

Doc #: 112001UA
Part #: 07M1200P-A



MODEM ELIMINATOR, RS-232

1200P

(CTS ME-V.24)

INSTALLATION AND OPERATIONS MANUAL

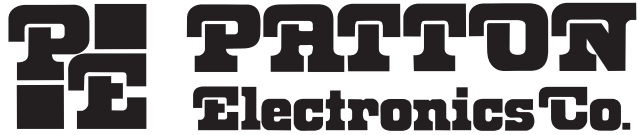
May 15, 2000



An ISO-9001
Certified Company

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The Patton MSDs generate and use radio frequency energy, and if not installed and used properly—that is, in strict accordance with the manufacturer's instructions—may cause interference to radio and television reception. The Patton MSDs have been tested and found to comply with the limits for Class A computing devices in accordance with the specifications in Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection from such interference in a commercial installation. However, there is no guarantee that interference will not occur in a particular installation. If the Patton MSDs do cause interference to radio or television reception, which can be determined by disconnecting the cables, the user is encouraged to try to correct the interference by one or more of the following measures: moving the computing equipment away from the receiver, re-orienting the receiving antenna, and/or plugging the receiving equipment into a different AC outlet (such that the computing equipment and receiver are on different branches).

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tel: (301) 975-1007;

email: support@patton.com;

or, www: <http://www.patton.com>.

NOTE: Packages received without an RMA number will not be accepted.

Patton Electronics' technical staff is also available to answer any questions that might arise concerning the installation or use of your Patton MSDs. Technical Support hours: 8AM to 5PM EST, Monday through Friday.

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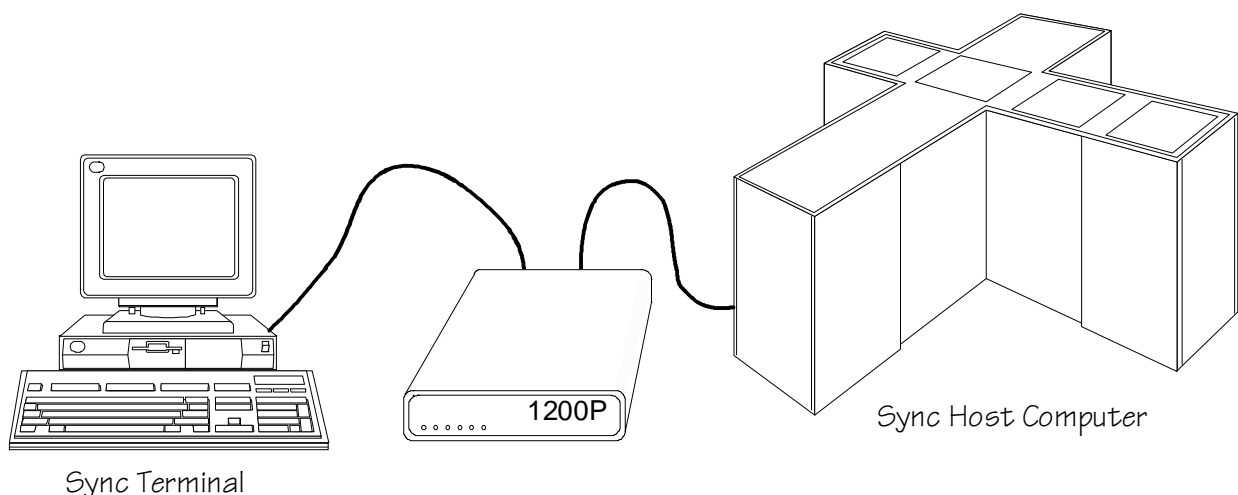
CHAPTER 1 - OPERATION

The Patton 1200P (CTS ME-V.24) is a RS-232 Modem Eliminator. This device is bi-directional with each port connecting to a DTE. The 1200P (CTS ME-V.24) permits interfacing one RS-232 / V.24 terminal to another RS-232 / V.24 terminal without the use of two Modems. The 1200P (CTS ME-V.24) provides sync baud rates up to 76.8Kbps. When the 1200P (CTS ME-V.24) is used with async data, baud rate selection is not required, because the Modem Eliminator is transparent to the data.

Terminal devices can be separated up to 50 feet away from the 1200P (CTS ME-V.24) depending on the baud rate selected. The unit is supplied with two DB-25 female connectors for connection of the terminal units.

