USER'S GUIDE

SLIMSCSI 1460 ADAPTER

▼▼▼▼ SlimSCSI 1460 Adapter

User's Guide

adaptec®

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Introduction

Congratulations on your purchase of Adaptec's SlimSCSI® 1460. The SlimSCSI 1460 allows you to connect up to three SCSI devices to your portable PC, including Zip drives, CD-ROM drives, hard disk drives, scanners, and other devices.

Where Do I Start?

1 Follow the instructions for installing the SlimSCSI 1460 and connecting your SCSI devices to it.

2 Install the software driver for the operating system you are using - Windows® 95 (page 6), Windows® 3.1 (page 7), Windows NT™ (page 8), or OS/2 (page 11).

3 (*Optional*) Install Adaptec EZ-SCSI software by following the instructions in the *Adaptec EZ-SCSI Quick Reference*. (EZ-SCSI is not required to operate the SlimSCSI 1460.)

Contents of Kit

- SlimSCSI 1460 PC Card-to-SCSI Adapter

- Windows 95, Windows NT, and OS/2 driver diskettes

- *SlimSCSI 1460 User's Guide*

- 50-pin high-density cable and 50-pin low-density cable

- Adaptec® EZ-SCSI® software for Windows 3.1, Windows 95, and Windows NT

- CardWizard Pro software for DOS and Windows 3.1

- Mail-in card for free DB25 cable

- Registration card

System Requirements

- Portable PC with a PC Card Type II, Type III, or Toshiba Type IV slot

- MS-DOS version 5.x or 6.x, Microsoft Windows 95, Windows NT version 3.51 or 4.0, Windows 3.x, Windows for Workgroups version 3.1 or 3.11, DR DOS, OS/2 version 2.x, or OS/2 Warp

Installing the SlimSCSI 1460

Follow these steps to install the SlimSCSI 1460 and connect your SCSI devices to it:

1 Remove the SlimSCSI 1460 from its packaging.

2 Determine which of the two 50-pin cables you will use to connect the SlimSCSI 1460 to your first (or only) SCSI device. To do this, see which cable connector (high-density or low-density) fits the SCSI connector on the back of the device.

> **Note:** If your SCSI device has a DB25 (25-pin) connector, you can order a free DB25 cable from Adaptec by sending in the card included in this User's Guide.

3   Connect the SlimSCSI cable to the SlimSCSI 1460, as shown below:

PC Card Slots

SlimSCSI 1460

SlimSCSI Connector
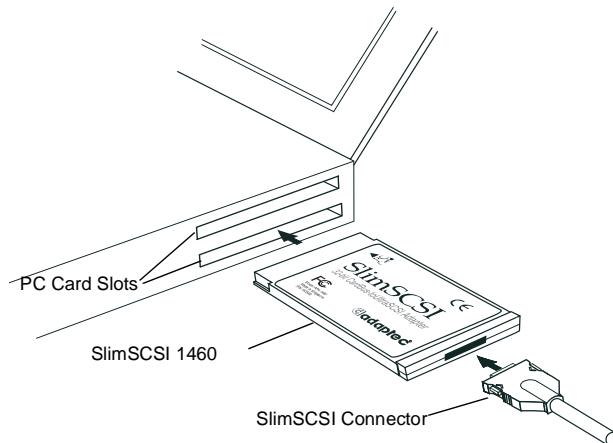
4   Plug the other end of the cable into the first (or only) SCSI device, as shown below. Make sure the SCSI device is not powered.

SCSI Connector

SCSI Device

Terminator
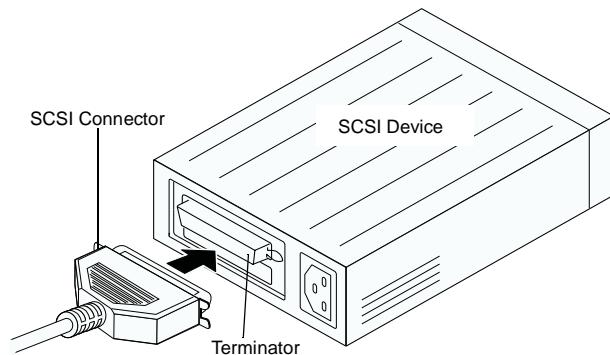
5 (*Optional*) Connect up to two additional SCSI devices by daisy-chaining them to the first device, as shown below:

