MANUAL

3G INTERCOM

AN1204 3G INTERCOM (ACCESS CONTROL SYSTEM)

Please read these instructions before using

Keep for future reference.

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Thank you for purchasing AN1204 3G Intercom. Please read this manual carefully before using. Be sure to keep this manual for future reference in case of any problem or question should arise.

IMPORTANT SAFTY INSTRUCTIONS

When using this AN1204 3G 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 lighting.

AN1204 3G INTERCOM INTRODUCTION

The 3G Intercom AN1204 is an intercom system which can be installed at the entrance of a building, factory, farm or car park. It is an ideal product to replace a 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 a door, gate or boom opening.

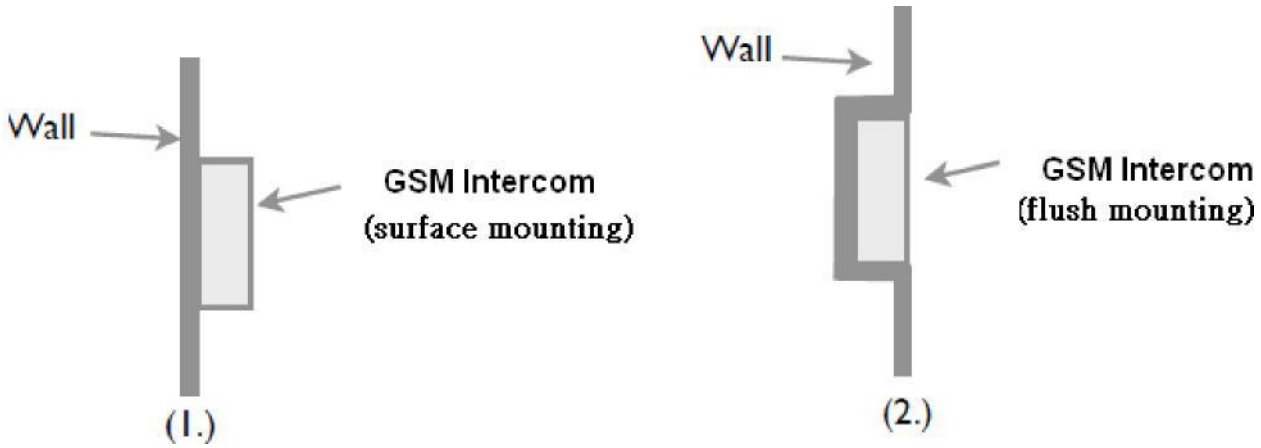
This AN1204 3G Intercom gives you the opportunity not only to know who is waiting at the entrance from a remote location but also to control the access point. Use of AN1204 3G Intercom at your company or house does not require any special installation and wiring. Simply install the AN1204 and connect the door latch and power supply.

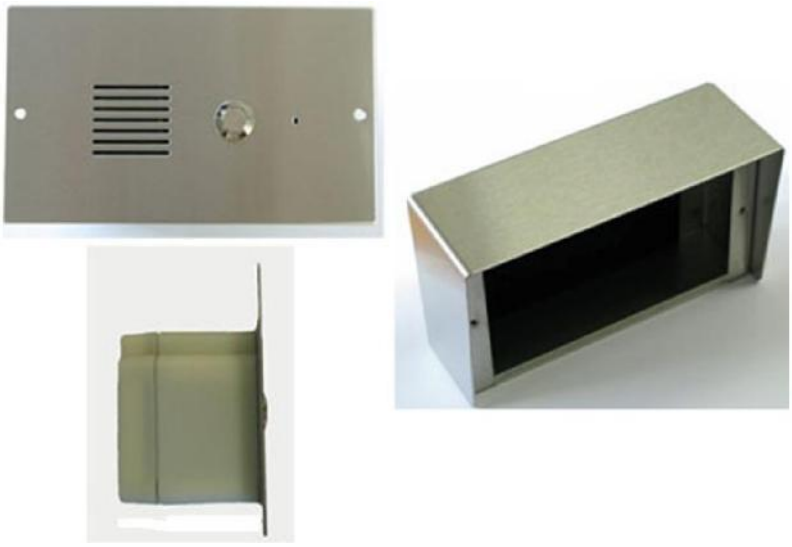
AN1204 3G INTERCOM WITH ACCESSORIES

Item	Description	Q'ty	Included	Optional
1	AN1204 - 3G Intercom	1	◎	
2	Power adapter	1	◎	
3	External antenna	1	◎	
4	Mounting Bracket for antenna	1	◎	
5	Operation manual	1	◎	

