## Installation

1) Before you install this equipment, please read this full manual.
2) Ensure that there is good network reception at the location where it will be installed.
3) As per Fig 1, install the speech panel on the front of the pillar.
4) Install the antenna as high as possible on the top of the pillar to ensure line of sight in all directions for best possible reception.

Fig.1.


Keep antenna high as possible, and above electronics + audio equipment to eliminate interference

Antenna Mount as high as possible away from metal.

## Wiring

5) Open the unit carefully to avoid damage and observe connections.


## Installing SIM card

6) Before installing SIM card, switch OFF POWER, ensure that the card has been registered, activated, and has some calling credit. Check it works in a mobile phone first.


Fig. 3.
7) Carefully slide the SIM holder door in the OPEN direction as shown in Fig 3. Slide the SIM card into the holder, and close the door, sliding it in the LOCK position.
8) After a final check of wiring, switch on the power to the system. There are 2 LED indicators on the module. 1 is for power, and the other is for GSM network detect.
Allow 20-30 seconds for the unit to boot up and detect the network. Once successful connection has been made, the unit will sound a confirmation tone and the status LED will begin flashing. If there is a fault or problem, the unit will emit a series of bleeps or warning tones. If this occurs, check...

1) That the SIM card has been activated and has credit.
2) That the SIM card does not require a PIN code, disable this in a phone.
3) That the SIM card can make and received a call on a phone.
4) Switch off power, remove and reseat the SIM card and try again.

## Programming

Programming is best done by SMS text. It can also be done by DTMF from a normal telephone.

1) First check reception. Send the following SMS to the unit...


The unit should send a reply "SIGNAL LEVEL = ?" where ? will be a number between 1 and 4. For successful operation the reception should be at least 3 or 4 . If it is lower, the unit will experience audio quality problems or other issues. Increase height of antenna, change network or fit higher gain antenna.
2) Program the numbers you wish the unit to dial when the call button is pressed, up to a maximum of 3 numbers. Each SMS must start with the pass code, default 1234, in the following format *12*1234\#, followed immediately by a command. E.g to program the telephone number 987654321 , enter the following SMS..
*12*1234\#11987654321\#


Up to 3 numbers can be sent together in a single SMS as follows..
*12*1234\#11tel.number1\#12tel.number2\#13tel.number3\# 11 = Telephone number 1
12 = Telephone number 2
13 = Telephone number 3
3) It is recommended to change the "no answer" time if there is more than 1 number stored. This stops the unit ringing a number after a set time, and can be used to prevent voicemail answering the call. Send the following SMS.
*12*1234\#52??\# Where ?? can be 2 digits from 10-99 seconds, default is 20 .
The unit can allow up to 100 telephone numbers to be stored, for users to be able to ring the system for automatic entry. This uses caller ID like a phone to determine the identity of the caller. First, the unit must know what country it is operating in.
4) Program the country code as follows..
*12*1234\#71??\# Where ?? can be 1-3 digits. For uk, insert 44, for Ireland 353. Do not use any leading zeros.
5) Enter the telephone numbers required to have access control. Do not enter country code, just the complete number as follows..

$$
\text { *12*1234\#72987654321\# Up to } 3 \text { numbers can be sent together in the same SMS. Just add } \begin{aligned}
& 72 \text { then the number, then \# each time. The pass code only needs }
\end{aligned}
$$ to be put at the beginning of each new messge.

## Complete list of paramaters

01????\# Change programming password Default = 1234

2?\# Change output relay. 1=N/O, 2=N/C Default = 1

4?\# Microphone volume 1-4
Default = 3
53??\# Max call time 05-99 seconds Default $=60$

73??????????\# Delete a number
02????\# Change access control password Default = 5678

51?\# Change relay activation time 1-9. Default $=1$. Range $=0.5-4.5$ secs

3?\# Speaker Volume
Default = 3
999\# Restore Defaults

73*\# Delete all numbers ????????? will be the telephone number to be deleted.

Remember to begin each new SMS with pass code *12*1234\#
Note: DTMF Programming is done by calling the unit, \& entering the pass code first, then after a long single confirm tone, commands can be entered. A fault is indicated by 3 short bleeps.

## Keypad Programming (AK model only)

For most installations, it is sufficient to add a single keypad code for all users. On the keypad, enter...


## Operation and Testing

1) Press the call button on the speech panel. You should hear a tone. The unit will ring the first telephone number programmed.
2) Answer the call and check for two way voice. Activate the relay by pressing the * key and hang up.
3) To open the gate/door by password, ring the unit. If the number is not stored in the access control section, then the unit will answer the call. Enter *33* password \# to activate the relay (default password $=5678$ ).