SCSI Devices

Terminator
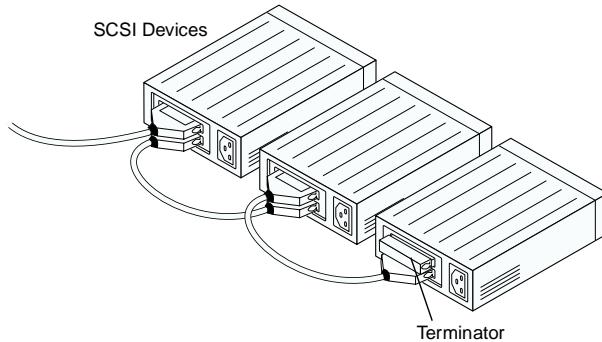
6 Be sure that each SCSI device has a unique SCSI ID ranging from 0 to 6. If any two devices have the same ID, change the SCSI ID of one device. This is usually done by changing a switch on the back of the device. (For more information, see *SCSI IDs* on page 15.)

The diagram below shows a typical SCSI device with a selectable SCSI ID switch:
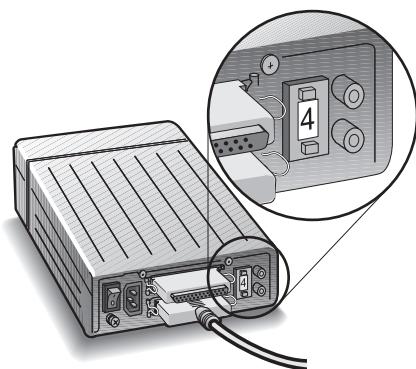
7 Terminate the *last* (or *only*) SCSI device connected to the SlimSCSI 1460. Read the device documentation if you are not sure how to terminate the device, or refer to *Terminating the SCSI Bus* on page 16.

8   Be sure that at least one external SCSI device provides SCSI
bus termination power or that the last device on the bus sup-
plies termination power to itself. Read the device documenta-
tion if you are not sure whether the SCSI device provides
termination power.

9   Connect all power cables to the SCSI devices. Then power up
all the devices.

10   Insert the SlimSCSI 1460 into one of your portable PC's
PC Card slots.

11   Power up your portable PC.

This completes the physical installation of your SlimSCSI 1460 and
SCSI devices. Next, you need to install the software driver for your
operating system.

Completing the Installation

Updating the Windows 95 Miniport Driver

Windows 95 has built-in software support for the SlimSCSI 1460. This means that when you install the SlimSCSI 1460, Windows automatically finds and installs the driver for it. However, you may be able to achieve better data I/O performance by installing the updated driver from the diskette included with the SlimSCSI 1460. Follow these steps if you wish to do this:

1 If Windows 95 is not already running, start it now.

2 Insert the Windows 95 drivers diskette in the portable PC's floppy disk drive.

3 Double-click the **My Computer** icon and Double-click the **Control Panel** icon.

4 Double-click the **Add New Hardware** icon. The Add New Hardware Wizard screen appears.

5 Click **Next**. When the next screen appears, select **No** and click **Next**.

6 When the next screen appears, select the **SCSI controllers** icon and click **Next**. (You may need to scroll down before you can see the icon.)

7 When the next screen appears, click **Have Disk**. Type a: if it does not already appear on the screen, and click **OK**.

8 When the next screen appears, select **APA-1460B PCMCIA SCSI Host Adapter**, if it is not already highlighted, and click **Next**.

9 When the next screen appears, click **Finish**.

10 Reboot your PC if Windows 95 prompts you to do so; if there is no prompt, you do not need to reboot in order to start using the new driver.

Completing the SlimSCSI Installation in Windows 3.1

1   If Windows 3.1 is not already running, start it now.

2   Insert the Adaptec EZ-SCSI diskette #1 in the PC's floppy disk drive.

3   Select **File/Run** from the Program Manager menu.

4   When the Run dialog box appears, type a:\setup, and click **OK**.

5   Follow the instructions that appear on the screen.

6   When EZ-SCSI is installed and your PC recognizes the SlimSCSI adapter, continue with *Using the SlimSCSI 1460* on page 13.

