

Installation Guide

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.

NOTE: The APA-1450A SlimSCSI adapter must be used with the supplied cable. Otherwise the adapter may cause harmful interference.

NOTE: The APA-1450A SlimSCSI adapter is a Class B product. The adapter was tested and verified for EMC compliance in a system with an IBM compatible 486 CPU. This product is expected to achieve compliance with the Class B limits when installed in systems with Pentium grade CPUs and below.



Copyright © 1996, Adaptec, Inc. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of Adaptec, Inc., 691 South Milpitas Blvd., Milpitas, CA 95035.

Adaptec, the Adaptec logo, APA, and SlimSCSI are trademarks of Adaptec, Inc. which may be registered in some jurisdictions. Windows 95 is a registered trademark of Microsoft Corporation in the U.S. and other countries, used under license. All other trademarks are owned by their respective owners.

The material in this document is for information only and is subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, Adaptec, Inc. assumes no liability resulting from errors or omissions in this document, or from the use of the information contained herein. Adaptec reserves the right to make changes in the product design without reservation and without notification to its users.

Printed in Singapore
Stock No.: 511338-00, Rev. A KL 10/96

SlimSCSI for Removable Drives PC Card-to-SCSI Host Adapter Model APA-1450A

APA-1450A SlimSCSI for Removable Drives I.G.
Part Number: 511338-00, Rev. A Page 4 of 4
Print Spec Number: 495970-00
Current Date: 10/18/96
Last Modified: October 18, 1996 3:15 pm
File Loc: d:\mario\slim1000.in\slimremv.frm
ECN Date: 10/22/96

 adaptec®

Introduction

This document explains how to install and use SlimSCSI[®] for Removable Drives model APA[™]-1450A PC Card-to-SCSI adapter. The SlimSCSI adapter allows you to easily connect removable drives to portable PCs running under Windows[®] 95. The SlimSCSI adapter includes the following features:

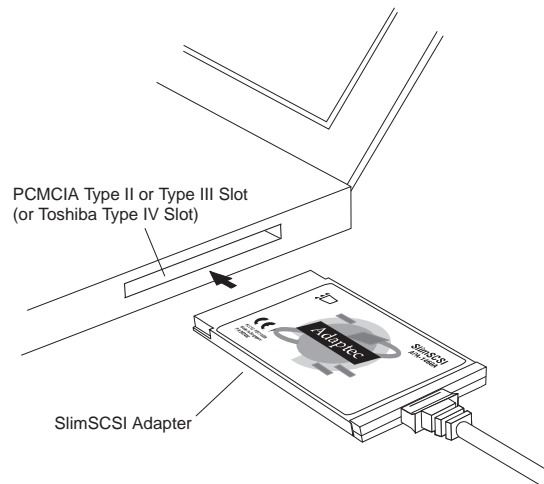
- High-speed data transfer
- Ability to connect up to seven SCSI devices
- Two standard SCSI connectors that can be used to connect almost any SCSI-compatible removable drive

A Win 95 Drivers Diskette with the most recent version of the miniport drivers is included with the SlimSCSI adapter.

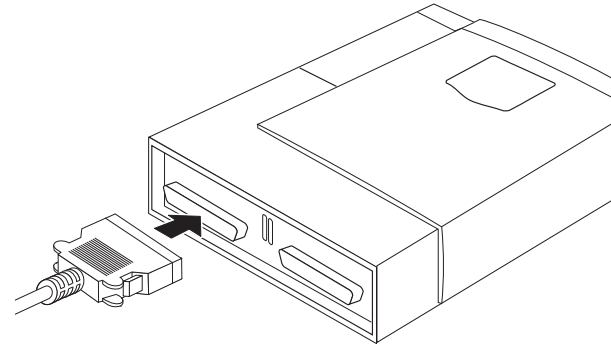
Installing the SlimSCSI Adapter

Follow these steps to install the SlimSCSI adapter and connect the removable drive to it:

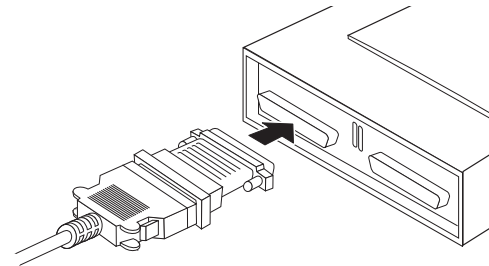
- 1 Insert the SlimSCSI adapter in a PC Card (PCMCIA) Type II or Type III slot, or a Toshiba Type IV slot on your portable PC, as shown below:



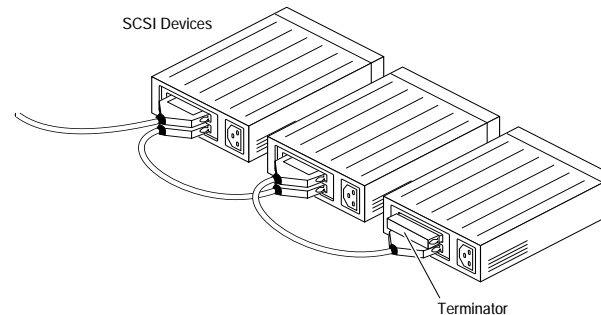
- 2 Plug the 50-pin connector on the end of the SlimSCSI cable into the removable drive, as shown below:



If the removable drive has a DB25 (25-pin) connector, attach the 50-pin-to-25-pin converter to the cable, as shown below, and plug it into the connector on the drive:



- 3 (Optional) Connect up to seven additional SCSI devices by daisy-chaining them as shown below. You need an additional external SCSI cable for each device:



APA-1450A SlimSCSI for Removable Drives I.G.
Part Number: 511338-00, Rev. A Page 1 of 4
Print Spec Number: 495970-00
Current Date: 10/18/96
Last Modified: October 18, 1996 3:15 pm
File Loc: d:\mario\slim1000.in\slimremv.frm
ECN Date: 10/22/96

- 4 Terminate the removable drive (or terminate the last SCSI device in the daisy chain). Usually, you terminate the device by setting a jumper or switch near the SCSI connector on the back of the device. See the device documentation for more information.
- 5 Be sure that each SCSI device has a unique SCSI ID, ranging from 0 to 6. (The SlimSCSI adapter uses SCSI ID 7.) The SCSI ID is usually set with jumpers or switches on the back of the device. See the device documentation for more information.



