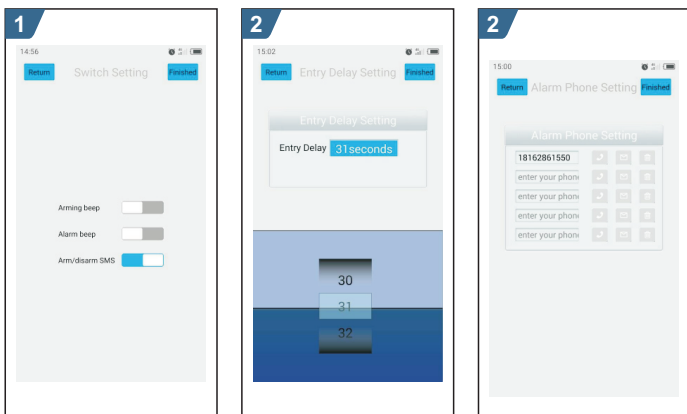
Refer to below diagram:



Inquire/set parameter: Set function switch; Set alarm phone; Set delay alarm

- Enter into System Setting → Switch Setting, there are 3 options(Arming beep, Alarm beep, Arm/disarm SMS) to select On/Off accordingly.
- Enter into System Setting → Alarm Phone Setting, click “📞” icon to activate phone calling function when alarming, click “✉️” icon to activate SMS function when alarming.
- Enter into System Setting → Entry Delay Setting, to select the delay time in the time roll. The unit is second.

Refer to below diagram:



Remote SMS

Parameter setup

The user is required to edit SMS message according to below format, and send the SMS message to SIM card in the alarm host.

*	Engineer Password*	Address	Content	*	Address	Content	*
---	--------------------	---------	---------	---	---------	---------	---

One SMS message can includes one or more address or content, but it must be separated by * and the first and last data must be *. The address should be founded of 2 digits. One SMS content can include maximum 160 bits. It is suggested to put all contents in one SMS.

Address	Function	Contents and Limit	Factory Default
35	Times of redial	1~255 times	Once
36	Times of auto answering ring	1~255 times	Once(reserved)
38	Revise user password	0000~9999 4 digits	1234
39	Revise system password	0000~9999 4 digits	6666
43	Initialization	Empty, refer to Note 1	
51	Set alarm phone 1	Refer to Note 2	Off
52	Set alarm phone 2	Refer to Note 2	Off
53	Set alarm phone 3	Refer to Note 2	Off
54	Set alarm phone 4	Refer to Note 2	Off
55	Set alarm phone 5	Refer to Note 2	Off
62	Inquire GSM signal strength	Empty	
90	Set GPRS server IP address	This operation is only valid for online GPRS. Refer to Not 3	Empty
92	Set GPRS APN	This operation is only valid for online GPRS. Refer to Not 4	CMNET
93	Set NTP IP	Refer to Note 5	us.ntp.org.cn
94	Set Greenwich time zone	Refer to Note 5	+ 8

Note: Below examples are based on default system password 6666

1.Initialization: All learnt remote control, wireless detector and RFID card are remained, the other parameter is reset to factory default.

Set SMS contents: *6666*43*

2.Format of alarm phone number:xxxxxxxxxx,A,B

XXXXXX is phone number(Max. 18 digits), A is calling alarm switch(1-on, 0-off). B is SMS alarm switch(1-on, 0-off) .

Example: Set 2 alarm phone numbers as 13912345678 and 075581234567. 13912345678 is used to receive calling and SMS alarm, 075581234567 is used to receive calling alarm, then please set SMS contents according to below format:

`*6666*5113912345678,1,1*52075581234567,1,0*`

3. Format of IP address: : `aaa,bbb,ccc,ddd,xxxx`
`aaa,bbb,ccc,ddd` is IP address, `xxxx` is the port, separated with comma.

Example: Set GPRS server IP address as 116.62.42.223, port is 2001, then please set SMS contents according to below format:

`*6666*90116,62,42,223,2001*`

4. Set GPRS APN

Example: The local GPRS APN is internet.beeline.kz, then please set SMS contents according to below format:

`*6666*92internet.beeline.kz*`

5. Set Greenwich time zone : Set auto synchronization between alarm host clock and internet time. Time difference zone range: -12.0~13.0

Alarm host name setup

The user can set a name for the alarm host which is used as the prefix of SMS phone number. This helps to recognize the alarm host or specific alarm location.

Example: SMS `1234@XX Building a Block`, 1234 is password, @ is command, `XX Building a Block` is the name(Max.40 bits)

Parameter inquiry

 All feedback SMS contents are written in English, please inquire according to below description.

