

INTRODUCTION

With SCSI Card 2940U2W, you can connect up to 15 SCSI peripherals, such as hard disk drives, scanners, CD-ROM drives, tape drives, to any IBM-compatible computer with PCI expansion slots.

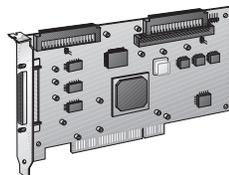
This installation guide provides instructions for:

- Installing the SCSI Card 2940U2W
- Connecting SCSI peripherals
- Installing SCSI Card 2940U2W software

See the *SCSI Card 2940U2W User's Reference* for additional information on using the SCSI Card 2940U2W.

Check the Kit Contents

Your SCSI Card 2940U2W kit should contain the following items:



SCSI Card 2940U2W



High-density 68-pin Internal Ultra SCSI Cable



Standard 50-pin Internal Ultra SCSI Cable



High-density 68-pin Internal Ultra2 SCSI Cable



Standard 50-pin Internal-to-High-density 50-pin External Ultra SCSI Cable (With Two Internal Connectors)



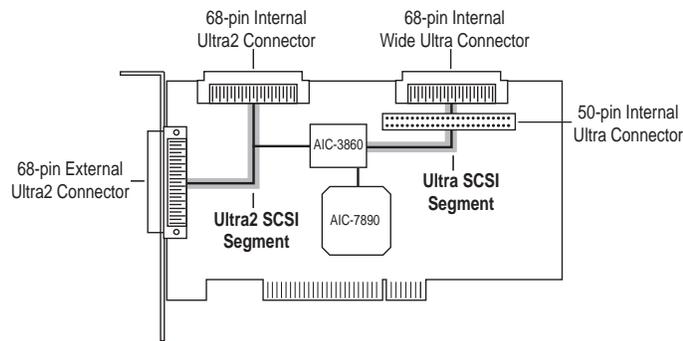
Manuals



Disks and CD-ROM

Bus Segments on the SCSI Card 2940U2W

The SCSI Card 2940U2W features Adaptec SpeedFlex™ technology. SpeedFlex technology ensures that you get the most performance from your Ultra2 SCSI peripherals by electronically isolating the Ultra2 SCSI segment from the Ultra SCSI segment on the SCSI bus. With the SpeedFlex advantage, the SCSI Card 2940U2W can support Ultra2 SCSI peripherals at speeds up to 80 MBytes/sec while simultaneously supporting Wide Ultra/Ultra (legacy) peripherals at speeds up to 40 MBytes/sec.



NOTE Attaching Wide Ultra/Ultra SCSI peripherals to the Ultra2 SCSI segment of the SCSI bus causes the Ultra2 SCSI segment and any attached peripherals to drop to Ultra SCSI performance levels (40 MBytes/sec). Attaching only Ultra2 peripherals to the Ultra2 segment, ensures that all peripherals on the Ultra2 segment will perform at Ultra2 performance levels (80 MBytes/sec).

Attaching an Ultra2 peripheral to the Ultra SCSI segment causes the Ultra2 peripheral to drop to Ultra SCSI performance levels instead of Ultra2 SCSI performance levels at which it is designed to run.

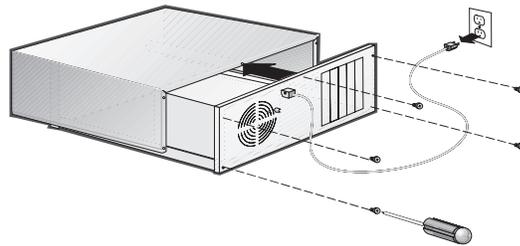
INSTALLING THE SCSI CARD 2940U2W

STEP 1 Discharge any static electricity build-up before handling your SCSI card by touching a grounded metal object (like the exposed metal parts on the back of your computer).

WARNING Turn OFF power to the computer and disconnect the power cord.

