

Step Five: Install peripheral cabling

Modem/Xem

Use standard RJ-11C telephone cables to connect Modem/Xem modules to the telephone lines. Connect to analog telephone circuits only. Never connect a modem module to a digital wall jack. Note that internal telephone systems (such as a PBX, Private Branch Exchange), may be digital.

Also, the Modem/Xem modules are to be used only with public access phone lines. Leased line operation is not supported.

Most phone systems are “loop start” but some are “ground start.” The Modem/Xem will not operate with “ground start” phone systems.

PORTS/Xem

You can connect printers, terminals, modems (or any other standard EIA-232 device to be controlled by applications on the computer) to the PORTS/Xem modules. The cable connector on the peripheral end depends on the requirements of the peripheral. The PORTS/Xem end of the cable must fit either an RJ-45 or DB-25 connector, depending on the module option you have. The pin assignments for each type of PORTS/Xem connector are as follows:

| <i>DB-25 Pin assignments</i> | | |
|------------------------------|---------------------|-----|
| Signal | Description | Pin |
| GND | Chassis Ground | 1* |
| TxD | Transmitted Data | 2 |
| RxD | Received Data | 3 |
| RTS | Request To Send | 4 |
| CTS | Clear To Send | 5 |
| DSR | Data Set Ready | 6 |
| SG | Signal Ground | 7 |
| DCD | Data Carrier Detect | 8 |
| DTR | Data Terminal Ready | 20 |
| RI | Ring Indicator | 22 |

* Chassis Ground is also available on the connector shell

| <i>RJ-45 Pin Assignment</i> | | |
|-----------------------------|---------------------|-----|
| Signal | Description | Pin |
| RI | Ring Indicator | 1 |
| DSR | Data Set Ready | 2† |
| RTS | Request To Send | 3 |
| GND | Chassis Ground | 4 |
| TxD | Transmitted Data | 5 |
| RxD | Received Data | 6 |
| SG | Signal Ground | 7 |
| CTS | Clear To Send | 8 |
| DTR | Data Terminal Ready | 9 |
| DCD | Data Carrier Detect | 10 |

† Pin 2 can be configured for DCD (through Digi software) if you want to connect using an 8 pin connector

Refer to the CD-ROM for more detailed cabling information.

What Next?

At this point the hardware installation for your PORTS/Xem or Modem/Xem system is complete. However, since the adapter must have software downloaded to its internal RAM before it becomes functional, you must next install the software driver for your operating system.

- Read the instruction booklet for the CD-ROM that came with your Xem system for instructions on installing software.
- View the on-line documentation on the CD-ROM for more information about *AccelePort* products.



AccelePort Xem System

*Xem PCI Host Adapter
PORTS/8em, PORTS/16em Modules
Modem/4em, Modem/8em Modules*

Hardware Installation Guide

Introduction

An *AccelePort*® Xem™ system consists of an Xem adapter coupled with PORTS/Xem™ modules (PORTS/8em™ and PORTS/16em™) and/or Modem/Xem™ modules (Modem/4em™ and Modem/8em™). The PORTS/Xem modules easily expand the number of EIA-232 ports on your computer, allowing you to cable additional peripheral devices such as printers, terminals or modems to your computer. Modem/Xem modules contain either four or eight modems.

The Xem adapter can support up to four modules. Multiple modules of either type can be linked in a chain to expand the number of EIA-232 ports and/or modems available.

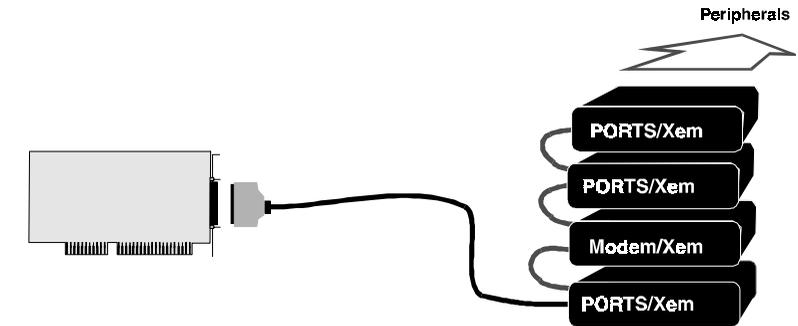


Figure 27. Example setup

This installation guide describes how to plan your Xem system setup and install the adapter and module hardware.

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Step One: Plan your setup

An *AccelePort* Xem system can be set up in a variety of ways. Before you start your installation, be sure of the following:

Number and type of components. Each Xem host adapter has an EBI bus onto which you can cable up to four modules (of just one type or combined PORTS/Xem and Modem/Xem).

