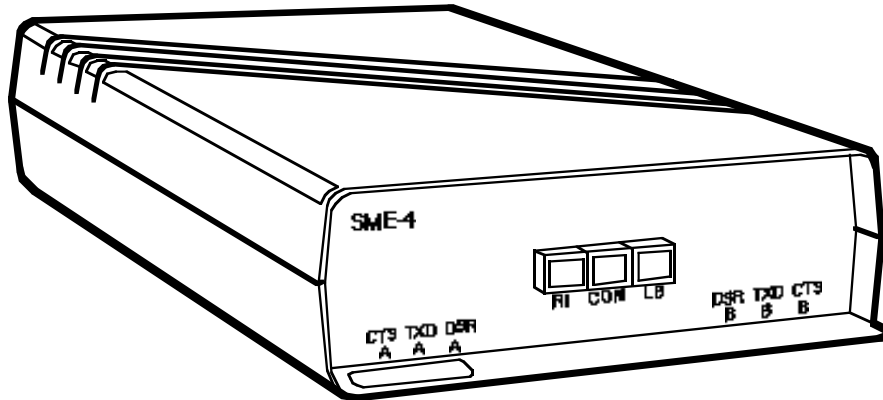




# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

### Synchronous Modem Eliminator (SME-4M)



*Replaces a pair of modems to connect IBM mainframes, minicomputers, and controllers—you save on equipment costs.*

*The SME-4M replaces two modems to connect controllers or other systems to your front-end processor. Since it provides clocking, you don't need any other equipment for your connection.*

#### Key Features

- ▶ *Replaces two modems in point-to-point applications.*
- ▶ *Operates at speeds up to 38.4, 56, or 64 kbps, depending on the model.*
- ▶ *Small and lightweight—easy to install or replace in the field.*
- ▶ *LED indicators show status of DSR, CTS, and TXD for both ports.*
- ▶ *Front-panel switches set signals and select test mode.*
- ▶ *Operates transparently in both asynchronous and synchronous modes.*

The Synchronous Modem Eliminator (SME-4M) lets a mainframe or minicomputer communicate locally with another mainframe, minicomputer, or remote controller.

The SME-4M replaces the two modems or line drivers you would usually need to do this.

A single SME-4M allows asynchronous, synchronous, or bisynchronous communications between two DTEs over RS-232C cable.

Three models are available: In synchronous mode, units operate at speeds of up to 38.4, 56, or 64 kbps, depending on the model. In either synchronous or asynchronous mode, the SME operates transparently.

The SME-4M is small and lightweight, so it's easy to handle. And since no special tools are needed, it's easy to install.

The front panel of the SME-

4M has six LEDs and three switches. The LEDs monitor Data Set Ready (DSR), Clear To Send (CTS), and Transmitted Data (TXD) for each port. The switches control Data Set Ready (DSR) and Ring Indicator (RI) signals, and select the digital loopback (DLB) test mode.

All three models can be installed in a 12-Card rack. Simply install Rackmount Cards and you can connect up to 12 controllers to your front-end processor.

Here's what you get when you order the SME-4M:

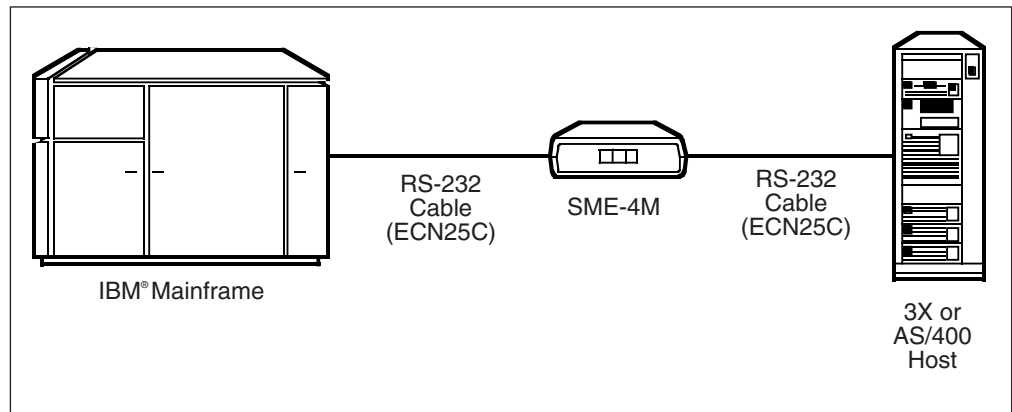
- SME-4M;
- Power transformer;
- User's manual.