INSTALLATION

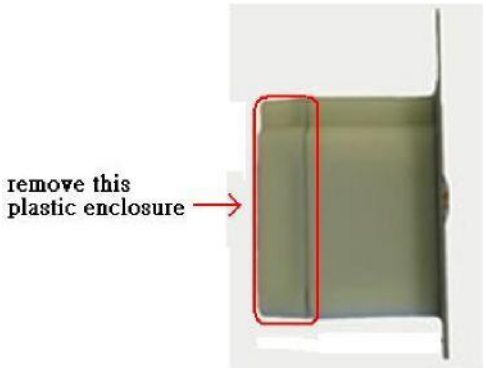
This 3G Intercom is suitable for both flush and surface mounting.



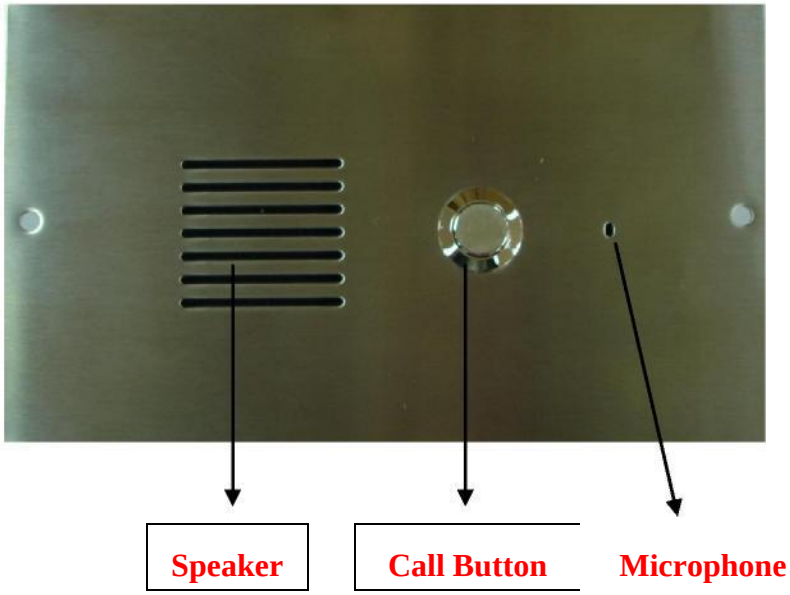


Note:

