

GSM Intercom Manual



Please read these instructions completely before use

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Thank you for purchasing PFGSM-1 Intercom. Please read this manual carefully before using. Be sure to keep this manual for future reference in case of any problems or questions should arise.

IMPORTANT SAFETY INSTRUCTIONS

When using this PFGSM-1 Intercom, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury. Please read the following before using your equipment.

1. Follow all warning and instructions on the product.
2. Unplug all the connections of product before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
3. Do not use this product near water.
4. Do not use this product near an area where there is a potential of gas leaks or near any fumes that can be explosive.
5. Do not place this equipment near or over a radiator or any other heat source.
6. Do not overload the wall outlet or power cord where the power adapter is installed. This can result in fire or electric shock.
7. Avoid spilling liquid on this equipment and do not insert any objects through the ventilation slots.
8. Avoid using the equipment during an electrical storm. There is a remote risk of electrical shock from lightning.

PFGSM-1 INTERCOM INTRODUCTION

The GSM Intercom PFGSM-1 is an intercom system, installed at the entrance of a building. It is an ideal product replacing the traditional door phone. It allows you to speak with visitors standing at the entrance of your company or house entrance from a remote location. A visitor, by simply pressing the call button establishes a mobile call with you. During the call you will be able to activate the relay connected.

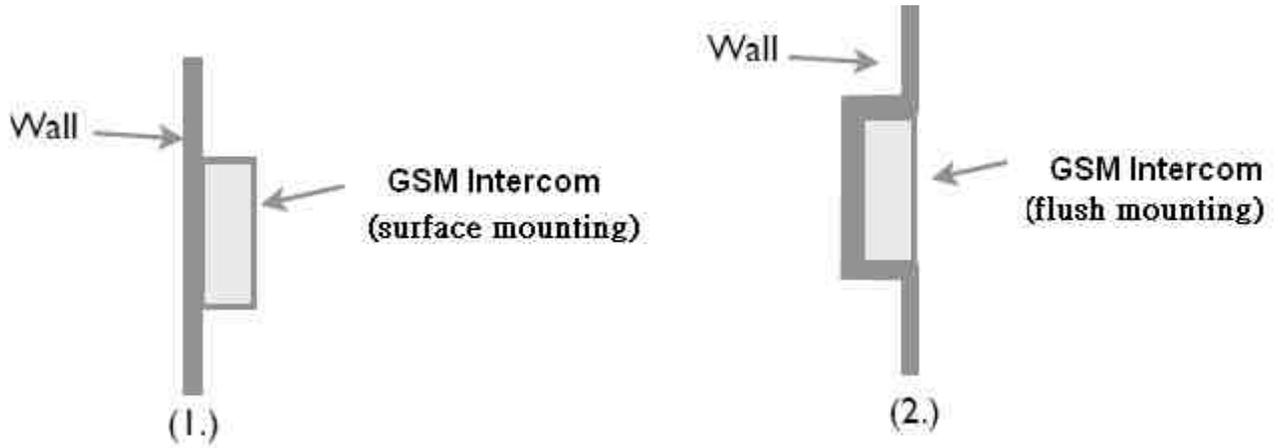
This PFGSM-1 Intercom gives you the opportunity not only to know who is waiting at the entrance from a remote location but also to control the access point. Use of PFGSM-1 Intercom at your company or house does not require any special installation or wiring. Simply install the PFGSM-1 and connect the door latch and power supply.