Inquire system setting

SMS format : `*6666*62*`, Alarm host feedback SMS :

SYSTEM set:	
SN:	Alarm host serial number
LANGUAGE:	Alarm host language
ENGINEER PASSWORD:	Engineer password
USER PASSWORD:	User password
GSM CSQ:	GSM signal strength (0 or 99 means abnormal strength)
WIFI RSSI:	WiFi signal strength

Inquire system setting2

SMS format : `*6666*90*`, Alarm host feedback SMS :

SYSTEM set2:	
APN:	GPRS name
GPRS IP:	GPRS server IP address and port
NTP:	Internet time server domain
TIME ZONE:	GMT standard time zone
SERVER:	Current WiFi server

Alarm phone setup inquiry

SMS format : `*6666*51*`, Alarm host feedback SMS :

PHONE set:	
1:	1st alarm phone number, voice alarm switch, SMS alarm switch, general switch
2:	2nd alarm phone number, voice alarm switch, SMS alarm switch, general switch
3:	3rd alarm phone number, voice alarm switch, SMS alarm switch, general switch
4:	4th alarm phone number, voice alarm switch, SMS alarm switch, general switch
5:	5th alarm phone number, voice alarm switch, SMS alarm switch, general switch
REDIAL COUNTER:Redial times of voice alarm	

Delay setup inquiry

SMS format : `*6666*33*`, Alarm host feedback SMS :

DELAY set:	
ENTRY:	Entry delay(unit: second)
EXIT:	Exit delay(unit: second)
SIREN:	Siren duration(unit: minute)

Switch setup inquiry

SMS format : `*6666*46*`, Alarm host feedback SMS :

SWITCH set:	
ARM/DISARM BEEP:	Arm/Disarm switching beep(1:on, 0:off)
ALARM BEEP:	Siren alarm beep(1:on, 0:off)
ARM/DISARM SMS:	Arm/Disarm SMS switch(1:on, 0:off)

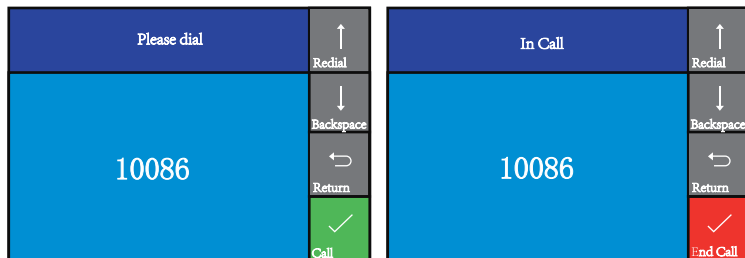
Remote control/detector/RFID card inquiry

SMS format : `*6666*26*`, Alarm host feedback SMS :

DETECTOR learned:	
REMOTE:	Number of remote control
DETECTOR:	Number of detector
RFID:	Number of RFID card

Phone function



In Main Interface, press **1** CALL key to make calling.
Please operate according to the hint in this interface.



 In case of following condition, No GSM network, in Arm mode, on alarm, making a call is forbidden.

Daily operation

The user can control the alarm host by any of following ways :

- ✓ Remote control, Keyboard, RFID card.
- ✓ Remote SMS.
- ✓  Mobile phone APP.
- ✓  GPRS alarm center.

Out Arm

By remote control: press **[🔒]** key to activate Out Arm.

By keyboard: In Main Interface, press **[🔒]** to activate Out Arm.


By RFID card: In Disarm mode, put the RFID card close to the sensitive area on bottom right corner of the alarm host.

By remote SMS: Send SMS message **1234#1** (1234 is user password) at first, then the alarm host will feedback "System Armed!" SMS to mobile phone to confirm.

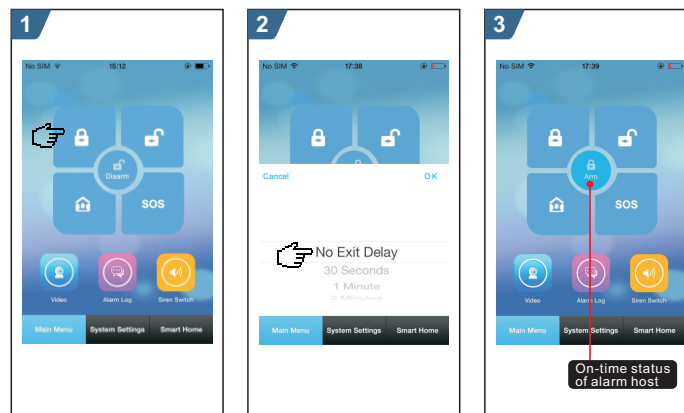
By APP: In Main Menu, select **[🔒]** icon, then select delay arm time(exit delay).

