

Chapter 1

Introduction

GENERAL

The Motorola V.3400 series of modems are synchronous, asynchronous, and fax modems that can establish and maintain data communications or facsimile links between a computer at your location, and a remote computer, fax, or Data Terminal Equipment (DTE) located anywhere a standard or cellular telephone can reach. Data transmission can be over standard dial-up, private leased telephone lines, or wireless communication.

The V.3400 series of modems communicate at standard data rates up to 28800 bps with compatible modems connected to similarly equipped computers, computer services, and data bases. Advanced error control and data compression ensure data integrity and increase data throughput.

When used with a Class 1 Fax software package, the modem can exchange fax documents at data rates of up to 14400 bps with any Group 3 fax machine or PC with a fax modem.

A high level security feature allows secure operation of the modem both locally and remotely.

FEATURES

The modem is a flexible telecommunications tool that offers outstanding compatibility and the following standard features:

Data Mode

- Full-duplex operation on 2-wire public, 2-wire or 4-wire private telephone connections with 2-wire public automatic or manual backup
- 300, 1200, 2400, 4800, 7200, 9600, 12000, 14400, 16800, 19200, 21600, 24000, 26400, and 28800 bps DCE data rates

- Compatible with these standards:
 - CCITT V.34
 - CCITT V.33
 - CCITT V.32 bis
 - CCITT V.32
 - CCITT V.29
 - CCITT V.27
 - CCITT V.22 bis
 - CCITT V.22
 - CCITT V.21
 - CCITT V.13
 - Bell 212A
 - Bell 103
 - Plus a variety of software packages
- Synchronous operation at all DCE data rates, and asynchronous operation up to 115200 bps
- CCITT V.42 bis and MNP level 5 data compression
- CCITT V.42 and MNP 4 error control protocol
- LCD configuration and status for easy operation
- Front panel lockout
- Autodial and Autoanswer capability
- Autobaud DTE rate and character format selection
- AT command set
- V.25 bis autodialer
- Configuration memory
- Phone number storage
- Multiple levels of security with auto callback and password protection and up to 50 users
- Automatic speed matching to originating modem
- Remote configuration using command mode or LCD
- Built-in standard diagnostics for testing phone line quality and modems at each end
- 801 auto dial support

- Many user options to support a wide range of operating environments

Fax Mode

- Fax speeds to 14.4 kbps
- HDLC framing to allow T.30 Error Correction Mode
- Standard Class 1 interface conforms to EIA-578
- Group 3 compatibility: CCITT V.21 Channel 2, V.27 ter, V.29, V.17
- Autoanswer under software control
- Automatic fax/data detection

COMMUNICATIONS SOFTWARE

Because software directs the computer and modem to communicate with each other, you will need Mirror III (available from Motorola) or another communications software package for most data mode operations involving the modem. After installing the modem consult the software user's manual for information on the communications software, commands, and features. Software operating commands provide the operator with complete control of the modem.

For operation as a fax modem, a computer and a Class 1 fax software package are required. A fax connection cannot be established except with software control. You will need FaxTalk Plus (available from Motorola) or another Fax communication package.

DESCRIPTION

Functional

The V.3400 processes serial asynchronous data from a DTE at all standard rates from 300 bps to 115.2 kbps, and serial synchronous data at rates from 300 to 28.8 kbps. Transmission can be over either dial-up lines or either 2- or 4-wire leased lines. The maximum line speed is 28.8 kbps. Built-in test features can determine system performance and isolate faults in the data link. Operation and configuration are controlled by either the front panel LCD, the AT command set, or the V.25 bis command set.

Physical

The V.3400 has a 32 character LCD front panel with three pushbuttons for option selection (Figure 1-1).

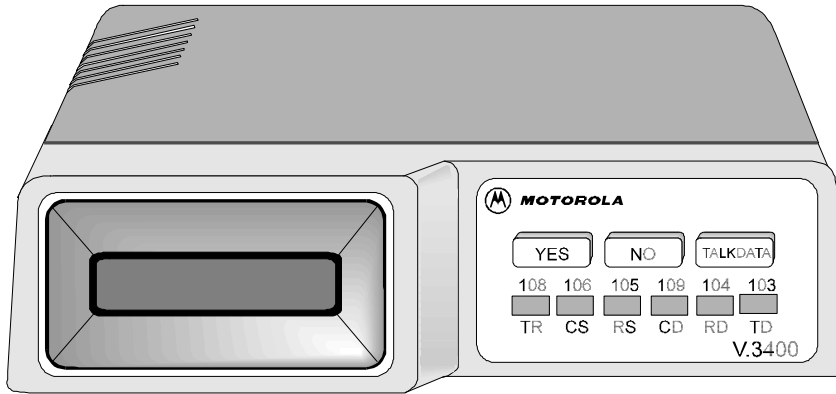


Figure 1-1 Typical Front Panel

The V.3400 rear panel has an EIA-232 DTE connector, an 8-pin AUX jack, an 8-pin LINE jack, the power switch, fuse, and cord (Figure 1-2).

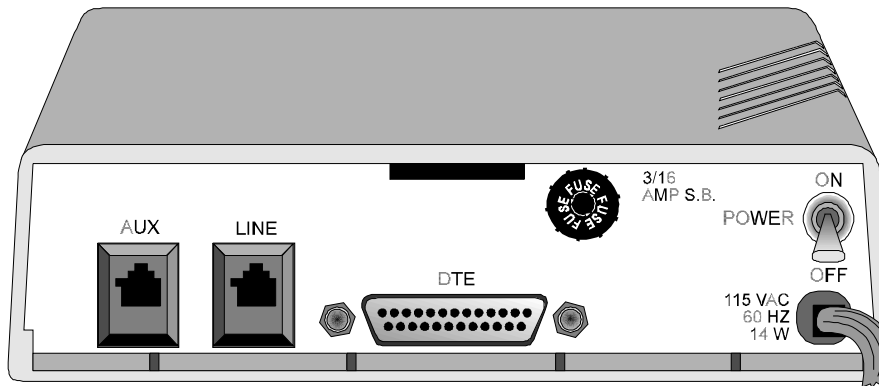


Figure 1-2 Rear Panel (115 Vac Model)

The shelf mount unit has edge connectors that insert into the shelf backplane. The shelf backplane performs the same functions as the standalone rear panel.