

Chapter 1

Introduction

GENERAL

The Motorola Managed Fractional T1 (FT100 M) connects a variety of Data Termination Equipment (DTE), including local and wide area networks (WANs), Private Branch Exchange (PBX), facsimile machines, personal computers, and high speed workstations to the T1 network. The FT100 M can be managed using Simple Network Management Protocol (SNMP) or Telnet and is Management Information Base II (MIB-II) compliant.

PHYSICAL DESCRIPTION

The FT100 M is a standalone unit with two main circuit boards stacked internally. The top main circuit board is the T1 interface card. This board has piggyback connectors that accept any two of the four available interface cards:

- RS-232
- V.35
- DSX-1
- RS-530

The bottom circuit board is the configuration management card. It has a piggyback board, which includes a series of Light Emitting Diodes (LEDs) indicating Local Area Network (LAN) network traffic. These LEDs are useful during network setup and debugging. However, they are not visible during normal operation and the piggyback board cannot be removed from the main board.

Both main boards have hardware options that require some disassembly to access them. You should not have to change hardware settings unless your network configurations do not match the factory settings.

Front Panel

The front panel (Figure 1-1) houses two bantam test jacks to monitor the transmit and receive signals to and from the T1 network. *They are:*

- RX Monitor - provides monitor-only access to the signal being received from the T1 network.
- TX Monitor - provides monitor-only access to the signal being transmitted to the T1 network.

The LEDs display unit status during operation, such as signal, alarm, and test mode status.

- TXD - Green LED - Port Transmit Data. Two sets--Port 1 and Port 2. Blinking indicates data is being transmitted. ON when in a low state, and OFF when in a high state or no data being transmitted. When a DSX-1 interface card is installed, this LED lights to indicate that the transmit data stream from the DTE is in synchronous.
- RXD - Green LED - Port Receive Data. Two sets--Port 1 and Port 2. Blinking indicates data is being received. ON when in a low state on the line, and OFF when in a high state or no data being received. When a DSX-1 interface card is installed, this LED lights to indicate that the receive data stream from the T1 network is in synchronous.
- YEL - Red LED - ON when a yellow alarm (Remote Alarm Indication) is detected from the T1 network.
- AIS - Red LED - ON when an alarm indication signal (unframed ones) is detected from the T1 network.
- LOS - Red LED - ON when Loss of Signal is detected from the T1 network.
- SYN - Green LED - ON when the configuring framing pattern is detected from the T1 network.
- PWR - Green LED - ON when power is on. Blinking when selected for T1 interface card configuration.

Rear Panel

The rear panel (Figure 1-2) has jacks, connectors, and a terminal block as listed here:

- T1 Network (NWK), line jack - connects the transmit and receive data to the T1 network
- LAN Network (LAN NWK), jack - connects the FT100 M to a 10Base T ethernet LAN for remote management control
- Management (MGT) connector - connects a VT100 terminal to the FT100 M via RS-232 for local management
- Alarm terminal block (ALARM/SENSE) - provides connection to external alarm devices for the FT100 M
- (PORT 1) and (PORT 2) data connectors for two DTEs
- (POWER) jack for the power transformer connection

FEATURES

- Supports VT100 terminal or equivalent
- MGT port speeds: 2400, 4800, 9600, and 19200 bps
- MGT port flow control: RTS/CTS or XON/XOFF
- Trivial File Transfer Protocol (TFTP) downloading capability for software upgrades
- Configuration and management using SNMP or Telnet

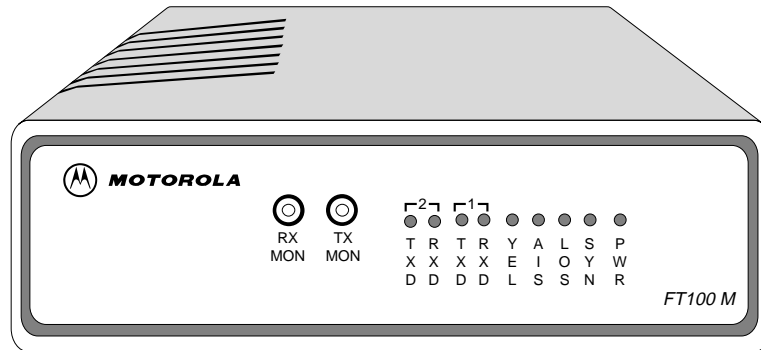


Figure 1-1
Front Panel

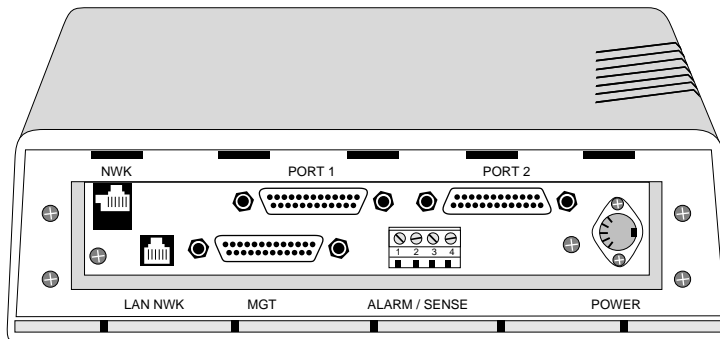


Figure 1-2
Rear Panel