MANUAL

3G DOOR OPENER

Please read these instructions before using.

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Thank you for purchasing the 3G Door Opener. Please read this manual carefully before using. Be sure to keep this manual for future reference.

1. SAFTY PRECAUTIONS

1. Unplug the power adapter before cleaning. Do not use liquid cleaners or aerosol Cleaners. Use a damp cloth for cleaning.

2. Do not use this product near water.

3. Do not use this product near an area where there is a potential of gas leaks or near any fumes that can be explosive.

4. Do not place this equipment near or over a radiator or any other heat source.

5. Do not overload the wall outlet or power cord where the power adapter is installed. This can result in fire or electric shock.

6. Avoid spilling liquids on this equipment and do not insert any objects through the Ventilation slots.

7. Avoid using the equipment during an electrical storm. There is a remote risk of electrical shock from lighting.

2. BRIEF INTRODUCTION

The 3G door opener is a remote control system which can activate automatic gates with a free call from you mobile phone. The users' phone numbers are programmed into the device by SMS or call. The device recognizes incoming Caller ID and drops the call before connecting.. With this system, you can authorize up to 100 phone numbers to open a gate, boom or door at no cost..

This model has 2 inputs included, input 1 and 2 can monitor the status of an electrical circuit when the circuit's state changes, the 3G opener will send an SMS messages to all of the nominated alarm contacts saved on the unit.

3.Product Features:

1. Simple to use, easy to program.
2. Programming via SMS command.
3. Ideal for remote control of automatic gates, barriers, doors, central heating systems, home
4. Send SMS notification when a short circuit exists on inputs
5. 100 telephone numbers memory for access control by caller ID automatic number recognition at no call cost to user.
6. To open the gate/door by password with 4 digit code access option if the number is not stored in the access control section.
7. 2 inputs for switching contacts (alarm output, sensors etc.)
8. Automation, industrial process, intruder alarm dialer and more.

4. STANDARD PACKING LIST

Item	Description	Q'ty	Included	Optional
1	3G door opener	1		
2	Adapter	1		
3	Short Antenna	1		
4	External Antenna - 3 meter length	1		
5	Bracket for antenna	1		
6	Manual	1		

5.INSTALLATION:

5.1 SIM CARD INSTALLATION (Fig1)

1. ensure power is off before inserting or removing the SIM card
2. disable the PIN lock from the SIM before inserting it in the unit
3. Insert the SIM card (note orientation of notched corner)
4. Make sure the SIM card is fully inserted
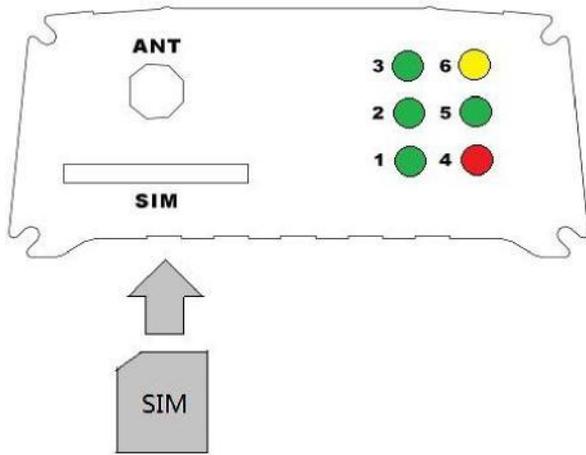5. after a final check of wiring , switch on the power to the system

Fig 1

5.2 ANTENNA CONNECTION
Ensure that there is good network reception at the location where it will be installed.
Install the antenna as high as possible for best reception.
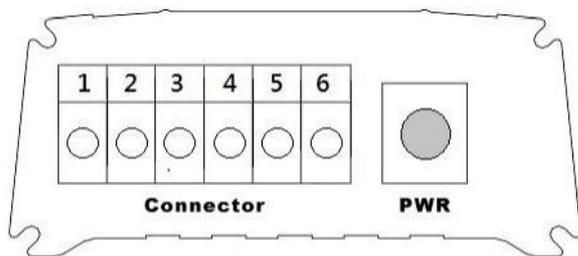
5.3 WIRING DIGRAM (Fig2 & Fig3)

Fig 2

Interface connections:

1	INPUT2	4	NO1
2	COM2	5	NC1
3	INPUT1	6	COM1

Use either NO or NC depending on types of door lock

Input2	1
COM2	2
Input1	3
NO1	4
NC1	5
COM1	6

Door Latch (+ −)

power to open (NO)
for fail-secure lock

Power (+ −)

