

PLEASE READ THESE INSTRUCTIONS IN FULL BEFORE USE

Product Description

GSM Gate Opener is an electronic that links to a GSM module, supplied with it. The purpose of this device is to be installed in parallel of the low voltage opening button of an electric gate to enable it to be opened by means of a GSM phone.

It has a relay whose contact has to be connected in parallel with the button which opens the gate. It has a White List of numbers who are enabled to open the phone, up to 64.

When the GSM Gate Opener receives a call it reads the caller ID then drops the call. If the calling number is in the list the gate will open otherwise if the number is unknown or withheld the caller is ignored.

Advantages of GSM Gate Opener

- 1- Safe: nobody can clone your phone as easily as they can do with a standard remote control
- 2- Flexible: you can add or remove anybody number in a minute with an SMS
- 3- Cheap: you don't need to buy a remote control for each member of your family
- 4- Convenient: no matter if you change car, or if you have different gates to open. Your phone will always be with you all the times your remote controls were somewhere else!

Safety Notes:

As with any automated system, you must ensure its operation cannot cause harm or injury. Gate opening equipment **regulations now require** that **any** automatic gate should sense an obstruction and return back to its starting position if obstructed. Also ensure no vehicles or items are left inside the range of the gates opening area to prevent damage or injury from a collision. **Although this system can be used globally, it is only recommended that non line of sight operation is used once it has been confirmed safe to do so by the person waiting to enter.**

Pay as you Go:

We strongly recommend that if you are using a PAYG SIM card you choose to auto 'Top-Up'. Contact the network provider you choose or visit their website for more details. The system will stop working if your provider disables the SIM card through lack of use. To prevent this, ensure there is always credit on the SIM card. Most providers allow auto 'Top-Up' of cards when they reach a set level. Some of our Orange SIM cards were topped up with a starting credit of £5 over 6 months ago and are still running as we printed this manual.

Storing Quick Dial Numbers in your phone:

We suggest adding the number to your phonebook that you don't use an obvious name such as 'Home Gates'. Use something less obvious like 'Home' or 'just simply '1'', just in case your phone gets into the wrong hands. It is also possible with most phones to set up a 'Speed Dial' key on the keypad to save time scrolling through your address book.

Phone theft:

If your mobile phone is stolen, there are two options to prevent users accessing your property. Immediately text the gates with the delete number code with the number of the phone that was stolen. Alternatively if you are to keep the same number, simply obtain a new SIM card and let your users know this is the new phone number for the gate system.

Preparing the SIM card

Before you install the GSM Gate Opener, we strongly recommend you 'prepare' the SIM card. This is done by inserting the SIM card into a normal mobile phone and powering up. All new SIM cards have to be registered with the network provider before it can be used. This is done by calling a number on the SIM card pack to activate it. Once this is done, ensure there are no PIN numbers on the SIM card when switching on. Also ensure there is sufficient credit on the SIM card for programming confirmation texts to be returned.

We also recommend you go through the procedure to setup your 'top up card' as the network usually sends a confirmation text which needs to be read on a mobile phone.

You must ensure the PIN request is disabled from the SIM card before inserting it in the unit otherwise the device will not work. If this is not done and the unit is switched on more than 3 times you will have to reset the PIN using the PUK Code!!

Switch the mobile phone off and back on and you should be able to make a call without putting any PIN numbers or codes in.

You MUST disable any voicemail that is set on the SIM using the codes below:

