The GSM switch is a very simple device which can be used for authorized door access, controlling gates, switching of remote equipment, car parking systems. Actually, the GSM switch can be used in places which requires turning ON/OFF your system, machines, engines, generators, etc remotely with a FREE call from your mobile phone and protect your assets.

Just dial from Authorized User number then the Barrier and doors are opened, or the machine are turn on or off by the GSM switch. There are no call costs, the GSM switch rejects the call from authorized number then carries out the turn ON/OFF action.

Technical specifications

Rated Voltage: DC 9V~36V/1A

Working temperature: -10℃～+60℃

Storage temperature: -20℃～+60℃

Relative humidity: 10-90%, No condensation

Working frequency:

GSM: 850/900/1800/1900MHz

Related Voltage of the Output Relay: 3A/240V AC

SIM Card ： Nano type, 3V

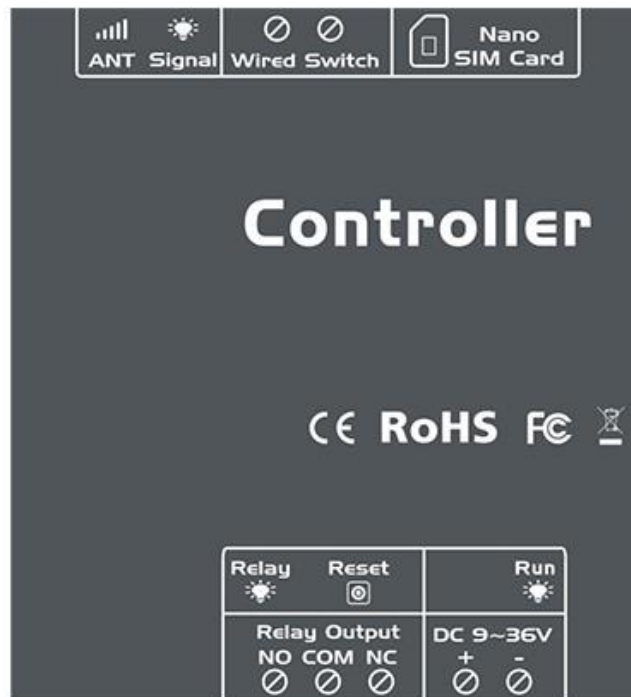Antenna: 50 Ω SMA

Wired Switch: Supports

Attention:

1, This device only support 2G, doesn't support 3G.

2, This product can't work in USA, so if you from USA, please don't buy this product.

Features

1.No call charges. The GSM switch rejects the call from authorized number, then the relay will turn

ON/OFF on the first ring;

2.It is no longer traditional to open the door, but it is more interesting to shake the mobile phone to unlock the door.

3.Multiple applications. (gates, bollards, barriers, garage doors, shutters and access doors or machines);

4.Secure - Using caller ID for identification, unknown callers are ignored;

5.Can be operated from anywhere, no distance limit;

6.Add or remove users by SMS Text command;

7.No need to provide a remote control for different users;

8.Up to 200 authorized phone numbers can be configured;

9.One output with relay （3A/240VAC）for connecting the switch of the door or machines;

10.The relay action will return an SMS confirmation to the owner, this function is editable by user;

11.Based on GSM Network, applied to many applications.

Controller

CE RoHS FC

Relay   Reset   Run

Relay Output   DC 9~36V
NO COM NC   +   -

Interface Instruction

INDICATORS	
ANT	Connect to GSM antenna
Signal	ON : registering to cellular network. Flash per 200 milliseconds: registered, OFF: can not connect to SIM card or unregistered to the cellular network.
Relay	Relay Status, calling in, the relay will work, this LED indicator will on.
Reset	Press and hold the Reset button until the Run LED is always on, then after 5 seconds, you can release the Reset button.This operation will reset the device to factory default.
Run	Flash per 1 second: Connected the cellular network successfully. Always on: Reset successfully when pressing the Reset button. OFF: can not connect to SIM card or unregistered to the cellular network.

Connection Terminals		
DC	**+**	Power supply input, Positive wire.
9~36V	**-**	Power supply input, Negative wire.
Relay Output	**NO**	Normally Open port. The relay is 3A/240VAC. Connect to the switch of the electric lock or device.
	COM	Common port. The relay is 3A/240VAC. Connect to the switch of the electric lock or device.
	NC	Normally Close port. The relay is 3A/240VAC. Connect to the switch of the electric lock or device.
Wired Switch		Dry contact, used to be connected with wired switch, like push button. Notice: It should not be connected with voltage input.

