



TELCON 500

GSM Controller
User manual

Thank you for purchasing our product. Please read this manual before starting to install the *TELCON 500* GSM controller. If you are unsure how to connect to the device you wish to control refer to a qualified person.

INTRODUCTION

The *TELCON 500* is a GSM remote control switch, it connects to the mobile phone network and the same as a mobile phone it has its own telephone number. The *TELCON 500* is activated by calling its phone number, it will recognise an authorised telephone number calling it, reject the call without answering and switch on or off the device connected to it, because it rejects the call without answering there are no call costs incurred.

Applications include authorised door access, controlling gates, car parking systems, re-setting of remote servers and routers.

Up to 500 authorised telephone numbers can be stored in the unit's memory. Whenever a call is made to the *TELCON 500*, it compares the phone number of the incoming call with the numbers stored in its memory. If a match is found, it recognises that the caller is authorised and the unit will activate.

PACKAGE CONTENTS

- TELCON 500
- CD (including the user manual and software.)
- Configuration cable for connection between the TELCON 500 and personal computer
- GSM antenna.
- Quick start guide

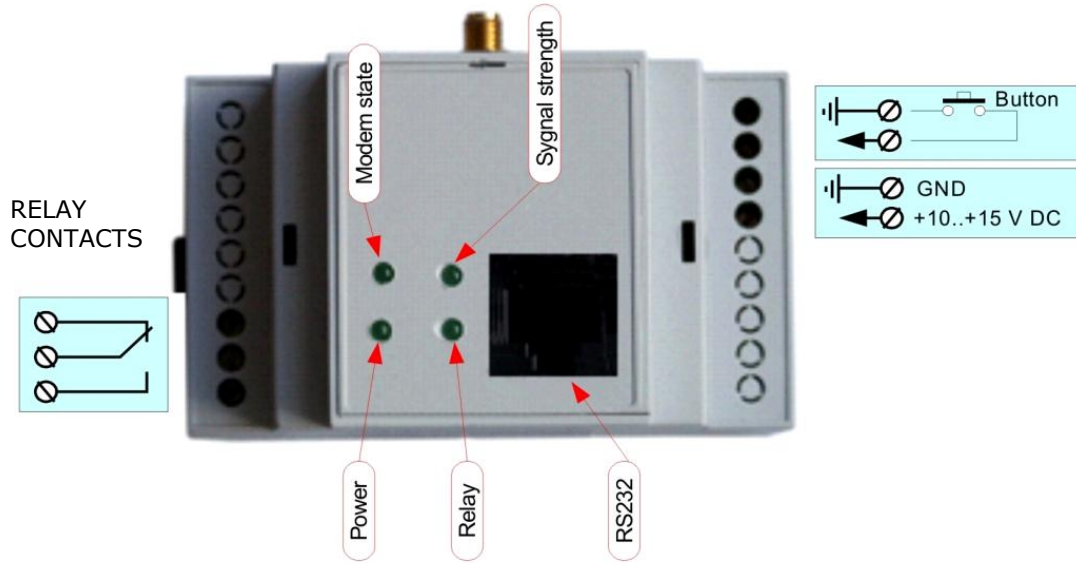
Note: A SIM card is not supplied, please obtain a SIM card from you preferred network provider

TECHNICAL SPECIFICATIONS

Power Supply Voltage.....	10-15 V DC
Average Power consumption.....	2 W
Operating Temperature.....	-20 to +40°C
Maximum Switching Current.....	5 A
Maximum Switching Voltage.....	220V
Dual Band GSM modem	900/1800MHz
Dimensions.....	90 x 53 x 58 mm

