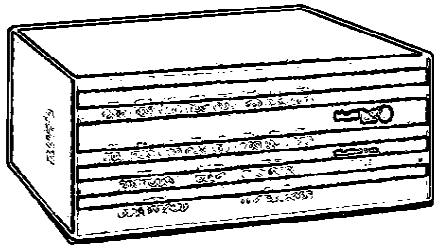


# MultiMux<sup>MMV</sup> Series



MMV1600-Series MultiMux

## General Description:

**G** High-speed multiplexers with optional voice/fax channels for medium- to large-scale installations.

The MMV-Series MultiMuxes consolidate 8 to 32 data channels for transmission over one or two composite links. Each channel handles async data at speeds to 19.2K bps, and the links operate at synchronous speeds to 128K bps per link (256K bps if only one link is used). Each model also includes a command port and a 2400 bps command modem for local or remote configuration.

The MMV1600-Series muxes have 16-channel capacity enclosures and consist of 8- and 16-channel models (base models MMV1608C and MMV1616C). The MMV3200-Series have 32-channel capacity enclosures and consist of 8-, 16-, 24-, and 32-channel models (base models MMV3208C, MMV3216C, MMV3224C, and MMV3232C, respectively). Options installed at the factory append extensions to the base model.

Options include a dual-channel voice/fax card (model MV2) and internal 56K bps composite-link DSUs (model MMV1656K).

The MV2 supports telephone, fax machine, key telephone system (KTS) or private branch exchange (PBX), Trunk and Station connection. It provides two channels for voice or fax traffic which will use the same composite link(s) that are transmitting data. "V" is added to the base model for this option, e.g., MMV1608C/V or MMV3232C/V (limit: one MV2 per mux).

The MMV1656K provides a Digital Data Service (DDS) interface for 4-wire, full-duplex operation at 56K bps without external hardware or serial cables. "56" is added to the base model for each DSU (e.g., MMV1608C/56 or MMV3232C/56/56). External link devices may be ordered separately.

## Features:

**F** Voice/data/fax multiplexing, Dual-composite links, and full system management with optional PBX connectivity!

### Multiplexing Features

- Priority Statistical Multiplexing™ gives active data channels more link time than idle ones and gives voice and fax packets priority over data.

### Link Options

- Single or dual composite links. A single link can handle 256K bps. With two links, each handles

## Selected Models and Description:

- MMV1608C - 8-channel MultiMux with command modem. Expands to 16 channels.
- MMV3208C - 8-channel MultiMux with command modem. Expands to 16, 24, or 32 channels.
- MMV8216 - Optional 8-channel expansion card.
- MV2 - Optional dual-channel voice/fax card.
- MMV1656K - Optional internal 56K bps link digital service unit (DSU).

data at speeds to 128K bps. Alternately, Link B may be used as a sync channel up to 64K bps.

- Networking Feature: Routes voice/fax/data traffic to any mux in a multi-node network (up to four muxes per network). Uses static voice pass-through and packet pass-through.
- May be used with internal 56K bps DSUs, model MMV1656K, or any external synchronous link device (e.g., modems or DSUs).
- Dynamic Link Load Balancing: Disperses traffic over both links when tandem to a single site.
- LAN Bridging: Passes SDLC LAN bridge data through the composite links.

### Management Features

- Configuration: Menus with help screens for local configuration via the command port or remote configuration via command modem.
- Command Functions: Select channel speeds, flow control method, parameter listing, storage and downloading configuration, status echo controls, reset, parity, stop bit(s), response time priorities, and test.
- Diagnostics: Memory tests, digital-, and voice/fax-loopback tests, switch and LED tests, Nonvolatile RAM test, and watchdog timer test.

## Specifications:

**S** Channel speeds to 19.2K bps, Link speeds to 256K bps, and Integral command modem.

### Data Channels

- Quantity: Eight (Link B may be used as a 64K bps SDLC sync channel)
- Expansion: Maximum 16 (MMV16xx) or 32 (MMV32xx)

- Interface: RS232C
- Speeds: Optional sync channel input at 64K, 56K, or 38.4K bps. Async channel input at 19.2K, 14.4K, 9.6K, 4.8K, 2.4K, 1.2K, or 300 bps
- Format: Async; 5, 6, 7, or 8 bits; 1, 1/2, or 2 stop bit(s); Odd, even, or no parity
- Control: Hardware and software flow control

### Composite Links

- Quantity: Two
- Speed: 128K bps each or 256K bps for one
- Format: Sync; Proprietary modified HDLC

### Electrical / Physical Specifications

- Dimensions: MMV16xx: 6.7 x 15.1 x 13.0" or 17.0 x 38.4 x 33.0 cm  
MMV32xx: 10.0 x 15.1 x 13.0" or 25.4 x 38.4 x 33.0 cm

- Weight: MMV16xx: 24 lbs (10.9 kg)  
MMV32xx: 30 lbs (13.6 kg)

- Switches: Power and DIPs (for parameters)

- Connectors: 1-Power, 8-DB25Fs (data on base models), 1-DB25F & 1-RJ11F (command), 2-DB25Ms (link), 1-RJ48F per optional MMV1656K and 2-RJ11Fs (FXS), 2-RJ11Fs (FXO), and 2-RJ48Fs (E&M) per optional MV2

- LEDs: XMT, RCV, FC (channel); CD, RCV, XMT, CTS, RX, FCR, RD, TM (link); CD, RCV, XMT, OH (command). FXS, FXO, E&M, VCE, FAX, XMT, RCV, XSG, RSG, TM (for optional MV2)

- Voltage: 100-120v AC (220-240v optional)

- Power: MMV16xx: 50 watts  
MMV32xx: 57 watts

### Optional Voice/Fax Card Specifications

- Compression: 9.6K or 16K bps voice digitization
- Interface: E&M, FXO, or FXS

### Optional Internal DSU Specifications

- Speeds: 56K, 19.2K, 9.6K, 4.8K, or 2.4K bps
- Format: Synchronous DDS or compatible
- Usage: Full-duplex over Local Area Data Set or 2-pair non-loaded metallic wire

- Warranty: Two years

Manufactured in Mounds View, MN, U.S.A.

The MMV-Series MultiMuxes also include the non-expandable 8-port MMV800-Series with dual composite links.

# MultiTech<sup>®</sup> Systems

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