MS-3/ MS-6 MODEM SPLITTER 3- OR 6-PORT

CUSTOMER SUPPORT INFORMATION

1.0 SPECIFICATIONS

INTERFACE:	RS-232-C	COMPLIANCE:	FCC PART 15
CONNECTORS:	DB25s (female)	DIMENSIONS:	7.5" H X 2.5" W X 1.3" D (19.1 X 6.4 x 3.3 cm)
CONFIGURATION:	MASTER Connector is DTE PORT Connectors are DCE	WEIGHT:	2lbs (0.9kg)
PINS SUPPORTED:	1(FG), 2(TD), 3(RD), 4(RTS), 5(CTS), 6(DSR), 7(SG), 8(DCD), 15(TC), 17(RC), 20(DTR),	TEMPERATURE:	32 to 122° F (0 to 50° C)
		HUMIDITY:	0 to 100% non-condensing

2.0 INTRODUCTION

The Modem Splitter allows an RS-232-C DEC device, such as a modem, to interface with up to six RS-232-C DTE devices, such as terminals. The MS-3 will support up to three additional units. The MS-6 will support up to six additional units. The MASTER port is configured DTE and PORTS 1-6 are configured DCE. No jumpers and/or switches are located on the Modem Splitter. See Figure 1 typical applications.

3.0 THEORY OF OPERATION

Signals present on the MASTER connector at pins 1,3,5,6,7,8,15, and 17 are sent to the corresponding pins on each of the PORT connectors. Signals present on the PORT connectors at pins 2,4, and 20 are passively stored and sent to the corresponding pins on the MASTER connector.

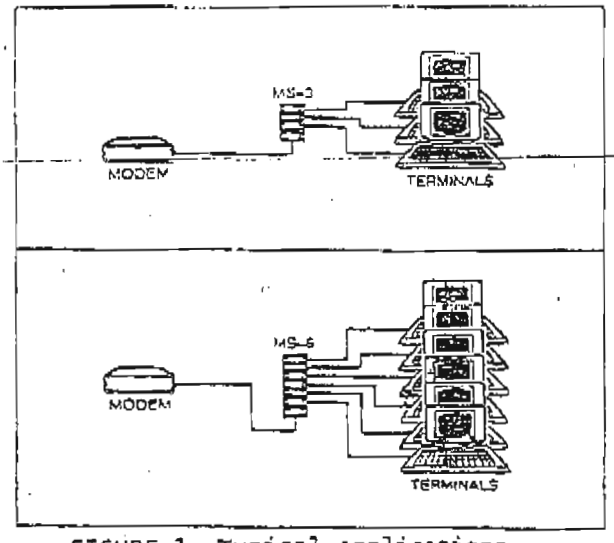

FIGURE 1. Typical Applications

4.0 INSTALLATION

The Modem Splitter is a passive device. The total length of cable connected to the unit should be less than 50 feet (15.2m). All connectors on the Modem Splitter are DB25s (female). The Modem Splitter is easily installed into a system by plugging the terminals into the Modem Splitter connectors labeled PORT 1 thru PORT 3 OR thru PORT6. The cable from the modem connects to the connector labeled MASTER. To ensure proper operation, the following guidelines should be followed:

1. The terminal devices connected to the Modem Splitter must be configured as DTE (Data Terminal Equipment) devices. The modem device the will share must be configured as DCE (Data Communication Equipment). Refer to you terminal or modem installation manual if your are unsure of this requirement. Generally speaking, terminals are DTE devices and modems are DCE devices.

2. Data coming onto the MASTER port on pin 3 of the Modem Splitter goes to all three or six terminal ports since the are all tied common. However only one terminal may transmit data to the modem at any one time. The transmit leads (pin 2) are not tied common and all terminals are isolated from each other by an OR gate.

5.0 WIRING CONFIGURATION

Three lines are isolated form each other in the Modem Splitter by OR gates. They are as follows:

Pin 2, Transmitted Data

Pin 4, Request to Send

Pin 20, Data Terminal Ready

Figure 2 illustrates the wiring configuration for these leads.