After around 3 seconds, Out Arm mode is completed.

The alarm host reminder: A reminding voice "System armed" will be heard, the Main Interface displays "Armed" and "Please exit", and an exit time progress bar appears. The user should leave the alarm zone before exit time. If Arm/Disarm SMS switch is on, the preset phone will receive "System Armed!" SMS.


 Under Out Arm mode, all defense zones are on alert status. If any defense zone is triggered, the alarm host will generate a local siren alarm, and send alarm SMS or make calling to the preset phone numbers , simultaneously send the alarm message to mobile phone APP or GPRS alarm center.


Refer to below diagram:




Stay Arm

By remote control: Press  key to activate Stay Arm.

By keyboard: In Main Interface, press  key for twice to activate Stay Arm.

By APP: In Main Menu, select “” icon. After around 3 seconds, Stay Arm mode is completed.


The alarm host reminder: A reminding voice “System armed” will be heard, the Main Interface displays “Stay Armed”. If Arm/Disarm SMS switch is on, the preset phone will receive “System Stay Armed!” SMS.


 Under Stay Arm mode, only valid Stay Arm defense zones are on alert status. If any defense zone is triggered, the alarm host will generate a local siren alarm, and send alarm SMS or make calling to the preset phone numbers, simultaneously send the alarm message to mobile phone APP or GPRS alarm center.

Refer to below diagram:




Disarm

By remote control: Press  key to activate Disarm

By keyboard: In Main Interface, press  to activate Disarm

By RFID card: In Arm/Stay arm mode, put the RFID card close to the sensitive area on bottom right corner of the alarm host.

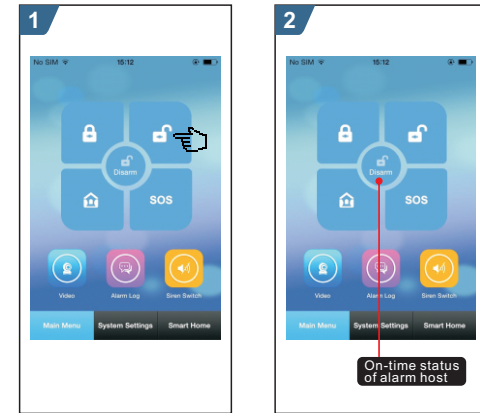
By remote SMS: Send SMS message `1234#2` (1234 is user password) at first, then the alarm host will feedback “System Disarmed!” SMS to mobile phone to confirm.

By APP: In Main Menu, select “” icon. After around 3 seconds, Disarm mode is completed.

The alarm host reminder: A reminding voice “System Disarmed” will be heard, the Main Interface displays “Disarmed”. If Arm/Disarm SMS switch is on, the preset phone will receive “System Disarmed!” SMS.

 Under Disarm mode, all the alarm procedure will be terminated.

Refer to below diagram:



SOS

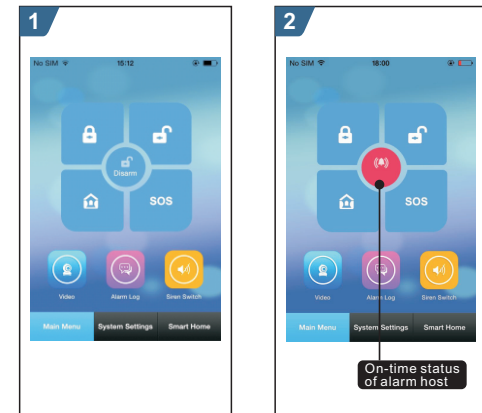
By remote control: Press **SOS** key to activate SOS.

By keyboard: In Main Interface, press **0** to activate Disarm

By APP: In Main Menu, select “**SOS**” icon.

The alarm host reminder: The Main Interface displays “Help”. The alarm host will generate a local siren alarm, and send alarm SMS or make calling to the preset phone numbers, simultaneously send the alarm message to mobile phone APP or GPRS alarm center.

Refer to below diagram:



SMS notification feedback

< The alarm host name > :
Remote operation result

Alarm and remote monitoring

The alarm host supports diverse alarm types. When alarm is triggered, it will send alarm SMS to the user's mobile phone and push alarm message to APP, simultaneously send alarm message to GPRS alarm center and make calling to the user, then the user can do on-time monitoring and remote operation.

The alarm host also support following alarm types,

- ✓ The main power malfunction(when main power malfunction lasts for 5 seconds, the alarm is activated)
- ✓ Back up battery shortage(In case of main power malfunction, when back up battery's voltage is lower than 3.45V and lasts for 10 seconds, the alarm is activated)
- ✓ Main power recovers.
- ✓ Anti-tamper alarm(When the mounting bracket is separated with the alarm host, the alarm is activated).