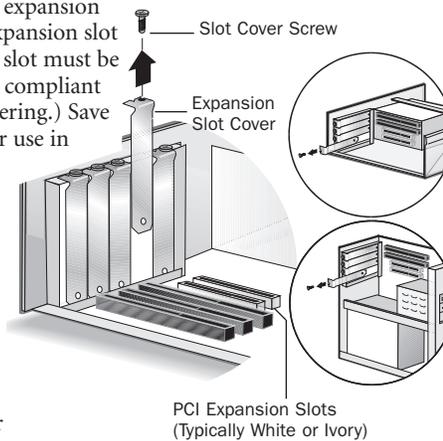
STEP 2 After you turn off your computer and unplug the power cord, remove the cover from the computer.

Refer to your computer manual for instructions on removing the cover.



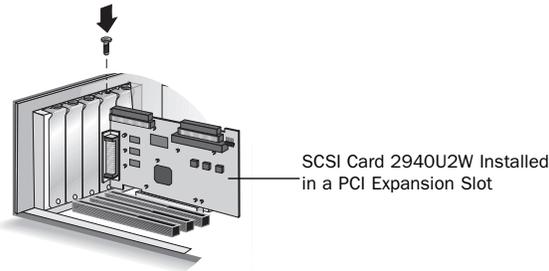
STEP 3 Locate an unused PCI expansion slot and remove the expansion slot cover. (The expansion slot must be PCI Rev. 2.1 or higher compliant and support Bus Mastering.) Save the slot cover screw for use in Step 4.

Computers may have vertical or horizontal expansion slots. Refer to your computer manual to locate the PCI slots. If your computer is a tower model, lay it on its side to allow for easier installation of the SCSI Card 2940U2W.



STEP 4

Insert the SCSI Card 2940U2W into the PCI expansion slot; press down firmly until it clicks into place, then replace the slot cover screw.



SETTING UP SCSI PERIPHERALS

Setting up SCSI peripherals before attaching them to the SCSI Card 2940U2W typically involves setting SCSI IDs and termination, mounting internal peripherals inside your computer, and connecting power cables to each peripheral. Since setup can vary from peripheral to peripheral, always refer to the peripheral's documentation for specific instructions. Below are some guidelines for setting SCSI IDs and termination on your peripherals.

NOTE If you refer to the peripheral's documentation for installation instructions, be sure to return to this document to continue with installation of the software included in the package.

Check the SCSI IDs

The SCSI Card 2940U2W and each peripheral you connect to it requires a unique SCSI ID number ranging from 0 to 15. ID numbers don't have to be sequential, as long as the SCSI Card 2940U2W and each peripheral has a different number.

The SCSI Card 2940U2W is preset to ID 7 and should not be changed. If you will be booting from a SCSI hard disk, it's best to set the disk's ID at 0 or 1. Most SCSI hard disks come from the factory preset to ID 0. The IDs for internal peripherals are usually set with jumpers; external peripherals are usually set with a switch on the back of the peripheral.

Terminate the Ends

To ensure reliable communication on the SCSI bus, the peripheral at the end of each cable, or the end of the cable itself, must have a terminator installed (or enabled). The peripherals between the ends of each cable must have the terminator removed (or disabled).

CONNECTING SCSI PERIPHERALS

A total of 15 SCSI peripherals can be connected to the SCSI Card 2940U2W. Before connecting peripherals to the SCSI Card 2940U2W, be sure to also review *Setting Up SCSI Peripherals* on page 3.

