

# Telstrom GSMKEY User Guide

## Quick Setup

The easiest way to program the GSMKEY is to insert the SIM into a phone and load the contacts and then program the other settings via SMS.

1. Insert the GSMKEY's SIM card into a mobile phone to add the relevant contacts into the phone book.
2. Add the following:
  - a. Setup an admin user, First Name: ADMIN1 & Number: +64212345678
  - b. Setup who alarms calls should contact. First Name: ALARM1 & Number: +64215555555
  - c. Setup access for users (upto 250) that can call the GSMKEY to open the gate. First Name: Caretaker & Number: +6421827101
3. Insert the SIM card into the GSMKEY and power on.
4. Set the "on event" Input 1/2 SMS messages. E.g. When Input1 is closed, send an SMS "Caution, Smoke Alarm activated!" Refer command : SMSx,y,text
5. Connect the inputs and relays
6. You are ready to go!

**Basic technical parameters:**

Power Supply: 9 to 15V DC, 500mA  
GSM network: 900/1800MHz  
Dimensions: 145 x 75 x 30 mm

**Features:**

- 2 inputs for detecting a closure (alarm output, sensors etc.) (5V)
- When a short circuit is detected at an Input, an SMS is sent to pre-programmed number.
- When a short circuit is detected at an Input, the unit progressively calls up to 8 pre-programmed numbers. (ALARM1 to ALARM8)
- 2 galvanically separated relays (switching contacts 230V/ 5A)
- 2 Relays A/B controlled by calling the GSMKEY. Only calls from authorised numbers can call and activate the relay. Up to 250 authorised numbers can call it.
- Both Relays can be controlled by SMS. You can control Open, Close and Closing time 1-99 minutes.
- The unit can be programmed via a PC or via SMS.

**Installation**

You can install the unit on a DIN rail, screw it to the wall or sit it on a shelf. The unit is not designed for exposure to the elements. If you require the unit outside, place it in a waterproof box.

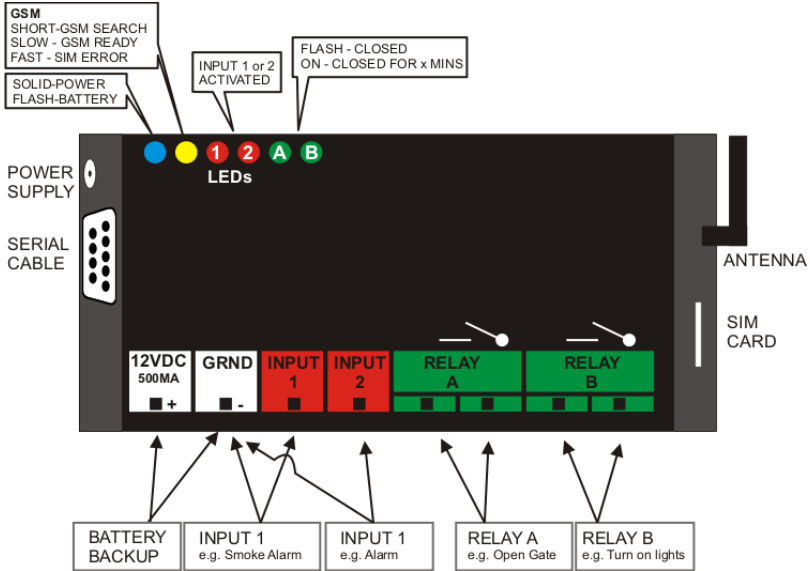
**SIM Card**

You can save the names and numbers of users either by inserting the SIM into your mobile phone, or by using the GSMKEY application.

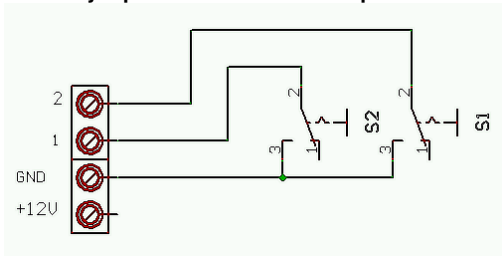
**The names ALARMx, ADMINx, ARMSMSx, CRED, OPER and RTIME must be saved in CAPS.**

*Note: numbers that the GSM Key calls must have their Voicemail turned off, else the Voicemail will answer the call and it will be treated as a successful call!*

## Schematics

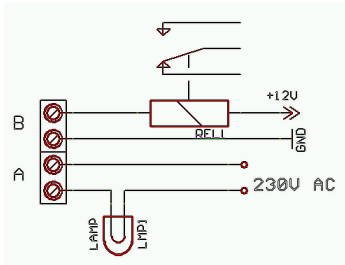


## GSM Key Input 1/2 connection examples:



Connect Inputs 1 and 2 to your smoke alarm or gate to detect if it has been activated.