SS91BM GSM INTERCOM WITH ACCESSORIES

Item	Description	Q'ty	Included	Optional
1	SS91BM - GSM Intercom	1	⊙	
2	Power adapter	1	⊙	
3	External antenna	1	⊙	
4	Mounting Bracket for antenna	1	⊙	
5	Operational manual	1	⊙	

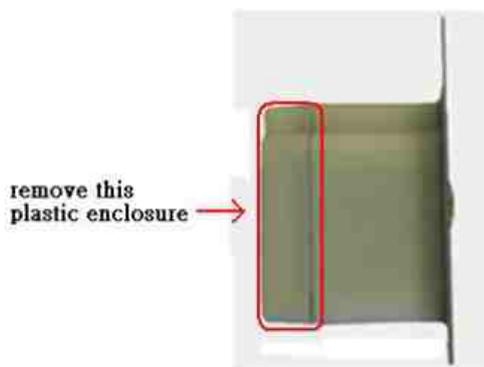
INSTALLATION

This GSM Intercom is suitable for both flush and surface mounting.



Note:

For surface mounting, you will have to remove the plastic enclosure before fitting main station into the stainless steel cabinet

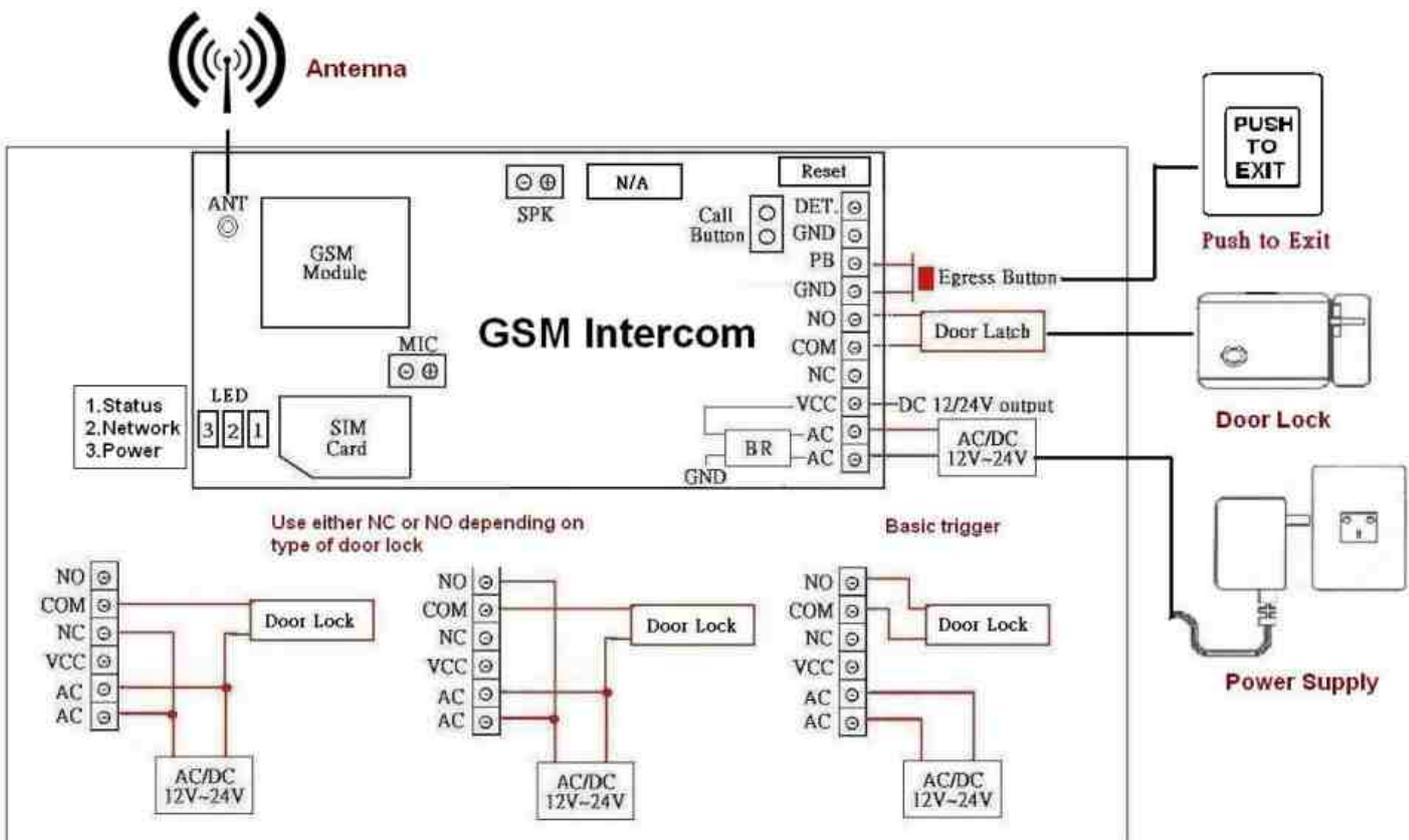


SS91BM GSM IntercomUnit



Speaker **Call Button** **Microphone**

Wiring Diagram



LED INDICATORS

1. LED “Intercom Status“ Indicator

LED	Status
Yellow (standby)	Flashing
Yellow (using)	Solid

2. LED ‘Network“Indicator

LED	Status
Green(ready)	Flashes once per 3 seconds
Green(searching)	Flashes once per second
Green(busy)	Solid

3. LED “ Power “ Indicator

LED	Status
Red(power on)	Solid
Red(power off)	Off

1. SM card

Register your SIM card with the network, and check it works in a mobile phone

You MUST remove the PIN request from the SIM before inserting it in the unit PFGSM-1

Ensure the power is OFF before inserting the SIM card. Carefully slide the SIM holder in the OPEN direction, insert the SIM, and slide in the CLOSED direction to lock it in place.

2. Antenna

Install the antenna as high as possible on the top of the pillar for best possible reception.

3. Door Lock

Connect an electric door lock to terminals marked “doorlatch.”

4. Power Supply

Connect a 12 volt DC power supply to terminals marked “AC, AC”

The power supply should be capable of supplying a constant current of no less than 1amp.

5. After a final check of wiring switch on the power

6. Allow 20~30 seconds for the unit to boot up and detect the network. Once successful connection has been made, the unit will sound a confirmation tone and the status LED will begin flashing.

PFGSM-1 GSM INTERCOM OPERATION

When the visitor pushes the call button to activate the PFGSM-1 ring tone will be heard from the GSM intercom. At the same time connection is established with the phone number that is stored in the PFGSM-1. If the first number is busy or not answered the call can be diverted to the second and the third. The remote phone answers the call from PFGSM-1 and starts conversation with the visitor. During conversation press* on your mobile for door open. The relay switches can also be temporarily or permanently switched on or off by press # and 1