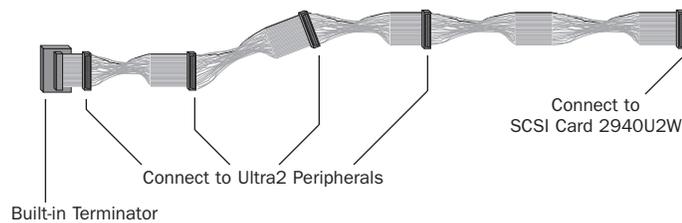
68-pin Internal Ultra2 SCSI Connector

Use the 68-pin internal Ultra2 SCSI connector to connect internal Ultra2 peripherals. The connector is an Ultra2 Low Voltage Differential, Single Ended (Ultra2-LVD/SE) connector. The internal Ultra2 cable included in the kit allows up to four internal Ultra2 peripherals. If you have more than four Ultra2 peripherals, you will need to obtain an Ultra2 cable with enough connectors to accommodate all of your Ultra2 peripherals. Follow these steps to connect your internal Ultra2 peripherals:

NOTE We recommend keeping your Ultra2 peripherals separate from your non-Ultra2 peripherals. Connecting a non-Ultra2 peripheral to the Ultra2 SCSI connector forces the Ultra2 SCSI segment and any attached peripherals to drop down to Ultra SCSI performance levels (40 MBytes/sec). (See “Bus Segments on the SCSI Card 2940U2W” on page 2.)

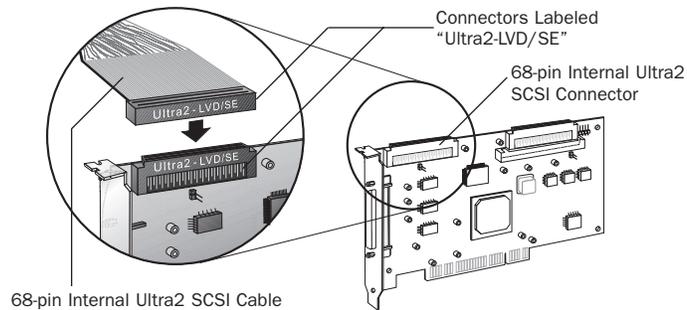
STEP 1

Locate the 68-pin internal Ultra2 SCSI cable in the package.



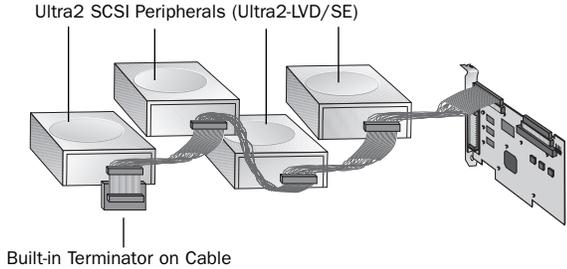
STEP 2

Plug the long end of the cable to the Ultra2 connector on the SCSI Card 2940U2W (connectors are labeled “Ultra2-LVD/SE”).



STEP 3

Plug the remaining connectors to your internal Ultra2 SCSI peripherals.



NOTE Internal Ultra2 SCSI peripherals come from the factory with termination disabled and cannot be changed. Proper termination is provided by the built-in terminator at the end of the Ultra2 internal SCSI cable provided in the kit.

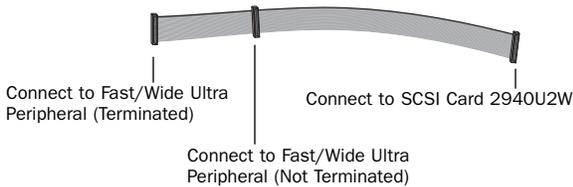
68-pin Internal Wide Ultra SCSI Connector

Use the 68-pin internal Wide Ultra SCSI connector to connect internal Fast/Wide Ultra SCSI peripherals that have 68-pin connectors. **Do not connect Ultra2 peripherals to this connector.**