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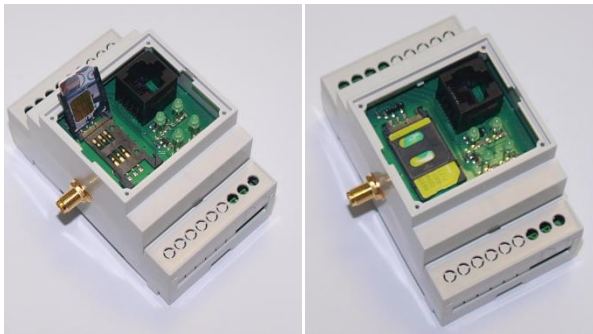
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TELCON 500

INSERTING A SIM CARD

Ensure power is switched off before inserting the SIM card



Please refer to page 9 for further details about SIM card requirements
 A SIM card is not supplied, please obtain a SIM card from you preferred network provider.
 Remove the top cover by inserting a small screwdriver into the slot and prising off the cover.
 Insert the SIM card into the holder as shown above.
 Replace the top cover.

CONNECTING THE ANTENNA

















Connect the supplied antenna to the socket on the side of the unit.

CONNECTING A POWER SUPPLY

A power supply is not supplied.
 Use a 12 volt DC, 1 amp regulated power supply and connect to the power supply terminals ensuring the correct polarity is observed.

CHECKING OPERATION

Switch on the power supply and observe the boot sequence as shown below

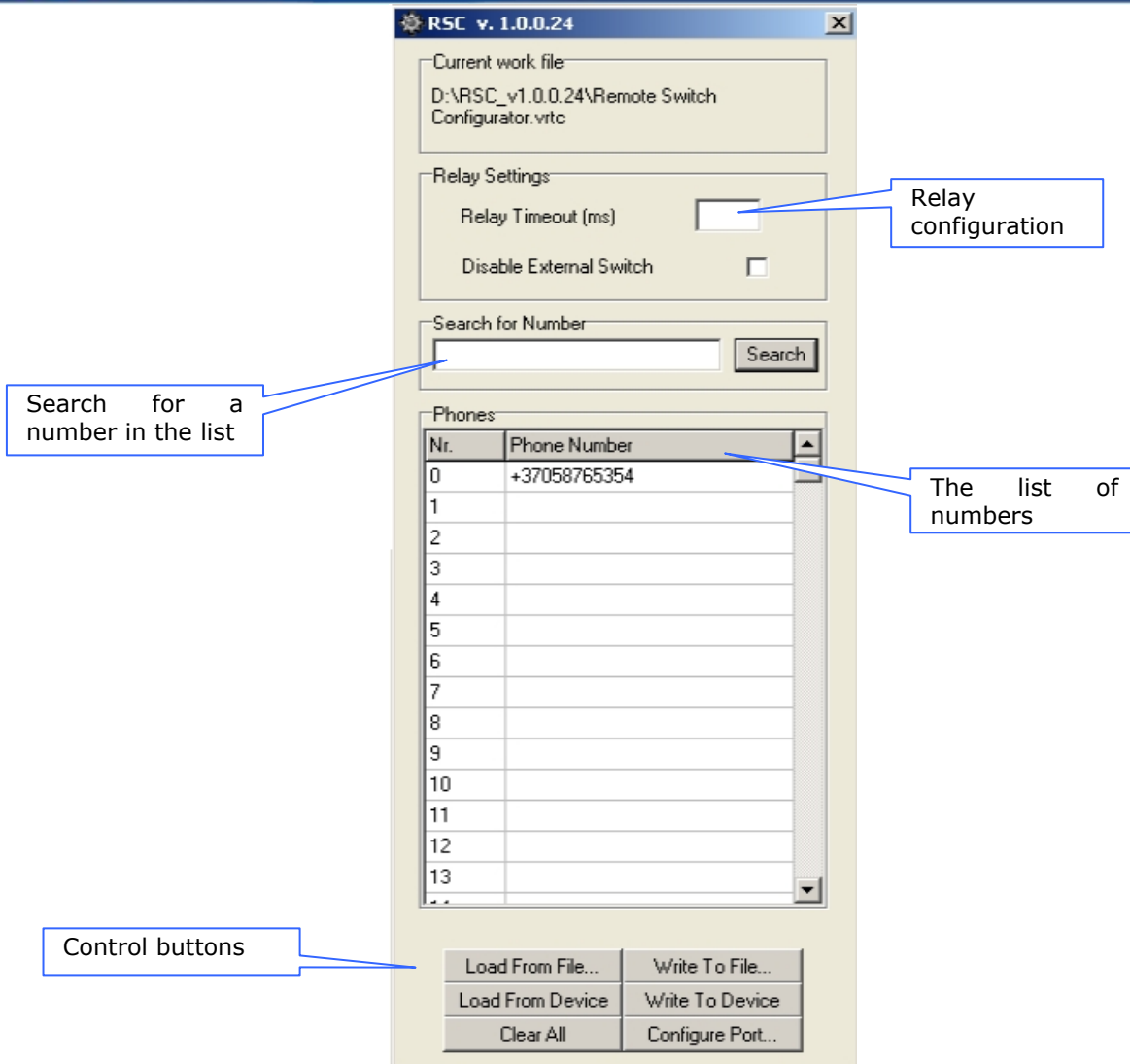
Turn-by-turn signals of light diodes	Description of the status
Power  Modem state  Relay  Signal strenght 	Light diode <i>Power</i> is turned on
Power  Modem state  Relay  Signal strenght 	
Power  Modem state  Relay  Signal strenght 	Light diodes <i>Relay</i> and <i>Signal Strength</i> are flashing alternatively. This status lasts as long as the modem is in progress of being connected to the GSM network.
Power  Modem state  Relay  Signal strenght 	When the modem has been connected to the GSM network, the light diode <i>Relay</i> stops flashing and the light diode <i>Signal Strength</i> starts flashing to reflect the Power of the signal being received. The light diode is pulsing, and the quantity of pulses refers to the Power of the signal. One pulse refers to the lowest signal, 7 pulses refers to the highest signal

