# AN1808-08 (ACCESS CONTROL SYSTEM)

# **OPERATING MANUAL**



For your protection, read these instructions completely

And keep them for future reference.

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#### **ARISTEL NETWORKS**

Thank you for purchasing AN1808-08 4G audio 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 Safety Instructions**

When using this AN1808-08 4G audio 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.

# **Introduction**

AN1808-08 4G audio intercom system is designed for multiple family complexes. It can dial up to 8 different families. When a visitor arrives at your property they will press call button on the intercom which will then connect to a phone number, landline or mobile (up to 3 numbers per resident or family, can be added which will be rung in sequence), once you answer the phone and speak to them you can then open the gate from your phone and let them in remotely from wherever you are in the world by pressing 1 to trigger relay 1 or press 4 to trigger relay 2

This system also has Mobile Access Control built in which recognizes your Caller ID and allows entry. You can open the gates by dialing the SIM card number held within the unit to open your gates, when a call is received, it is dropped and the Caller ID checked against numbers programmed and if there is a match, will send a signal to open, any unknown callers will be ignored.

The unit is easily wired into your gate and garage systems and it does not need any special installation or complicated wiring; it needs power only and an active SIM card.

# **Parts List**

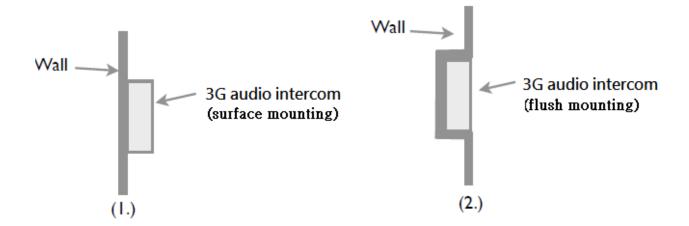
Item	Description	Q'ty
1	AN1808-08 4G audio intercom	1
2	Power adapter	1
3	External 3-meter antenna	1
4	Mounting Bracket for antenna	1
5	Operating manual	1
6	6 Pin Cable	1
7	Terminal Blocks	1

# Accessories Terminal Bl



# **Installation**

This 4G audio intercom is suitable for both flush mounting and surface mounting.





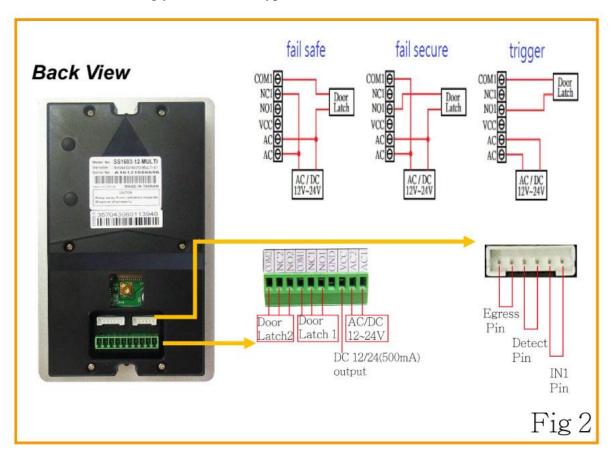
# 1. SIM card installation (Fig 1)

- 1.1 Disconnect the 12V adaptor from the AN1808-08
- 1.2 Remove the rear plastic cover
- 1.3 Remove the SIM card cover from the bottom of the unit
- 1.4 Slide the SIM card holder towards the front of the unit
- 1.5 Lift up the holder
- 1.6 Before inserting the SIM card, ensure that it is not PIN number locked. (If locked, use a mobile phone to unlock it).
- 1.7 Insert the SIM card (Note orientation of notched corner)
- 1.8 Replace holder and slide towards the rear of the unit to lock in place
- 1.9 Replace rear plastic cover



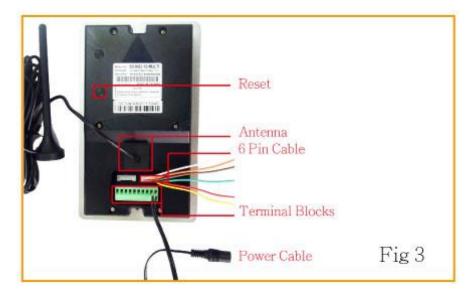
### 2. Connecting with the door lock system (Fig 2)