The 1200P (CTS ME-V.24) is available as either a standalone unit or in a multi-unit rackmount configuration. In the standalone configuration the 1200P (CTS ME-V.24) is housed in a sturdy aluminum enclosure and is supplied with a switchable 110VAC / 220VAC linear power supply. In the rack-mount configuration, the 1200P (CTS ME-V.24) occupies one slot of the 1010R16/P/UI (CTS MCS-16C), 16 card slot, front load rack.

The unit has MET, c-MET and CE approvals.



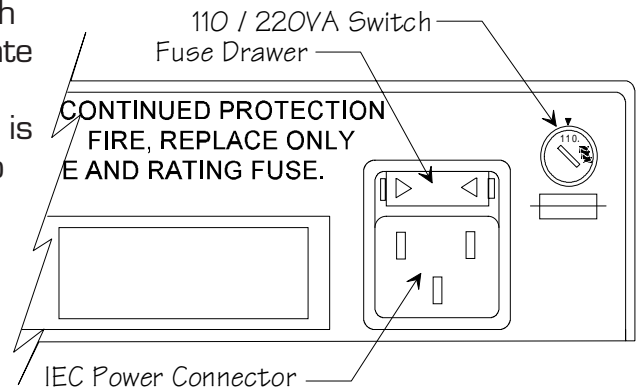
Typical Application

Caution, Disconnect the POWER Before Removing The Cover
Vorsicht, Befor Deckung Abnehmen Mach Strom Zu.

CHAPTER 2 - SETUP AND INSTALLATION

Power Connection

Before connecting the 1200P (CTS ME-V.24) to an AC power source the top cover must be installed and secured with the supplied screws. The unit is supplied with a 110/220VAC voltage switch, turn the switch with a coin or screw driver to the appropriate voltage for your country. EXAMPLE: United States of America; set to 110VAC. The unit is supplied with a IEC power connector next to the voltage select switch, plug the power cord into the connector until it is firmly seated. You may now connect the power cord into your AC outlet.



Factory Configuration

The 1200P (CTS ME-V.24) is configured prior to shipment with the switches and jumpers in the following default positions:

- SW1 - 1 **ON**, 2 **OFF** (CLK1)
 3 **OFF**, 4 **OFF**, 5 **ON** (9600bps)
 6 **OFF** (Signal and Chassis Ground NOT Connected)
- SW2 - 1 & 2 **ON** (CTS Delay = 0)
 3 & 4 **ON** (DSR Switched)
 5 & 6 **ON** (DCD Switched)

Installation

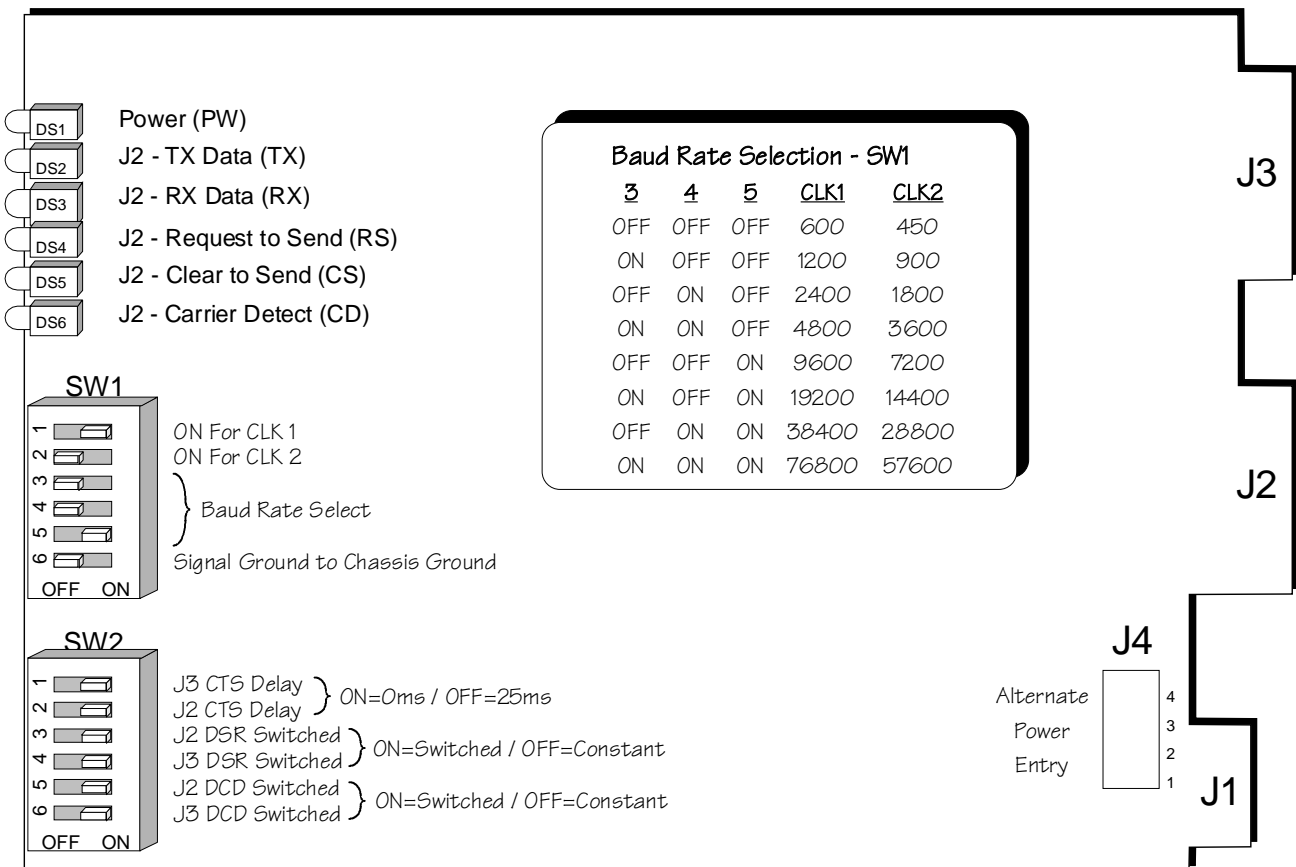
Set switches to match the required configurations based on the diagrams below. The cabling between each device and the 1200P (CTS ME-V.24) must be terminated with male connectors.