CONFIGURING THE TELCON 500

Before the *TELCON 500* can be used it must be configured, the authorised telephone numbers need to be entered into the user list and the relay time set. The unit can be configured by SMS text messages and by using a computer with the software provided. When configuring using SMS text messages the unit will only respond to messages sent from the telephone number entered in the 0th position of the units memory, since the 0th memory position does not contain a number initial configuration must be carried out using a computer, once a number is entered into the 0th position further configuration can be carried out using SMS text messages.

CONFIGURING USING A COMPUTER

Insert the CD into your computer and install the *Remote Switch Configurator* software
 Connect the *TELCON 500* to the computer using the configuration cable
 Start the program *Remote Switch Configurator*



Relay Timeout – This is the time the relay will activate for in milliseconds, the maximum time is 6500 ms (6.5 seconds)

Disable External Switch – If the external switch function is not required then check this box

Search for Number – Enter the number you wish to find in the list and click search

Authorised Number List – Up to 500 numbers can be added to the list

Note: Add a + sign in front of numbers entered

Control buttons

Load From File – Loads a saved configuration

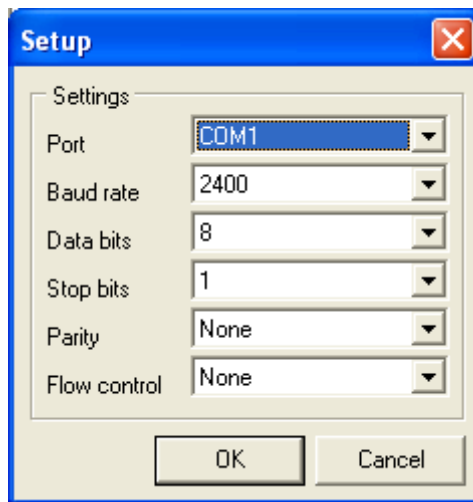
Load From Device – Loads the configuration stored in the TELCON 500

Clear All – Clears all fields

Write To File – Saves the current configuration to file

Write To Device - Saves the current configuration to the TELCON 500 memory

Configure Port – Opens the port configuration window



Select the Port which the TELCON 500 is connected to and click OK

RELAY CONFIGURATION

Enter the *Relay Timeout* time in milliseconds, eg 500 = 0.5 seconds

AUTHORISED NUMBER LIST

Note: Add a + sign in front of numbers entered eg +08456528456

In memory position 0 enter the administrator telephone number, this is the number that will be able to add and remove authorised telephone numbers using SMS text messages, this is the only number that will be able to configure the device using SMS text messages.