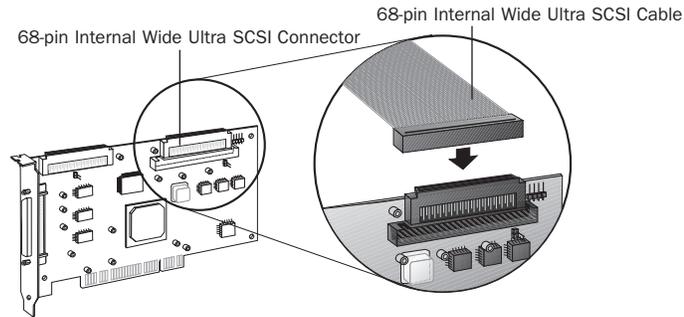
The 68-pin internal Ultra SCSI cable included in the kit allows you to connect up to two Fast/Wide Ultra peripherals. If you have more than two Fast/Wide Ultra peripherals, you will need to obtain a 68-pin cable with enough connectors to accommodate all of your Fast/Wide Ultra peripherals. Follow these steps to connect your internal Fast/Wide Ultra peripherals.

STEP 1

Locate the 68-pin internal Ultra SCSI cable in the package.

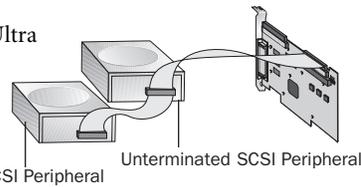


STEP 2 Plug the long end of the cable to the 68-pin internal Ultra SCSI connector on the SCSI Card 2940U2W.



STEP 3 Plug the other end of the cable to a terminated Fast/Wide Ultra SCSI peripheral.

STEP 4 To connect a second Fast/Wide Ultra SCSI peripheral, plug the middle connector of the cable to the peripheral. The peripheral must not be terminated.



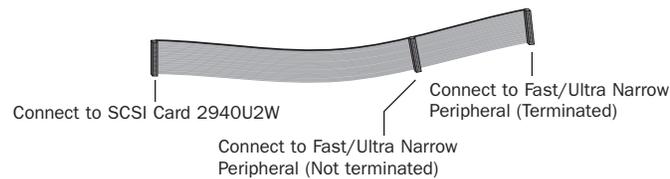
50-pin Internal Ultra SCSI Connector

Use the 50-pin internal Ultra SCSI connector to connect internal or external Fast/Ultra Narrow SCSI peripherals that have standard 50-pin connectors.

Internal Fast/Ultra Narrow SCSI Peripherals

The 50-pin internal cable included in the kit allows you to connect up to two standard internal SCSI peripherals. If you have more than two standard internal 50-pin peripherals, you will need to obtain a 50-pin cable with enough connectors to accommodate all of your standard peripherals. Follow these steps to connect your standard internal Fast/Ultra Narrow peripherals:

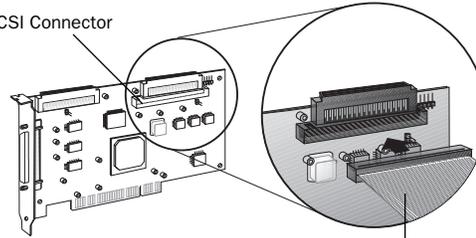
STEP 1 Locate the 50-pin internal Ultra SCSI cable in the package.



(Continued on the other side)

STEP 2 Plug the long end of the cable to the 50-pin connector on the SCSI Card 2940U2W.

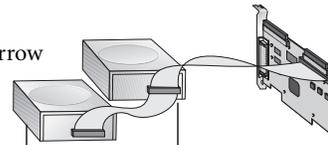
50-pin Internal Ultra SCSI Connector



50-pin Internal Ultra SCSI Cable

STEP 3 Plug the other end of the cable to a terminated Fast/Ultra Narrow SCSI peripheral.

STEP 4 To connect a second Fast/Ultra Narrow SCSI peripheral, plug the middle connector of the cable to the peripheral. The peripheral must not be terminated.