Input2	1
COM2	2
Input1	3
NO1	4
NC1	5
COM1	6

Door Latch (+ −)

power to lock (NC)
for fail-safe lock

Power (+ −)

Input2	1
COM2	2
Input1	3
NO1	4
NC1	5
COM1	6

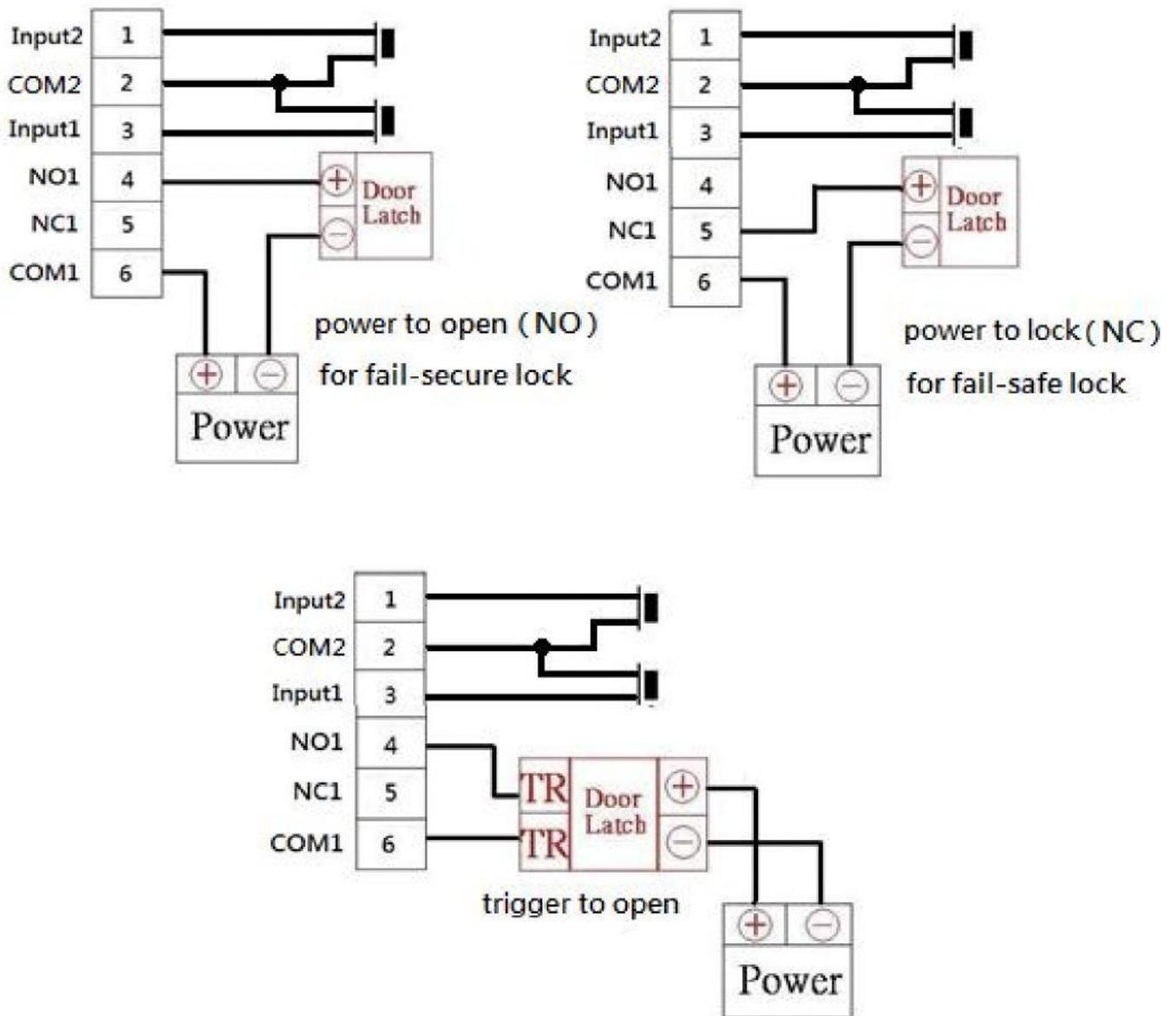TR / TR Door Latch (+ −)