Enter system menu

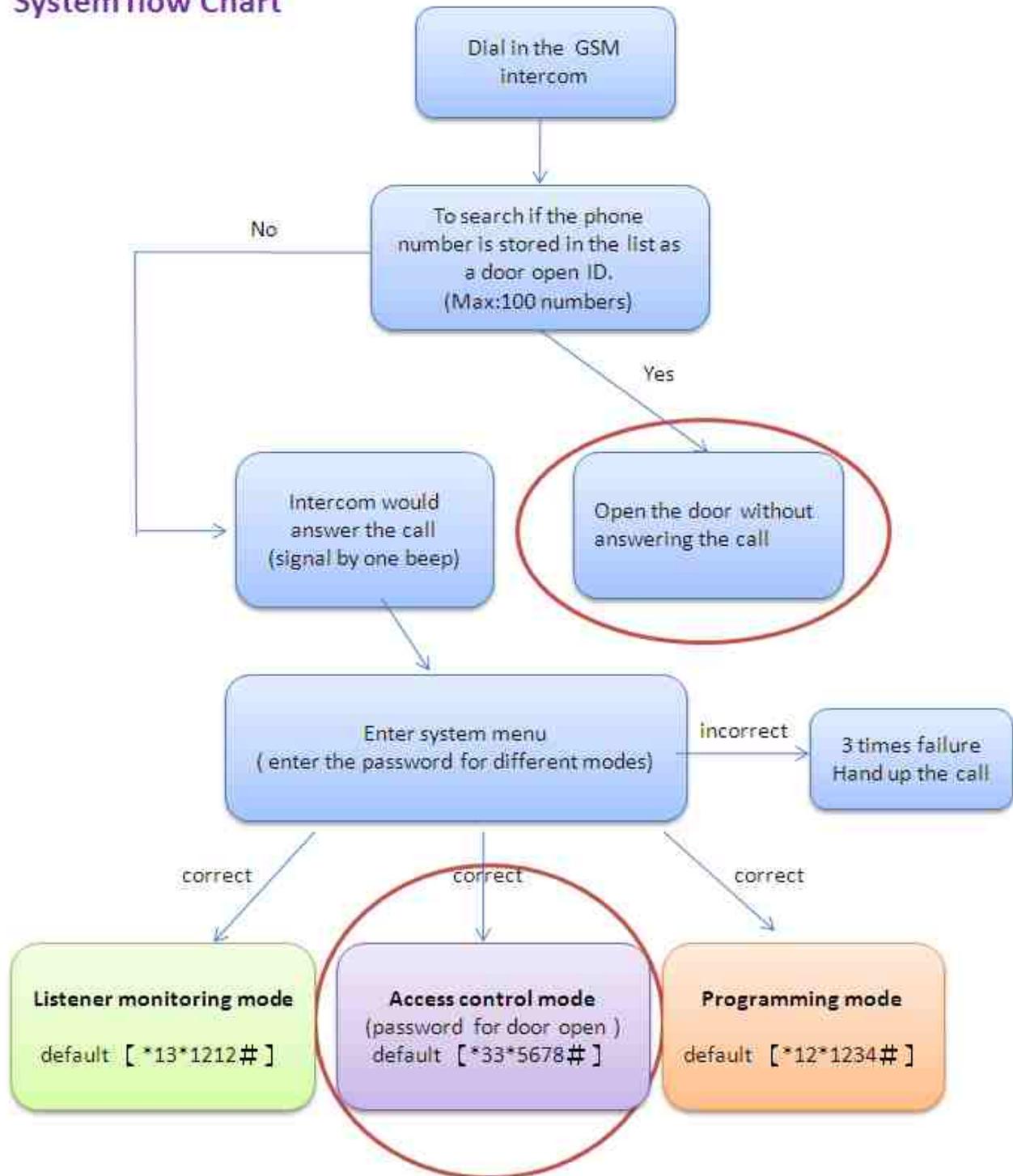
There are three different modes under system menu.

1. Listener monitoring mode
2. Access control mode
3. Programming mode

To gain access to the system menu via dial in, follows these steps:

1. Call the telephone number of the GSM intercom
2. Wait for the intercom to answer and signal by one beep to enter system menu
3. Enter the password of the mode you would like to enter
4. Password correct one beep password error 3 beeps.
5. 3 times failure attempt on password , hang up the call

System flow Chart



Enter Listener Monitoring Mode

1. Call the telephone number of the GSM intercom
 2. This device will then verify your phone number with your predefined numbers.
 3. You will hear a “Do” tone to enter listener monitoring mode by pressing **【*13*1212#】** where 1212 is the password.
 4. You are now in the “listener monitoring mode” (you can hear the live sound of the intercoms surrounding environment)
- * Under this mode speaker is OFF. (**35# : turn on speaker**)
- * You can still control the relay output when you are under listener monitoring mode but speaker must be ON status

Enter Access Control Mode

1. Call the telephone number of the GSM intercom
 2. This device will then verify your phone number with your predefined numbers.
 3. You will hear a “Do” tone to enter access control mode by pressing **【*33*5678#】** where 5678 is the password.
 4. The door will be opened after enter the correct password
- *(To open the door by password, if the number is not stored in the access control section)

Enter Programming Mode

1. Call the telephone number of the GSM intercom
 2. This device will then verify your phone number with your predefined numbers.
 3. You will hear a “Do” tone to enter into programming mode by pressing **【*12* 1234#】** where 1234 is the password.
 4. You are now in the “programming mode”
- Note: At the end of each command there can be one of the two indications:
Successful long “beep” tone, failed: three short “beep” tone.**
5. To make changes on settings please refer to the user commands. (B,116)
 6. To end programming mode just hang up.

