



Miniature Modem Eliminators

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INFORMATION

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ME1240A-F, ME1243A-M

1. Features

Miniature modem eliminators:

- Synchronous operation
- Selectable data rates up to 38.4 kbps (ME1240A-F) or 64 kbps (ME1243A-F)
- V.24 (ME1240A-F) or V.35 (ME1243A-F)
- Range of 30m/99 ft (ME1240A-F) or 75m/247 ft (ME1243A-F) on each side
- Selectable RTS to CTS delay
- Carrier controlled or constantly ON
- Easy to install and configure
- Miniature, lightweight.

Versions

The following versions of the modem eliminators are available:

- ME1240A-F – modem eliminator with RS-232/V.24 interface, operating with internal or external clock at data rates of up to 38.4 kbps
- ME1243A-F – modem eliminator with V.35 interface, operating with internal clock at 64 kbps.

Application

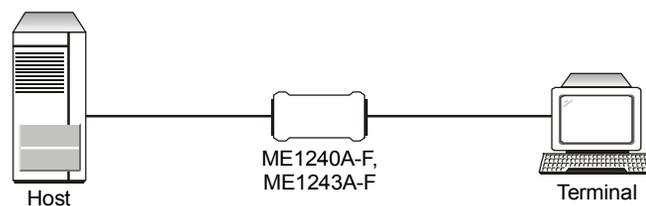


Figure 1. Typical Application

2. Description

ME1240A-F and ME1243A-F are miniature modem eliminators, which replace two synchronous modems by permitting direct port-to-port connection, as shown in [Figure 1](#).

The modem eliminators operate at to 38.4 kbps (ME1240A-F) or 64 kbps (ME1243A-F), connecting two synchronous DTEs at ranges of up 30m/99 ft (ME1240A-F) or 75m/247 ft (ME1243A-F) on each side.

The delay between RTS and CTS can be independently set on either port to 0, 6.6 or 53 msec for ME1240A-F or 0, 7, or 64 msec for ME1243A-F.

The DCD signal can either be set to constantly ON, or used as a port-to-port handshaking signal, where RTS on one port is converted to DCD on the other port.

Physical connection between ME1240A-F and its associated terminal and computer is via D-type 25-pin female connectors.

Physical connection between ME1243A-F and its associated terminal and computer is via two 34-pin V.35 female connectors on 85 cm (2.8 ft) cable.

3. Technical Specifications

Transmission	<i>Format</i>	Synchronous
	<i>Mode</i>	Emulates half or full duplex lines
	<i>Data Rate</i>	ME1240A-F: 2.4, 4.8, 9.6, 19.2, 38.4 kbps ME1243A-F: 64 kbps
	<i>Range</i>	ME1240A-F: 30m (99 ft) on each side ME1243A-F: 75m (247 ft) on each side
	<i>RTS/CTS Delay</i>	ME1240A-F: 0, 6.6 or 53 msec ME1243A-F: 0, 7, or 64 msec
	<i>DCD</i>	Continuously ON or controlled by RTS from the DTE on the other side
	<i>Interface</i>	ME1240A-F: V.24 ME1243A-F: V.35
	<i>Connectors</i>	ME1240A-F: D-type, 25-pin, female ME1243A-F: 34-pin, female
	Power	No external power supply is required
Physical	<i>ME1240A-F</i>	
	<i>Height</i>	30 mm / 1.2 in
	<i>Width</i>	50 mm / 2.0 in
	<i>Depth</i>	135 mm / 5.3 in
	<i>Weight</i>	100g / 3.5 oz

ME1240A-F

Height 30 mm / 1.2 in

Width 50 mm / 2.0 in

Depth 130 mm / 5.1 in

Weight 300g / 10.5 oz

Environment *Temperature* 0–50°C (32–122°F)

Humidity Up to 95%, non-condensing

4. Installation

Caution This is a delicate instrument. Be careful when setting jumpers or performing any actions within the product so that you do not break or shake any components.

Installation of the modem eliminators is simple and straightforward, just follow these steps:

1. Separate the two parts of the plastic cover by firmly pressing the marked places on the sides. If this is difficult, insert a small screwdriver into the slot, where there is a small opening. Lift the handle, gently levering the tip of the screwdriver down. The cover will separate without pressure.

Caution Do not insert the screwdriver straight into the middle of the slot, as this may break off the prongs which snap the cover together.

2. Configure the unit according to the desired mode, referring to [Figure 2](#), [Figure 3](#) and [Table 1](#).

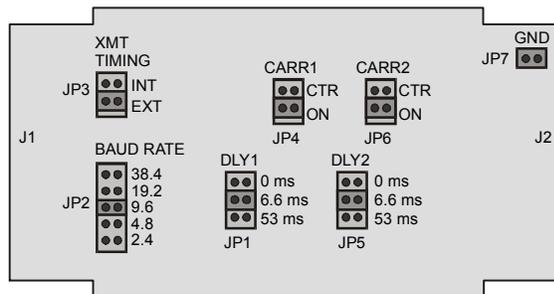


Figure 2. ME1240A-F Internal Jumper Locations

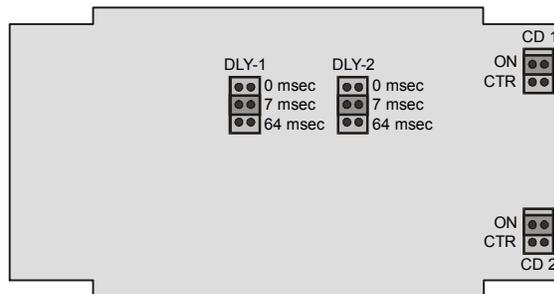


Figure 3. ME1243A-F Internal Jumper Locations

Table 1. Internal Jumper Settings

Jumper	Function	Possible Settings	Default Setting
XMT TIMING (ME1240A-F only)	Selects transmit timing for ME1240A-F unit	INT – Internal EXT – External from DTE	EXT
BAUD RATE (ME1240A-F only)	Selects data rate for ME1240A-F unit	38.4 – 38.4 kbps 19.2 – 19.2 kbps 9.6 – 9.6 kbps 4.8 – 4.8 kbps 2.4 – 2.4 kbps	9.6

Table 1. Internal Jumper Settings (Cont.)

Jumper	Function	Possible Settings	Default Setting
CARR1 (ME1240A-F) CD1 (ME1243A-F)	Selects the carrier to be constantly ON or controlled by RTS (port 1)	ON – Constantly ON CTR – Controlled by RTS	ON
CARR2 (ME1240A-F) CD2 (ME1243A-F)	Selects the carrier to be constantly ON or controlled by RTS (port 2)	ON – Constantly ON CTR – Controlled by RTS	ON
DLY1	Selects delay between receipt of RTS and CTS (port 1)	ME1240A-F: 0 ms 6.6 ms 53 ms ME1243A-F: 0 ms 7 ms 64 ms	6.6 7
DLY2	Selects delay between receipt of RTS and CTS (port 2)	ME1240A-F: 0 ms 6.6 ms 53 ms ME1243A-F: 0 ms 7 ms 64 ms	6.6 7
GND (ME1240A-F only)	Controls connection of the protective ground to the signal ground	Jumper plug is on – Protective ground (AA) is connected to the signal ground (AB) Jumper plug is off – Protective ground (AA) is disconnected from the signal ground (AB)	Jumper plug is on

- Close the unit and connect to the computer and terminal.