trigger to open
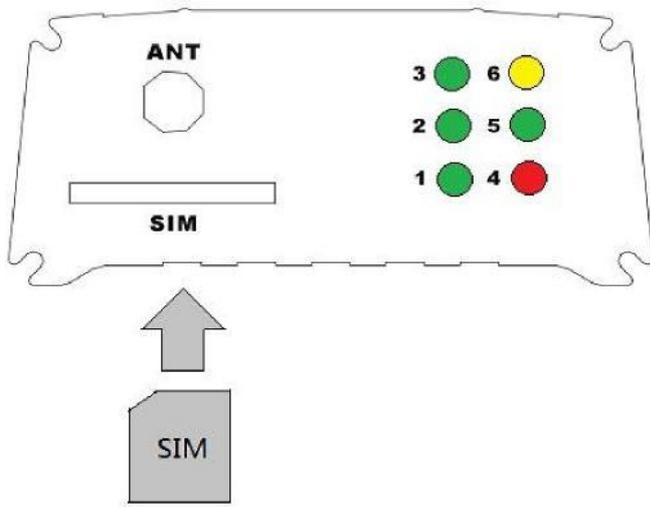
Power (+ −)

Fig3

5.4 POWER SUPPLY

After a final check of wiring , switch on the power to the unit.
The 3G door opener 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.

6. LED INDICATORS

LED Number	Definition	LED Status		
		Solid	Off	Flash
1	Trigger input 2	Input 2 active & Sending SMS	Standby	In triggering setup time (17+Time#)
2	Trigger input 1	Input 1 active Sending SMS Standby&		In triggering setup time (15+Time#)
3	Output Relay 1	Relay1 ON	Relay1 OFF	X
4	Power	Power ON	Power OFF	X
5	3G Network	busy	Module OFF	Flashes once per 3 seconds (Search network)
				Flashes once per 3seconds (Standby)
6	Device status	Standby	Power OFF	Flashes once per second (No SIM inserted)
				Flashes twice per second (SIM not registered)

7. OPERATION

Calls from telephones whose numbers have been recorded in the device, will be recognized as authorized telephone numbers. The device will reject the call without answering (so there will be no charge) and it will automatically open the gate or door. The relay can also be temporarily or permanently switched on or off by sending SMS or dialing in.

This 3G Opener can enable a 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 an authorized telephone number.

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 *71*5678# (5678 is default password), the door can be opened after enter correct password.

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

8.Programming

Programming can be carried out either by text message or by dialing into the 3G door opener.

8.1 Programming by dialing in
Dial the SIM card telephone number. The unit will answer the call and you will hear a bleep tone.

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.
    Example: start to program the phone number for dialing in to open the door.

    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):**721+ telephone number #** *

        Delete a number: **73 + telephone number #**

        * Delete all numbers: **73*#**

Any numbers programmed will now automatically open the door or gate when ringing in the unit SIM card number.
Note:
*programming dialing in can,t be used from telephones which are already programmed to open the door when they dial the 3G door opener.

* If the number of your phone is programmed to open the door but you still would like to use the same phone to dial in for programming, then you can **disable Caller ID display (withhold the number)** on the phone by dialing 1831 before the 10 digit number of the device.

8.2 Programming by text message

Most of the programming features can be setup by text messages. Programming by text message is the simplest way to customize the settings of the 3G door opener and add or delete telephone numbers. Simply send texts in the format to the telephone number of the SIM within the 3G door opener.

Note:
Text messages are limited to 140 characters per piece when using SMS programming.

Example: (programming user phone numbers for dialing in to open the door)
Country code: 353 (Ireland)
058 57235 (landline number)
086 5682554 (mobile number)
086 2235644 mobile number)

SMS format:
*12*1234#**71**353#**721**05857235#**721**0865682554#**721**0862235644#

NOTE: To be successful in programming we strongly suggest using text message rather than dialing in, since errors may occur in the command code if 3G transmission is in a poor reception area.

9. ADMINISTRATOR NUMBER

Once the administrator number is stored in the unit, either by programming via dialing in, or by text message, then only this number is allowed to make any changes in the device.

10. CHECK SIGNAL STRENGTH (0~31 levels)

When a request for 3G signal strength message is sent to the 3G door opener, it will reply with a signal strength code and operator name. The code will be between 0~31 which indicates the signal level is from poor to best.