2.1 According your door lock type to wire with door latch of connector.



### 3. Connecting the Antenna (Fig 3)

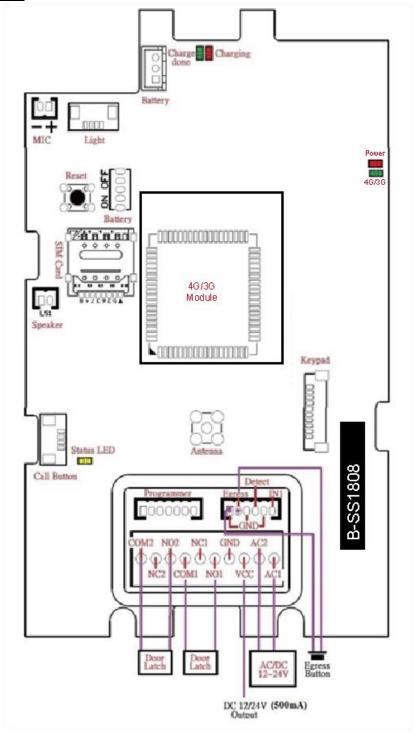
- 3.1 Plug on the antenna cord to the connector on the rear of the unit
- 3.2 Place antenna away from electrical/electronic systems (computers, microwave ovens, etc)



#### 4. Power on and Fix it well

- 4.1 Connect the power adapt or into the connector marked AC
- 4.2 The blue indicator of call button should be on and you will hear Du Du tone.
- 4.3 Fix the unit on the position before ready.
- 4.4 When the Du Du tone is disappeared then the Device is ready.

# Wiring Diagram



## **Using the AN1808-08**

## 1. Setting your call out numbers

- 1.1 Send the text SMS to the number of device.
- 1.2 The format of text SMS is

\*12\*1234#1[XX][Y][ phone number]#1[XX][Y][ phone number]#...

XX=01-08, it means the 8 call buttons.

 $Y=\sim 1\sim 3$ , it means three phone numbers

1.3 When the setting is finished, the sender will receive the reply as below.

#### 1[XX][Y][ phone number]#1[XX][Y][ phone number]#...OK

1.4 If you press the call button of device, it will call to the numbers of call buttons in sequence.

#### 2. Setting your dial in numbers

- 2.1 Send the text SMS to the number of device.
- 2.2 The format of text SMS is
  - \*12\*1234#71[country code]#72[relay][call in number 1]# 72[relay][call in number 2]#...
- 2.3 When the setting is finished, the sender will receive the reply as below.
  - 71[country code]#72[relay][call in number 1]# 72[relay][call in number 2]#...OK
- 2.4 If you call to the number of device through the dial in numbers, the device will trigger the relay to control the door latch.
- 2.5 If the number is not matched with the dial in numbers, the device will answer and sound a beep. Then you can enter the programming mode by password.

### 3. App on iOS and Android

- 3.1 Please search **3G intercom** on Apple store or Google Play
- 3.2 The App can help you to program the device easier.
- 3.3 You can use the App to unlock the door through call or SMS.

### **Enter System Menu**

- 1. Please call the number of the 4G intercom device.
- 2. The device will answer and sound one beep to enter system menu.
- 3. Enter the password of the mode you would like to enter.
  - 3.1 Listener monitoring mode. [\*13\*1212#]
  - 3.2 Access control mode [\*33\*5678#]
  - 3.3 Program setting mode [\*12\* 1234 #]
- 4. Password correct one beep, password error 3 beeps.
- 5. 3 times failure attempt on password, the device hang up the call.

#### **Enter Listener Monitoring Mode**

- 1. You will hear a "Do" tone to enter listener monitoring mode by pressing [\*13\*1212#] where 1212 is the monitoring password.
- 2. Then you can hear the live sound of the device's surrounding environment.
  - \* Under this mode speaker is OFF. ( 35 #: To turn on speaker)
  - \* You can still control the relay output under listener monitoring mode but speaker must be ON status.

#### **Enter Access Control Mode**

- 1. You will hear a "Do" tone to enter access control mode by pressing [\*33\*5678 #] where 5678 is the access control password.
- 2. 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 Program setting Mode**

- 1. You will hear a "Do" tone to enter into program setting mode by pressing [\*12\* 1234#] where 1234 is the setting password.
- 2. You are now in the "program setting 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.

- 3. To make changes on settings please refer to the command codes in page 12.
- 4. To end program setting 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 by text message**

Programming by text message is the simplest way to customize the settings of the 4G audio intercom and add or delete telephone numbers. Simply send texts in the format to the telephone number of the SIM within the 4G audio 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 Code 1] # [command Code 2] # [command Code 3] #...
- 3. Each SMS must start with the pass code \*12, default setting password 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:**

Store a call button phone numbers (Max 3 numbers) and delete 2&3 phone numbers.

```
      058 57235 (landline number 1)
      Command to use: *12*1234#1[XX][Y][ phone number]#

      086 5682554 (mobile number 2)
      XX= call button 01~08

      086 2235644 (mobile number 3)
      Y= number 1~3
```

SMS format: (store a call button phone numbers)

\*12\*1234#1**081**05857235#1**082**0865682554#1**083**0862235644#

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

\*12\*1234#**1082**\*#**1083**\*#

#### User command code CORRECT

SMS format:

\*12\*1234#1**081**05857235#1**082**0865682554#1**083**0862235644#

SMS reply:

108105857235#10820865682554#10830862235644# OK

### **User command code ERROR (user command 192 error)**

SMS format: \*12\*1234#1**081**05857235#1**92**0865682554#1**083**0862235644#

SMS reply: 108105857235#1920865682554# Error

# **ARISTEL NETWORKS**

# **Command Codes**

You can program many different command codes in one text message with SMS command format. \*12\*1234 # [command Code 1] # [command Code 2] # [command Code 3] #.......