## Relay A / B connection examples:



Example, Relay A turns the lights on and Relay B opens the gate.

**SMS Commands that are sent to the SIM inside the GSMKEY.**

Note: SMS commands must be sent in CAPS

SMS Command	Example	Function	response	
Where x = parameter, y = phone number, ss=secs, mm=mins Do not use spaces between commands!				
SMS can only be sent from an ADMIN user!	ADMINx,y x = 1 to 8 users y = phone number	ADMIN3,+642156265	The GSMKEY will make contact with the ADMINx user when one of the following occurs: <ul style="list-style-type: none"> <li>By ringing the GSMKEY will activate Relay A</li> <li>By sending an SMS to the GSMKEY, activate Relay A or B</li> <li>By sending a SMS to the GSMKEY to get Input 1,2 &amp; Relay A,B status</li> </ul>	'OK,credit'
	ADMINx, x = 1 to 8 users	ADMIN3,	Remove ADMINx user	'OK,credit'
	ALARMx,y x = 1 to 8 users	ALARM3,+642156265	The GSMKEY will make contact with the ALARMx user when one of the following occurs: <ul style="list-style-type: none"> <li>By ringing the GSMKEY will activate Relay A</li> <li>By sending an SMS to the GSMKEY, activate Relay A or B</li> <li>By sending a SMS to the GSMKEY to get Input 1,2 &amp; Relay A,B status</li> <li>On Input 1,2 closing, GSMKEY sends SMS from position 2(3) and progressively rings the contacts of ALARMx numbers (until call answered)</li> <li>On mains power failure for 30seconds+ and the GSMKEY sends SMS to ALARM8 number with 'ACCU,credit'</li> </ul> When mains power resumes for 30seconds+, GSMKEY sends SMS to ALARM8 with 'POWER ON,credit'	'OK,credit'
	ALARMx, x = 1 to 8 users	ALARM3,	Remove ALARMx user	'OK,credit'
	ARMSMSx,y x = 1 to 8 users y = phone number	ARMSMS4,+642156265	Add users that will only receive SMS notifications when Input 1 / 2 are closed.	'OK,credit'
	ARMSMSx x = 1 to 8 users	ARMSMS4	Remove user x number	'OK,credit'
	RTIME,ss	RTIME,10	Time closing of Relay A during ringing (ss=01..99 sec)	'OK,credit'
	SMSx,y,text x = 1 to 8 users y = phone number	SMS1,+642156265,online SMS2,+642156265,fire SMS3,+642156265,alarm	SMS that is sent to the mobile phone on event: 1 = The unit has been switched on 2 = Input 1 activation 3 = Input 2 activation	'OK,credit'
	SMSx,	SMS2	Erase SMS on position x	'OK,credit'
	NAME,y	NAME,+642156265	Sends the user contact name and number, so when the call the SIM Relay A is activated.	'OK,credit'
	NAME,		Erase all numbers with NAME	'OK,credit'
	NAME,y-DEL	NAME,+642156265-DEL	Erase exact number with NAME (may exist more times !)	'OK,credit'
	CAL,AT+CSQ		Report GSM signal strength	'+CSQ,17,99, credit'(max 32)
CAL,AT+CPBR=x	CAL,AT+CPBR=5	Detection of phone number at position x	'+CPBR:1,"+421012345 678", 145,"ADMIN1"	
ALARM	STAT		Status inquiry of all inputs and relays. <b>12ab</b> Input1 = (1 or 0) where 0 = alarm Input2 = (1 or 0) where 0 = alarm Relaya = (0,1,2) where 0=off, 1=on, 2=on for mm time. Relayb = (0,1,2) where 0=off, 1=on, 2=on for mm time.	STATUS=1111,V1.31,3 5383737363
	REL1_ON		Activate relay 1 (Relay A)	OK(REL1_ON),credit
	REL1_OF		Deactivate relay 2 (Relay A)	OK(REL1_OF),credit
	REL1_ON,mm	REL1_ON,15	Activate relay 1 (Relay A) for time mm, where mm=1-99 min	OK(REL1_ON,mm),credit
	REL2_ON		Activate relay 2 (Relay B)	OK(REL1_ON),credit
	REL2_OF		Deactivate relay 2 (Relay B)	OK(REL1_OF),credit
	REL2_ON,mm	REL2_ON,11	Activate relay 2 (Relay B) for time mm (mm=1-99 min)	OK(REL1_ON,mm),credit

