BURK TECHNOLOGY

Multi-Tech MultiModem II MT2834BL

Programming Instructions for use with the GSC3000 or VRC2500

Two Multi-Tech MT2834BL modems are required for a full-time connection. One modem will reside at the studio site (originate) and the other at the transmitter site (answer).

CONFIGURING THE MODEM:

Programming the modem requires one available COM port on your computer and a terminal program such as HyperTerminal. You will need to program each modem individually.

Note: These instructions assume you are using HyperTerminal. If you are using a different terminal program, establish a connection using the same parameters as described in step 3. HyperTerminal is usually installed with a standard Windows installation and should be located in the Start Menu under Programs > Accessories > Communications.

Step 1:

With the modem powered off, set the DIP switches (located on the side of the modem) as follows:

UP		x	x	x	x	x				x				x	x	x
DOWN	x						x	x	x		x	x	x			
SWITCH#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Step 2:

Connect the modem to your computer's COM port using a standard DB9 to DB25 serial cable (supplied with your GSC or VRC system).

Step 3:

Open HyperTerminal. When prompted, enter a name for this connection. Click OK to continue. When prompted for a phone number, leave the field blank and select the COM port you will use in the "Connect Using" field. Click OK to continue.

You will now be prompted to specify the COM port properties. Use the following settings: Baud Rate: **19,200**; Data Bits: **8**; Parity: **None**; Stop bits: **1**; Flow Control: **Hardware**. Once your COM port settings are established, click OK, and a blank terminal window will appear. A connection to this COM port is now active.

Step 4:

Hold the switch on the modem's front panel in the ANSW position, power the modem on, and then release. In HyperTerminal, type **AT** in the terminal window and hit enter. OK will appear on screen. Type **AT$SB19200$BA0&W** and hit enter. After a few seconds, OK will appear on screen.

If your modem does not respond to these strings it may need to be reset to factory defaults. Instructions on loading factory defaults can be found in the modem manual. If you have difficulties resetting the modem, please contact Multi-Tech technical support for further assistance.

Step 5:

Power down the modem and move the serial cable to the other modem. Repeat steps 1 through 4. When both modems are programmed as described in step 4, close HyperTerminal and go to step 6.

Step 6:
Set the DIP switches on each modem as described below. Changes from the settings in step 1 are indicated in **bold**. Program one modem as originate and the other as answer. It is recommended that you label both modems so you know which one is originate and which one is answer.

For the originate modem, set the DIP switches as follows:

UP / DOWN															
	x	x	x	x	**X**	x	x	x	x	**X**	x	x	x	x	x	**X**
SWITCH#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

For the answer modem, set the DIP switches as follows:

UP / DOWN																
	x	x	x	x	x	x	x	x	x	**X**	x	x	x	x	x	**X**
SWITCH#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Step 7:
Verify the modems will communicate with each other by connecting them together and powering them on at the same time. The modems will go through a quick self-test and then attempt to establish a connection. If a connection is established, the CD LED will be on, the 33.6 LED (28.8 LED on the 28.8k bps model) will flash, the TR LED will be on, and the EC LED will flash.

Step 8:
Attach the originate modem to your computer, and the answer modem to your GSC3000's COM1 or VRC2500's FULL-TIME port. You will need to cycle power on your GSC or VRC unit to detect the modem.

TWO-WIRE CONFIGURATION:

If you are using a two-wire connection, set DIP switch 16 to the **UP** position, and leave the other switches as indicated above. To connect the modem to your leased line, connect the LEASED jack on the modem to a leased line wall jack or terminals.

WIRING CONNECTIONS:

For a four-wire connection, the modems should be connected using a cable that is broken out as follows:

Modem 1: Send 1 (Yellow) ⇨ Modem 2: Receive 1 (Green)
Modem 1: Send 2 (Black) ⇨ Modem 2: Receive 2 (Red)
Modem 1: Receive 1 (Red) ⇨ Modem 2: Send 1 (Black)
Modem 1: Receive 2 (Green) ⇨ Modem 2: Send 2 (Yellow)

When connecting the modem to the computer and GSC or VRC hardware, a standard DB9 to DB25 serial cable. Pinouts for this cable are as follows:

DB9F		DB25M
1	⇨	8
2	⇨	3
3	⇨	2
4	⇨	20
5	⇨	7
6	⇨	6
7	⇨	4
8	⇨	5
9	⇨	22