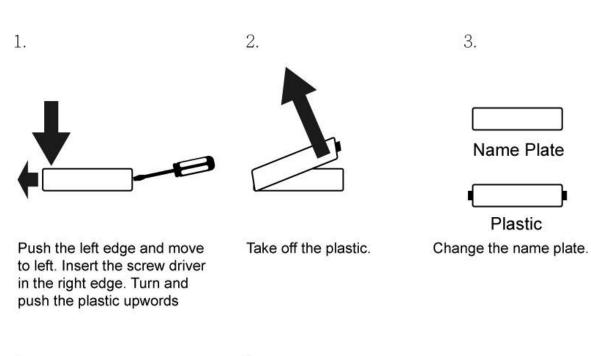
No.	Feature	Command	Description	Default	
1	Change setting Password	01 [ password ] #	password:4 digit codes	1234	
2	Change access control password	02 [ password ] #	password:4 digit codes	5678	
3	Change monitoring password	03 [ password] #	password:4 digit codes	1212	
4	Store or delete a call button phone numbers	1 [XX][ Y ] [ phone number ] #  1 [XX][ Y ] * #	XX= 01~08 Y= phone number 1,2 or 3 Phone number= 3~20 digits (One * can be delay 3 seconds)  Delete phone number1, 2, 3	None	
5	Speaker Volume	3 [ speaker volume] #	speaker volume level= 0 ~ 4	3	
6	Microphone Volume	4 [ microphone volume] #	microphone volume level= $0 \sim 4$	3	
7	Relay 1 Trigger Time	51 [ relay1 time ] #	Relay 1 time= 1~9999 sec	1	
8	Relay 2 Trigger Time	50 [ relay 2 time ] #	Relay 2 time= 1~9999 sec	1	
9	Call Divert to next number time	52 [ call divert time ] #	Call divert time= 10~99 sec	20 sec	
10	Max Call Time	53 [ max call time] #	Max call time= 005~999 sec	060 sec	
11	Max Monitoring time	55[ duration time] #	duration time= 00 ~ 60 mins 00 ( no limit time)	10 mins	
	Call in to open the door numbers (Max: 1150 numbers)	71 [ country code ] #	Country code= 1~3 digit codes		
		72[relay] [ phone number ] #	Relay= 1 or 2		
12		73 [phone number ] #	Delete phone number	None	
		73*#	Delete all phone numbers		
13	Add administrator phone number	74 [ admin number ] #	admin number= 3~15 digits ( no number no restriction)	None	
14	Del administrator phone number	74*#	delete admin phone number	None	
15	SMS reply notice of Relay status	894[X]#	X=0 (disable SMS reply) X=1 (enable SMS reply)	0	
16	Dial tone volume	898[X]#	X=1~3 ( levels)	2	