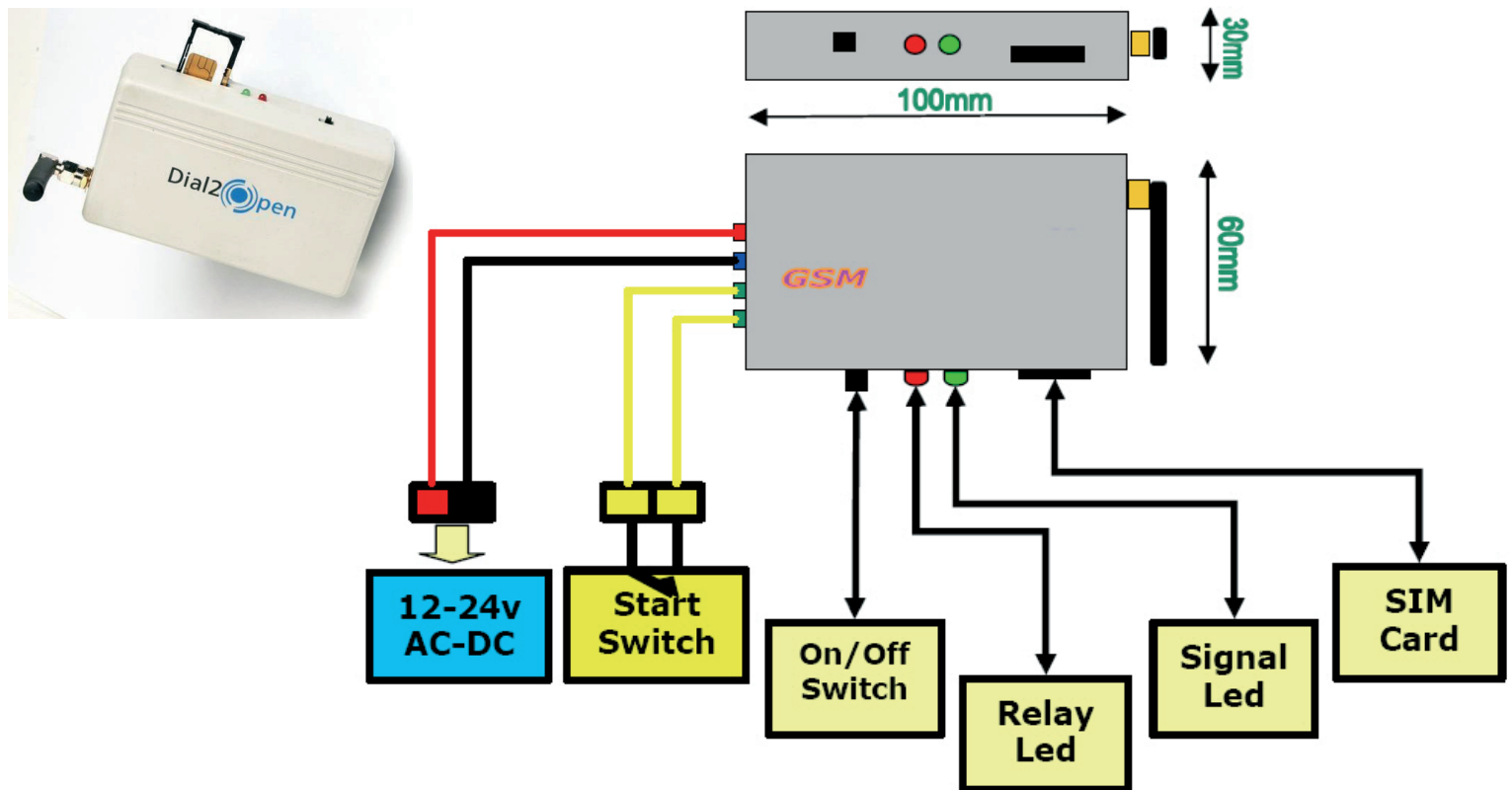
VodaFone: 1210 >Send - you will hear 'order is accepted and confirmed.

O2 - Call 1760 >Send - you will hear 'order is accepted and confirmed.

T-Mobile - Call 222 and follow instructions

Orange - - Call 450 and follow instructions

The SIM Card is now ready.



Installation

To install the GSM Gate Opener you need to connect the 2 yellow wires of the relay contact in parallel with the 'open' and common terminals. The relay contacts can stand 48V 0.5A maximum, this is enough for its operation but **don't try to switch higher voltages or currents**. Connect the yellow wires to these contacts.

The GSM Gate Opener is powered by means of 12 to 24V AC or DC supply. This is usually supplied by your existing controller. Check there are low voltage AUX or accessories contacts on the controller you can use to power this unit and is able to stand 0.5 Amps. We can supply an AC adapter if required although 98% of controllers provide auxiliary power. Connect the red to the positive supply and black wire to the negative.