SMS format *21*1234#

SMS reply   Vodafone Signal Level = 31   Signal is very strong

11. HOW TO RESET THE UNIT WHEN YOU FORGET THE PASSWORD

1.   To keep the red button pressed on the PCB

2.   Then power up and wait for 5 sec

3.   After you see LED 1 and 2 starts to flash which means it's resetting.

4.   Release the red button

12. USER COMMANDS

User commands list

No.	Command	Description	settings	Default
1	01 + password#	Change password of Programming Mode	password:4 ~6digits	1234
2	02 + password#	Change password of Access control Mode	password:4 ~6digits	5678
3	11+Time#	Door open confirming time	Time = 0~99 seconds	(0s= no delay)
4	12+Time#	Relay 1 activation time	Time = 1~9999 seconds	1
5	14+Time#	Activation time when input 1 is trigged	Time = 1~9999 seconds	0s= no delay)
6	16+Time#	Activation time when input 2 is trigged	Time = 1~9999 seconds	(0s= no delay)
7	15+Time#	Sending SMS duration when input 1 continues triggering	Time = 0-60 minutes	(0s= no delay)
8	17+Time#	Sending SMS duration when input 2 continues triggering	Time = 0-60 minutes	0s= no delay)
9	18+Status#	Set Input1 status	Status= 0 or 1 0=N.O 1=N.C	0
10	19+Status#	Set Input 2 status	Status= 0 or 1 0=N.O 1=N.C	0
11	20+mode#	Set Input 1 mode	Mode= 0 or 1 0 = Egress ,1 =Trigger	1
12	21+mode#	Set Input 2 mode	Mode= 0 or 1 0 = Egress ,1 =Trigger	0
13	71+country code#	To set country code	Country code= 1-3 digits (UK:44 / USA:1)	886
14	721 +mobile#	Store Phone number For ringing in to open the door (max: 100 numbers)	Mobile=3 ~14 digits	none
15	73 +mobile#	Delete a ring in to open number	Mobile =3 ~14 digits	none
16	73*#	Delete all ringing in to open numbers		

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No.	Command	Description	settings	Default
17	74+mobile #	Add administrator phone number	Mobile =3 ~14 digits (no number no restriction)	None
18	74*#	Delete administrator phone number		
19	75+No.+mobile#	Add mobile number of alarm contact when inputs are triggered.	No.=1~3 mobile numbers Mobile =3 ~14 digits	none
20	75+No.+*#	Delete mobile number of alarm contact when inputs are triggered.	No.=1~3 mobile numbers Mobile =3 ~14 digits	none
21	999#	Reset		

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

No.	Command	Description	SMS Reply
1	*12*1234#+command1 # + command2#+command3#	Programming by text message	Successful: command Code# OK Failed: command Code# .... Error
2	*21* 1234 #	check 3G signal strength and operator	Signal Level = X (X=0~31) From poor to strong
3	*22*1234#	Reply list of ringing in to open phone numbers	Relay + number#+ relay + number# Relay= 1 or 2 E:Next page /N: End
4	*23*1234#	Reply list of alarm contact numbers when inputs are triggered	Number#+ number#....
5	*24*1234#	Check relay and inputs status	Relay 1: status (status= hold/ release) Input1: status (status= high / low) Input 2:status (status= high / low)
6	*31*1234# + SMS content	Store SMS content when input 1 is triggered.	SMS content=Max 100 characters
7	*31*1234#	To check input 1 SMS content	Default SMS " trigger 1 is active"
8	*32*1234# + SMS content	Store SMS content when input 2 is triggered.	SMS content=max 100 characters
9	*32*1234#	To check input 2 SMS content	Default SMS " trigger 2 is active"
10	*71*5678 #	Trigger relay 1 (You can't trigger when relay is on hold status before you release it)	No reply
11	*72*5678 #	Hold relay 1	No reply
12	*73*5678#	Release relay1	No reply

Note: 1. Password 1234 is changeable (same as programming mode password)
  2. Password 5678 is changeable (same as access control mode password)
  3. You can also dial in the unit to control relay by using the same command.

14. SPECIFICATION:

Operating Voltage	12/24 volts AC/DC
Operating Current	Maximum 250mA, typically 55mA
GSM Module	Siemens Cinterion -Germany
GSM Frequency	GSM 850/900/1800/1900 or GSM 900/1800 MHz
WCDMA Frequency	UMTS 850/1900 Telstra & Vodafone or 900/2100 Mhz Optus
Power Consumption	Standby: 42mA/hr / Relay on: 83mA/hr
Physical size	9.5 (L) X 6.0 (W) x 2.5 (H) cm
Antenna	Short Antenna
Humidity	Less than 80% RH
Operating Temperature	-20°C to 50°C

Aristel Networks Pty Ltd.
1 / 25 Howleys Road, Notting Hill, 3168
Victoria.
Ph. 03 8542 2300   Fax 03 9544 3299

www.aristel.com.au

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