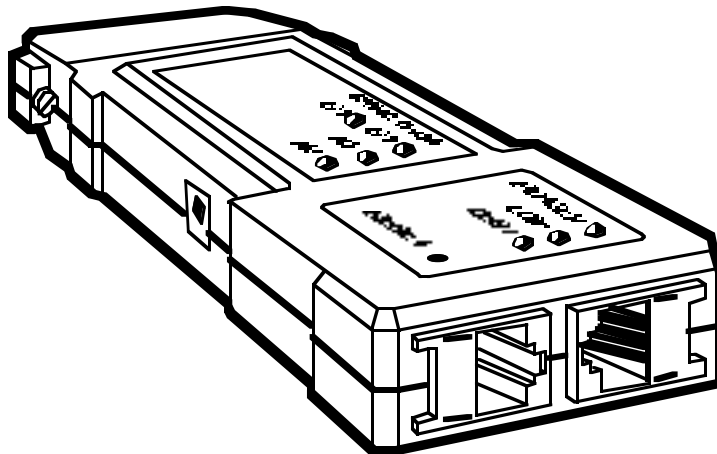


BLACK BOX[®]

NETWORK SERVICES

Miniature 2-Channel Statistical Multiplexor



Multiplex two asynchronous channels at data rates up to 19.2 Kbps onto a single composite link.

Key Features

- ▶ *Composite-link data rate up to 19.2 Kbps.*
- ▶ *Independent hardware and software flow control on each sub-channel.*
- ▶ *User-friendly menus make it easy to configure and diagnose.*
- ▶ *Error detection and automatic retransmission.*
- ▶ *Password-secured access for system configuration.*
- ▶ *System configuration is permanently stored.*
- ▶ *Comprehensive diagnostics.*

The compact Miniature 2-Channel Statistical Multiplexor is ideal for combining two asynchronous channels onto a single composite link. The channel and composite ports operate at speeds up to 19.2 Kbps. The Multiplexor provides error-free end-to-end performance via powerful error detection and automatic retransmission. Models are available with either 115-VAC or 230-VAC power supplies.

The composite link interface features a V.24/RS-232 interface.

Any channel can be used as a command port to configure the entire system or to perform diagnostic tests.

Your system's secure—password-only access prevents unauthorized users from altering the system configuration.

The Mux stores its system configuration in permanent, non-volatile memory. Plus, you can download the configuration parameters from the local to the remote Mux, or vice versa, via simple software commands.

The Mux also offers independent hardware and software flow control for each channel.

- End-to-end flow control can run from DTE to DTE or from the Mux channel to the remote DTE.
- Several characters for X-ON and X-OFF are provided, so the Mux is compatible with most applications.

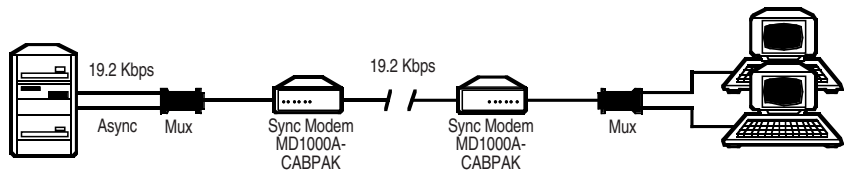
Comprehensive diagnostic capabilities provide local and remote loopbacks on the channels or on the composite link. The Mux can control pins 18 and 21 on the composite link, for sending loopback commands to the modem connected to the link. You get complete system diagnostics—you can even test modems between Multiplexors.

The Mux comes in a compact enclosure, and has one DB25 female composite-interface connector and two RJ-45 female channel-interface connectors.

Typical Application

Connect two asynchronous channels to a single composite link.

Connect two async terminals to an async host via a pair of modems and a pair of Miniature 2-Channel Statistical Multiplexors.



Specifications

General

Test Modes — *Main Channel and Sub-Channels:* Local and remote loopback; *Main Channel Modem:* Local analog and remote digital loopback Control; *Command Port:* Any sub-channel port

Indicators (LEDs) —
 (1) SYNC for main channel,
 (2) DATA LEDs (one for each sub-channel),
 (1) POWER, (1) OVF,
 (1) TEST, (1) RESET

Power — MX870A: 115 VAC, MX870AE: 230 VAC; 47 to 63 Hz; 5 VDC, 700 mA, regulated

Temperature — 0 to 50° C

Humidity — Up to 95%, noncondensing

Size — 2.2 x 5.3 x 11 cm

Weight — 90 g

Sub-Channel

Configuration — DCE

Number of Sub-Channels — 2

Data Rate — 300 to 19200 bps, user-selectable

Interface — *Control Signals:* RTS, CTS, DTR, DCD; *Local Control Signal:* RTS to DCD

Transmitted End-to-End

Character Code — 5, 6, 7, or 8 data bits

Stop Bits — 1, 1.5, or 2

Parity — Odd, even, none

Connectors — (2) RJ-45 female

Flow Control — *Hardware:* DTR/CTS for end-to-end (DTE-DTE) flow control, CTS flow control from sub-channel to DTE; *Software:* X-ON, X-OFF. X-ON, X-OFF characters are selectable from DCI (11H) to DC4 (14H) and 91H to 94H

Composite Channel

Configuration — DTE

Transmission Format — Synchronous, external timing

Data Rate — Up to 19.2 Kbps

Connector — (1) DB25 female

Control Signals — RTS, CTS, DCD, DTE, analog loopback (pin 18), remote digital loopback or signal quality (pin 21)

Protocol — Proprietary variant of HDLC framing protocol as defined in CCITT X.25 level 2

Technically Speaking

The Multiplexor comes configured with the following default parameters:

- 9600 bps
- 8 data bits
- No parity
- 1 stop bit

You can change these parameters to suit your application via the INIT-NOR (JP1) jumper.

The jumper has two positions:

1. Normal operation
2. Initialization

The Mux also has two other jumpers:

- Pin 21 ON-OFF jumper (JP3) can serve either as a signal-quality indication line or as a remote-loopback command line.
- TXCLK jumper (JP2) enables checking of transmit clock for the main channel.

Additional equipment you may need:

- Cables (EL08MS-07)
- Modems with Cables (MD1000A-CABPAK)

For these and other components...

Call our expert Technical Support Staff for all your data-communications needs. They'll help you find the best equipment for your application.

Ordering Information

This information will help you place your order quickly.

PRODUCT NAME	ORDER CODE
Miniature 2-Channel Statistical Multiplexor	
230-VAC	MX870AE