Note: If your PC does not recognize the SlimSCSI adapter and SCSI devices, there may be a resource allocation problem. Review the *General Hardware Troubleshooting* on page 18. If the adapter is still not recognized, install CardWizard Pro software (included with your SlimSCSI adapter) by following the directions in *Troubleshooting with CardWizard Pro* on page 23.

Completing the SlimSCSI Installation in Windows NT

The SlimSCSI adapter is supported under Windows NT *version 3.51 and higher.*

> **Note:** Windows NT 3.51 does not support *hot plugging* or *hot swapping.* This means that the SlimSCSI adapter and the devices connected to it must be plugged in and powered ON before you start Windows NT and that you cannot remove the adapter (or other PC Cards) while Windows NT is running.

If Windows NT Is Not Installed on Your PC

If Windows NT is *not* already installed on your PC, install it now and then continue with the instructions in the next section, *If Windows NT Is Installed on Your PC.*

Follow these steps if you need to install Windows NT from a CD-ROM drive connected to your SlimSCSI adapter:

1 Insert the SlimSCSI adapter in a PC Card slot, connect the CD-ROM drive to it, and turn the drive ON.

Be sure the CD-ROM drive is *terminated,* if it is the last (or only) SCSI device on the bus. Also, be sure that you have installed your PC's version of DOS Card and Socket Services.

2 Boot the PC to DOS and insert the EZ-SCSI diskette #2 in the PC's floppy drive.

3 At the DOS prompt, change to the drive letter of the floppy drive (usually a:), type dosinst, and press **Enter**.

4 Follow the instructions that appear on the screen. EZ-SCSI will install the drivers required by the CD-ROM drive.

5   When EZ-SCSI installation is complete, remove the diskette and reboot your PC to DOS. A drive letter should now be assigned to your CD-ROM drive.

6   Insert the Windows NT installation CD in the CD-ROM drive and change to the *i386* directory on the CD.

7   At the DOS prompt, type winnt /b and press **Enter**.

8   Install Windows NT by following the instructions that appear on the screen.

When Windows NT is installed, continue with the next section, *If Windows NT Is Installed on Your PC*.

If Windows NT Is Installed on Your PC

You must complete *all* steps in this section, even though Windows NT is already installed on your PC. These steps ensure that the required Windows NT registry changes are made.

1   Be sure that the SlimSCSI adapter is inserted in a PC Card slot and that the CD-ROM drive is connected to it and is turned ON.

2   Start Windows NT on your PC.

3   Double-click the Windows NT **Setup** program icon in the Main group.

4   Select **Options** from the Setup menu bar, then select **Add/Remove SCSI Adapters**. A list of all currently installed SCSI adapters will appear.

> **Note:** If Adaptec 151x/152x/AIC-6260/6360 appears on the list, select it and click **Remove**.

5   Click **Add,** then click **OK** to verify that you want to add an adapter.

6   When the Select SCSI Adapter Option dialog box appears, select **Other** from the Adapter window.

7   Insert the Windows NT/OS2/Windows 95 Driver diskette (included with your SlimSCSI adapter) in the PC's floppy drive. Type a:\winnt in the dialog box and click **OK**.

8 Select **APA-1425/50/60 SCSI Host Adapter**, **for NT 3.51** from the list and click **OK** to add it to the list of SCSI adapters.

9 Select **APA-1425/50/60 SCSI Host Adapter, for NT 3.51** from the list of SCSI adapters and click **Install**. Follow the instructions that appear on the screen.

10 When the Setup program displays an updated list of currently installed host adapter types, verify that *APA-1425/50/60 SCSI Host Adapter, for NT 3.51* appears on the list.

11 Click **Close**, and exit Setup; then restart your PC when you are prompted to do so.

12 When Windows NT starts again, insert the EZ-SCSI diskette #1 in the floppy disk drive.

13 Select **Run** from Program Manager's File menu.

> **Note:** If you are using Windows NT 4.0, click the **Start** button, and select **Run**.

14 Type a:\setup and click **OK** to install EZ-SCSI.

15 When Adaptec EZ-SCSI is installed, continue with *Using the SlimSCSI 1460* on page 13.

Completing the SlimSCSI Installation in OS/2

Here is some important information about using the SlimSCSI adapter in computers running under OS/2:

- OS/2 *must already be installed* before you begin these installation steps. OS/2 does not support installation from a CD-ROM drive connected to a PC Card such as the SlimSCSI adapter.