Note: Be sure that the removable drive provides termination power for itself. The SlimSCSI adapter terminates itself but does not provide termination power to devices connected to it.

Your SlimSCSI adapter and SCSI removable drive are now installed.

Updating the Miniport Driver

Although Windows 95 has built-in support for the SlimSCSI adapter, you can achieve better data I/O performance by installing the updated driver from the diskette included with the SlimSCSI adapter.

- 1 Insert the Win 95 Drivers Diskette in the PC's floppy disk drive.
- 2 Double-click the **My Computer** icon.
- 3 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-1450A PCMCIA SCSI Host Adapter**, if it is not already highlighted, and click **Next**.
- 9 When the next screen appears, click **Finish**.

The updated miniport driver is now copied from the diskette. 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.

Using the SlimSCSI Adapter

Before you boot your PC, be sure that the SlimSCSI adapter is firmly inserted in a PC Card slot and that the removable drive is connected to the adapter and is turned ON. You cannot boot your portable PC from a disk drive or other SCSI device connected to the SlimSCSI adapter.

Formatting Removable Media

Many removable media drives include a formatting utility that you can use to format removable media. If no utility program was included with your drive, you can format removable media with the *afdisk* program included on the Win 95 Drivers Diskette.



Caution: All files on the removable media are erased when you format it. Do *not* use the Windows 95 Format command to format removable media.

Copy the *afdisk.exe* file from the Win 95 Drivers Diskette to the Command folder in the Windows directory on your hard disk drive. Then follow these steps to run the *afdisk* program:

- 1 Insert the media in the drive. (Be sure the drive is connected to the SlimSCSI adapter and is turned ON.)
- 2 Click the **Start** button, select **Programs**, and select **MS-DOS Prompt**.
- 3 In the MS-DOS Prompt window, type *afdisk* and press **Enter**.
- 4 Use the arrow keys to move the highlight to the name of the removable drive in the Select SCSI Device window, and press **Enter**.
- 5 Press **Ins**. A small Create a DOS Partition window appears at the bottom right of the screen.

APA-1450A SlimSCSI for Removable Drives I.G.
 Part Number: 511338-00, Rev. A Page 2 of 4
 Print Spec Number: 495970-00
 Current Date: 10/18/96
 Last Modified: October 18, 1996 3:15 pm
 File Loc: d:\mario\slim1000.in\slimremv.frm
 ECN Date: 10/22/96

- 6 Press **Esc**. When the confirmation prompt appears, select **Yes** and press **Enter** to create the partition.
- 7 Press **Esc** to return to the Select SCSI Device to Partition window.
- 8 To quit *afdisk*, press **Esc** and select **Yes**.

Hot Plugging

When you use the SlimSCSI adapter in a PC running Windows 95, you can remove and insert the adapter at any time except when data is being transferred on the SCSI bus. (You can tell that data is being transferred if the SCSI device's activity light is on.) This is called *hot plugging*.

- To remove the SlimSCSI adapter while Windows 95 is running, click the small **PC Card (PCMCIA)** icon in the lower right corner of the screen and select **Stop APA-1450A PCMCIA SCSI Host Adapter**. A system prompt will appear to inform you that you can remove the SlimSCSI adapter.
- When you insert the SlimSCSI adapter while Windows 95 is running, the removable drive (and any other SCSI device connected to the adapter) appears immediately as an active device in Windows Explorer and My Computer. (The removable drive must be powered ON before you insert the SlimSCSI adapter.)

Troubleshooting

Check these items first if your SlimSCSI adapter and removable drive do not operate properly.

- Be sure that all SCSI cables and power cables are firmly connected and the removable drive is turned ON.
- Be sure the SlimSCSI adapter is firmly seated in the PC Card slot.
- Be sure each SCSI device has a different SCSI ID.
- Be sure that the removable drive is terminated and that it supplies termination power to the SCSI bus. (Some devices have a switch to enable or disable termination power.)

The SlimSCSI adapter terminates itself but *does not* provide termination power to other devices on the SCSI bus, because it would need to draw this power from the portable PC's battery. Most removable drives and other SCSI devices *do* supply termination power for themselves.

- Be sure that Windows 95 Socket is enabled and is running correctly. Follow these steps:
 - 1 Insert the SlimSCSI adapter in the PC Card slot, if it is not already inserted.
 - 2 Select **Settings** and **Control Panel**.
 - 3 Double-click the **System** icon, and then select the **Device Manager** tab.
 - 4 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 the Windows 95 documentation for more information.

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.

APA-1450A SlimSCSI for Removable Drives I.G.
 Part Number: 511338-00, Rev. A Page 3 of 4
 Print Spec Number: 495970-00
 Current Date: 10/18/96
 Last Modified: October 18, 1996 3:15 pm
 File Loc: d:\mario\slim1000.in\slimremv.frm
 ECN Date: 10/22/96