What Next?

At this point the hardware installation for your *AccelePort* Xr EIA-422 host adapter is complete. However, since the adapter must have software downloaded to its RAM before it becomes functional, you must next install the software drivers for your operating system.

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

AccelePort Xr Family: 4r and 8r

*PCI Host Adapters
EIA-422*

Hardware Installation Guide

Introduction

An *AccelePort*® Xr™ EIA-422 host adapter easily adds EIA-422 ports to your computer, allowing you to cable EIA-422 peripheral devices directly to your computer.

As shown in the figure below, an Xr host adapter has one connector to which a special Digi cable assembly is attached to provide the peripheral port connections. The cable assembly is available with either DB-9 or DB-25 connectors at the peripheral end of the cable.
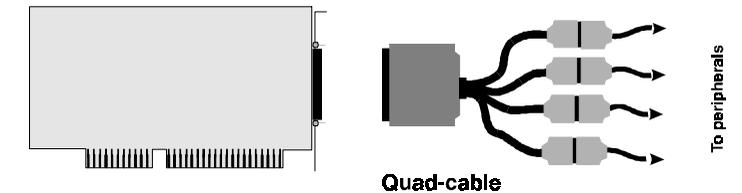

Figure 21. Example 4r EIA-422 host adapter with cable assembly

> **Note:** The 8r EIA-422 host adapter cable assemblies have eight DB-9 or DB-25 connectors to which peripherals are attached.

This installation guide describes how to plan your setup and install an *AccelePort* Xr host adapter.

Step One: Plan your setup

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

Number of components. You can connect up to four peripherals to an *AccelePort* 4r and up to eight peripherals to an *AccelePort* 8r host adapter.

Location of components. You can locate peripherals a distance from the adapter, but you must be sure that the cables you use to make the connection are properly constructed. Cable lengths of up to 4000 feet are permissible with the EIA-422 interface. To achieve the greatest reliability over distance, cables should be:

- Shielded, twisted pair cables.
- Grounded at both ends of the cable.
- Routed away from noise sources such as generators, motors and fluorescent lights.

Cable Connections. Before beginning the installation, be sure that you have a cable for each peripheral that you will be attaching to the host adapter. The connector type that you need at either end of the peripheral cable depends on the type of Digi cable assembly that you use and the connector on the peripheral.

Digi cable assemblies are available with DB-9 or DB-25 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.

Additional information about the AccelePort 4r and 8r, such as specifications and cabling details, is provided on the CD-ROM that is packaged with the host adapter.

Step Two: Install the Xr PCI host adapter

Before installing the Xr host 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 the 78-pin end of a Digi cable assembly to the connector on the adapter.

Step Three: Install peripheral cabling

You can connect any standard EIA-422 device to be controlled by applications on the computer, to an *AccelePort* Xr host adapter by installing a cable between the peripheral and the Digi cable assembly.

On the peripheral end of the cable, the connector you use depends on the requirements of the peripheral. The other end of the cable must fit either a DB-9 or DB-25 connector, depending on the Digi cable assembly you have. The pin assignments for each type of connector used on the Digi cable assemblies are industry standard:

DB-25 Pin Assignments

Signal	Description	Pin
GND	Chassis Ground	1, 7 *
TxD A (+)	Transmitted Data (+)	2
TxD B (-)	Transmitted Data (-)	14
RxD A (+)	Received Data (+)	3
RXD B (-)	Received Data (-)	16
RTS A (+)	Request To Send (+)	4
RTS B (-)	Request To Send (-)	19
CTS A (+)	Clear To Send (+)	5
CTS B (-)	Clear To Send (-)	13

* Chassis Ground is also available on the connector shell

DB-9 Pin Assignments

Signal	Description	Pin
GND	Chassis Ground	Shell
TxD A (+)	Transmitted Data (+)	8
TxD B (-)	Transmitted Data (-)	9
RxD A (+)	Received Data (+)	6
RXD B (-)	Received Data (-)	7
RTS A (+)	Request To Send (+)	2
RTS B (-)	Request To Send (-)	3
CTS A (+)	Clear To Send (+)	4
CTS B (-)	Clear To Send (-)	5

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