Terminated SCSI Peripheral

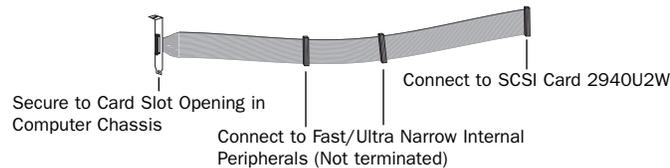
Underminated SCSI Peripheral

External Fast/Ultra Narrow SCSI Peripherals

The 50-pin internal-to-high-density 50-pin external Ultra SCSI cable, also included in the kit, allows you to connect your standard external SCSI peripherals and up to two standard internal SCSI peripherals. For each external peripheral, you will need to obtain a 50-pin external SCSI cable. Follow these steps to connect your standard external peripherals:

NOTE This cable enables you to keep external Ultra SCSI peripherals without impeding the performance of your Ultra2 SCSI peripherals. (See “Bus Segments on the SCSI Card 2940U2W” on page 2.)

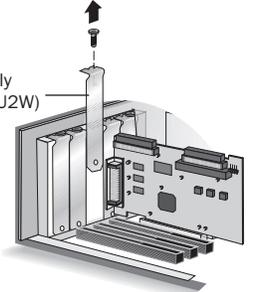
STEP 1 Locate the 50-pin internal-to-high-density 50-pin external Ultra SCSI cable in the package.



STEP 2

Remove an available slot cover from the chassis of the computer.

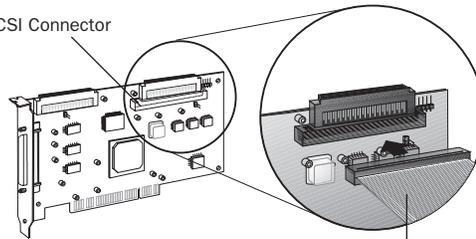
Remove Slot Cover (Preferably Next to the SCSI Card 2940U2W)



STEP 3

Plug one end of the cable to the 50-pin internal Ultra SCSI connector on the SCSI Card 2940U2W.

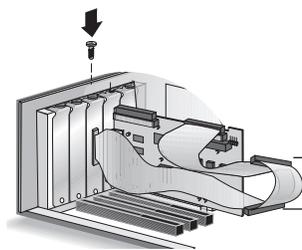
50-pin Internal Ultra SCSI Connector



Standard 50-pin Internal-to-High-density
50-pin External Ultra SCSI Cable

STEP 4

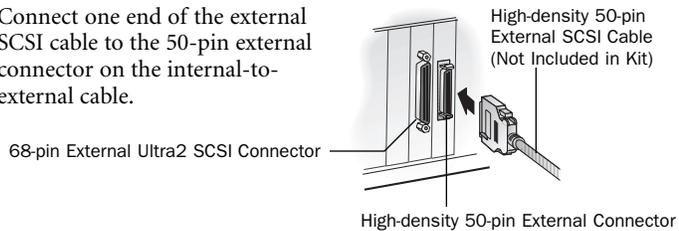
Secure the mounting bracket of the cable to the exposed card slot opening in the chassis of the computer.



Use these connectors on the cable to connect up to two internal Fast/Ultra Narrow SCSI peripherals, These peripherals must not be terminated.

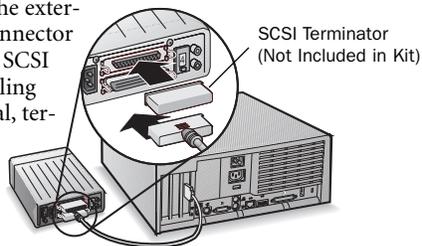
STEP 5

Connect one end of the external SCSI cable to the 50-pin external connector on the internal-to-external cable.



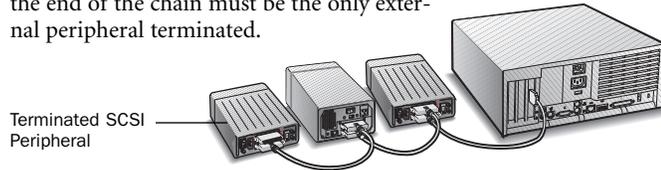
STEP 6

Connect the other end of the external SCSI cable to a SCSI connector on the back of the external SCSI peripheral. If you are installing only one external peripheral, terminate the peripheral and skip to Step 8.