- OS/2 does not support *hot-plugging*. This means that the SlimSCSI adapter and the devices connected to it must be plugged in and powered ON before you start OS/2 and that you cannot remove the adapter (or other PC Cards) while OS/2 is running.

Follow these steps to complete installation of the SlimSCSI adapter under OS/2 versions 2.x, 3.0, or 4.0 (Warp).

1 Be sure that the SlimSCSI adapter is inserted in a PC Card slot and that the SCSI disk drive and/or other SCSI devices are connected to it and are turned ON.

2 Start OS/2.

3 Open the **OS/2 System** icon, then open the **System Setup** icon. Double-click the **Selective Install** icon.

> **Note:** In version 4.0 (Warp), select the **Install/Remove** icon.

4 Click **PCMCIA Support**, select the PCMCIA system appropriate to your PC, and click **OK**.

5 Click **Install** and follow the instructions that appear. (You will be instructed to insert a series of OS/2 diskettes.)

6 When the installation procedure is completed, click **OK**.

7 Insert the Windows NT/OS2/Windows 95 Driver diskette in drive *A*.

8 Open the **OS/2 System** icon, and then open the **System Setup** folder. Double-click the **Device Driver Installation** icon.

> **Note:** In version 4.0 (Warp), select the **Install/Remove** icon.

9 Click **Change**, double-click the **OS2** directory, and click **Install**. The *aha152x.add* file is now installed on your PC, and the required changes are made to your *config.sys* file.

10 If you are installing a CD-ROM drive, select a CD-ROM from the Selective Install icon.

11 When automatic installation completes, restart your PC. The installation is now complete.

12 Continue with *Using the SlimSCSI 1460* on page 13.

Follow these steps if automatic installation does not complete successfully:

1 Use a text editor to add these lines to the *config.sys* file. (Be sure to place them before other basedev lines.)

```
basedev=aha152x.add  /v
basedev=os2scsi.dmd
```

2 Copy the *aha152x.add* file from the *\os2* directory of the Windows NT/OS2/Windows 95 Driver diskette to *\os2\boot*.

3 Restart your PC. The installation is now complete.

4 Continue with the next section, *Using the SlimSCSI 1460*.

Using the SlimSCSI 1460

Hot Plugging

After you install the SlimSCSI 1460 driver in your Windows 95 PC, you can insert or remove the SlimSCSI 1460 at any time except when data is being transferred on the SCSI bus. This is called *hot plugging*. (You can tell that data is being transferred if the SCSI device activity light is on.) Follow these steps to remove the SlimSCSI 1460 while Windows 95 is running

1 Click on the small **PC Card (PCMCIA)** icon in the lower right corner of the screen. You will see a dialog box similar to the following:
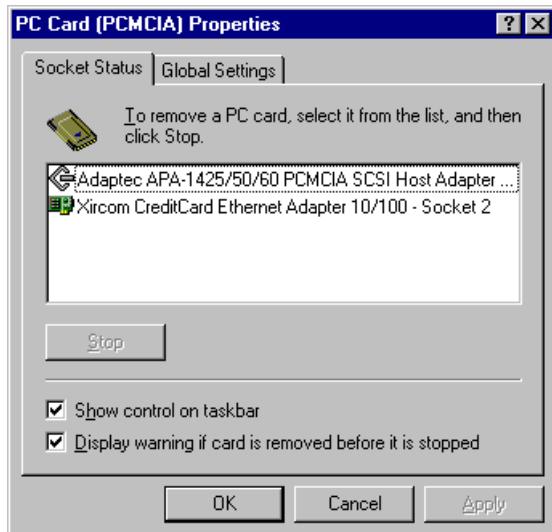
2 Select **Adaptec APA-1425/50/60 PCMCIA SCSI Adapter**.

3 Click the **Stop** button.

4 When you see the message You may safely remove this device, remove the SlimSCSI 1460 from the slot.

> **Caution:** Your PC may hang if you remove the adapter before the message appears.

When you insert the SlimSCSI 1460 adapter while Windows 95 is running, Windows 95 detects the adapter and the device(s) connected to it. (Be sure the devices are powered before you insert the adapter!)

