



# GM Techtronics

## GMT-4GSRF

### 4G Switch with RF for remote control

Operate gates, doors and more with your mobile phone.



## Product Information

The GMT-4GSRF GSM Switch with FR Key Fob incorporates a professional, industrial grade engine that receives calls at its SIM number, as any ordinary GSM mobile phone.

The system operates in the GSM module quad band 850/900/1800/1900/2100mhz frequencies.

To give an example, if your SIM has the number 07234567890, this is the number you must call to open the gate. The system has a memory where you will store the numbers of people enabled to open the gate (up to 120). When the Gate Opener receives a call, it will check the calling number is in the WHL list, \*answer the call for 3 seconds\*, then reject the call and open the gate if the number is recognized. \*The unit answers the call which means any sim provider can be used as there are timing issues with these kind of switches and certain network providers\*

The advantage of this over other systems is that you do not have to leave the car to open the gate avoiding weather conditions or safety issues.

## Specification

- Simply dial the sim card number to open the gate.
- Phone list for added security with up to 120 stored numbers
- Text for signal strength
- Text for fast/slow relay pulse
- Text to keep/latch the gate open
- RF Key fob activation, button A to trigger - button B to latch
- 2G/4G sim card
- Antenna Supplied
- Keep Sim Active Function
- Dimensions - L 150 x W90 x H45mm
- Dimensions PCB Only - L 125 x W67mm
- Operating Temperature -10 to +40c
- Input 12/24 VDC
- Output Relay 2 Amp N/O Volt Free
- Quad band Frequency 850/900/1800/1900/2100 MHz
- 2G or 4G either by DIP switch or modem (call us on 01225 767 129 if 4G is required)

### **IMPORTANT - PLEASE READ**

**PLEASE ENSURE THAT YOU DISCONNECT THE POWER WHEN YOU FIT THE SIM CARD**

We strongly recommend checking the signal strength on the 2G networks and using which has the highest signal strength score. The signal strength should be at least a score of 10 or more for reliability.

You can only send one number at a time. Please send the message and wait for the switch to send you a text acknowledgment 'stored' before you try to add another number via text entry.

## Powering the GSM 4G Gate Opener

Connect the 12 volts DC to the input connector as per figure 1. Once the power has been applied the **blue** network LED will flash once every second. Once the signal has been found the **green ready** LED will come on and stay on indicating that the unit is now ready for use.

## Password Change

Default password for the 4GSRF is 1234. To change this, send the following:

**#1234\*PW4321#**

This will set the unit password to 4321.

## Signal Strength

To help make sure that you place the unit in a suitable position you can text the unit to see how much signal strength the dialer is receiving. Text the command

**#4321\*SIGNAL#**

The dialer will perform a test on the signal strength. You will receive a text telling you the signal strength score between 1 up to 30. We strongly recommend that you place the unit where you can receive a signal strength score of at least 10 or higher. You will find that with a score of less than 10 the unit will be unreliable.

## DIP SWITCH 1

Dip Switch 1 is for selecting between 2G or 4G, OFF = 2G / ON = 4G

Please call 01225 767 129 to enable this switch.

# **How to program the 4GSRF**

## Storing and Deleting Numbers

Once the unit has a **green** light it is ready to be used. To program a number to the caller ID (WHL) list you will need to send the following text message code:

**#4321\*WHL=NUMBER#** e.g. #WHL=01225767129#

To delete the number, send the text message code **#DEL=NUMBER#**

If the code is accepted the unit will reply 'WHL number stored' or 'WHL number deleted'

## Turning Caller ID ON or OFF (Open to All Numbers)

The unit can be restricted to just the WHL numbers or open to all. **OFF is default**

**#4321\*ID=ON#** will only allow access to numbers stored on the unit.

**#4321\*ID=OFF#** will turn caller ID off allowing access to any number that calls the unit.

## Relay Speed

Relay Speed can be changed between Fast and Slow. **FAST is default**

**#4321\*SLOW#** sets a relay timer of 5 seconds.

**#4321\*FAST#** sets a relay timer of 1 second.

## Clearing The WHL

If you want to clear the caller list that is stored on the unit, you can delete individual numbers as stated above or send **#4321\*CLEAR=WHL#** for a complete WHL clear.

## Keep SIM Alive

Just like the 2GSRF, the 4GSRF has a pre-configured SIM keep alive setup.

You can now change this option. **OFF is default TEXT\*ONLY is default**

**#4321\*BOOTUP=07123456789#** this will change the default number to a number you prefer to receive boot up and 6 weekly messages.

**#4321\*BOOTUP=ON#** If the above number has been changed then you need to turn the service on.

**#4321\*BOOTUP=OFF#** If you want to revert to default turn the service off.

**#4321\*TEXT&CALL#** Some service providers require an outgoing call to be made, so we have included this as an option.

**#4321\*TEXT\*ONLY#** If an outgoing call is not required then the unit can set to text only.

### Reset Function

For quick reset and to clear ALL numbers there is a built-in reset function that is triggered via sending a text message

**#4321\*RESET#** Well reset the unit back to factory

The unit will then remove ALL WHL numbers stored, Relay will be set to FAST, BOOTUP will be set to OFF.

### What to do if the Password is Lost

DIP Switch 2 can be used locally as a hard reset incase the password has been lost. This will reset the password and everything back to default **BUT WILL NOT** affect the WHL, all user numbers will remain stored.

Turn the power off to the unit, turn DIP Switch 2 ON and apply power, wait the **GREEN** ready light, and then turn DIP Switch 2 OFF, the unit's password is now defaulted to 1234.

If the above is not an option, please contact GM Techtronics Ltd 01225 767 129 where we can assist you further.

### Using the 4GSRF

Using your mobile phone or land line call the SIM card number. You will hear a couple ring tones. The unit will automatically hang up. The relay will then pulse for a period - this is where it is sending a signal to your gate control board to open the gate.

If the ID option is ON and a number not stored tries calling, they will hear 2 rings the unit will cut the call off, but nothing will happen with the relay.

### Text the 4GSRF

**#4321\*OPEN#** To latch the relay on.

**#4321\*CLOSE#** To release the relay, this can also be done via a phone call or by Pressing A on the remote fob included.

### Remote Fob

The unit comes with 1 pre-programmed remote fob included.

Button 'A' is used to trigger the relay.

Button 'B' is used to latch the relay. A latched relay can be released by button 'A' on the remote fob, or by calling the switch.

### Quick Programming

**#1234\*PW4321# - PASSWORD CHANGE**

**#4321\*ID=ON/OFF# - OPEN OR CLOSE ACCESS TO INCOMING CALLS**

**#4321\*WHL=07123456789# - TO STORE NUMBERS \*ONE AT A TIME\***

**#4321\*DEL=07123456789# - TO DELETE STORED NUMBERS \*ONE AT A TIME\***

**#4321\*FAST/SLOW# - RELAY TIMER FAST OR SLOW**

**#SIGNAL# - REPLY SIGNAL CHECK FROM 0-30**

**#RESET# - FACTORY DEFAULT**

**#4321\*BOOTUP=07123456789# - STORES THE 'KEEP ALIVE' NOTIFICATION NUMBER**

**#4321\*BOOTUP=ON/OFF# - TURNS THE BOOTUP TEXT AND 6 WEEK KEEP ALIVE ON OR OFF**

**#4321\*TEXT&CALL# - WILL SEND AN TEXT AND PLACE AN OUTGOING CALL ON BOOTUP AND EVERY 6 WEEKS**

**#4321\*TEXT\*ONLY# - WILL SEND ONLY A TEXT ON BOOTUP AND EVERY 6 WEEKS**