

# Model 3000 / Access 4000

# FE3000 GSM INTERFACE KIT

P/No: 995015P11 (128K)  
995016P12 (512K)  
995017P10 (32K)

## INSTALLATION MANUAL

### This Kit includes:

- FE3000 GSM Interface KIT Installation Manual (this document)
- RAM CHIP (32K, 128K or 512K)
- PIC Option Chip
- 604090 GSM Modem Interface Cable.

One of the following UART board options must be fitted to the Type 2 Panel :  
995065 Single Port UART; 995066 Dual Port UART; 995068 Four Port UART

### Introduction

The Model 3000/ Access 4000 now allows a Fratech FE3000 GSM modem to be connected via a Uart port (RS232) to provide the alarm system with GSM Digital Mobile facilities. The Model 3000/ Access 4000 must be a **Type 2 PCB with Version 4.63 Control Module firmware or later** (available from your supplier) . By selecting the GSM Comms task in conjunction with the FE3000, the Model 3000/ Access 4000 is able to:

- Backup the hard-wired dialler with a wireless GSM transmission sending in Contact ID
- Send Contact ID data via the GSM network as the primary data path.
- Send alarms as text messages to nominated GSM mobile phones using the GSM short message service (SMS).
- Accept control commands from nominated or arbitrary GSM mobile phones via SMS text strings, to control the Model 3000/ Access 4000 and send back a text message confirmation via SMS, for example:
  - Turn on/off a home auxiliary.
  - Turn on a home auxiliary for a specified time in minutes.
  - Turn on a home auxiliary for a specified time in seconds.
  - Turn on/off an area.
  - Request the current name and state of any 6 home auxiliaries.
  - Request the current name and state of any 6 areas.
  - Isolate/Restore a zone.
  - Discard pending SMS messages waiting to be sent.
  - Request a short help message

The status and call progress of the GSM Modem can be followed or inspected via a comprehensive review log, including display of received signal strength to ensure installation is reliable.

## POWER WARNING:

Disconnect the AC power supply AND Battery from the panel before replacing components to avoid any damage to the components or panel.

## CAUTION:

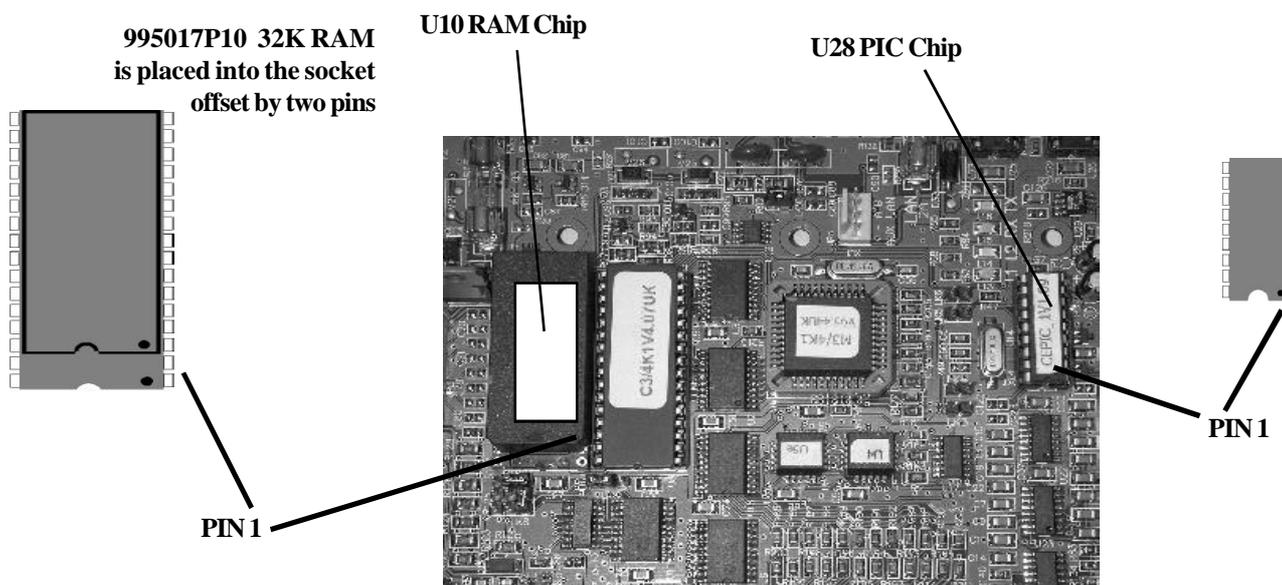
This installation must be performed by qualified personnel.

