

Model 2247V-4 Modem Sharing Unit

The 2247V-4 Modem Sharing Unit (MSU) allows up to four RS-232-C/V.24-compatible Data Terminal Equipment (DTE) devices to share a single synchronous modem for communications over a polled line (switched or leased). Figure 1 shows the 2247V-4 MSU, and Figure 2 shows a typical configuration. In Figure 2, the 2247V-4 MSU allows the modem to be shared by four Wang 2246R Remote Workstations, which are individually polled by a Wang VS system.

OPERATION

Each DTE attached to the MSU must have the capability to respond to a poll from a primary device (such as a VS system acting as a host). Each DTE acts as a secondary station having a unique poll address. The MSU passes the host polling message to each DTE.

To respond to the polling message, a DTE must first request line access by transmitting a Request To Send (RTS) signal to the MSU. The 2247V-4 MSU scans the attached DTEs in a cyclical manner to detect RTS. When RTS is detected, the MSU halts the DTE scanning process and passes RTS from the requesting DTE to the modem. In response, the modem passes a Clear To Send (CTS) signal back to the MSU. The MSU, in turn, passes CTS back to the requesting DTE. By this action, the DTE is granted exclusive access to the communications line.

The DTE retains exclusive access to the communications line for the duration of its transmission sequence. When the transmission sequence is completed, the DTE drops RTS, and the MSU scans the next DTE for RTS. With the 2247V-4 MSU, each of the attached DTEs can share use of the local modem on an equal-priority basis. The 2247V-4 does not support polling of multiple DTEs having the same poll address.



Figure 1.
2247V-4 Modem Sharing Unit

FRONT PANEL

The 2247V-4 MSU front panel provides an RS-232-C/V.24-compatible connector for attachment of a modem. Eight RS-232-C/V.24-compatible connectors on the MSU front panel are provided for DTE attachment, but only Connectors 1 through 4 can be used. In a corresponding manner, eight numbered indicators on the front panel signify Terminal Clear to Send, but only Indicators 1 through 4 are enabled. Three additional LED indicators on the front panel signify MSU Power On/Off, Ready (Data Set Ready signal from the modem), and Receive (Carrier Detect signal from the modem).

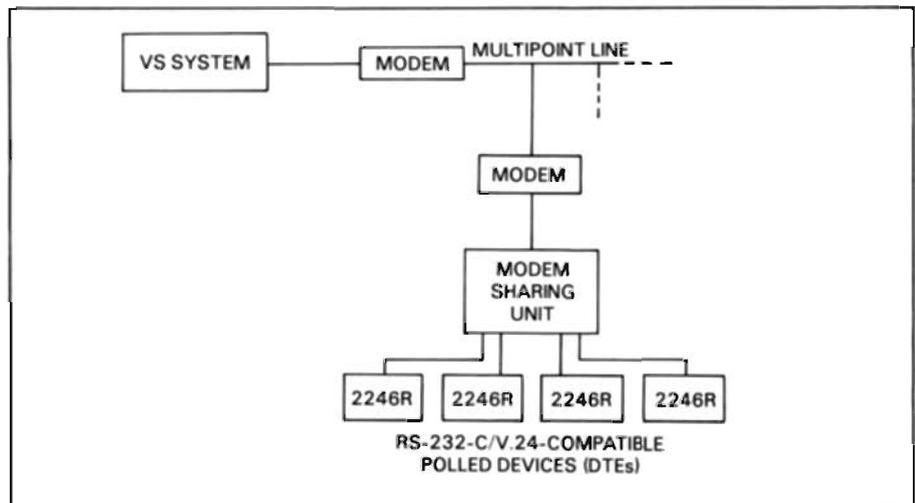


Figure 2. VS Remote Workstation Configuration

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PHYSICAL INTERCONNECTION

The 2247V-4 MSU is delivered with a 25-foot (7.6-meter) RS-232-C/V.24-compatible cable for connection to a modem. If a cable length other than 25 feet is appropriate, a 12-foot (3.6-meter) or 50-foot (15.2-meter) cable can be ordered for delivery with the MSU. (Refer to Table 1 for modem cable information.) To conform to the recommendations of the RS-232-C standard, the MSU can be connected up to 50 feet (15.2 meters) from the modem.

The 2247V-4 is capable of supporting DTE connections up to 2000 feet (610 meters). Extension cables are available from Wang for such connections. (Refer to Table 2.)

Table 1. Wang RS-232-C/V.24-Compatible Cables*

Length (in Feet)	Length (in Meters)	Type**	Order Number
12	3.6	(M-M)	120-0113
25	7.6	(M-M)	120-0219
50	15.2	(M-M)	120-0220

* These cables should not be joined with the extension cables in the following table.

** These cables are equipped with RS-232-C/V.24-compatible connectors. (M-M) cables have male connectors at both ends.

PRODUCT SPECIFICATIONS

Model Number
 2247V-4 Modem Sharing Unit

Physical Dimensions
 Height: 6 in. (15.2 cm)
 Width: 8 in. (20.3 cm)
 Depth: 12 in. (30.5 cm)

Weight
 8.5 lb (3.5 kg)

Heat Dissipation
 200 Btu/hr maximum

Fuses
 2 amp Slow-Blow (SB) 115 VAC
 1 amp SB 230 VAC

Power Requirements
 115 or 230 VAC ($\pm 10\%$)
 50 or 60 Hz (± 1 Hz)
 65 watts

Operating Environment
 50° to 90° F (10° to 32° C)
 35 to 65% relative humidity,
 noncondensing

Modem Selection
 The 2247V-4 MSU provides an RS-232-C/V.24-compatible interface for connection of a synchronous modem. Modems at both ends of the communications line must be compatible.

Table 2. Wang Extension Cables*

Length (in Feet)	Length (in Meters)	Type**	Order Number
25	7.6	(M-M)	120-0247
50	15.2	(M-F)	120-2247-01
100	30.5	(M-F)	120-2247-02
200	61	(M-F)	120-2247-03
300	91.4	(M-F)	120-2247-04
400	122	(M-F)	120-2247-05
500	152.4	(M-F)	120-2247-06

* These cables can be joined together to achieve a cable length not to exceed 2000 feet (610 meters).

** These cables are equipped with RS-232-C/V.24-compatible connectors. (M-M) cables have male connectors at both ends. (M-F) cables have a male connector at one end and a female connector at the other end.