

Chapter 3 Getting Started

OPTION SELECTION

There are six ways to change or select options:

- LCD - Using the front panel LCD and pushbuttons is simple, straightforward, and requires the least amount of technical background. Chapter 4 explains LCD operation.
- AT Commands - The AT compatible command set can be used to select modem options. Chapter 5 describes AT commands.
- V.25 bis Commands - An extended set of V.25 commands allows selection of modem options during synchronous operation. Refer to Chapter 11.
- Status Registers - A series of special ATS commands allows the operator to change the decimal or hexadecimal value of a memory byte to change one or more options in that byte. Chapter 10 describes S-registers.
- Single Bit Status Registers - A second series of special ATS commands allows the user to change single bits within a byte to change an option. Chapter 10 explains single bit control.
- Software program - A wide variety of software programs are available, or advanced computer users can write their own software programs to interact with the modem. This manual does not discuss software programs.

POWERUP

A powerup procedure is not required. Turn the ON/OFF power switch on the rear panel to ON. The modem is factory configured to operate in most public switched telephone applications. If a user has stored a desired option set it will be automatically be restored at power up.

PLACING A CALL

Using a Standard Telephone

1. Lift the telephone receiver. Wait for the dial tone.
2. Dial the number of the remote site.
3. When the answer back tone is heard, immediately press the TALK/DATA button and hang up the telephone. The modems go through a connection sequence and establish a data link. If a data link is not established, return to the first step.
4. After the link is established, hang up the telephone.

Autodial from Front Panel

1. If no number to dial is stored yet advance to Main Menu #6, CHANGE PHONE NUMBER.
2. Enter the number using NO to scroll and YES to select.
3. When number is entered press YES to store the number.
4. Advance the LCD to main #2, DIAL STORED NUMBER.
5. Select number to dial and press YES to dial. After dialing the modems follow the same procedure as when using a standard telephone.

Autodial from a Terminal with the AT Command Set

To dial a number, for example 555-1212, type *AT D 555-1212* and press Enter, or enter *ATDSn* where *n* equals the stored telephone number location 1-9 to dial.

The modem dials the number — either pulse or tone, whichever is currently in effect — and takes the role of the originate modem.

Refer to Dial Commands section in Chapter 5 for additional dialing commands.

ANSWERING A CALL

Autoanswer

Normally the modem is configured to autoanswer on the first ring. A telephone plugged into the AUX jack will also ring.

Manual Answer

On ring detection the modem LCD displays ringing status.

Press TALK/DATA to answer the call and place the modem in the data mode.

Answer from Terminal with AT Command Set.

The modem displays the ring response.

To answer an incoming call type *ATA*. The modem begins sending an answer back tone and attempts to connect to the remote modem.

ENDING A CALL

Call Termination from Front Panel

1. Press TALK/DATA and DO YOU WANT TO DISCONNECT will be displayed.
2. Answer YES.

Call Termination from Terminal with AT Command Set

1. Enter +++ and the modem will enter command mode.
2. Enter *ATH* and the modem will terminate the call.

Reasons for Call Termination

The following conditions cause call termination.

Condition	Description
Abort Disconnect (No answer, busy signal, no modem, etc.)	Default 30 sec; select 1 to 255 sec (S-register 7)
ATH	Disconnect command
Loss of Carrier Disconnect	Select 100 ms to 25.5 sec (S-register 10)
Receive Long Space Disconnect	Disabled or select 2 sec
DTR Disconnect	Disabled or select 10 ms to 2.55 sec (S-register 25)
Loss of Line Current Cleardown	A disconnect method used in V.32 and V.34 mode.
LCD Display	When TALK/DATA is pressed, the LCD displays DO YOU WANT TO GO TO TALK? When YES is pressed modem hangs up, if no telephone is con- nected or if the connected telephone is not off hook. Pressing NO displays DO YOU WANT TO DISCONNECT? Press YES to disconnect.
Train Timeout	Modem fails to establish communication with remote site. Default is 30 seconds (S-register 7)
Protocol Link Establishment Failure	Reliable mode only; failure to establish reliable link
Inactivity Timeout	Default is 0 or disabled; select for disabled or 1 to 255 minutes (S-register 8)
Protocol Retry Limit Exceeded	12 retransmissions of the frame
Minimum DCE Speed	A connection occurred at a rate less than minimum
Security Password Failure	Maximum password entry attempts exceeded
Security Callback	Security callback is enabled and a new remote con- nection is established. The modem disconnects and places a call to the programmed number
Signal Quality	Leased line operation with dial backup enabled; extended loss of carrier or 4 unsuccessful retrains in 3 minutes cause dial backup
Test Mode entered	Certain test modes require call termination
Modem power is turned off.	