Settings (SMS Commands)

Notice:

1. The default Password is 1234

2. All the settings are through SMS commands, please edit the below SMS commands in your cell phone then send to the GSM switch. The GSM switch cannot support PIN Code Protected SIM Card

3. You can program the GSM switch with SMS commands by using your phone. It is safe to do so because in addition to the fact that other people may not know the number of the SIM inserted in, it also uses a Password that makes it impossible for anybody, who doesn't know it to access the system by chance.

4. The relay output will change the close or open status by every call in, please note it Means the first time call it will close the relay to switch on, if the second call in is in the setting time then the unit will ignore the setting time, and open the relay, to switch off the lock or machine.

5. Remember that commands must be CAPITAL Lock LETTERS It is PWD not pwd CAP not Cap etc. Don't add spaces or any other character.

6 The pwd in the commands means the password. when you use it, please in stand of it by the digital number the capital letters PWD is the command letter, use PWD directly

7. If you use this model for gate open you only need to change the password and setup the authorized numbers

8 For some GSM operators, they use different SMS parameter, the units cannot return the SMS confirmation. Normally it is not a product problem. Also, you can try to add the country code before the number, see the below settings.

For example:

In the UK, the country code is 0044, or +44

The user cell phone number is 3405888666 and has been assigned as the first user number, the SIM card number in the panel is 3408838555

Problem 1: The first user number can receive the Relay action message from the GSM switch, but the GSM switch cannot receive the commands from the first user number. Solution 1: Please add country code to the SIM card number in the GSM switch. It means send SMS commands to 003408388555

to instead of 3405888555

Solution 2: When you use cell phone to dial another cell phone, what number it will be displayed then you can see this displayed number as the dial numbers; when you use cell phone to send SMS to another cell phone, what number it will be displayed then you can set the displayed number as the first user number just use the 00 to replace the also you can try the "+"

9. Please write down the Authorized number list in a paper for review it in the future

10. If you want to reset the GSM switch to factory default, then please send pwd/RESET (The unit will reply a message with Reset Success! it will auto restart after 8 seconds or When the GSM switch works normally, you can press and hold the RESET button for several seconds until the Run Led is always ON, and then after 5 seconds, it will reset the GSM switch to factory default. If the reset successful it will auto restart after 8 seconds.

11. If the command is incorrect the GSM switch will return: *Command error, please resend command* So please check the Command, or add the country code before the telephone number or check the input is in ENGLISH INPUT METHOD and CAPS LOCK

12 The SMS commands that you will certainly use in the GSM switch are shown below:

5.1 Setup New Password

`pwd#PWDnewpassword#PWDnewpassword#`

If successful, the unit will return: New Password:xxxx.
For example, the original password is 1234, you want change it to 6666, then you can send the command below:
`1234#PWD6666#PWD6666#`

Tips: 1.The pwd in the commands means the password, when you use it, please use digital number, the capital letters PWD is the command letter, use PWD directly.

2. Remember that commands must be **CAPITAL Lock LETTERS**. It is PWD not pwd, CAP not Cap   etc. Don't add spaces or any other character. When input punctuation symbol #, must be in ENGLISH or DIGITAL input method. Not support other input method.

5.2 Setup Authorized number

5.21 Only Authorized phone number:

`pwd#TELAuthorized Number#Serial Number#`

E.g.: if you want to setup 13500001111 as the first user number, and the password is 1234,then you can send `1234#TEL004413500001111#001#` to the GSM unit. After the unit received this command (the 0044 is country code), the device will return:

```
001:004413500001111
```

5.22 Authorized phone number & user name:

`pwd#TELAuthorized Number#Serial Number#Authorized User's name#`

Authorized User's name: It is be regarded as remarks of the authorized phone number, Authorized User's name must be CAPITAL Lock LETTERS,Max:10

E. g.: `1234#TEL004413500001111#002#AB#`
Return:

```
001:008613500008888
AB
```

Set 008613500008888 as the second user   Name:AB

Tips: 1. the authorized number means the one who can dial the GSM unit to open it.

2. We highly recommend that the serial number of 001 is administrator's cellphone number, because the Relay action message only send to the first position number;

3. The Serial Number is the position to store the authorized number, from 001~200.

5.3 Inquiry the Serial Number's Authorized number

5.31 By serial number

`pwd#TELSerial Number?`

E.g.: If you want to know the authorized number at position 2, and the password is 1234, then you can send `1234#TEL002?` to check it.