CTS Delay (SW2-1,2)

SW2 position 1 selects RTS to CTS delay for the terminal connected to J3. Set SW2 position 1 to **ON** for no delay and **OFF** for 25ms of delay. SW2 position 2 selects RTS to CTS delay for the terminal connected to J2. Set SW2 position 2 to **ON** for no delay and **OFF** for 25ms of delay.

DSR Control (SW2-3,4)

SW2 position 3 selects DSR control for the terminal connected to J2. Setting SW2 position 3 to **ON** will select DSR on J2 to switch in response to DTR from J3 switching. Setting SW2 position 3 to **OFF** will force DSR on J2 to Active. SW2 position 4 selects DSR control for the terminal connected to J3. Setting SW2 position 4 to **ON** will select DSR on J3 to switch in response to DTR from J2 switching. Setting SW2 position 4 **OFF** will force DSR on J3 to Active.



DCD Control (SW2-5,6)

SW2 position 5 selects DCD control for the terminal connected to J2. Setting SW2 position 5 to **ON** will select DCD on J2 to switch in response to RTS from J3 switching. Setting SW2 position 5 to **OFF** will force DCD on J2 to Active. SW2 position 6 selects DCD control for the terminal connected to J3. Setting SW2 position 6 to **ON** will select DCD on J3 to switch in response to RTS from J2 switching. Setting SW2 position 6 to **OFF** will force DCD on J3 to Active.

Clocking (SW1-1,2,3,4,5)

Clock selection is accomplished via SW1, positions 1 thru 5. Set position 1 to **ON** and 2 to **OFF** for CLK1. Set position 1 to **OFF** and 2 to **ON** for CLK2. Table I outlines the switch settings and the rates provided by positions 3 thru 5.

Equipment Grounding (SW1-6)

SW1, position 6 provides for grounding interconnection in those systems requiring a connection between Pin # 1 (Frame Ground) and Pin # 7 (Signal Ground).

SW1-5	SW1-4	SW1-3	CLK1	CLK2
OFF	OFF	OFF	600	450
OFF	OFF	ON	1,200	900
OFF	ON	OFF	2,400	1,800
OFF	ON	ON	4,800	3,600
ON	OFF	OFF	9,600	7,200
ON	OFF	ON	19,200	14,400
ON	ON	OFF	38,400	28,800
ON	ON	ON	76,800	57,600

Table I

Indicators

LED indicators display the state of the J2 interface leads and power. The following interface leads are displayed: Power Applied, TX Data, RX Data, Request to Send, Clear to Send, and Carrier Detect.

Appendix

Technical Specifications

Applications

RS-232 Sync or Async Terminal to Terminal interconnection.