#### Typical Application

*Use the SME-4M to connect an AS/400<sup>®</sup> and a System/3X computer for local communication.*

*Install six Rackmount Cards in your SME-4M Rack and connect six minicomputers to six remote controllers. You can have up to twelve Cards in the Rack.*

Insert an SME-4M between an IBM® mainframe and a 3X or AS/400 Host via RS-232C cable to create a typical point-to-point application without modems.



### Technically Speaking

The SME-4M simplifies logistics problems by replacing the two modems or line drivers you would normally need in point-to-point applications. Configure your computer equipment for point-to-point, nonswitched phone line.

- When two devices are connected via the SME-4M, the maximum distance on either side is 50 feet (15.2 m) using standard RS-232C cable.
- Six indicators and three front-panel switches facilitate operation and do-it-yourself troubleshooting.

Three indicators for each port monitor Transmitted Data, Data Set Ready, and Clear to Send signals.

Two of the front-panel switches control Data Set Ready (DSR) and Ring Indicator (RI) signals.

- The third switch enables a digital loopback test you can use in asynchronous

applications. Simply press the switch and enter data at the host terminal or computer. That data should return to you exactly as you sent it. To end the test, press the loopback switch again.

- You can expand the capabilities of the SME-4M using a 19-inch rack and adding a rackmount cards. The rack will hold 12 cards —replacing 24 modems.
- You can configure the SME-4M to operate at some nonstandard data transmission speeds, depending on the model of your SME-4M and the frequency of the installed crystal. To set the SME-4M for one of these speeds, configure the unit according to the chart at right.

Additional equipment you may need:

- Rackmount cards designed for the 12-Card Rack.
- 12-card rack chassis available for installing SME-4M.
- Standard RS-232 low-noise cable for connecting the SME-4M to your hosts and controllers. When ordering from us, please specify length and gender. The cable product code is ECN25C-00XX, with XX = specified length. Available up to 50 feet (15.2 m).

### SME-4M Synchronous Transmission Speeds

	ME251A-R2	ME253A	ME255A
CRYSTAL FREQUENCY	2.4576 MHz	1.792 MHz	2.048 MHz
STRAP POSITION	TRANSMISSION RATE (BPS)		
a	76800	56000	64000
b	153600	112000	128000
38400	38400	28000	32000
19200	19200	14000	16000
9600	9600	7000	8000
4800	4800	3500	4000
2400	2400	1750	2000
1200	1200	875	1000

### Specifications

**Protocol** — Synchronous/  
Asynchronous

**Speed** — 38.4-Kbps model: 1.2, 2.4, 4.8, 9.6, 19.2, 38.4 kbps;  
56-Kbps model:  
14, 28, 56 kbps;  
64-Kbps model:  
8, 16, 32, 64 kbps

**Operation** — Full- or half-duplex

**Clock** — Internal or external

**Indicators** — (6) LEDs: TX Data, CTS, and DSR for each of the two ports

**Diagnostics** — Bidirectional loopback (asynchronous)

**External Controls** — RI button, loopback switch, and DSR control

**Interface** — RS-232/V.24

**Connectors** — (2) DB25 female

**Size** — SME-4M:  
1.8"H x 5.5"W x 8.5"D  
(4.6 x 14 x 21.6 cm);  
12-Card Rack: 19" (48.3 cm)

**Weight** — 2 lb. (0.9 kg)

## Ordering Information

This information will help you place your order quickly.

PRODUCT NAME	ORDER CODE
SME-4M (38.4-Kbps Model) .....	ME251AE-R2
SME-4M (56-Kbps Model) .....	ME253A-E
SME-4M (64-Kbps Model) .....	ME255A-E
Standard RS-232 Low-Noise Cable .....	ECM25C-00XX

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