

# GSM Door Opener Manual



**Model:**

1.PFGOGSM : 1 Output 2 Inputs

**Please read these instructions completely before use**

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Thank you for purchasing GSM Door Opener. Please read this manual carefully before using. Be sure to keep this manual for future reference in case of any problems happen.

## **1. SAFTY PRECAUTIONS**

1. Unplug the power adapter before cleaning. Do not use liquid cleaners or aerosol Cleaners 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 liquid 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 lightning.

## **2. BRIEF INTRODUCITON**

GSM door opener is a GSM switch 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 drop the call before switching. With this system you can authorize up to 100 phone numbers to open the gate or door at no cost

Use of GSM Door Opener at your company or house does not require any special installation and wiring. Simply install the GSM Door Opener and connect the door latch and power supply.

This model with 2 inputs included input 1 and 2 can monitor the status of an electrical circuit when the circuits state changes, the GSM opener will send an SMS messages to all of the nominated alarm contact 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	GSM 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	⊙	

### 4. INSTALLATION :

#### 5.1 SIM CARD INSTALLATION (Fig1)

1. Ensure power is off before inserting or removing the SIM card
2. Register your SIM card with the network, and check it works in a mobile phone
3. Remove the PIN request from the SIM before inserting it in the unit
4. Insert the SIM card ( note orientation of notched corner)
5. Make sure the SIM is fully inserted

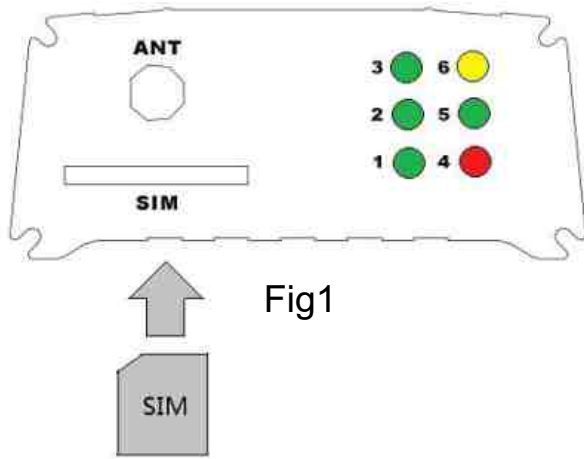


Fig1

### 5.2 ANTENNA CONNECTION

1. Ensure that there is good network reception at the location where it will be installed.
2. If you use a 3 meters antenna install it as high as possible on the top of the pillar for best possible reception