If you need to install the device in a place with little signal, you may consider using an external antenna which can be supplied as an optional extra purchased separately with 2 meters of cable.

You can now insert the SIM card into the unit by gently applying pressure to both sides of the SIM card holder and pulling the holder out. Place SIM card into the tray and gently push back all the way until it stops. Switch the power onto the unit and after the green light flickers for a few seconds it will then settle to one flash every 3 or 4 seconds showing it is logged onto the GSM network and is in normal operation.

Don't use a mobile phone battery charger! Most of them rely on the phone battery and are unable to supply the power needed. You should install the GSM Gate Opener in a place where there is GSM signal strong enough from the network you want to use. Check it with a normal phone before proceeding with the installation.

If you need to install the device in a place with little signal, you may consider using an external antenna which can be supplied as an optional extra purchased separately with 2 meters of cable.

You can now insert the SIM card into the unit by gently applying pressure to both sides of the SIM card holder and pulling the holder out. Place SIM card into the tray and gently push back all the way until it stops. Switch the power onto the unit and after the green light flickers for a few seconds it will then settle to one flash every 3 or 4 seconds showing it is logged onto the GSM network and is in normal operation.

For quick, easy, accurate programming in less than 10 minutes go to:

www.sms-config.com

If you need to change the access phone number, FREE SIM cards are available from:

www.gsm-secure.co.uk/free_sim_cards.htm

GSM Gate Opener Programming

You can program the GSM Gate Opener with SMS commands 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, we also use a Password that makes it impossible for anybody, who doesn't know it, to access the system by chance.

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

The SMS commands that you will certainly use in the GSM Gate Opener are the following:

#PWD: Password

#WHL: White List (add or remove numbers)

#ACM: Access Mode - **the unit is supplied 'open to any number' calling it and we recommend using this to enable the caller ID call screening.**

#CAP: Change password command

You could also use the following, though not necessarily:

#GOT: Gate pulse time

#SCA: Set mobile provider service centre address

#CSQ: Check Signal Quality

Once you issue a command with an SMS, you will receive a confirmation SMS with OK if everything is correct or Err if there is an Error. **PLEASE ENSURE THE SIM CARD HAS CREDIT ON FOR THIS TO WORK.**

#PWD

Password. This command must always come first. Use 6 digits as a password. The standard factory default password is 123456. **We suggest that you change it**, using the #CAP command.

In all the following examples we will use 123456 as an example of password.

#WHL

White List. This is the command that you will use most. it is used to add or remove numbers that are enabled to open the gate into the White List. You can add up to 64 numbers in the list. Every position must be indicated in the command and we advise you to keep a list written somewhere to know which numbers are in and in which position.

Please note that it is only possible to program up to 10 digits for a number. If it has more digits you should use the rightmost ones. For example, if your number appears as 447776665555 you should not program the country code (44). If your number has only 9 digits or less, it is not a problem. The important thing is that you don't exceed 10 digits as the UK uses 11 digit numbers.

- To add a number, the syntax of the command is the following:

```
#PWD123456#WHL01=7776665555
```

Where 01 is the position in the list and 7776665555 is the number enabled.

- To check which is the number in a place of the list:

```
#PWD123456#WHL01?
```

- To erase a number:

```
#PWD123456#WHL01=0000000000 (or you can overwrite with another number you wish to change it)
```

#ACM

Access Mode. This command allows you to open only to people that are in the white list or to anybody calling the SIM number.

The syntax of the command is the following:

- #PWD123456#ACM0 (it is a zero)

Warning! with the above command you allow free access to anybody calling!

- #PWD123456#ACM2

with the above command you allow only people that are in the white list. This is the standard and recommended option.

- #PWD123456#ACM?

To check how it is set

#CAP

Change Password. Use this command to change the password with a new one that you will chose for your device (don't forget it or you will have to send the unit back to us to reset it, and this has a cost!)

The #CAP command must be issued 2 times to be sure you don't digit a wrong one. Of course it must be preceded by the old password.

