

# Alarm 2 Mobile (A2M)

## Installer Manual



Device Telephone Number: \_\_\_\_\_

Default Password: \_\_\_\_\_#8531\_\_\_\_\_

## QUICK START–Basic Installation Steps

1. If there is a SIM installed in the A2M 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 Gate 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. Configure the Alarm Panel Outputs to be Negative with the following meaning.

| Output Number | Configured As | Polarity |
|---------------|---------------|----------|
| 1             | Arm/Disarm    | Negative |
| 2             | PA (Panic)    | Negative |
| 3             | Alarm         | Negative |
| 4             | Tamper        | Negative |

4. Wire the A2M unit to the Alarm Panel as shown on the wiring diagram.

- Remove power to the alarm panel. Wire the power, +12V from Alarm Panel to A2M
- Wire 4 outputs from Alarm Panel to A2M 4 inputs. Connect
  - Output 1 to I/P 1 of A2M
  - Output 2 to I/P 2 of A2M
  - Output 3 to I/P 3 of A2M
  - Output 4 to I/P 4 of A2M
- If the A2M is to be used to Arm and Disarm the panel, connect a Zone input of the Alarm Panel to the N/O (Normally Open) and Common (Com) connections of the relay connector

**\*\*This alarm panel Zone needs to be configured as a key switch zone.**

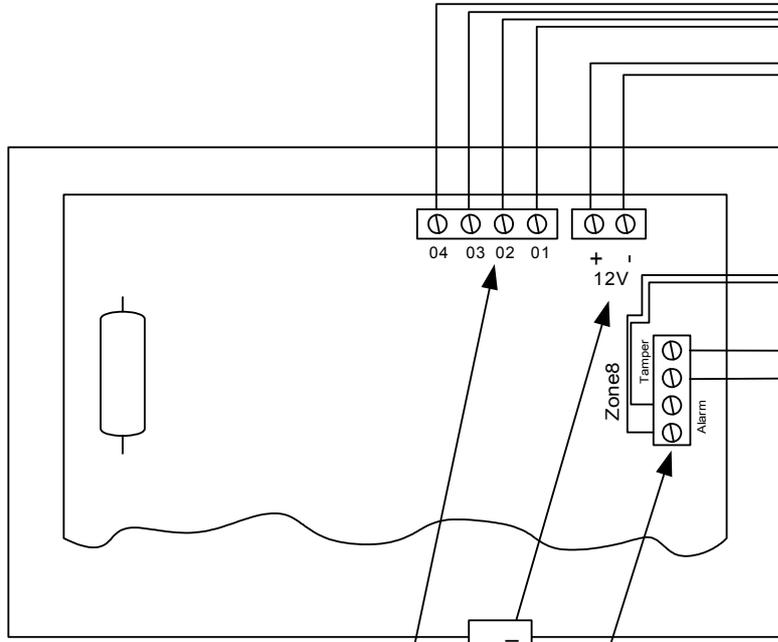
- Connect a Tamper input of the Alarm Panel to the tamper output of the A2M

5. Power the Alarm Panel or supply the source of power to the A2M. The Power Light should come on, on the Unit.

6. 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.

# A2M Wiring Diagram

## ALARM PANEL



Outputs of  
The Alarm Panel

Power Supply  
From The Alarm Panel

Input of  
The Alarm Panel

## Network Registered.

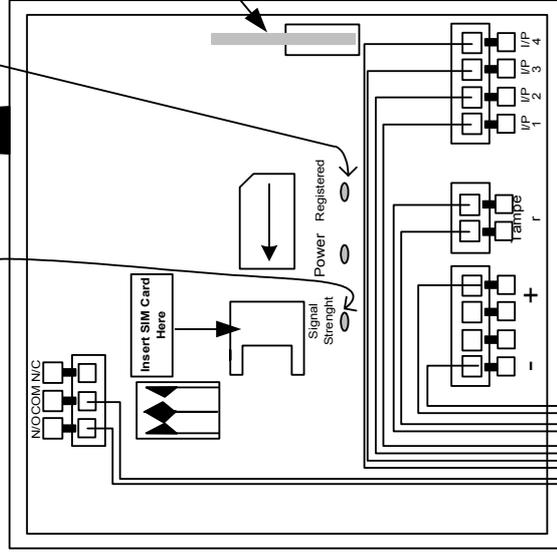
1. Flash every Second : Not Registered
2. Flash Every 3 Seconds : Registered