NOTE:

***To be successful in programming, originate a call from a land line and enter the digits slowly or using programming by text message.**

Programming

Programming can be carried out either by dial into the GSM intercom or by text message

(Certain programming features can only be set up by text message, please refer to user commands P.15)

Programming by text message

Programming by text message is the simplest way to customize the settings of the GSM intercom and add or delete telephone numbers. Simply send texts in the format to the telephone number of the SIM within the GSM intercom.

Note:

1. A Single SMS text messages is limited to 140 characters
2. You can program many different user command codes in one text message with SMS command format. ***12*1234# [command Code1] # [command Code 2] # [command Code 3] #.....**
3. Each SMS must start with the pass code , default 1234 in the following format **#12*1234** Followed immediately by a command.
4. To program a call button numbers DO NOT enter country code, just the complete number as you would dial it.

Example:

Storing a call button phone number (Max 3 numbers) and delete 2&3 phone numbers. (Refer to user commands P.16)

05857235 (landline number1)

0865682554 (mobile number2)

0862235644 (mobile number3)

Command to use: *12*1234#1[Y][phone number]# Y= 1~3 (sequence of phone number)
--

SMS format: (storing a call button phone numbers)

*12*1234#1105857235#120865682554# 130862235644#

SMS format: (delete 2&3 phone numbers from a call button)

*12*1234#12*#13*#

User command code CORRECT

SMS format:

*12*1234#1105857235#120865682554# 130862235644#

SMS reply:

1105857235#120865682554#130862235644# OK

User command code ERROR (user command 19 error)

SMS format: *12*1234#1105857235#190865682554#130862235644#

SMS reply: 11 0587235#190865682554# Error

Programming by dial in

Note: programming dial in can't be used from telephones which are already programmed to open the door when they dial the GSM intercom but you can disable Caller ID display (withhold the number) on the mobile before using.

To gain access to the programming mode via dial in, follows these steps:

Example:

Storing a telephone number for dial in door release

Enter Programming Mode by Pressing.....

***12*1234#** (1234 is default password)

A successful pass code will produce a single long beep. A failed attempt will produce 3 short beeps.

You may now program up to 100 telephone numbers into memory.

Use the following commands to program the unit

- * Insert international country code (1~3 digits): **71 [country code] #**
- * Add a number (up to 100 numbers):**72 [telephone number] #**
- * Delete a number: **73 [telephone number] #**
- * Delete all numbers: **73*#**

Door /Gate Release(ring in to open)

This GSM intercom also has an extra feature to allow user to gain access from their mobile phone by two methods.

1. Caller ID recognition
2. by access control password mode

1. Caller ID recognition to open

Ring in to open the door for authorized telephone number. It can support for up to 100 users.

When GSM Intercom receives a call from user, it will check the calling number and if the number is in the list, the GSM Intercom will drop the call and then open the gate/door. The GSM Intercom doesn't answer the call, it simply checks the caller ID, and so it won't cost you anything to open the gate / door.

For Caller ID recognition to open the door or gate you need to program the mobile numbers and country code into the memory before using.

Example:

Ireland Country code: 353 (UK: 44 / USA: 1)

086 5683624 (mobile number 1)

086 5682554 (mobile number 2)

086 2235644 (mobile number 3)

Command to use: *12*1234#71[country code]#72[phone number]#72[phone number]#...

SMS format:

*12*1234#71353#720865683624#720865682554#720862235644#

To delete phone numbers of dialing in to open

SMS format: (to delete phone number 1 and 2)

*12*1234#730865683624#730865682554#

SMS format: (to delete all numbers)

*12*1234#73*#

After the numbers are programmed you can also send the text message to check the stored numbers by sending SMS format *21#, then the GSM intercom will reply the phone number list text message.