Disk Partitioning

If you want to use a new, unpartitioned SCSI drive with your SlimSCSI adapter, you must first partition the drive. Follow these instructions:

- *Windows 3.x or Windows 95 PCs*: Boot the PC to DOS and partition the drive with the *afdisk.exe* utility. (This utility is installed in the *\scsi* directory when you install EZ-SCSI.) If you are running Windows 3.1, use the Disk Partitioner program found in the Adaptec SCSI program group. Disk Partitioner is not supported under Windows 95.

- *Windows NT 3.51 PCs*: Start Windows NT, and use the Disk Administrator program (in the Administrative Tools program group) to partition the drive.

- *OS/2 PCs*: Currently, you cannot partition a SCSI drive connected to the SlimSCSI adapter while OS/2 is running. There are two ways you can partition the drive:

  1 Boot the PC to another operating system, such as DOS or Windows 3.x, and follow the instructions under the *Windows 3.x or Windows 95 PCs* bullet.

  2 Partition and format the drive on another PC first.

Understanding SCSI

SCSI (pronounced "scuzzy") stands for **S**mall **C**omputer **S**ystems **I**nterface. SCSI is an industry standard computer interface for connecting SCSI devices (such as hard disk drives, CD-ROM drives, and scanners) to a common SCSI bus.

A *SCSI bus* is an electrical pathway consisting of a SCSI adapter (such as the SlimSCSI adapter) installed in a computer and one or more SCSI devices. SCSI cables are used to connect the devices to the SCSI card.

For the SCSI bus to function properly, SCSI IDs must be assigned to the SCSI devices and the SCSI adapter, and the SCSI bus must be properly terminated.

SCSI IDs

Each device attached to the SlimSCSI 1460 adapter, as well as the adapter itself, must be assigned a unique SCSI ID number from 0 to 6. A SCSI ID uniquely identifies each SCSI device on the SCSI bus and determines priority when two or more devices are trying to use the SCSI bus at the same time.

- The SlimSCSI 1460 adapter is preset to SCSI ID 7, which gives it the highest priority on the SCSI bus.

- In Windows 95, you can use the Device Manager to view the SCSI ID and other information about each installed SCSI device.

- If you installed Adaptec EZ-SCSI software, you can use the SCSI Explorer utility to view the SCSI ID and other information about each installed SCSI device.

Terminating the SCSI Bus

To ensure reliable communication on the SCSI bus, *terminators* must be installed (or enabled) on the devices at the physical ends of the SCSI bus. The terminators on all devices between the physical ends must be removed (or disabled). Termination on the SlimSCSI 1460 is permanently enabled, since it is always at one end of the SCSI bus.

There are various methods for terminating disk drives and other SCSI devices. Read the device documentation if you are not sure how to do this. Here are some general guidelines for termination:

■ Termination is usually controlled by installing or removing a SCSI terminator. On some SCSI devices, termination is controlled by setting a switch on the back of the device, as shown in the illustration on page 4.

■ Most SCSI devices come from the factory with termination enabled.

Obtaining SCSI Cables

You will need additional SCSI cables if you connect more than one SCSI device to your SlimSCSI 1460. It is important to use high-quality cables to ensure that data is read and written correctly. Adaptec provides high-quality SCSI cables designed specifically for use with the SlimSCSI 1460. For purchasing information, contact Adaptec at 1-800-442-7274, Monday to Friday, from 6 a.m. to 5 p.m. (Pacific Time).

External SCSI Cables

PCMCIA 26-pin to High-Density 50-pin Cable
PCMCIA 26-pin to Centronics 50-pin Cable
PCMCIA 26-pin to DB25 Cable[1]

[1] See the free cable offer on the card included in this *User's Guide*

Connector Types

Several different types of SCSI connectors are used on SCSI devices, and each type requires a different kind of cable. The following diagrams illustrate the different kinds of SCSI connectors:
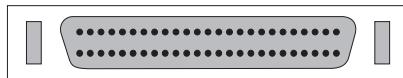

SCSI-2 High-density 50-pin Connector
Typically used with high-performance CD-ROM drives, hard disk drives, Jaz drives, and Plug and Play devices.
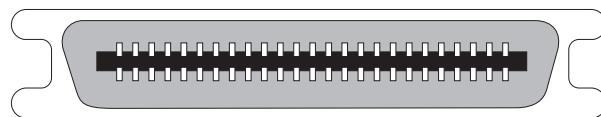
SCSI-1, Low-density Centronics 50-pin Connector
Used with many CD-ROM drives, hard disk drives, SCSI tape drives, and scanners
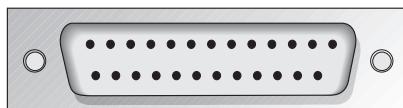
DB25 Connector
Used with Iomega ZIP drives, Syquest EZFlyer, etc.