Antenna

## Mobile Network Signal Strength.

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

## SMS TXT DIALLER



Tamper- Switch  
Normally Closed on Lid  
Box

**7. Now program the A2M device with the numbers to which you wish to text when an event occurs.**

| Send This Text     | Receive this text response.       |
|--------------------|-----------------------------------|
| phone 1 0872736678 | phone 1 0872736678<br>programmed. |

*\*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 A2M Unit.
- Use the following Text commands:
  - phone 2 0872234355
  - phone 3 0872735522

**8. Test the system configuration**

- Arm the alarm panel from the keypad.
- You will receive a text from the A2M to indicate that the panel is arming.

House alarm is Arming

- Generate an alarm event on any of the Alarm panel zones.
- Confirm that the A2M device sends the following text message to the phone numbers that you have added to the device.

House Alarm has activated

Now disarm the Alarm panel from the keypad. Confirm that the following text response is received

Alarm 3 restored

**9. Enable the Arm and Disarm function.**

If the system is to be used to Arm and Disarm the Alarm Panel we should test these features.

We have already set up the Alarm Panel Output giving Arm and Disarm status to Input 1 of the A2M board. So now we can enable the Arm/Disarm feature.

Send this text

arm disarm on

Receive this Text response.

arm disarm on

The command to turn off this mode is "arm disarm off"

**\*\* The alarm panel Zone used for this feature needs to be configured as a key switch zone.**

**10. Arm the Alarm Panel.**

Send this text

arm

Receive this Text response.

system arming

**11. Test that the Alarm Panel is Armed.**

Now generate an alarm event to confirm that the Alarm panel is in the correct state.

Receive this Text response.

House Alarm has activated

Confirm that the text message above has been received at all programmed phone numbers.

**12. Disarm the Alarm Panel.**

Send this text

Disarm #8531

Receive this Text response.

system disarming

- To disarm the Alarm Panel we must always use the security code.

**13. Turn off reporting of Arm/Disarm status.**

Reporting of all arm and disarm status events is unlikely to be required. Turn off the reporting of events on this input.

Send this text

Disable Message 1

Receive this Text response.

Message Reporting on Input 1 is disabled

\* The command to enable a message is "Enable Message 1"

## Advanced Installation Options.

If required in the future you may need to check phone numbers programmed in the phone list or the open 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???????

### To Program New Text messages to be sent to programmed phone numbers.

The default text messages will have to be changed when the Alarm Panel outputs are configured to give different information to the A2M

For example; to change the message on input 4 to indicate a Fire event at Jim Smith's house.

Send this text.

Receive This TxT Response

Input 4 Fire at Jim  
Smith's

Input Message 4 Fire  
at Jim Smith's

### Test Call

To confirm that the A2M unit is operating correctly we can get it to generate a test call at any time.

Send this text.

Receive This TxT Response

Test

alarm GSM unit Test Call

### To Determine whether an Alarm Panel is armed or disarmed.

To determine whether an Alarm panel is armed or disarmed

Send this text.

Receive This TxT Response

status

alarm armed

OR

alarm disarmed

\*You must have ARM/Disarm enabled for the status command to work.

### 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 Gate 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 A2M 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 A2M 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

**Security code ON #8531**

**Security code on**

#### **Changing the Security Code.**

Send this text.

Receive This TxT Response

**Change Code XXXX #YYYY**

**Security Code Changed**

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

Example: **Change code 1234 #8531**

## Installation For Mobile Network

**16.** The A2M 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 gate 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.<br>(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

Alarm Credit

Credit = XX.XX

## Fixing Problems.

**Q1.** I am sending a text messages to the A2M 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 A2M 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 gate 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 gate 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. Test again by causing an event with the alarm system and confirm that SMS Text is received by the newly programmed number.

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