2. Access control password to open

Dial the SIM card telephone number. The unit will answer the call and you will hear a bleep tone.

To trigger door by pressing *33*5678#

To latch or hold open door by pressing *34*5678#

To unlatch door by pressing *35*5678#

*Above operation same as sending SMS commands

*This is for door open option for telephone numbers not stored.

Check GSM signalstrength (0 ~ 31 levels)

When a request for GSM signal strength SMS is sent to the GSM intercom it will reply with a signal strength code and service provider name. The code will be between 0~31 means the signal level is from poor to best.

Example:

SMS format *20#

SMS reply Vodafone Signal Level = 31 【Signal is very strong】

Check Relay Status

You can send SMS command code to check relay status

SMS format*22#

SMSReply Relay=ON Detect=ON【Relay=Hold , Detect=GND】

Remark:

Terminal mark Detect' (see wiringdiagram) is for you to connect a door red switch The gates would have a reed switch wired through "DET" input to groundIt's used by the user to check if the gates are open or closed

Administrator Number

Once the administrator number is stored in the unit whether programming via dialing in or text messages can only carry out by this number.

Example:

Programa mobile number as administrator number via SMS

Mobile number0865682554

Command to use*12*1234#74 [Admin number]#

SMS format *12*1234#740865682554#

To delete the Admin number *12*1234#74*#

To gain access to the different modes and control (by dial in)

No.	Function	command	Description	Default
1	Enter Programming Mode	*12* [password] #	Programming by calling	1234
2	Enter Monitoring Mode	*13* [password] #	To hear the surroundings where the intercom installed	1212
3	Enter Access control Mode (Trigger relay)	*33* [password] #	Password mode access option	5678
4	Hold Relay	*34* [password] #	To hold relay to keep door opened	5678
5	Release Relay	*35* [password] #	To release relay for door close	5678

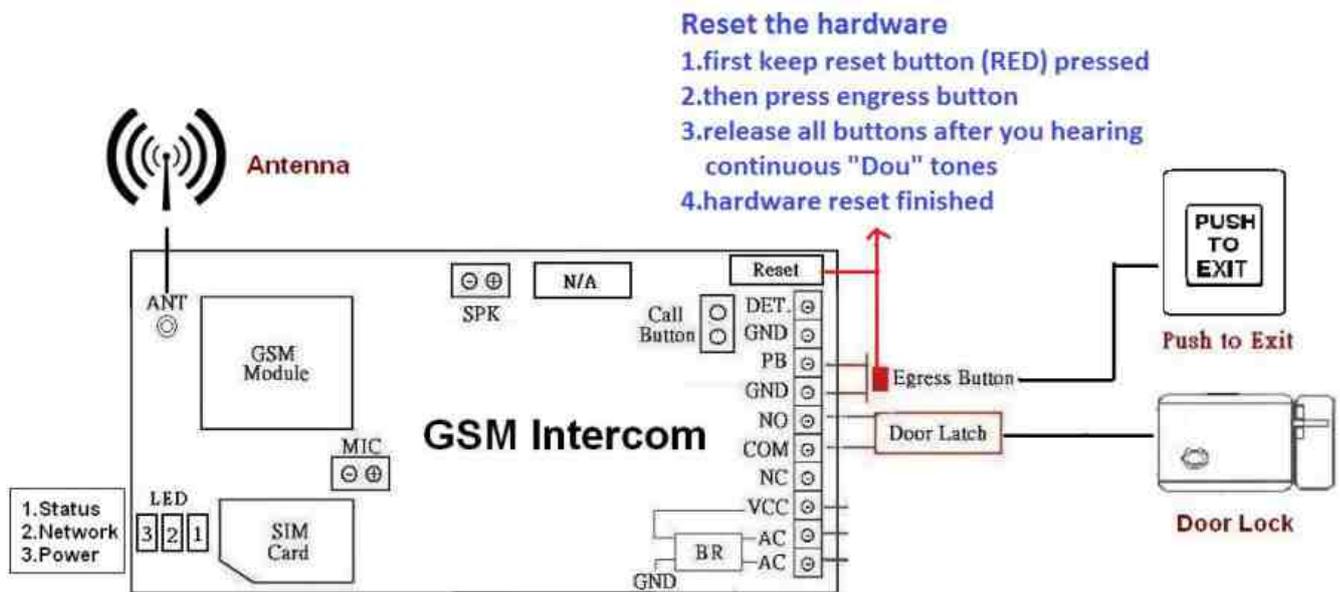
User commands list to check system info & control relay via SMS