Enter the other authorised telephone numbers, we recommend keeping a list of the name, number and position so authorised users can be easily deleted by SMS text message if required
Click the *Write to Device* button

CONFIGURING BY SMS TEXT MESSAGES

When configuring using SMS text messages the unit will only respond to messages sent from the telephone number entered in the 0th position of the units memory, this number must be entered using the configuration software and a computer

Note that a + must be added before the number and a ; must be added after the number

To add an authorised telephone number into the memory the following SMS message is sent

P#nnn=+xxxxxxx ;

nnn is the position in the memory to store the telephone number
xxxxxxx is the telephone number

Example to store the number 08456528456 in position 35 of the memory you would send the following SMS message

P#035=+08456528456;

You will receive the following confirmation SMS message from the unit `*#035=+08456528456`

Several numbers can be entered in a single SMS message

`P#002=+08456528456;#003=+0845652222;#004=+0845658882;` - Note the P is only required at the start of the message

To delete an authorised number from the memory the following SMS message is sent

`P#035=+000000000000;` - this will delete the number from position 35 in the memory - note enter 12 x 0 (zero)

To enter the relay timeout time the following SMS message is sent

`PRTIMT=xxxx;`

where xxxx is the time in milliseconds

Please note the maximum relay timeout time is 6500 milliseconds (6.5 seconds)

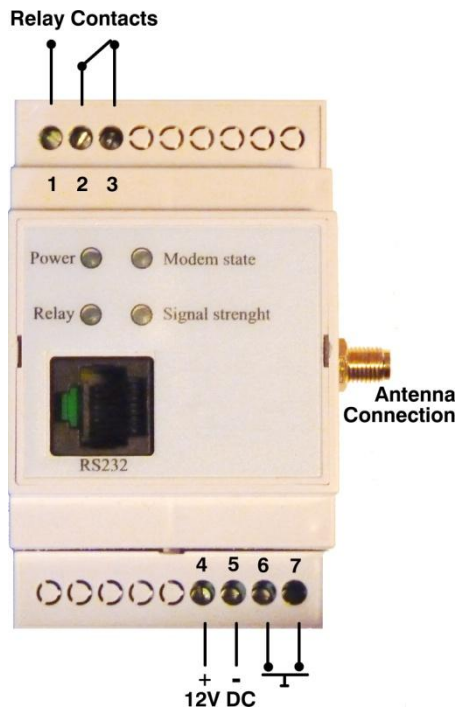
Example to set the relay timeout time to 1 second you would send the following SMS message
`PRTIMT=1000;`

You will receive the following confirmation SMS message from the unit `*RTIMT=01000`

TEST

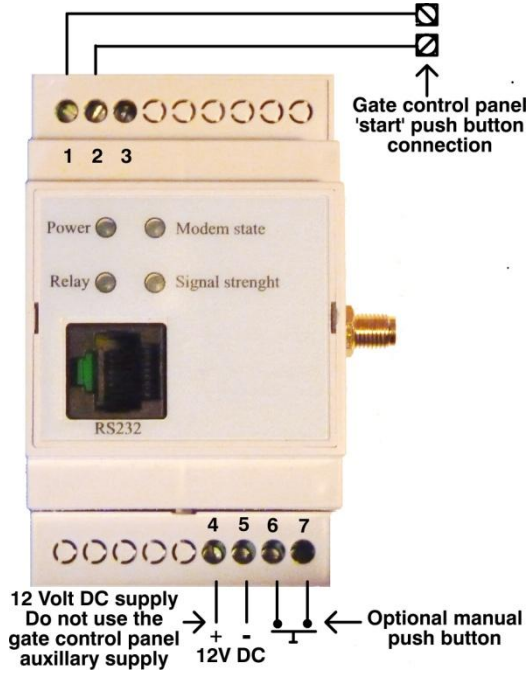
Call the *TELCON 500* from a telephone that has been added to the authorised number list in the devices memory, the *TELCON 500* will reject the call without answering and the relay will activate for the time configured.