5.32 By batch serial number

```
pwd#TELserial number start#serial number end?
```

E.g.: If you want to know the authorized numbers from position 1 to 10, and the password is 1234, then you can send **1234#TEL001#010?** to check them

5.33 By user's name:

```
pwd#TELAuthorized User's Name?
```

If you want to know the authorized number(name:FRANK), and the password is 1234, then you can send **1234#TELFRANK?** to check it

5.34 By user's Authorized phone number:

```
pwd#TELPAuthorized User's phone number?
```

If you want to know the authorized number(Authorized phone number:123456), and the password is 1234, then you can send **1234#TELP123456?** to check it

5.4 Remove the Authorized Number

5.41 Just remove one user

```
pwd#TEL#Serial Number#
```

(Or you can overwrite with another number you wish to change it).
E.g.: if you want to remove the authorized number at position 12, and the password is 1234, then you can send 1234#TEL#012#

5.42 Remove batch the Authorized Number

```
pwd#TEL#Serial Number Start#Serial Number End#
```

E.g.: if you want to remove the authorized number from position 1 to 10, and the password is 1234, then you can send 1234#TEL#001#010#

5.5 Setup any phone number could dial to access the device

```
pwd#AA#
```

Tips: This command allows anybody calling the SIM number to access it.
Warning! With the command above, it will allow anyone to access the device.

5.6 Setup only authorized number can access it (Default)

```
pwd#AU#
```

Tips: With the command above, you could allow the authorized number can access the GSM switch.

This is the default settings.

5.7 Setup the device description

pwd#DTDescription#

You can add description to GSM unit(such as install position,user information),the description will show in SMS which will be send to you.Max:20

E.g.:1234#DTMachine Room#

5.8 Setup the relay close time

pwd#GOTTime#

Tips: The time should be in 0~999seconds.

This command is useful in case you need to keep the relay closed (or button pressed) longer. The default time is 1 second. You can change it with the GOT command. The relay closed time is as same as the number you set, E.g.: if you set **pwd#GOT999#**, means the relay closed 999 Seconds.If you want to let the relay always closed until you call it next time, then you can set the time as 000, the format is **pwd#GOT000#**, the relay will be always closed until next time call in. in this case, only the authorized number can access it. The other unauthorized numbers can not access the unit. This is very useful for remote switch on or switch off the electricity appliance or equipment or device for a long time.

5.9 Enable return SMS confirmation when Relay action

pwd#R#

Tips: if you enable it, when the relay action, close or open, the unit will return a SMS confirmation to you(The first user number). The return SMS is: R-ON&Tel: xxx&Name&Description or R-OFF&Tel: xxx&Name&Description. You can disable it by the following command: pwd#N#. Default is no return SMS confirmation when relay is activated. This is very useful when you use the switch to control the equipment remotely.

5.10 Check current status of the device

pwd#CSQ?

Return:

GSM/4G signal value
Current relay status
Total authorized numbers
The authorization of phone number
The relay close time
Enable/Disable return SMS confirmation when relay activated
The device description

GSM/4G signal value: Range:0~31,GSM/4G signal quality. we suggest to keep the signal level above 12. If it is below 12, please make sure you had connected with an external GSM/4G antenna, or take the device to a better open area where has a better GSM/4G signal.

Current relay status:R-ON: Relay close.R-OFF:Relay open

Total authorized numbers: Total number of Authorized numbers

The authorization of phone number:

C-Type:ALL:any phone number could dial to access the device

C-Type:AUT:only authorized number can access it(refer to *5.5 &5.6 above*

The relay close time: R-Time:xxx,refer to *5.8 above*

Enable/Disable return SMS confirmation when relay activated:R-SMS:ON/OFF,ON:Enable return SMS confirmation when Relay action,OFF:Disable this function .refer to *5.9 above*

The device description:refer to *6.7 above*

E.g.:

```
S:19
R-ON
Usage:021
C-Type:AUT
R-Time:01s
R-SMS:OFF
Machine Room
```

5.11 Control the relay ON/OFF by SMS command

```
pwd#ON#
```

Return SMS: The relay is ON.

```
pwd#OFF#
```

Return SMS: The relay is OFF.

5.12 Inquire the Serial Number of authorized number

```
pwd#USER?
```

When you do not know which serial number has authorized number ,This command is useful

F. g.: Command:1234#USER?

Return:

```
001
003-005
012
```

the Serial Number of authorized number:001/003/004/005/012

6. Installation

Before installing the control unit, please help to test the system firstly, including power supply, GSM/4G signal, etc.

6.1 Connecting the Electronic Lock or Electric equipment