# **ARISTEL NETWORKS**

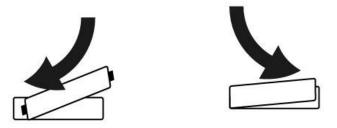
			W 0 ( 1 1)		
17	Set Egress Pin output relay	900[X]#	X=0 (relay 1) X=1 ( realy2)	0	
	Set Detect pin output relay		X=0 (relay 1)		
18	(Detect Pin is egress mode)	901[X]#	X=0 (realy 1) X=1 (realy 2)	1	
	(Detect 1 iii is egress mode)		X=0~3		
			0:disable		
19	Detect pin on PCB setup	902[X]#	1:egress mode (901)	0	
19	Detect pin on PCB setup	- 702[Λ]π	2:trigger		
			3. esistance= $10K\Omega(7.5K\sim13K)$		
	Emitting bleep when correct PIN		X=0 (disable)		
20	code entered	903[X]#	X=1 (enable)	1	
	Intercom moving Detection		X=0 (disable)		
21	(Theft Proof)	904[X]#	X=1 (enable)	0	
	Set Alert phone number		Y= phone number 1,2 or 3		
22	(moving & trigger)	905[ Y ][ phone number ] #	Phone number=3~15 digits	None	
	(moving & urgger)		X=0 (disable)		
23	Enable or disable IN1	907[X]#	X=0 (disable) X=1 (enable)	0	
			X=1 (1 code open code)	1	
24	Change the length of open code	940[X]#	X=2 (2 codes open code)		
			X= apartment number	1	2
			A,B,C,D,E,F= 0~9 and *	code	code
	Change open codes of relay 1&2 including trigger / hold / release for independent apartment	93[X]*[ABCDEF]#	A= trigger relay 1	1	10
			B= hold relay 1	2	20
24			C= release relay 1	3	30
			D= trigger relay 2	4	40
			E= hold relay 2	5	50
			F= release relay 2	6	60
	Send SMS message		Password=setting password	Detec	t PIN
26	(when Detect Pin is triggered)	*26*[ password ] #[content]	content= up to 100 characters	Trigge	er
	Send SMS message		Password=setting password	Case open	
27	(when Intercom is moved)	*27*[ password ]#[content]	content= up to 100 characters		
	Send SMS message		-		
28	(when external power is off)	*28*[ password ]#[content]	Password=setting password	Power loss	
20	(works for inside battery)	20 [ password ]π[content]	content= up to 100 characters		
29	Send SMS message	12.15 -	Password=setting password	Power	• ·
	(when external power is active)	*29*[ password ]#[content]	content= up to 100 characters	active	
	(works for inside battery)				
30	Send SMS message	*30*[ password ]#[content]	Password=setting password	IN1 tr	igger
	(when IN1 is triggered)	_	content= up to 100 characters		

31 Reset 999# reset default None

# **How To Change The Name Plate**







Then insert the left sdge Push the right edge and into sideling. Push the right edge and move to right

# **How To Reset The Hardware When You Forget Your Password**

- 1. Keep both reset and egress buttons pressed
- 2. Release all buttons after you hearing continuous "Dou" tones
- 3. The device will restart and hardware reset is done

# **Troubleshooting (Q &A)**

## Q. The unit keeps bleep.

- A. This means the unit is not able to detect the network for some reason.
- -Check the SIM card is activated and has calling credit.
- -Power off the unit, remove the SIM and check it in a mobile phone to verify it can make a call.
- -Check if the PIN code of SIM disable when put in a phone.
- -Check the reception is good. Poor reception is not sufficient.
- -Check the antenna has been mounted as high as possible, not near large metal objects, or wet green shrubs etc.

# Q. The unit calls the first number, but there is not enough time to answer before it diverts to the next number.

A. Increase the no answer time as per programming instructions.

# Q. The unit calls the first number but voicemail comes on before it can ring the second number.

A. Decrease the no answer time as per programming instructions.

#### Q. The caller ID part does not work.

A. Be sure to program the caller ID part under 72 feature. If your number is a private or number withheld, then it will not work.

Even if you have already programmed a number to receive a call from the intercom, if you also want that number to have caller ID access, it must be programmed under the 72 feature also.

Ensure the number is entered as you would normally dial it from another phone.

#### Q. There is no audio from the gate, but the person at the gate can hear ok.

- A. This can be due to low reception.
- -Check reception level by \*20#.
- -Change SIM card if necessary to another network which may have better coverage.
- -Purchase a high gain antenna.

# Q. The audio quality that can be heard on the remote telephone is poor or humming (buzzing).

A. A small amount of GSM buzz can be considered normal on 4G audio intercoms, but not so much that causes inability to hear the person speaking. This can be caused by the GSM antenna being mounted too close to the speech panel or not mounted high enough.

- -Try earthling the speech panel chassis to 0V of the power supply.
- -This is also a symptom of poor reception. Try above steps on checking and improving reception.

### Q. The 1 or 2 key does not work when the intercom calls a phone.

A. Check if you can hear the relay clicking at the gate when the 1 or 2 key is pressed during a call. If it can be heard, then the system is working, check wiring between the relay and the lock or gate panel. If the relays do not make a clicking sound, then check this feature on a different mobile cell phone or landline. If it works on a different phone, check the settings on the phone in question under DTMF tones. Failure of DTMF tones to operate correctly is also a symptom of low reception. Check steps above on improving reception. Try pressing the buttons longer when attempting to activate the gates or door.

# **Specification**

Model	AN1808-08 4G Audio Intercom
	WCDMA 800/850/900/1900/2100 MHz
Frequency	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28
	LTE TDD: B40
Face plate	180 (H) x 109 (W) mm
Surface back box	189 (H) x 118 (W) x 65(D) mm
Length of antenna	3 meters cable
Power supply	12~24V AC/ DC
Design and material	Vandal resistant / die cast aluminum
Humidity	Less than 80% RH
Operating Temperature	-20°C to 50°C
Operating Current	Maximum 250mA, Typically 55mA