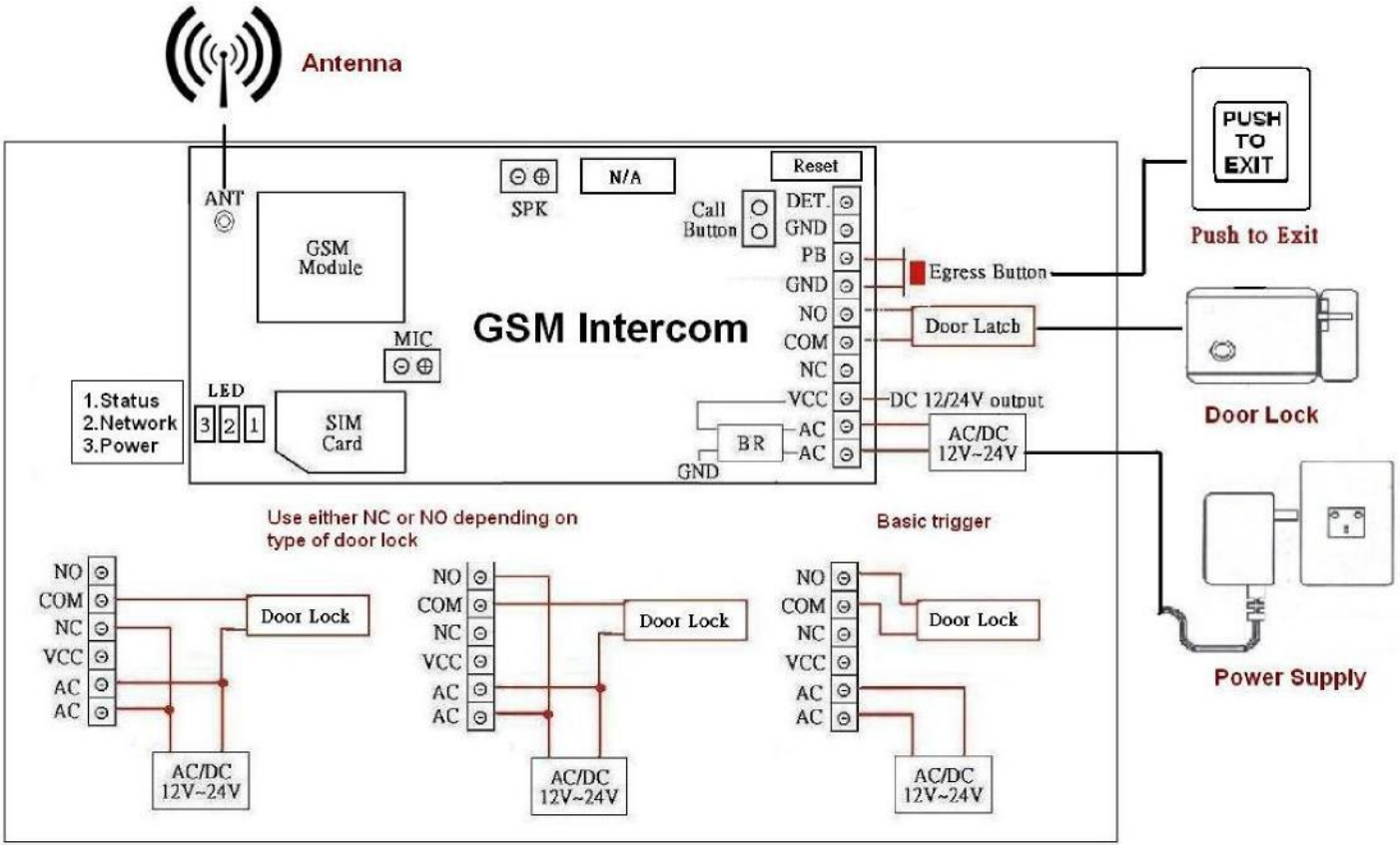
For surface mounting, you will have to remove the plastic enclosure before fitting main station into the stainless steel cabinet.



AN1204 3G Intercom Unit



Wiring Diagram



LED INDICATORS

1. LED "**Intercom Status** " Indicat**or**

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

2. LED '**Network** "Indicat**or**

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

3. LED " Power " Indicat**or**

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

1. SIM card

   You MUST disable the PIN lock from the SIM before inserting it in the unit AN1204.

   (use your mobile phone to disable the PIN lock)

   Insert the SIM card into the SIM card holder and close it carefully.

2. Power Supply

   Connect a 12 volt DC power supply to terminals marked "12V~24V AC/DC"

   The AN1204 is designed to work with power supplies 12V~24V AC/DC.

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

3. Door Lock

   Connect an electric door lock to terminals marked "door latch".

4. Antenna

   The 3G antenna connects to the SMA female bulkhead on the rear of the panel.

AN1204 3G INTERCOM OPERATION

When a visitor pushes the call button to activate the AN1204, ring tone will be heard from the 3G intercom. At the same time, connection is established with the phone whose number is stored in the AN1204. 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 AN1204 and starts conversation with the visitor. During a conversation press * on your mobile to open the door. The relay switch can also be temporarily or permanently switched on or off by pressing # and 1.