The RAM and PIC chips are sensitive to static electricity, avoid touching the pins of these devices. Always take precautions to reduce the chances of electrostatic discharge (ESD) harming the components. Touching a nearby grounded metal surface before touching a component drains static electricity, reducing the likelihood of ESD damage.

## CHIP INSTALLATION:

**Note:** Care must be taken to ensure that any existing programming is preserved and is not lost when the RAM chip is replaced.

Replace the current RAM chip U10 and the PIC chip U28, with the components supplied in this kit. Carefully remove the IC's with help of an IC puller or a very small screw driver. Make sure the chip is inserted into the socket with correct orientation.



Section of the Model 3000/ Access 4000 panel PCB

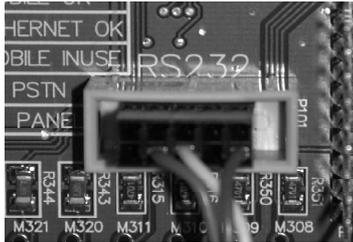
The GSM options are enabled with the installation of the RAM and PIC chips.

The Programmer's Reference section of the Programming Manual Rev 4.50, provides details of procedures for upgrading and/or reconfiguring the memory. This information can be found under "Memory Defaulting" [<MENU>, 7, 5, 2]. The procedure will require a PC with Upload/Download software installed.

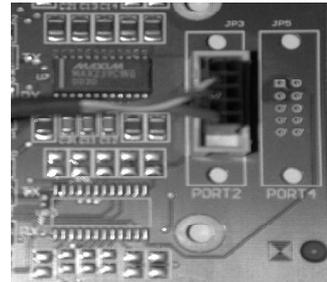
## Connecting the GSM Modem (See wiring diagram)

The FE3000 is connected to the Model 3000/ Access 4000 via a 3-wire connector signalling cable , data in, data out and signal ground (RS232).

This connection is made with the Interface cable p/n 604090, both ends of the cable are identical and connect to the RS232 Header on the FE3000 and a port on the Model 3000/ Access 4000 UART Interface board.



FE3000 Serial connection



Model 3000 / Access 4000 Serial connection

The GSM Modem may alternatively be powered by the Model 3000/ Access 4000 Detector supply pins (DET) (not recommended) . Note that the idle current of the FE3000 is approximately 140ma, peaking at up to 700ma during transmission and needs to be taken into account when making power requirement calculations.