If you have a SCSI device with a DB25 connector, you can order a free DB25 cable from Adaptec to connect it to the SlimSCSI 1460. The mail-in card for the cable is inserted in this *User's Guide.*

The total length of cabling on the SCSI bus should not exceed the maximum lengths listed in the following table:

Maximum Cable Lengths

Maximum Devices Supported	Data Transfer Rate	Maximum Cable Length
3	Fast SCSI (10 MBytes/sec)	3 m (9.8 ft.)
3	5 MBytes/sec asynchronous or synchronous	6 m (19.7 ft.)

Troubleshooting

Most problems with the SlimSCSI 1460 result from errors in preparing and connecting the SCSI devices to it. If you have problems, check the items below.

Note: If you have problems with a specific SCSI device when other SCSI devices are working correctly, contact the manufacturer of the problem device for troubleshooting information.

General Hardware Troubleshooting

■ Be sure all SCSI cables and power cables are properly connected and all SCSI devices are powered.

■ Be sure the SlimSCSI 1460 is firmly seated in the PC Card slot.

■ Be sure each SCSI device has a different SCSI ID.

■ Be sure the last (or only) SCSI device on the SCSI bus is terminated.

■ Be sure at least one SCSI device connected to the SlimSCSI 1460 supplies termination power to the SCSI bus. Otherwise, the SCSI devices will not work correctly. (Some devices have a switch to enable or disable termination power. See the device documentation for more information.)

The SlimSCSI 1460 terminates itself but does not provide termination power to other devices on the SCSI bus (the adapter would need to draw this power from the portable PC's battery, which would not be desirable).

Windows 3.1 Troubleshooting

If you installed CardWizard Pro software to correct a resource allocation problem, be sure that the EZ-SCSI drivers are listed *after* the CardWizard Pro drivers in the *config.sys* file. Here is an example (the names of the CardWizard files may vary):

```
device=c:\cardwiz\ss(chip).exe
device=c:\cardwiz\cs.exe
device=c:\cardwiz\csalloc.exe
device=c:\cardwiz\cardid.exe
device=c:\scsi\aspi2dos.sys  /d  /z  /pcmcia
```

Windows 95 Troubleshooting

How do I determine if the Windows 95 socket is enabled and is running correctly?

1 Insert the SlimSCSI 1460 in the PC Card slot.

2 Click the **Start** button and click **Settings**.

3 Click **Control Panel.**

4 Double click the **System** icon, and then select the **Device Manager** tab.

5 Double-click **SCSI controllers**. If APA-1450/60 PCMCIA is not listed, double click **Other Devices**.

6 If PCMCIA Socket is not listed, or if it is listed but has a yellow exclamation mark or a red "X" next to it, PCMCIA Socket has not been loaded properly or is not configured properly. See your Windows 95 documentation for more information.

When I start Windows 95, the system locks up when the Windows logo is displayed. How can I get the system to start so I can verify that the SlimSCSI 1460 is functioning normally?

1 Start or restart your PC, and view the onscreen messages.

2 When Starting Windows 95 appears, press and release **F8** while the text is on the screen.

3 From the menu that is displayed, select **Safe Mode.** (It may take several minutes for Windows 95 to load.)

4 Verify that the SlimSCSI 1460 software driver is loading properly (see below).

How do I determine if the SlimSCSI Windows 95 miniport driver is working correctly?

1 Insert the SlimSCSI 1460 into the PC Card slot, if it is not already inserted.

2 Click the **Start** button and click **Settings**.

3 Click **Control Panel.**

4 Double-click the **System** icon, then select the **Device Manager** tab.

5 Double-click **SCSI controllers**. The driver for the SlimSCSI adapter is listed as Adaptec APA-1450/60 PCMCIA SCSI Adapter.