SMS alarm

When any alarm is triggered, the alarm host will send SMS to preset phone numbers as following contents:

< The alarm host name > :
Current alarm

Voice alarm and remote monitoring

Automatic dialing preset phone number when the alarm host alarms

When any alarm is triggered, the alarm host will automatically dial preset phone numbers(make sure the dial switch is on). After the user ringed, the alarm host will play current alarm type at first. If there is a preset voice, this voice will be played. Then the user will hear reminding voice "Press 1 to arm, press 2 to disarm, press 3 to monitor, press 4 to talk". If it is mistake alarm, the user can press "2" to activate Disarm. The user also can press "3" or "4" to turn off the alarm sound for better monitoring. If monitoring is unnecessary, just quit calling.

If the user does not answer the call or failed calling, the alarm host will constantly dial the preset phone number according to the preset redial times until the user answers the call.

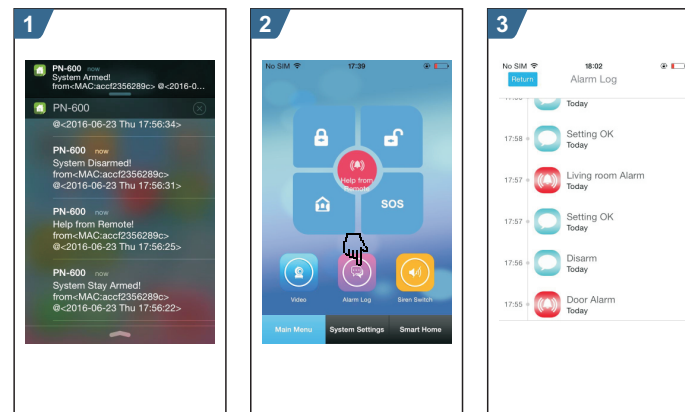
Preset phone number to call alarm host

If the preset phone number voluntarily calls the alarm host, the alarm host will automatically answer the call, then the user can do on-time monitoring and remote operation.

Alarm receiving procedure via APP

When any alarm is triggered, the alarm host will push alarm message to mobile phone at first. Open APP and enter into main menu, the user can see a red alarm icon in the middle status bar and the current alarm type. The user can select "Alarm Log" icon to inquire all operation record and alarm log.

Refer to below diagram:



Receiving alarm by Intranet monitoring center

When any alarm is triggered, the alarm host will send alarm message to GPRS alarm center. The alarm center can handle the alarm quickly after receiving and confirming the alarm message.



The function is only valid when the IP address is correctly set. Proper APN setting is required for foreign countries. Please refer to "SMS parameter setup" for details.

Specification

- Input voltage: DC5V(micro USB jack)
- Working current: <120mA
- Standby current : <80uA
- Siren output:<500mA
- Wireless frequency: 433MHz
- Wireless coding: EV 1527
- GSM bands: 850/900/1800/1900MHz
- WiFi standard: IEEE802.11b/g/n wireless standard
- Back up battery: 3.7V/300mAh lithium battery
- Working temperature: : 0~55°C
- Relative humidity: < 80%RH (No freezing)
- Product dimension:185x125x14.7MM (LxHxT)

Packing List

- Alarm host x1
- Micro USB 5V/1000mA Power adapter x1
- Wireless PIR detector x1
- Door sensor x1
- Remote control x2
- RFID card x2
- Wired siren x1

PGST[®]

Date: Mar.4th,2017

产品型号	PG-103	部件名称	PG-103公司标准英文说明书V1.0
设计	Belinda	材 料	封面128铜板纸（表面过哑膜） 内页70G双胶纸
品 号			
工 艺		成品尺寸	120*180MM

注：封面封底四色CMYK
内页单色

1. Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following

measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different

from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.

NOTE: This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

RF Exposure Statement

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance of 10mm the radiator your body.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF Exposure Information:

The SAR limit of USA (FCC) is 1.6W/kg averaged over one gram of tissue. Device Types (FCC ID: 2AIT9PG-103) has also been tested against this SAR limit.

The highest SAR value reported under this standard during product certification for use when properly worn on the body is 0.622 W/kg .

Simultaneous RF exposure is 0.679W/Kg.

This device was tested for typical body - worn operations with the back of thehandset kept 5mm from the body.To maintain compliance with FCC RF exposure requirements, use accessories that antain a 0mm separation distance between the user's body and the back of thehandset.

The use of belt clips, holsters and similar accessories should not containmetallic components in its assembly.

The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly.

The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.