### 5.3 WIRING DIAGRAM (Fig2 & Fig3)

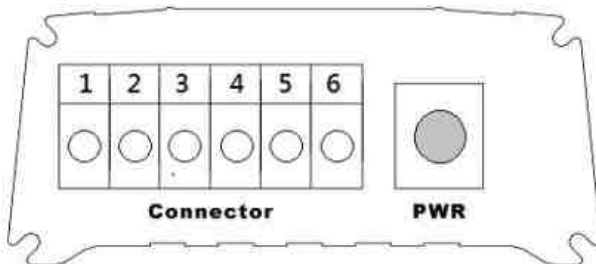


Fig2

#### Interface introduction:

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

Use either NO or NC depending on types of door lock

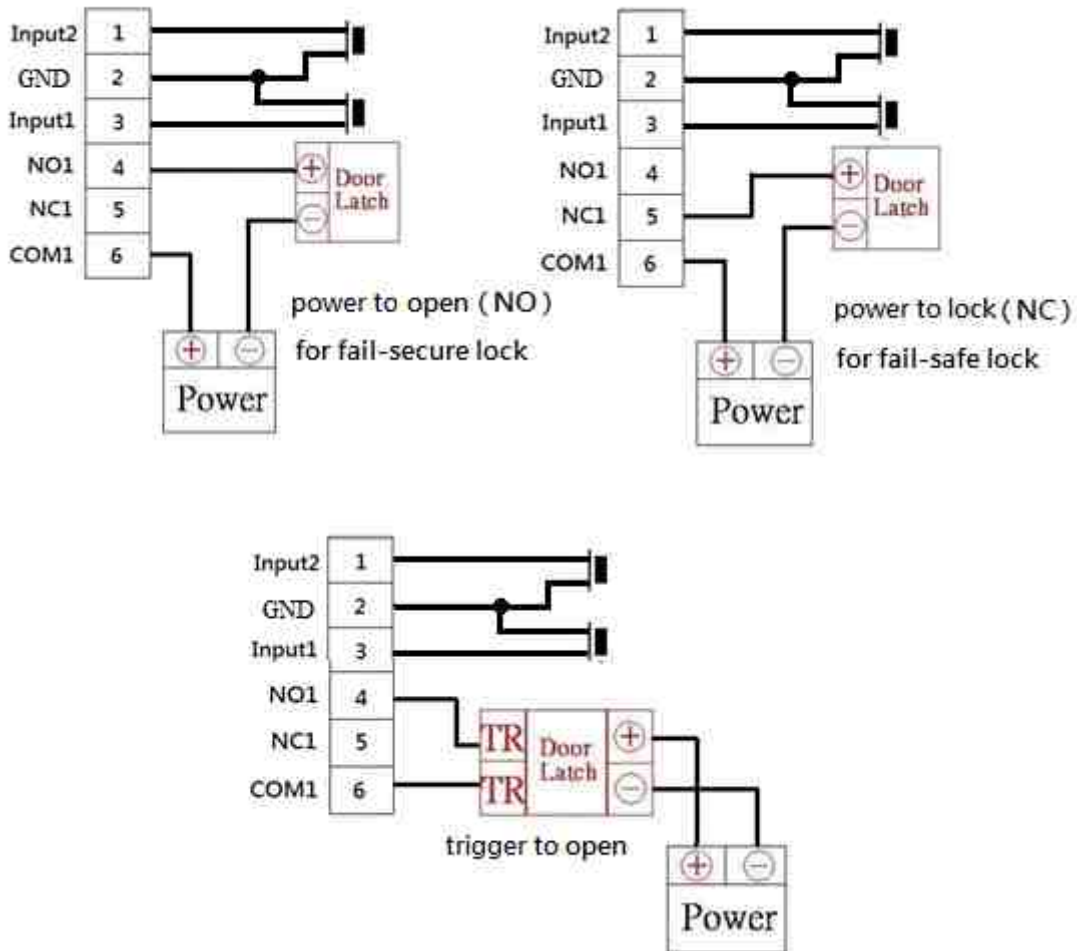


Fig3

#### 5.4 POWER SUPPLY

The GSM 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

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

**YOU CAN CUT THE PLUG OFF AND USE THE WIRE TO CONNECT TO 24v SUPPLY**

If you do the above ensure the black wire with long white printed dashes only is connected to 24v +

## 6. LED INDICATORS

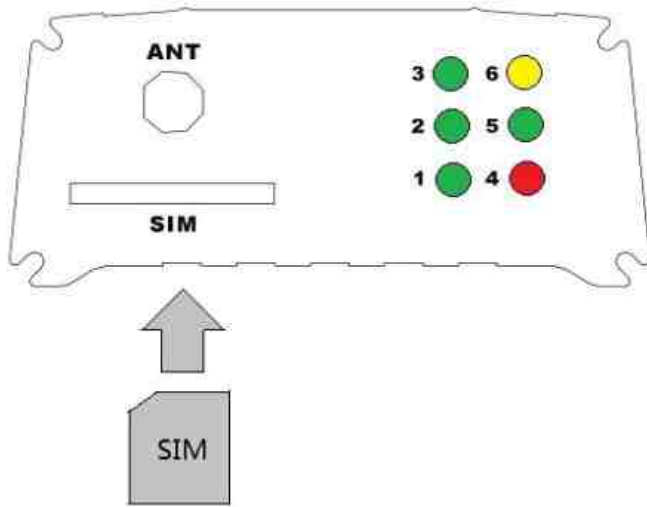


Fig4

LED Number	Definition	LED Status		
		Solid	Off	Flash
1	Trigger input 2	Input2 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	GSM Network	busy	Module OFF	Flashes once per second (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)



Parking Facilities GSM Door Opener

### Quick Instructions

Basically this unit will operate via TEXT or by CALLING in to the Unit.