■ If the driver is listed, this means it is loaded properly.

■ If the driver is listed but has an exclamation mark inside a yellow circle, it is in a problem state (usually indicating a conflict with other hardware using the same resources.)

■ If the driver is listed but has an "X" inside a red circle, this indicates that it is disabled and is not loading.

■ If the SCSI controllers icon or the APA™-1460 driver is not listed, reinstall the driver (see directions on page 6).

> **Note:** Software upgrades (including downloadable drivers) for Adaptec products are available on the Adaptec Web site at *http://www.adaptec.com*

An "X" inside a red circle appears with the SlimSCSI 1460 software driver in Device Manager. What does this mean?
It means that the software driver is disabled and is not loading. Follow these steps to enable the driver:

1 Double-click the SlimSCSI 1460 software driver in Device Manager.

2 Under the **General** tab, check the **Original Configuration** (current) box.

What if there is no SCSI controllers icon under Device Manager, or the SlimSCSI 1460 software driver does not appear under Device Manager?

If the SCSI controllers icon or the software driver does not appear:

1 Double-click the **Add New Hardware** icon in the Control Panel.

2 Select **Yes** on the second screen of the Add New Hardware Wizard to have Windows search for the SlimSCSI 1460.

3 Follow the onscreen instructions.

If Windows 95 does not detect the SlimSCSI 1460, run the Add New Hardware Wizard again:

1 Double-click **Add New Hardware** in the Control Panel.

2 Select **No** on the second screen of the wizard.

3 Select **SCSI controllers** on the next screen.

4 Select the model of your Adaptec SCSI adapter.

If the SlimSCSI 1460 is not listed, you may be able to install the driver from the Windows 95 CD-ROM. To do this, follow these steps:

1 Place the Windows 95 CD-ROM in your CD-ROM drive and run the Add New Hardware wizard.

2 Select **No** on the second screen of the wizard.

3 Select **SCSI controllers** on the next screen.

4 Click the **Have Disk** button, then click the **Browse** button.

5 Look in the *\drivers\storage* directory of the CD-ROM and select the model of your SCSI adapter.

How can I check the status of a resource (for example, IRQ, Memory, I/O)?

1 Click the **Start** button, point to **Settings**, then click **Control Panel**.

2 Double-click the **System** icon, then click the **Device Manager** tab.

3 Click **Computer**, then click **Properties**.

4 On the View Resources tab, click the option button for the type of resource you want to check. Read the information.

- If a specific resource is not listed, the resource is not used by a device.

- If a resource is listed more than once, the resource is used by more than one device.

- If a resource is used by an unknown device, the resource is used but the device using the resource cannot be detected.

How do I use the Hardware Conflict Troubleshooter in Windows 95?

1 Click the **Start** button, then click **Help**.

2 From the Contents tab, double-click **Troubleshooting**.

3 Double-click **If you have a hardware conflict**.

4 Follow the step-by-step instructions in the Help topic.

Windows NT Troubleshooting

Follow these steps if CD-ROM drives or hard disk drives do not appear in File Manager or in Disk Administrator:

1 Open **Control Panel**, then open **Devices**.

2 Look at the scsidisk and scsicdrm devices.

3 If scsidisk and/or scsicdrm have not been started, select them and set the device to **System** by clicking on the **Startup** button.

4 Reboot the PC.

Follow these steps to determine if the SlimSCSI drivers have loaded properly:

1 Open **Control Panel**, then open **Devices**.

2 Look at the sparrow device.

3 If the sparrow device has not been started, there is a device or resource problem.

You can also check for errors in loading drivers by opening **Administrative Tools** and then opening **Event Viewer**.

OS/2 Troubleshooting

Your SCSI subsystem and SCSI devices may become unstable when your laptop PC enters suspend mode (APM). (This is due to the way in which IBM has implemented suspend mode in OS/2.) If this problem occurs, disable suspend mode.

Troubleshooting with CardWizard Pro

CardWizard Pro software, from SystemSoft, is a PC Card resource allocation and configuration utility that is included with your SlimSCSI adapter. Install and use CardWizard Pro if your Windows 3.1 PC does not recognize the SlimSCSI adapter. (This is seldom necessary; in most cases you can use the Card and Socket Services software included with your portable PC.)