For example, to change the password 123456 into the new password 333444 you need to send the following SMS:

- #PWD123456#CAP333444#CAP333444

You will receive a confirmation with PWD OK and CAP OK if you wrote correctly or an Error message if you made a mistake.

#GOT

Gate pulse time. This command is useful in case you need to keep the button pressed longer. The standard time is 0,3 seconds (300 ms). You can change it with the GOT command.

The syntax of the command is the following:

#PWD123456#GOT500

With the above command the opening time has been set to 500 ms (0,5 seconds). You can check what the current pulse time is with the command

#PWD123456#GOT?

#SCA

Service center address.

NOTE! Most of the times you won't need to use this command. Try to see if the unit work well and acknowledges SMSs before using the SCA command!

If you want the Easygate to be able to send an SMS you should tell it what is the number of the SMS service centre. Most of the times the unit answers anyway because it gets it from the SIM. Sometimes this doesn't happen and you have to program it. For example, Vodafone in UK uses the service center number 44385016005. You should ask your operator which is their SMS service center number. You can see it in your phone in the SMS settings (if you are using the same operator).

• To program the service center number for Vodafone in the UK we use the following command:

#PWD123456#SCA44385016005

#CSQ

Check GSM signal quality. This command is useful to see what is the GSM network signal level your GSM Gate Opener is receiving. If you send the command: #PWD123456#CSQ?

You should receive an SMS with signal quality in range 0 to 32 (if it is 0 we doubt it will ever answer). You should have a signal above 12 to be sure of being able to open the gate in any condition. Better if above 16. You should add an external antenna if this is not the case, or eventually even change operator with another that serves your area better.

Most common problems and solutions

Some phones cannot open the gate:

Verify that they send the caller ID when calling another phone. Check that the number you see in the other phone is what you have programmed in the GSM Gate Opener

Phone a number with the phone and check the number is **NOT** withheld

I have inserted the SIM but the unit doesn't work:

Check to have removed the PIN request from the SIM. If you didn't do it and you have switched-on the unit more than 3 times, you may need to use the PUK code. Check with SIM instructions for details

The gate opens only sometimes:

Check that there is enough signal from the operator you are using in the GSM Gate Opener, and also from the operator that you use in the phone that is calling.

I have checked in all possible ways but still the unit doesn't work:

Try to change operator.

The pulse is not long enough to activate the gate:

Use the #GOT command to increase the relay closed time

Is it possible anyone to open the gate?

Yes, you can do it using the #ACM command but not recommended

Password	
-----------------	--

Location	Number	Name
#WHL1=		
#WHL2=		
#WHL3=		
#WHL4=		
#WHL5=		
#WHL6=		
#WHL7=		
#WHL8=		
#WHL9=		
#WHL10=		
#WHL11=		
#WHL12=		
#WHL13=		
#WHL14=		
#WHL15=		
#WHL16=		
#WHL17=		
#WHL18=		
#WHL19=		
#WHL20=		
#WHL21=		

Location	Number	Name
#WHL22=		
#WHL23=		
#WHL24=		
#WHL25=		
#WHL26=		
#WHL27=		
#WHL28=		
#WHL29=		
#WHL30=		
#WHL31=		
#WHL32=		
#WHL33=		
#WHL34=		
#WHL35=		
#WHL36=		
#WHL37=		
#WHL38=		
#WHL39=		
#WHL40=		
#WHL41=		
#WHL42=		

Location	Number	Name
#WHL43=		
#WHL44=		
#WHL45=		
#WHL46=		
#WHL47=		
#WHL48=		
#WHL49=		
#WHL50=		
#WHL51=		
#WHL52=		
#WHL53=		
#WHL54=		
#WHL55=		
#WHL56=		
#WHL57=		
#WHL58=		
#WHL59=		
#WHL60=		
#WHL61=		
#WHL62=		
#WHL63=		
#WHL64=		

Important note: electronic devices may pollute the environment.
Act according to your local laws when disposing this unit.



The PCB152 electronic board complies with EMC regulation.
The Siemens TC35 GSM engine complies with EMC regulation

