

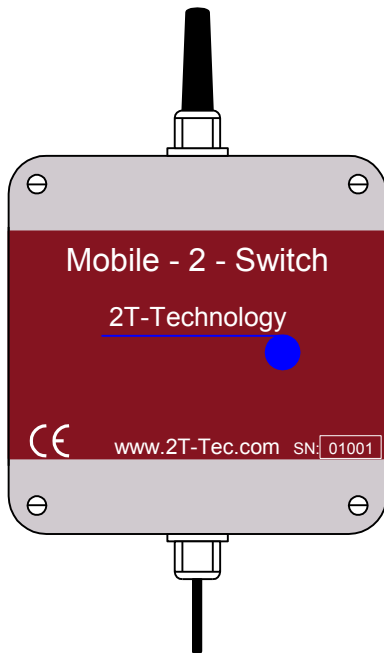


WARNING!
Only fully Qualified
Personnel should use or
service this Device.

2T-Technology

Mobile 2 Switch (M2S)

Installer Manual



Voltage	Max switching Load Current
AC 220—250 VAC	6A
DC 30V	3A



**DANGER
HIGH VOLTAGE**

Device Telephone Number: _____

Default Password: _____8531_____

QUICK START—Basic Installation Steps

1. If there is a SIM installed in the unit skip to step 3.

2. Un-programme the PIN number from the SIM card.

SIM Cards have a PIN that the phone user must enter when turning on their phone. This is stored in the SIM and must be removed for the unit to work. This is done by placing the SIM in any mobile phone and going to the 'Settings', then 'Security' menus. Then Turn Off the PIN Code request.

3. Wire the M2S unit to the item to be controlled as shown on the wiring diagram on the next page.

- Be very careful if Controlling an AC mains device. Only apply mains after all wiring is complete and top is screwed back onto GSM Unit.
- Only a fully qualified electrician should install, use or repair this equipment
- Ensure that the maximum applied voltage and maximum current specified in the table on the wiring diagram are complied with,

4. Apply power to the GSM unit.

5. Give the Unit about 2 minutes to register when first turned on. When the Signal Strength light is on constantly or flashing the unit has registered on the network. If the signal strength light fails to light at all you may have to change the position of the device to pick up a GSM signal.

6. Now program the M2S device with the numbers which you wish to allow to control the device.

Send This Text

phone 1 0872736678

Receive this text response.

phone 1 0872736678
programmed.

**No Spaces in Tel Number

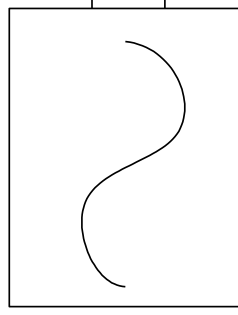
Remember to put the full telephone number into the device including area or country codes, that you would have to use if calling that number from any mobile phone.

- ❑ 2 more numbers can be programmed into the phone list of the M2S Unit.
- ❑ Use the following Text commands:
- ❑ phone 2 0872234355
- ❑ phone 3 0872735522

M2S - Wiring Diagram

WARNING!
Only fully Qualified Personnel should use or service this Device.

DANGER HIGH VOLTAGE



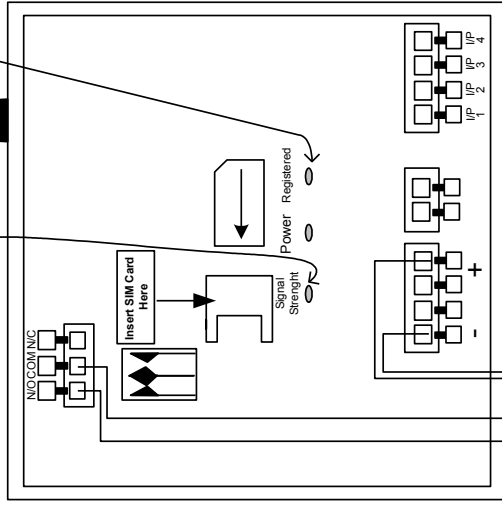
220V AC

Mobile Network Signal Strength.
1. On Steady: Strong Signal
2. Flashing: Acceptable Signal.
3. Off: No Signal.

Antenna



Network Registered.
1. Flash every Second : Not Registered
2. Flash Every 3 Seconds : Registered



Mobile 2 Switch

+12V DC or AC

Voltage	Max switching Load Current
AC 220—250 VAC	6A
DC 30V	3A

7. Test the system configuration by placing a call.

- Call the GSM device from one of the 3 mobile numbers programmed into the GSM unit.
- The GSM unit will recognise the calling number and switch the relay to control power to the attached device.
- Again Call the GSM device from one of the 3 mobile numbers programmed into the GSM unit.
- The GSM unit will again recognise the calling number and switch back the relay to control power to the attached device.

8. Test the system configuration by sending an SMS text to the GSM unit.

- Send the following text to the GSM Unit

Send This Text

on

Receive this text response

Command Received

- The GSM unit will accept the command and switch the relay to control power to the attached device.
- Again Send the following text to the GSM Unit

Send This Text

off

Receive this text response

Command Received

- The GSM unit will accept the command and switch back the relay to control power to the attached device.