CONNECTION DETAILS



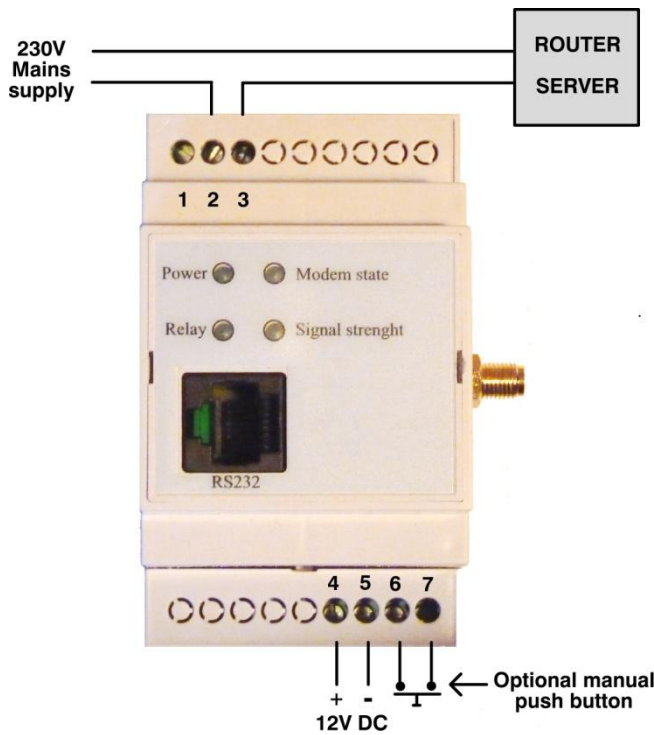
1	Normally open	Relay contacts, maximum switching capacity 5 amps @ 230V
2	Common	
3	Normally closed	
4	+12 Volts	12 Volt DC supply @ 1 amp
5	- 12 Volts	
6	Normally open momentary push button connection	Allows manual control of the unit
7		

CONNECTION EXAMPLES



CONNECTION TO A GATE CONTROL PANEL

When the TELCON 500 is activated the relay contact will send a signal to the gate control panel and open the gate



CONNECTION TO A ROUTER OR SERVER

When the TELCON 500 is activated the relay contact will interrupt the power supply and re-set the router or server

SIM CARD

All new SIM cards have to be registered with the network provider before they can be used, refer to the instructions supplied with your SIM card.

Ensure there is sufficient credit on the SIM card for programming confirmation texts to be returned.

We recommend that if you are using a 'pay as you go' (PAYG) SIM card that you choose to automatically 'Top-Up' when the cards credit falls below a certain limit please contact your network provider or visit their website for more details.

Most but not all PAYG SIM cards will be de-activated by the network if not used to make an outgoing voice call or send an SMS text message within a specific period. To prevent this simply send the TELCON 500 a txt command, it will reply by text message, do this once a month to keep the SIM card active.

You must ensure the PIN request is disabled from the SIM card before inserting it into 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.

To check the PIN request status of your SIM card, place the card in an unlocked mobile phone, switch the phone on. If you are able to make calls without entering a PIN number the PIN request is disabled. If you need to enter a PIN number, look through the phones options for the 'disable PIN request' and disable it.

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

These are for UK networks please refer to your network operator if outside the UK

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