**The GSM power supply and Battery must be DISCONNECTED**

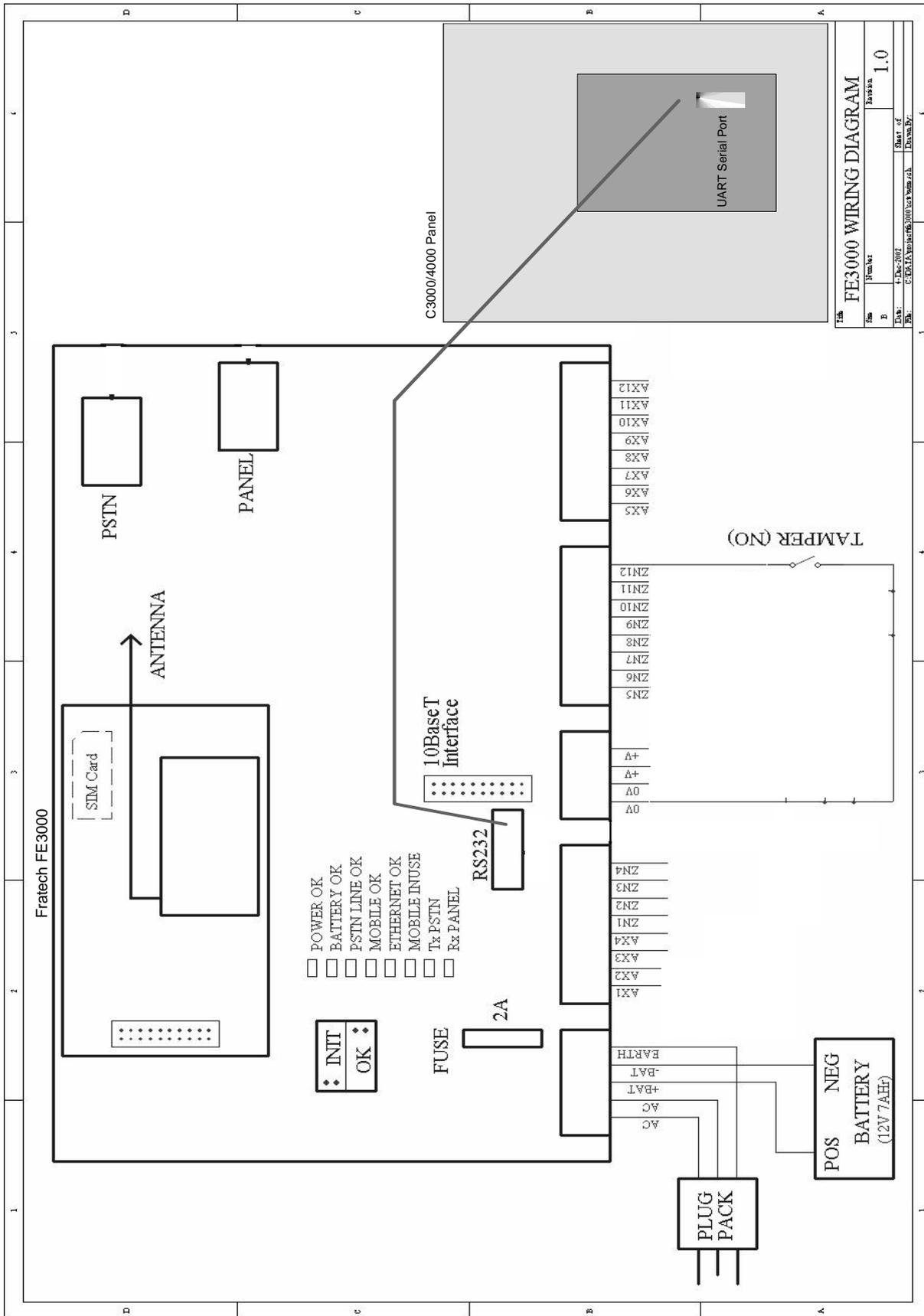
When programming the Model 3000/ Access 4000 Comms Task, (MENU, 7, 3, 1) for GSM Modem, the correct UART Port number (1 to 4) must be selected, the baud rate is automatically set in the task.

**THE FE3000 SHOULD BE DEFAULTED TO INTERFACE MODE (Default 4) PRIOR TO INSTALLATION.**

The FE3000 Rx Panel lamp will illuminate when the FE3000 is being polled by the Model 3000/ Access 4000, and will flash rapidly when not being polled (30 second delay).

**The Programming & Reference Manual Rev 4.50, should be consulted for further details concerning Control Module programming and GSM Communications operation.**

**The FE3000 Quick Install Guide contains the details for the setup and installation of the FE3000.**



**Disclaimer:**

1. The manufacturer &/or it's agents take no responsibility for any damage, financial loss or injury caused to any equipment, property or persons resulting from the correct or incorrect use of the system or it's peripherals. The purchaser assumes all responsibility in the use of the system and it's peripherals.
2. While every effort has been made to ensure the accuracy of this manual, the manufacturer assumes no responsibility or liability for any errors or omissions. Due to ongoing development, this manual is subject to change without notice.