This Page Intentionally Left Blank

Advanced Installation Options.

If required in the future you may need to check phone numbers programmed in the phone list.

To Check Numbers in the Phone List.

For example to check what number is programmed into the first phone number in the list.

Send this text.

Receive This TxT Response

Send Phone 1

Phone 1:
08???????

Test Call

To confirm that the unit is operating correctly we can get it to generate a test call at any time.

Send this text.

Receive This TxT Response

Test

GSM switch unit Test Call

To Remove Numbers in the Phone List.

To remove an already programmed number we enter an invalid number such as the number 0. OR we can overwrite the existing number with a new number we want to use.

Send this text.

Receive This TxT Response

Phone 2 0

phone 2: 0 programmed

The newly programmed invalid number can not be reported to.

It is possible to reset the unit back to factory settings.

ENGINEER RESET - Return to Factory Settings.

***Warning:** Credit code, credit alarm and other factory settings will revert to their factory settings.

Send this text.

Receive This TxT Response

Default

Restored to Factory
Settings.

ENGINEER RESET - Remove all Phone Numbers from the SIM.

***Warning:** This command will clear all programmed telephone numbers from the Phone lists.

***Warning:** This command can take up to 3 minutes to complete. Do not send any other commands to the Unit until this command completes.

Send this text.

Receive This TxT Response

Default SIM

SIM Cleared

Options for Security Settings

21 If extra security is required when using the Unit it is possible to enable a requirement for a security code when configuring the unit.

When the security code is on, then all text messages sent to the Unit must be followed by the four-digit security code. The default four-digit code is 8531. Always put # in front of the code. The security code is OFF by default when the Unit leaves the factory. It can be turned on as follows:

To Turn on the Requirement for a Security Code.

Send this text.

Receive This TxT Response

code ON 8531

Security code on

Changing the Security Code.

Send this text.

Receive This TxT Response

Change XXXX YYYY

Security Code Changed

XXXX is the New Security Code, YYYY is the old Security Code.

Example: **Change 1234 8531**

Installation For Mobile Network

16. The Unit can be used with bill pay or pre pay SIM cards. For pre pay cards the ability for the user to get an indication when credit is falling low is useful and allows the user to add credit when required. Confident that he can keep the unit topped up with credit the user will be happy to use a pre pay SIM card.

The system is factory configured for an O2 SIM. To use a different network requires that you program a different Credit code.

Set the Credit Code

For example to set the credit code for O2 in Ireland.

Send this text.

Receive This TxT Response

Credit Code *100#

Credit Number
set.

**There are
different**

codes for different networks. This table gives a list of those that can be used.

Network	Ireland	UK
Vodafone	*174#	*#1345#
O2	*100#	*#10#
Meteor	*#100#	
Orange (UK only)		Orange not currently giving credit. (Use a bill pay SIM)

Turn Off The Credit Warnings.

Should the User switch to a Bill-Pay SIM or if credit monitoring is no longer required, it can be turned off as follows.

Send this text.

Receive This TxT Response

Credit Alarm Off

Credit Alarm Off

To Check the Remaining Credit on a SIM.

Send this text.

Receive This TxT Response

switch Credit

Credit = XX.XX

Fixing Problems.

Q1. I am sending a text messages to the Unit but I'm not getting any response.

Check the following:

1. Is the PIN removed from the SIM Card? Put the SIM card into any mobile phone. When the mobile is powered up the phone should not look for a PIN if it has been disabled. If the mobile looks for a PIN then you must turn off the PIN request.
2. Is the Signal Strength LED flashing or on constantly? If it is OFF then either the device is not registered OR there is not enough signal strength for the device to work.
3. Move the position of the antenna to obtain a stronger signal level. On occasions you will find that some operators have no signal strength in certain location while another will have good signal strength. This will require changing the SIM to one from an operator who has good coverage at this location.

Q2. I am sending a text message to the unit but I'm getting the following response.

Command Error

Check the following:

1. Check the spelling of the txt message sent. Quite often this response comes from a command which is almost correct but is spelt wrong.
2. Has the requirement for a security code been turned ON? If a security code is required then it must be added to the end of the text message being sent.

Q3. I am sending a text message to the unit but I'm getting the following response.

Invalid Command

Check the following:

1. Check the spelling of the txt message sent. Quite often this message can come from wrong spelling.
2. Check the details of the command being sent against the details in this manual.

Q4. Some numbers that I have programmed into the phone list work, but others do not.

Check the following:

1 You must always program the full telephone number into the device. So if there are area codes that you would need to use if you were dialling this number from a mobile phone then you must program this into the device for this number.

2 Call the number that is causing you a problem from your own mobile phone. Use the number exactly as you have programmed it into the unit. Confirm that you can call it without a problem.

3 When programming telephone numbers into the device do not leave a gap between an area code and the number.

4 Check the number that is not working by getting the device to send you the number in the location you programmed it. Use the "Send Phone X" command to get the number. Confirm that the returned number is correct.

5. If all else fails re-program the telephone number that is causing problems. Confirm from the returned message that the number is programmed correctly.

2T-Technology

www.2t-tec.com