Capacity

Two RS-232 Terminals

Data Format

Data Coding: .. Synchronous or Asynchronous

Data Rates

Up to 76,800bps

Data Interface

RS-232

RS-232 Physical Interface

Female DB-25 Connector

Enclosure

Metal: Aluminum

Front Panel

Indicators: Power (PW)
J2 Send Data (TX)
J2 Receive Data (RX)
J2 Request to Send (RS)
J2 Clear to Send (CS)
J2 Carrier Detect (CD)

Power Requirements

110-120/200-240 VAC, 50 to 60Hz, 0.16/0.08 A, Switch Selectable

Approvals

MET, c-MET, & CE

Environmental

Operating Temp: 32° to 122°F (0° to 50°C)

Relative Humidity: ... Up to 90% non-condensing

Altitude: 0 to 10,000 feet

Dimensions

Height: 1.75 inches (4.44 cm)

Width: 8.90 inches (22.60 cm)

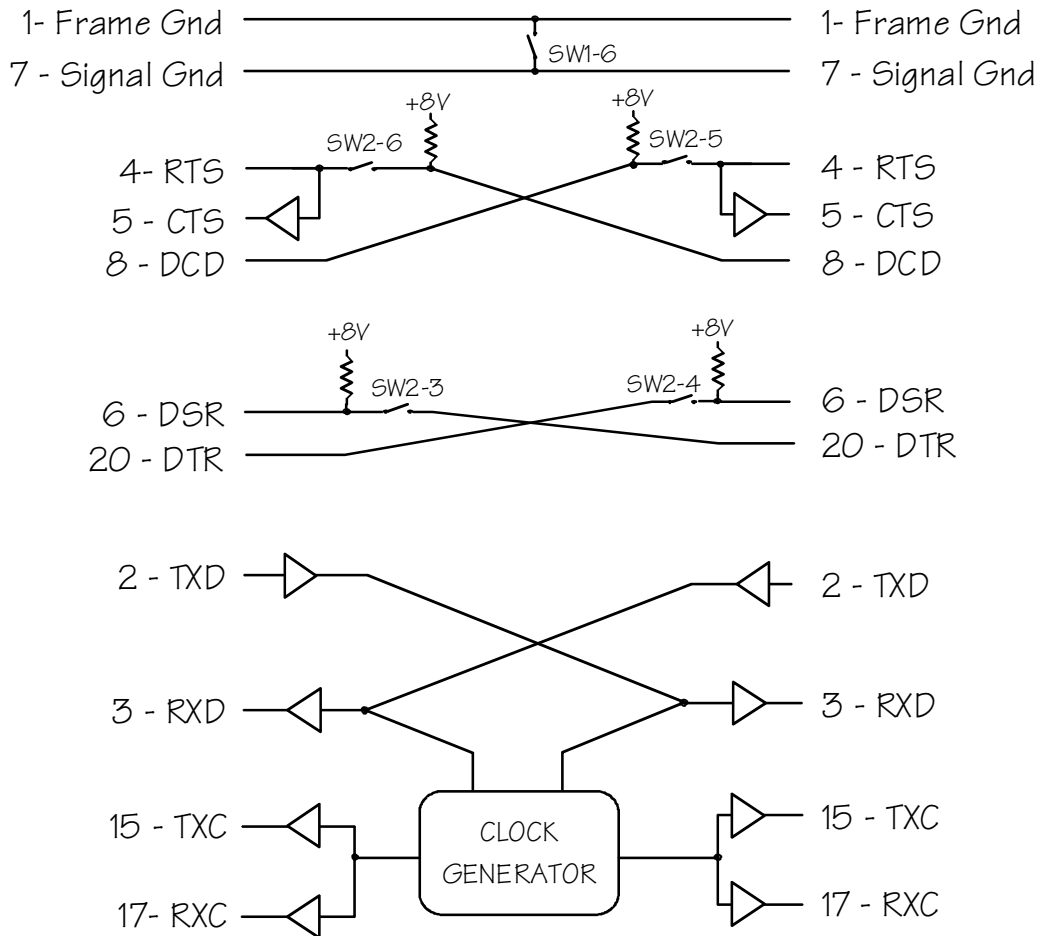
Length: 10.00 inches (25.40 cm)

Weight

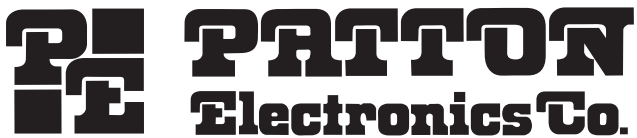
2.50 lbs (1.1.35 Kg)

J2

J3



1200P Signal Routing Diagram



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