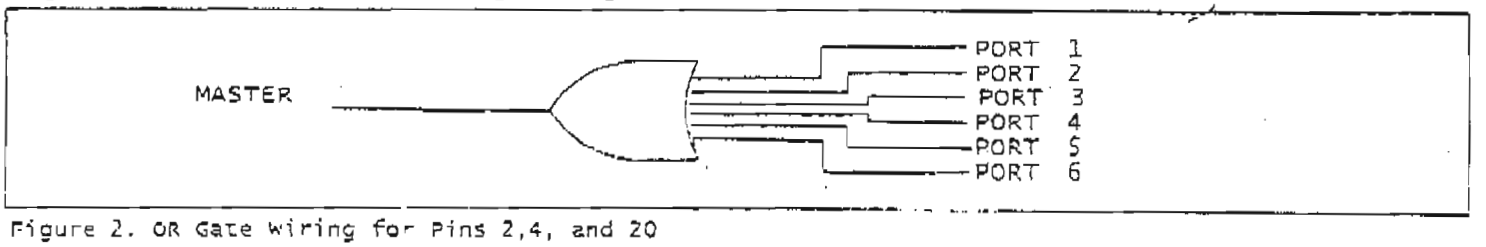

Figure 2. OR Gate Wiring for Pins 2,4, and 20

Eight other leads are tied straight through and are illustrated in Figure 3.

They are as follows :

Pin 1, Protective ground

Pin 3, Received data

Pin 5, Clear to Send

Pin 6, Data Set Ready

Pin 7, Signal Ground

Pin 8, Received Line Signal Detector

Pin 15, Transmitter signal Element Timing (DCE)

Pin17, Received Element Signal Timing (DCE)

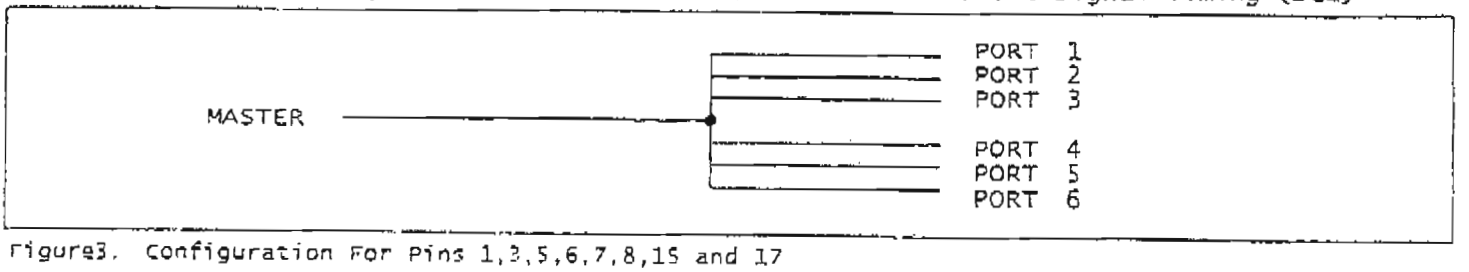

Figure3. Configuration For Pins 1,3,5,6,7,8,15 and 17

5.1 MODEM SPLITTER PINOUT TABLE

PIN	EIA CIRCUIT	DESCRIPTION	SIGNAL TO DCE	DIRECTION FROM DCE
1	AA	PROTECTIVE GROUND	-	-
2	BA	TRANSMITTED DATA	X	
3	BB	RECEIVED DATA		X
4	CA	REQUEST TO SEND	X	
5	CB	CLEAR TO SEND		X
6	CC	DATA SET READY		X
7	AB	SIGNAL GROUND	-	-
8	CF	RECEIVED LINE SIGNAL DETECTOR		X
15	DB	TRANSMITTER SIGNAL ELEMENT TIMING (DCE)		X
17	DD	RECEIVER SIGNAL ELEMENT TIMING (DCE)		X
20	CD	DATA TERMINAL READY	X	