

# V32 modem support for BACS

Since 5th July 1993 BACS have not accepted new users of V26 Synchronous Comms or existing users upgrading to it. Since the above date, the only Synchronous Comms protocol supported by BACS has been V32.

We have now certified V6.2 Global Comms – 2780 Emulation (product CI) for use with BACS using V32 synchronous Comms with the following modems:-

Modtech M5032/42b  
Miracom Courier V.32

Only these two modems are supported for use with V32 Synchronous Comms transmissions to BACS.

Neither of these modems is configured for synchronous operation by default so the following programming changes need to be carried out. These can be achieved by connecting a serial screen (with its serial port configured to 9600 baud, 8 data bits, 1 stop bit and no parity) to the modem and keying the commands. Note that the modems can still be accessed via a serial screen after they have been switched to synchronous mode provided the screen's serial port is configured as described above.

Please note that the details on page 39 of the handbook "..... BACS .... would not accept new users of Synchronous Comms" was misleading; it is now clear that it is only the V26 Comms which is unsupported.

## MODTECH M5032/42b

This modem is set into synchronous mode from its factory default setup by using the following command:-

```
AT&M2&S2&X2S31=4
```

The specified BACS phone number must be saved in location 0 of the modem's number store using the following command:-

```
AT&Z0=phone number
```

The new configuration should be saved in user profile 0 and the modem should be set to load profile 0 when it is reset or switched on by using the following command:-

```
AT&W0&Y0
```

As a final check, reset the modem and use the `AT\V`, `AT\S` and `AT&Z?` commands to check the settings have been saved correctly.

## MIRACOM COURIER V.32

This modem is set into synchronous mode from its factory default setup by using the following command:-

```
AT&M1S13=8&S1&X2
```

The specified BACS phone number must be saved in position 0 of the modem's number store using the following command:-

```
AT&Z0=phone number
```

The new configuration should be saved in the modem's non-volatile RAM by using the following command:-

```
AT&W
```

As a final check, use the AT15 command to check the settings have been saved correctly.

## COMMS SETUP

The Comms configuration screen should be set up as follows:-

BOS/COMMUNICATIONS - CONFIGURATION PARAMETERS			
PROTOCOL PARAMETERS			
Protocol Used	2780/E	Sync or Async (S/A)	S
Half or Full Duplex (H/F)	H	Data Buffer Size	400
LINE CONTROLLER PARAMETERS			
First Device Address	0003A0	Second Device Address	000000
First Interrupt Vector	00002C	Second Interrupt Vector	000030
Controller Parameter A	000000	Controller Parameter B	000000
TIMING PARAMETERS (T=Ticks S=Secs)			
Receiver Active Timeout	10 (T)	Connect Timeout	40 (S)
Transmit Complete Timeout	5 (S)	Receiver Idle Timeout	5 (S)
Clear to Send Timeout	20 (T)	Length of Break Signal	10 (T)
LINK PARAMETERS			
Transmitter Bit Rate	9600	Receiver Bit Rate	9600
Parity (Odd, Even, 1, 0, None)	N	Number of data bits	8
Number of Stop Bits/SYN's	3	Break (None, Main, Reverse)	N
Connection (Local 2 or 4 wire)	2		

The Options screen is not set up, since it has no function in Synchronous Comms.