Enter system menu

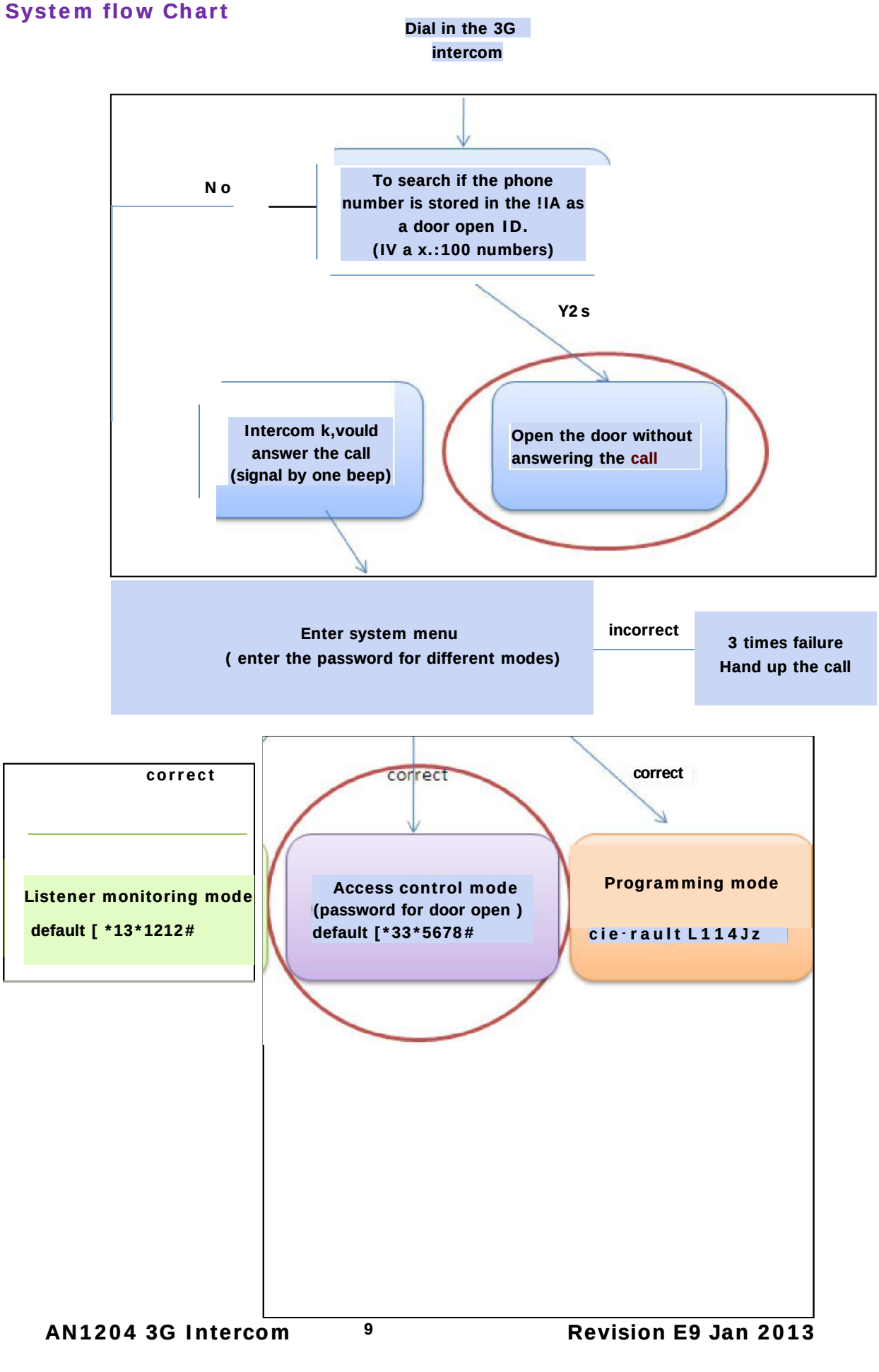
There are three different modes under system menu.

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 3G 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. Hang up after 3 failed attempts with password and try again.

System flow Chart



Enter Listener Monitoring Mode

1. Call the telephone number of the 3G 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 intercom’s 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 3G 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 3G 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: a long “**beep**” tone, failed**:** three short “**beep**” tone.
5. To make changes on settings please refer to the user commands.(P15,16)
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 3G intercom or by text message

(Certain programming feature 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 3G intercom and add or delete telephone numbers. Simply send texts in the format to the telephone number of the SIM within the 3G intercom.

Note:

1. A 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 Code3] #.....**
3. Refer to user command table on P15~P16

Example:

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

058 57235 (landline number 1)
086 5682554 (mobile number 2)
086 2235644 (mobile number 3)

SMS format: (storing a call button phone numbers)
*12*1234#**11**05857235#**12**0865682554#**13**0862235644#

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#**19**0865682554#130862235644#

SMS reply:

110587235#190865682554# Error

Programming by dial in

Note: p**rogramming dial in can'**t be used from telephones which are already programmed to open the door when they dial the 3G intercom. However, you can disable Caller ID display (withhold the number) on your mobile by inserting 1831 before the 10 digit 3G Intercom`s number. This will enable your mobile access to programming.

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 bleeps.

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 3G 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 3G Intercom receives a call from a registered user, it will check the calling number and if the number is in the list, the 3G Intercom will drop the call and then open the gate / door. The 3G Intercom doesn't answer the call, it simply checks the caller ID, and so it won't cost you 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.