## Customer Case Studies

RelayA is connected to your electric gate.

RelayB is used to disable your Alarm system.

Input1 is connected to the security alarm

Input2 is connected to the smoke alarm sensor.

You set your mobile number to the unit with commands ADMIN1 and ALARM1.

You program Input1 so it sends an SMS "Alarm activated!"

You program Input2 so it sends an SMS "Fire Alarm activated!"

- 1.) When you drive up to your house, just call the GSMKEY and the gate will open as it detects your caller ID of your mobile. (Its a free call, as the call is never answered)
- 2.) You are at work. The GSMKEY calls your mobile. You can now call your neighbour to check the house and you can turn off the Alarm by sending an SMS.
- 3.) You want to give your gardener access into the main gate for his routinely clean up. Just send an SMS command: John,+6421829283 Now John can call and open your gate at any time. Once he is finished working for you, just send an SMS to remove John.

## PC Programming

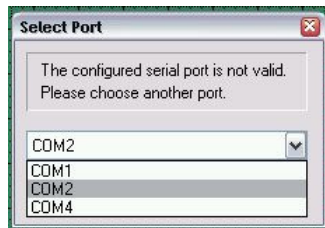
### Installation of PC software

Insert the CD and install the USB drivers before plugging in the USB cable to your PC.



Create a folder on your PC, and copy the program EXE and INI file into it.

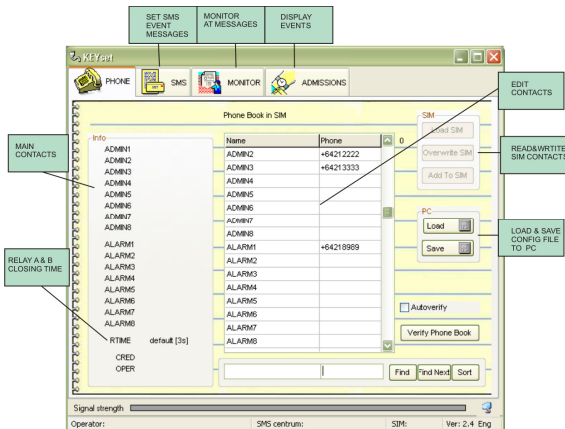
To remove the software simply delete the folder.

Start the program and select serial port that has been assigned to the USB cable. If you are unsure what serial port has been allocated to the USB cable, check system properties and COM ports.



### Basic window of the program

On the bottom right of the screen is a 30 second timer icon . Every 30 seconds the application obtains the status with the GSMKEY, while it syncs, the icon changes  and some parts of the application are unavailable.



### Phone book contacts

When you start up the application the phone book will be empty.

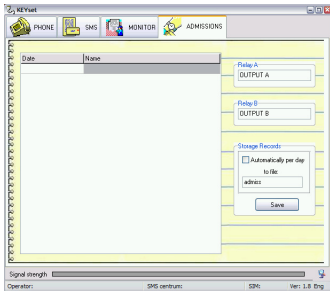
Click "Load SIM", this retrieves the contacts from the unit. It is important to store the following parameters (ADMIN, ALARM, CRED etc.) with their associated phone numbers in international format. To save the changes, click "Overwrite SIM".

## SMS notification messages

This section allows you to customise the SMS messages that are sent on power up, Input 1/2 activation.



## Access log of Input and Relay activity.



This sections allows you monitor the activities of the inputs and relays. It requires the GSMKEY to be permanently connected to a PC. It records the date, time, name and phone number of the event. You can rename Relay A and B to e.g. Front Gate and Back Gate. You can choose to automatically save the log file or save it manually. It is saved as a CSV file, so can easily be opened in Excel.

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