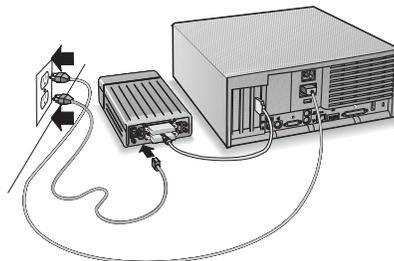
STEP 7

Connect other external peripherals by connecting each peripheral to the previous one until all peripherals are connected. The peripheral at the end of the chain must be the only external peripheral terminated.

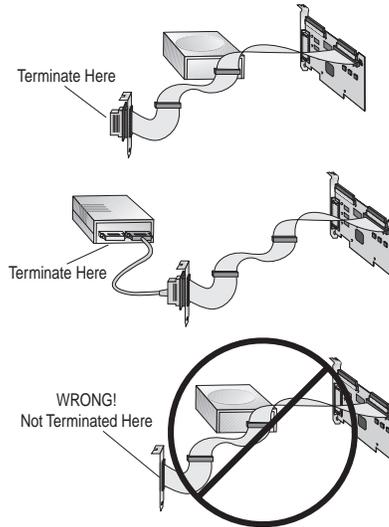


STEP 8

Connect all power cables to the external peripherals.



NOTE When using the internal-to-external Ultra SCSI cable, the 50-pin external connector itself, or the last external peripheral connected to the connector, must have a SCSI terminator installed.



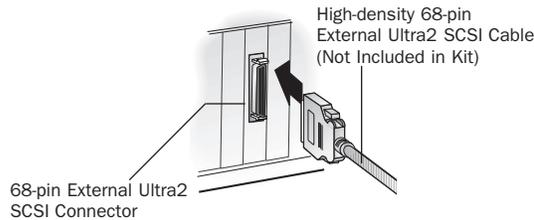
68-pin External Ultra2 SCSI Connector

Use the 68-pin external Ultra2 SCSI connector to connect your external Ultra2 peripherals. Ultra2 external cables are not included in the kit. For each external Ultra2 peripheral, you will need to obtain a 68-pin external Ultra2 SCSI cable. Follow these steps to connect your external Ultra2 SCSI peripherals:

NOTE We recommend keeping your Ultra2 peripherals separate from your non-Ultra2 peripherals. Connecting a non-Ultra2 peripheral to the Ultra2 SCSI connector forces the Ultra2 SCSI segment and any attached peripherals to drop down to Ultra SCSI performance levels (40 MBytes/sec). (See “Bus Segments on the SCSI Card 2940U2W” on page 2.)

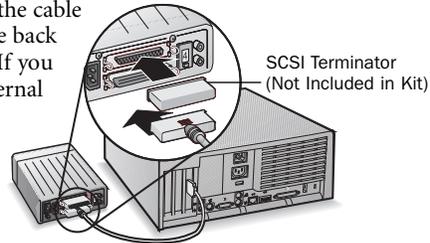
STEP 1

Connect one end of the external SCSI cable to the external Ultra2 connector on the SCSI Card 2940U2W.

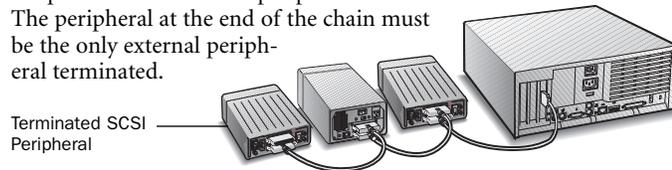


STEP 2

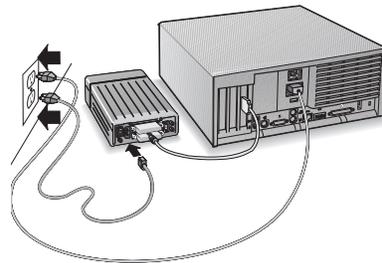
Connect the other end of the cable to a SCSI connector on the back of an external peripheral. If you are installing only one external peripheral, terminate the peripheral and skip to Step 4.