*To be successful we strongly suggest programming via text message.

Example:

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

086 5683624 (mobile number 1)

086 5682554 (mobile number 2)

086 2235644 (mobile number 3)

SMS format:

*12*1234#**71**353#**72**0865683624#**72**0865682554#**72**0862235644#

To delete phone numbers of dialing in to open

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

*12*1234#**73**0865683624#**73**0865682554#

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 3G 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 activate relay by pressing *33*5678# (5678 is default password), the door can be opened after enter correct command code.

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

Check 3G signal strength (0~31 levels)

When a request for 3G signal strength SMS is sent to the 3G 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#

SMS Reply Relay=ON Detect = ON［Relay=Hold , Detect=GND］

Remark:

Terminal mark" Detect" (see wiring diagram) is for you to connect a door reed switch. The gates would have a reed switch wired through the" DET" input to ground. It'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:
Program a mobile number as an administrator number via SMS
Mobile number: 0865682554

SMS format *12*1234#**74**0865682554#

To gain access to the different modes and control relay (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

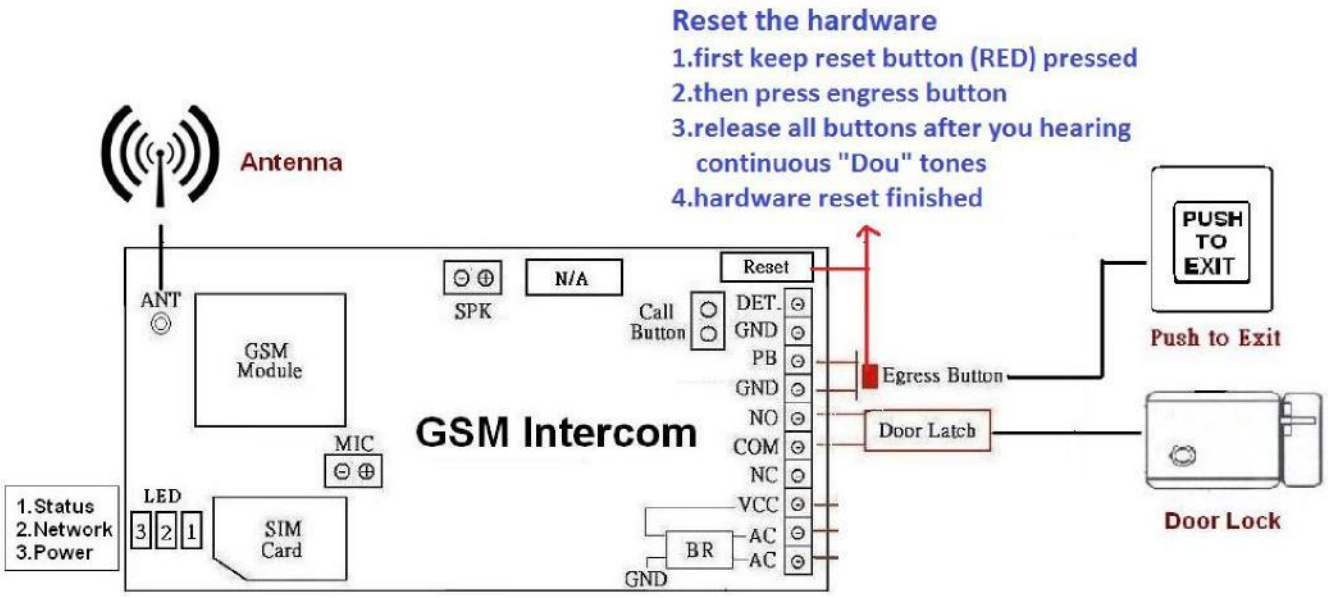
User commands list (to check system info & control relay via SMS)

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)
	l SMS data error	(Only 0~9~*~# are available)	SMS Data Error
	l 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 phone number	1 [N] [phone number] #	N=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[N]*#	N=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 If You Forget your Password



AN1204 3G Intercom Specification	
Operating Voltage	12 to 24 Volt AC/DC
Operating Current	Maximum 250mA, Typically 55mA
GSM Frequency	GSM 850/900/1800/1900 or GSM 900/1800 MHz (Cinterion module)
WCDMA Frequency	UMTS 850/1900 Telstra or Vodafone or 900/2100 Mhz Optus.
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

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E. &O.E.