No.	Function	Command	Reply
1	Programming by text message format	*12*1234 # [command Code 1] # [command Code 2] # [command code 3] # [command code 4] .#.....	Successful: command Code#..... OK Failed: command Code#..... Error (default password:1234)
2	check signal strength	*20#	Signal Level 0-31 from poor to best Service provide name, network
3	Check stored numbers	*21#	O [number]...,I [number].....E (N) O : call button numbers list I : dial in to open numbers list E : End N : Next SMS
4	Check relay status	*22#	Relay[status],Detect[status] Status: ON / OFF
5	Trigger relay	*33* [password] #	No reply (default password:5678) (Latch on when relay is on hold status)
6	Hold relay	*34* [password] #	No reply (default password:5678)
7	Release relay	*35* [password] #	No reply (default password:5678)
	• SMS data error	(Only 0~9, *, # are available)	SMS Data Error
	• Function code error		Function Code Error

User commands table

No.	Feature	Command	Description	Default
1	Change password of Programming Mode	01 [password] #	password:4 digit codes	1234
2	Change password of Access control Mode	02 [password] #	password:4 digit codes	5678
3	Change password of Monitoring Mode	03 [password] #	password:4 digit codes	1212
4	Store a call button number	1 [Y] [phone number] #	Y=1~3 (sequence of phone number) Max 3 phone numbers phone No.:3~15 digit codes	None
5	Delete a call button Phone number	1 [Y] * #	Y=1~3 (sequence of phone number) phone No.:3~15 digit codes	None
6	Speaker Volume	3 [speaker volume] #	speaker volume:0~4 levels	3
7	Microphone Volume	4 [microphone volume] #	microphone volume:0~4 levels	3
8	Relay Time	51 [relay time] #	relay time: 1~9999 sec	1
9	Divert to second no. time	52 [divert time] #	divert time :10~99 sec	20 sec
10	Call Time	53 [call time] #	call time:005~999 sec	060 sec
11	Monitoring duration time	55 [duration time] #	duration time:00~60 minutes 00 (no restriction)	10 mins
12	Change trigger relay code	61 [X] #	X=0~9 / * / #	*
13	Change old relay code	63 [X] #	X=0~9 / * / #	#
14	Change release relay code	64 [X] #	X=0~9 / * / #	1
15	Ring in to open the door (Max: 100 numbers)	71 [country code] # 72 [Add phone number] # 73 [Del a phone number] # 73*#	Country code:1~3 digit codes Add number: 3~15 digit codes Del a phone No.3~15 digit codes Del all phone numbers	886
16	Add administrator phone number	74 [admin number] #	admin number:3~15 digit codes (no number no restriction)	None
17	Del administrator phone number	74*#	delete administrator phone number	None
18	Reset	999#	reset default	None

How To Reset The Hardware When You Forget your Password



SS91BM GSM Intercom Specification	
Operating Voltage	12 to 24 VoltAC/DC
Operating Current	Maximum 250mA,Typically 55mA
GSM Frequency	GSM 850/900/1800/1900 or GSM 900/1800MHz (Cinterion module)
Physical size	Face plate: 170 x 100 mm, Stainless cabinet 174 x 113 x 65 mm
Length of antenna	3 meters cable
Humidity	Less than 80% RH
Operating Temperature	-20°C to 50°C