The number that I will use as an example on this unit is **07595 062 810** which by the way, is the number you can call if you want to get some tech support. Try and follow the instructions first before calling as I am quite busy!.

Kind Regards

Damian Speer

### Step One

Tell the GSM unit that the telephone you are using is authorised to make changes:

#### Via Text

1. Open a new text message to the sim card number in the GSM unit
2. Enter: **\*12\*1234#7407595062810#**
3. You will receive a text back stating **7407595062810#** OK

#### Via Phone

1. Call the mobile phone sim that is installed in the GSM opener
2. Enter: **\*12\*1234#7407595062810#**
3. You will hear 1 continuous beep for success
4. If you hear 3 short beeps then you have miss-typed the code/numbers.

This number is now authorised to program the unit using the rest of this manual.

### To Send an Open Command Quick Guide

#### Via Text

1. Open a new text message to the sim card number in the GSM unit
2. Enter: **\*71\*5678#** (Pulse open)
3. Enter: **\*72\*5678#** (Latch open)
4. Enter: **\*73\*5678#** (Un-Latch open)

#### Via Call

1. Ensure that you have programmed an authorised number in before this step text:  
(\*12\*1234#7144#72107595062810#)
2. Simply Call the GSM mobile number you will hear 1 beep for successful open. If you hear 3 short beeps this number was not authorised properly.



## 7. OPERATION

Programming of the telephone numbers in and whenever the unit receives a call will recognize an authorized telephone number calling it and will then reject the call without answering (so there will be no charge) and open the gate or door. The relay can also be temporarily or permanently switched on or off by sending SMS or dialing in.

This GSM Opener can allow user to gain access from their mobile phone by two methods

1. CallerID recognition
2. by access control password mode

### 1. Caller ID recognition to open

Ring in to open the door for 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. The door can be opened after enter correct pass code.

To trigger door by pressing \*71\*5678#

To latch or hold door by pressing \*72\*5678#

To unlatch door by pressing \*73\*5678#

\*Above operation same as sending SMS commands

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

**Please note you must see Page 11 Step 9 to authorise a telephone number to make programming changes first!**

## 8. Programming

Programming can be carried out either by text message or by dialing into the GSM 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 beeps.

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 [phone number]#**
- \* Delete a number: **73 [phone number]#**
- \* Delete all numbers: **73\*#**

**Note:**

\*programming dialing in can't be used from telephones which are already programmed to open the door when they dial the GSM door opener.

\* If the number is programmed to open the door but you still would like to use the same number to dial in for programming, then you can **disable Caller ID display (withhold the number)** on the mobile.

**8.2 Programming by text message**

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

**Note:**

1. A Single SMS text messages is limited to 140 characters
2. You can program many different user command codes in single a text message with SMS command format.\*12\*1234#[command Code1] #[command Code2] # [command Code3] #.....
3. Each SMS must start with the pass code , default 1234 in the following format\*12\* 1234# Followed immediately by a command

Program with the following format

\*12\*1234#71[country code] #721[phonenumber]#721[phonenumber]#721[phonenumber]#.....

Country code: 1~3 digits, for Ireland insert 353, UK insert 44, USA insert 1(Do not using any leading zeros)

The passcode \*12\*1234 only needs to be put at the beginning of each new message.

**Example:**

UK Country code: 44

086 5683624 (mobile number)1

0865682554 (mobile number)2

0862235644 (mobile number)3

SMS format:

\*12\*1234#71 44 #7210865683624#7210865682554#7210862235644#

**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\*22\*1234# , then the GSM opener will reply the phone number list text message.