**STEP 3**

Connect other external peripherals by connecting each peripheral to the previous one until all peripherals are connected. The peripheral at the end of the chain must be the only external peripheral terminated.

**STEP 4**

Connect all power cables to the external peripherals.



INSTALLING SCSI CARD 2940U2W SOFTWARE

To install the SCSI Card 2940U2W software (software driver), go to the section below for the operating system (for example, Windows® 95) installed on your computer. If the operating system is not yet installed, install it now. Refer to your operating system documentation for instructions.

NOTE

If you have installed a new SCSI hard drive in a computer running Windows or DOS, you must partition and format the drive with the DOS Fdisk and Format commands before it can be used. Refer to your Windows and DOS documentation for instructions.

Computers with Windows 95

- STEP 1** Turn on all external peripherals and then the computer. Windows 95 now will recognize the SCSI Card 2940U2W installed in your computer and will ask you to select which driver you want to install.
- STEP 2** Select "Driver from disk provided by hardware manufacturer," then click OK.
- STEP 3** Insert the Adaptec EZ-SCSI Setup Diskette in your floppy disk drive, then click OK.
- STEP 4** Follow the instructions that appear onscreen.

Computers with Windows NT

- STEP 1** Turn on all external peripherals and then the computer.
- STEP 2** Start Windows NT on your computer.
- STEP 3** Insert the Adaptec EZ-SCSI Setup Diskette in your floppy disk drive.
- STEP 4** Click the Start button, then click **Run**.
- STEP 5** When the Run dialog box appears, type **a:\setup** if you are using the A drive, or **b:\setup** if you are using the B drive. Then click OK.
- STEP 6** Follow the instructions that appear onscreen.

Computers with NetWare, OS/2, SCO UNIX, and UnixWare

The Adaptec 7800 Family Manager Set included in the package allows you to install drivers for NetWare, OS/2, SCO UNIX, and UnixWare. Refer to the *7800 Family Manager Set User's Guide* for installation instructions.

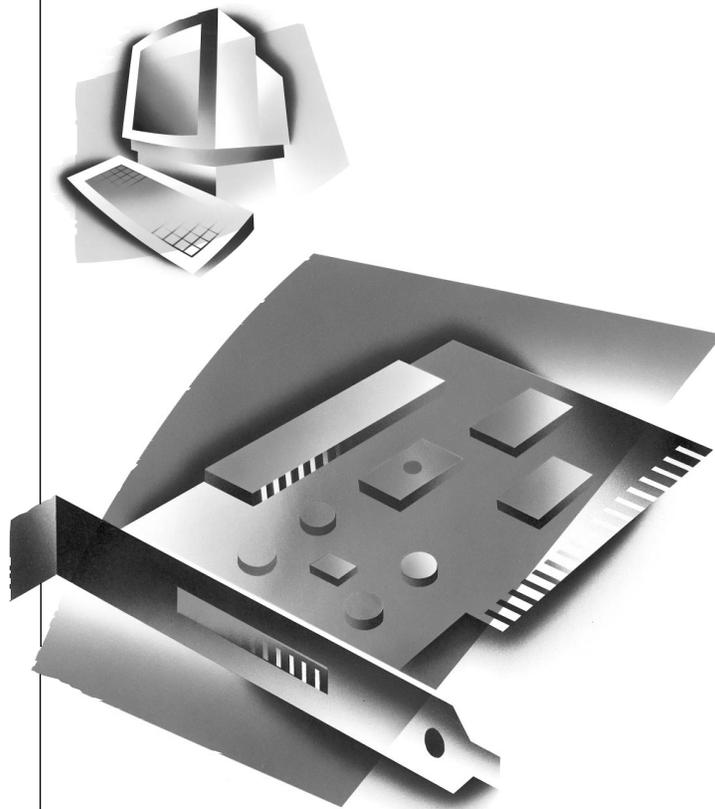


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