Note: *Do not* install CardWizard Pro if you have an IBM ThinkPad 760 series PC. CardWizard Pro currently does not support this PC model.

Follow these steps if you need to install CardWizard Pro on your Windows 3.1 PC. Before you begin, be sure that Adaptec EZ-SCSI is already installed:

1 Remove any PC cards that are currently installed in PC Card slots on your portable PC.

2 Insert the CardWizard Pro diskette in your PC's floppy disk drive.

3 Start Windows 3.1, if it is not already running.

4 Select **File/Run** from the Program Manager menu.

5 Type a:\setup and click **OK**.

6 Follow the instructions that appear on the screen. Refer to the CardWizard Pro online Help if you encounter any problems during installation.

7 When you see a message asking if you want to restart your PC now, click **Restart Now** and wait until Windows restarts.

When Windows restarts, your PC should recognize the SlimSCSI adapter.

When CardWizard Pro is installed, the PC sounds the following beep codes when you insert or remove a PC Card:

- *Medium tone followed by high tone*—The card is recognized and successfully configured.

- *Single low tone*—The card is recognized but is not successfully configured. You may need to change your PC and/or CardWizard Pro configuration.

- *High tone followed by medium tone*— A card has been removed.

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Contacting Adaptec

If you have questions about installing or using your Adaptec product, check this *User's Guide* first—you will find answers to most of your questions here. If you need further assistance, please contact us. We offer the following support and information services:

Electronic Support

Technical information, including product literature, answers to commonly asked questions, information on software upgrades and other topics is available electronically through the following:

- Adaptec World Wide Web (WWW) site at
  http://www.adaptec.com

- File Transfer Protocol (FTP) server at *ftp.adaptec.com*

- Adaptec USA Bulletin Board Service (BBS) at 408-945-7727; supports up to 28,800 bps (bits per second), 8 data bits, 1 stop bit, no parity. No product literature is available on the Adaptec BBS.

- Interactive Fax System at 408-957-7150; available 24 hours a day, 7 days a week.

Technical and Product Support

- For technical support and information about many of Adaptec's electronic support services, call 800-959-7274 or 408-945-2550, 24 hours a day, 7 days a week.

- To use the Adaptec Interactive Support System, call 800-959-7274 or 408-945-2550, 24 hours a day, 7 days a week. The system prompts you with questions regarding your problem and then provides step-by-step troubleshooting instructions.

- To speak with a product support representative, call 408-934-7274, M–F, 6:00 A.M. to 5:00 P.M., Pacific Time. After hours, on weekends, and on holidays, product support is also available for a fee at 800-416-8066.

Sales and Ordering Information

- For sales information, call 800-959-7274 or 408-945-2550, M–F, 6:00 A.M. to 5:00 P.M., Pacific Time.

- To order Adaptec software and SCSI cables, call 800-442-7274 or 408-957-7274, M–F, 6:00 A.M. to 5:00 P.M., Pacific Time.

- To request additional documentation for Adaptec products, call 800-934-2766 or 510-732-3829, M–F, 6:00 A.M. to 5:00 P.M., Pacific Time.

### Federal Communications Commission Radio Frequency Interference Statement

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. However, if this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Use a shielded and properly grounded I/O cable and power cable to ensure compliance of this unit to the specified limits of the rules.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Adaptec, Inc.   APA-1460B

FC   Tested To Comply
               With FCC Standards

FOR HOME OR OFFICE USE
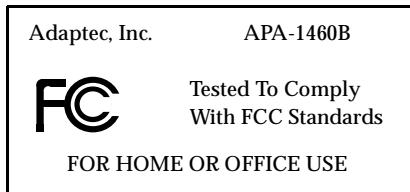
Canadian Compliance Statement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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    b make one copy of the Software in machine readable form solely for back-up purposes provided you reproduce Adaptec's copyright notice and any proprietary legends.

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Warranty service is available to the purchaser by delivering the product during the warranty period to an authorized Adaptec service facility or to Adaptec and providing proof of purchase price and date. The purchaser shall bear all shipping, packing and insurance costs and all other costs, excluding labor and parts, necessary to effectuate repair, replacement or refund under this warranty.

For more information on how to obtain warranty service, write or telephone Adaptec at 691 South Milpitas Boulevard, Milpitas, CA 95035, (800) 959-7274.

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