Location of components. The first module on the EBI bus can be located up to five feet from the adapter (the length of the cable that comes with the system). Additional modules can then be stacked on top of the first module using the shorter cables provided with the add-on modules.

Note: The cumulative length of cable from the Xem adapter to the last module should not exceed ten feet.

To remain in compliance with emissions standards, you must use the cables that come with the product; the EBI cables cannot be extended.

Peripheral cabling. Before beginning the installation, be sure that you have the cables that you will need for the peripherals that you will be attaching to the modules. PORTS/Xem modules are available with either RJ-45 or DB-25 connectors for peripheral cabling. Modem/Xem modules accommodate modular phone line connectors.

You will need to be sure that you have cables of the correct length and with the right connectors to properly attach the devices you want to use with each module.

Power requirements. The first two PORTS/Xem modules can obtain power from the EBI bus. However, as you add modules to the EBI bus you must evaluate whether an auxiliary power supply will be necessary for the additional modules.

In general, the third and fourth modules on the EBI bus will require auxiliary power.

Note: If there is sufficient power for the module, the LED indicator on the side panel of the PORTS/Xem module will light.

Each Modem/Xem module requires its own power supply.

Before proceeding with the installation, you should determine if there is a need for auxiliary power supplies (available for purchase from Digi) and also determine that adequate power is available where modules will be installed.

Additional information about the Xem system, such as specifications and cabling details, is provided on the CD-ROM that is packaged with the host adapter.

Step Two: Install the Xem PCI adapter

Before installing the Xem adapter, you should do the following:

- Wear an ESD wrist strap to ground yourself while handling the adapter. If one is not available, discharge static electricity from your body by touching an unpainted metal surface, such as the computer's chassis, prior to handling the adapter.
- Record the adapter serial number, which will enable Digi to provide you with better service, should the need arise. The serial number label has this general format: **S/N: (S) XXX XXXXX**
- Unplug power from the PC.

1. Remove the computer's cover.
2. Locate an available PCI slot in your computer and remove the slot plate.
3. Insert the adapter into the slot and screw the endplate to the computer chassis. The endplate must be screwed into the computer chassis to remain in compliance with Part 15 of FCC rules.
4. Replace the computer's cover.
5. Attach one end of the EBI cable to the connector on the adapter.

Note: Do not power on the host system yet.

Step Three: Install modules

During this step (and whenever EBI cables are attached or removed from the modules) the host system must be turned OFF and power must not be applied to the modules.

1. Position modules at the location you have prepared according to the plan you developed in **Step One**.
2. Attach the cable from the adapter to the connector labelled EBI IN on the first PORTS/Xem or Modem/Xem module that is to be connected.

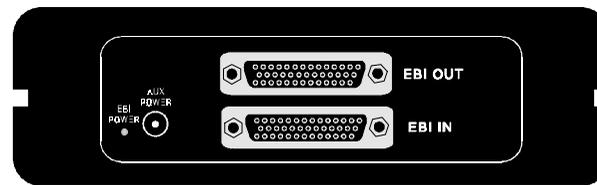


Figure 28. Side Panel of PORTS/Xem module

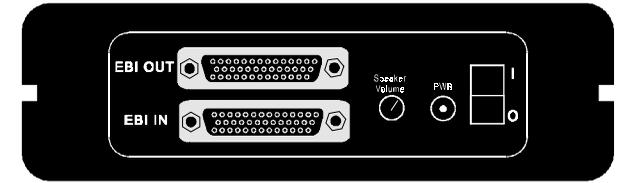


Figure 29. Side Panel of Modem/Xem module

If you are cabling multiple modules together, attach a daisy-chain cable to the EBI OUT connector of the first module. Connect the other end to the EBI IN connector of the second module. Continue cabling until all modules in the string are cabled.

3. Attach power supplies to all Modem/Xem modules, and the PORTS/Xem modules that need auxiliary power, and *then* plug power supplies into AC receptacles.

Turn on power to Modem/Xem modules using the power switch on the left side of the module. (PORTS/Xem modules do not have a power switch.)

Step Four: (Modem/Xem only) Set the speaker control

Each Modem/Xem module has an internal speaker which will provide audio output for any one of the modem ports in the module. You can select the modem port that is to be connected to the speaker or select not to use the speaker, via a DIP switch on the rear of the unit.

See the hardware information that came with your Modem/Xem for the switch settings to use.

There is a speaker volume control on the left side of the module.