## 9. ADMINISTRATOR NUMBER **THIS MUST BE DONE BEFORE ANY OTHER PROGRAMMING**

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

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

SMS format \*12\*1234#740865682554#

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

## 10. CHECK SIGNAL STRENGTH

When a request for GSM signal strength SMS command is sent to the GSM Opener, the unit should 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 \*21\*1234#

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

## 11. CHECK RELAY STATUS

You can send SMS command code to check relay status.

SMS format \*24\*1234#

SMS Reply Relay: [status] (Status = Hold / release / trigger

Input 1:[status] Input 2[status] (status=high / low)

## 12. 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 start to flash which means it's resetting.
4. Release the red button

### 13. USER COMMANDS

#### User commands list

No.	Command	Description	settings	Default
1	01 [newpassword]#	Change password of Programming Mode	password:4-6digits	1234
2	02 [new password]#	Change password of Access control Mode	password:4-6digits	5678
3	11[Time]#	Door operconfirmingtime	Time = 0~9 seconds	0 sec no delay
4	12[Time]#	Relay 1 activation time	Time = 1~9999seconds	1
5	14[Time]#	Activation time wheninput 1 is triggered	Time = 1~9999 seconds	0 sec no delay
6	16[Time]#	Activation timewheninput2 is triggered	Time = 1~9999seconds	0 sec no delay
7	15[Time]#	Sending SMS duration wheninput 1 continues triggering	Time = 0-60 minutes	0 min no delay
8	17[Time]#	Sending SMS duration wheninput 2 continues triggering	Time = 0-60 minutes	0 min no delay
9	18[Status]#	SetInput1 status	Status= 0 or 1 0=N.O 1=N.C	0
10	19[Status]#	SetInput2 status	Status= 0 or 1 0=N.O 1=N.C	0
11	20[mode]#	SetInput 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 setcountry code	Country code= -3 digits (UK:44 / USA:1)	886
14	721[phonenumber]#	Storephone number For ringing in to operthe door (max 100 numbers)	Phonenumber=3~14 digits	N/A
15	73 [phonenumber]#	Delete a ring in to open number	phonenumber=3~14 digits	N/A
16	73*#	Deleteall ringing in to openumbers		

No.	Command	Description	settings	Default
17	74[adminnumber]#	Add administrator phone number	adminnumber=3~14 digits ( no number no restriction)	N/A
18	74*#	Delete administrator phone number		
19	75[N][phonenumber]#	Add mobile number of alarm contact when inputs are triggered.	N=1~3(sequence of phone number) phonenumber=3~14 digits	N/A
20	75[N]*#	Delete mobile number of alarm contact when inputs are triggered.	N=1~3(sequence of phone number)	N/A
21	999#	Reset		

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

No.	Command	Description	SMS Reply
1	*12*1234 # [ command Code 1 ] # [command Code 2 ] # [ command code 3 ] # [command code 4 ] #.....	Programming by text message format	Successful:command Code#..... OK Failed: command Code#..... Error
2	*21* 1234#	check GSM signal strength and operator	Signal Level =0~31 From poor to strong
3	*22* 1234#	Reply list of ringing in to open phone number	[ number1]#[number2]#[number3]..... E:Next page N: End
4	*23*1234#	Reply list of alarm contact numbers when inputs are triggered	[ number1]#[number2]#[number3]
5	*24*1234#	Check relay and inputs status	Relay 1: status (status=on/ release trigger) 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 "trigger2 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 relay 1	No reply

**14. SERIAL MODELS:**

Model NO.	Description
PFGOSAM-01	2 OUTPUTS GSM Door Opener

**15. SPECIFICATION:**

Operating Voltage	12~24 volts AC/DC
Operating Current	Maximum 250mA, typically 55mA
GSM Module	Cinterion -Germany
GSM Frequency	GSM 850/900/1800/1900 or GSM 900/1800 MHz
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

Thank you for purchasing our products.