

## ORDERING

### **MME/M:**

Miniature Modem Eliminator, male connectors

### **MME/F:**

Miniature Modem Eliminator, female connectors

# MME

*Synchronous Modem  
Eliminator*

**RAD**



Specifications are subject to change without prior notice.

**RAD**

data communications

<http://www.rad.com>

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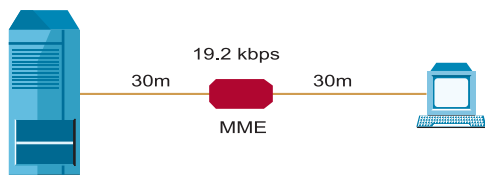
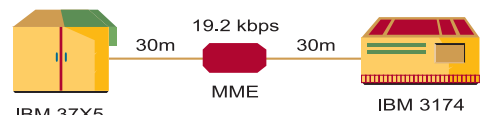
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223-100-08/98

## FEATURES

- Synchronous
- Selectable data rates up to 19.2 kbps
- Range of 30m/99 ft on each side
- No AC power required
- Easy to install and configure
- Miniature, lightweight

## APPLICATIONS



## DESCRIPTION

- MME is a miniature modem eliminator, which replaces two synchronous modems by permitting direct port-to-port connection.
- MME is the smallest modem eliminator available in the market. It requires no AC supply connection, using the ultra-low power from the standard RS-232/V.24 data and control signals.
- MME generates the Receive and Transmit clocks required for proper operation of the two synchronous DTEs, as well as all the control signals necessary to emulate dial-up or dedicated service.
- The delay between Request to Send and Clear to Send can be independently set on either port, for 0, 6.6 or 53 msec.
- The Data Carrier Detect signal can either be set constantly to 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 MME and its associated terminal and computer is via 25-pin RS-232 connectors, either two male or two female.

## SPECIFICATIONS

- **Terminals Supported**  
All IBM 3270 Category A displays and printers, or their compatibles
- **Transmission Format**  
Synchronous
- **Transmission Mode**  
Emulates half or full duplex, dial-up or dedicated lines
- **Data Rates**  
Selectable:  
1.2, 2.4, 4.8, 9.6, 19.2 kbps
- **Range**  
30m/99 ft at 9.6 kbps. The range extends linearly for lower bit rates and decreases for higher bit rates.
- **RTS/CTS Delay**  
0, 6.6, 53 msec
- **DCD**  
Continuous or terminal-controlled
- **Ring Indicator**  
Constantly ON
- **Interface**  
RS-232/V.24
- **Connectors**  
25-pin RS-232 connectors,  
two female or two male (options)

- **Power**  
No power supply required
- **Physical**  
Length: 135 mm / 5.3 in  
Width: 50 mm / 2 in  
Height: 30 mm / 1.2 in  
Weight: 100g / 3.5 oz
- **Environment**  
Temperature: 0-50°C / 32-122°F  
Humidity: Up to 95%,  
non-condensing

## Declaration of Conformity

**Mfr. Name:** RAD Data Communications Ltd.  
**Mfr. Address:** 12 Hanechoshet St.  
Tel Aviv 69710  
Israel

**declares that the product:**

**Product Name:** MME

Conforms to the following standard(s) or other normative document(s):

**EMC:** EN 55022 (1994): Limits and methods of measurement of radio disturbance characteristics of information technology equipment.  
EN 50082-1 (1992):  
Electromagnetic compatibility -  
Generic immunity standards for residential, commercial and light industry.

### Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 89/336/EEC.  
The product was tested in a typical configuration.

Tel Aviv, March 31st 1996



Haim Karshen  
VP Quality

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## 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 MME is straightforward and simple, no tuning is required. Just follow these steps:

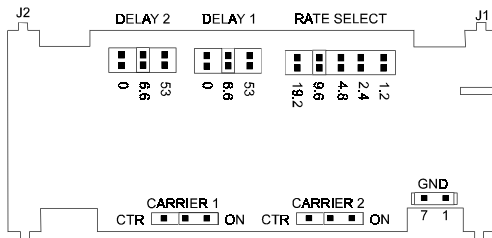
1. Open the unit by pressing the marked places on the sides. If this is difficult, insert a small screwdriver into the slot, where there is a small opening. Lift the handle, gently levering the tip of the screwdriver down. The cover will separate without pressure.  
  
**Note:** *Do not insert the screwdriver straight into the middle of the slot, as this may break off the prongs which snap the cover together.*
2. Choose the mode of operation according to *Table 1* and *Figure 1*. There are six strap selections to be made.
3. Close the unit and plug it directly to the computer and terminal cables.

**Table 1 – MME Strap Selection**

Strap Identity	Function	Possible Position	Factory Setting
RATE SELECT	Selects the rate at which data is transmitted	1.2	9.6
		2.4	
		4.8	
		9.6	
		19.2	
DELAY 1	<b>Selects Modem 1 delay between receipt of Request To Send (CA) and Clear To Send (CB)</b>	0.0	6.6
		6.6	
		53.0	
DELAY 2	<b>Selects Modem 2 delay between receipt of Request To Send (CA) and Clear To Send (CB)</b>	0.0	6.6
		6.6	
		53.0	
CARRIER 1	ON: Modem 1 Carrier Detect (CF) is constantly ON	ON	ON
	CTR: Modem 1 Carrier Detect (CF) is controlled by Port 2 Request To Send (CA)	CTR	
CARRIER 2	ON: Modem 2 Carrier Detect (CF) is constantly ON	ON	ON
	CTR: Modem 2 Carrier Detect (CF) is controlled by Port 1 Request To Send (CA)	CTR	
GND	IN: Connects Protective Ground (AA) to Signal Ground (AB)	IN	IN
	OUT: Disconnects Protective Ground (AA) from Signal Ground (AB)	OUT	

**Figure 1 - MME Strap Selection**

for male connectors:



for female connectors:

