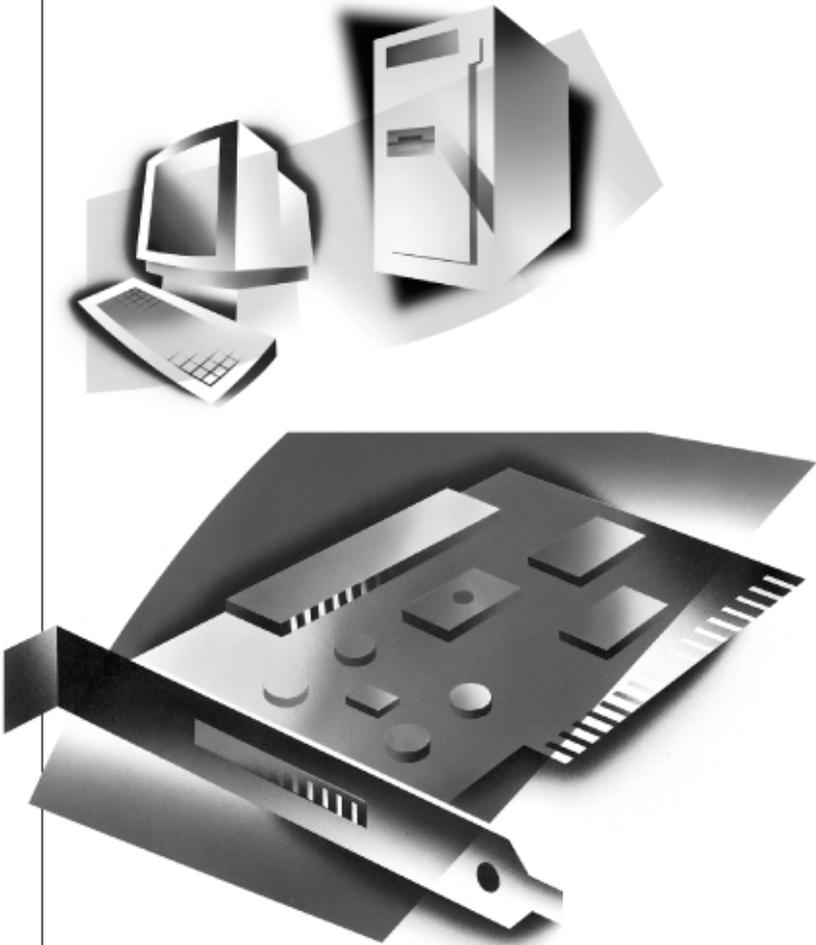




INSTALLATION GUIDE



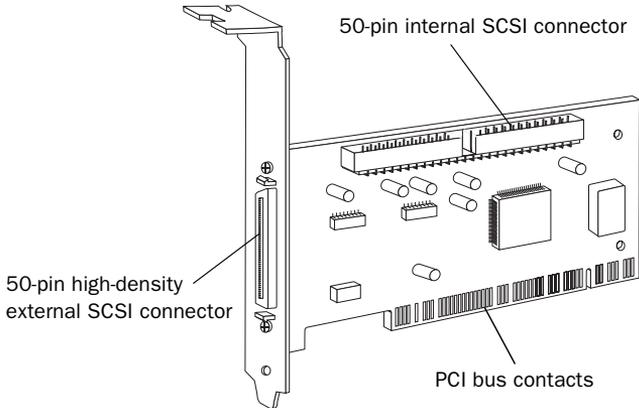
AVA-2904
PCI-TO-FAST SCSI CARD

INTRODUCTION

The AVA®-2904 PCI-to-Fast SCSI Card enables you to connect up to seven SCSI devices—such as scanners and CD-ROM, CDR, CDRW, and DVD drivers—to Microsoft operating systems (OSs). The Adaptec drivers are embedded within the Microsoft OS as AIC-7850. Alternately, the drivers can be downloaded from Adaptec’s Web site—<http://www.adaptec-europe.com> or <http://www.adaptec.com>—using the driver download option.

Technical Specifications

OSs Supported:	DOS, Windows 95/98/Me/NT/2000
PC Bus Type:	32-bit PCI
Interface Transfer Method:	Bus Master DMA (Direct Memory Access)
Data Transfer Rate:	10 MB/sec
Supported Protocol:	SCSI-1, SCSI-2, and Fast SCSI-2
Peripheral Support:	Nonbootable
Total Devices Supported:	7 total (internal or external)
External Connector:	50-pin high-density SCSI-2 (female)
Internal Connector:	50-pin standard (male)



AVA-2904 PCI-to-Fast SCSI Card

Goal of this Installation Guide

This installation guide explains how to install and use your new AVA-2904 SCSI Card. Once you have performed the installation steps described in this guide, your AVA-2904 SCSI Card and SCSI devices are ready for operation.

If you are not connecting the full complement of seven devices during your initial installation, when the time comes to add another peripheral, this guide will help with that installation. As such, we recommend that you keep this guide with your important computer documents. Feel free to refer to the Adaptec Web site for access to an online copy if the need arises.

This installation guide provides step-by-step instructions for:

- Installing the AVA-2904 PCI-to-Fast SCSI Card
- Connecting internal SCSI devices
- Preparing and connecting the external SCSI devices
- Installing the AVA-2904 SCSI Card driver software

INSTALLATION AND SETUP

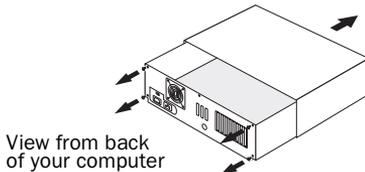
Be sure to take the following precautions before you begin installing your new AVA-2904 SCSI Card:

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

Always handle the SCSI card by its metal bracket or by the card edges. Do not touch the gold connector or any of the components on the card.

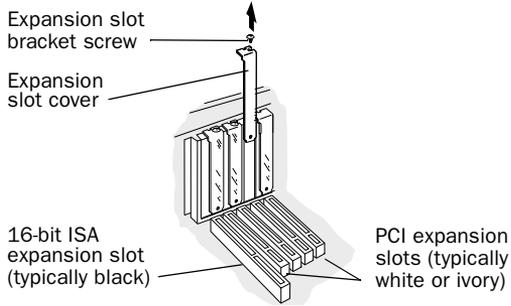
STEP 1

After turning off power to your PC and unplugging the power cord, remove the cover from the computer case. (If necessary, refer to the instructions in your computer documentation.)



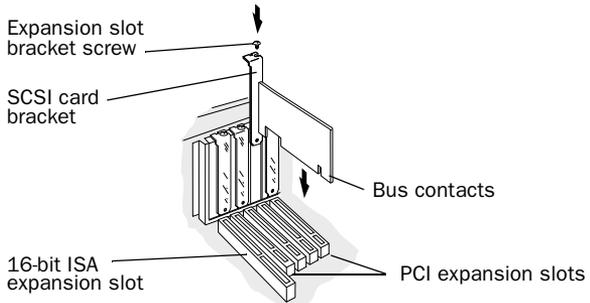
STEP 2

Locate an unused PCI expansion slot (typically white or ivory). Unscrew and remove the expansion slot cover that protects the card-slot opening. Save the slot cover screw for use in Step 3.



STEP 3

Align the AVA-2904 SCSI Card over the PCI slot and lower the card into the slot. Press it down firmly so that the bus contacts are securely seated in the slot. Secure the card bracket with the screw you removed in Step 2.



CONNECTING SCSI DEVICES

You can connect a total of seven SCSI devices to the AVA-2904 SCSI Card.

Whether installing internal or external devices to a SCSI card, be certain that all devices are assigned a unique SCSI ID from 0 to 6. Some instruction is supplied here; however, it is best to double-check with each device's manufacturer's instructions for correct location and proper device ID setting.

NOTE The card's SCSI ID is preset to 7 and cannot be changed.

Connecting Internal SCSI Devices

You must prepare each internal SCSI device for installation. (If you are installing external SCSI devices only, skip to *Connecting External SCSI Devices* on page 7.)

NOTE If only external devices are being connected to the AVA-2904 SCSI Card, do not use the 50-pin ribbon cable.

STEP 1

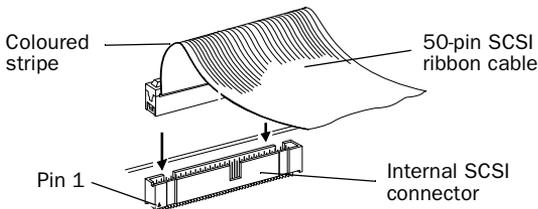
Using the SCSI ID selector, make sure all internal SCSI devices are assigned a unique ID number ranging from 0 to 6. Refer to the device's documentation for instructions on setting the SCSI ID.

STEP 2

Install and mount each internal SCSI device in an available drive bay inside your computer. (Refer to your computer and device documentation for instructions.)

STEP 3

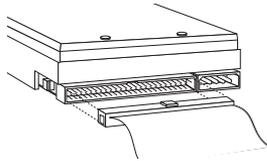
Connect one end of the cable into the SCSI connector. It should fit snugly into the notched connector along the top of the card.



- If you purchased your SCSI card in an Adaptec kit, an internal SCSI cable that allows you to connect up to two internal SCSI devices is included. If you are connecting more than two internal SCSI devices, you must obtain a 50-pin internal SCSI cable with enough connectors to accommodate any additional devices.
- Make sure the coloured stripe on one side of the cable is aligned with pin 1 of the card's connector. Pin 1 on the connector is usually designated by a small triangle (▲), or a "1" on the connector. The SCSI card's internal connector is also keyed to ensure the cable is not plugged in backwards.

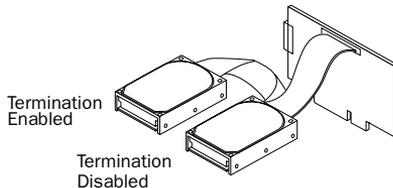
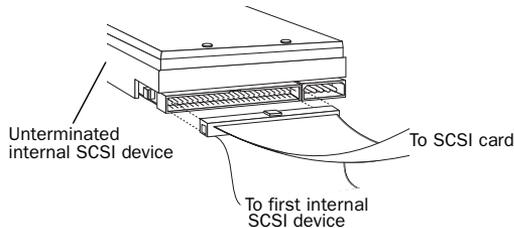
STEP 4

Plug the other end of the cable into the internal device. If this device is the only (or final) one, it *must* be terminated. Refer to manufacturer's instructions for device termination.



STEP 5

Plug any remaining connectors on the cable into any other internal devices, provided you have any others to include. Any devices located between the SCSI card and the last device *must not* be terminated (as shown in the following figures).



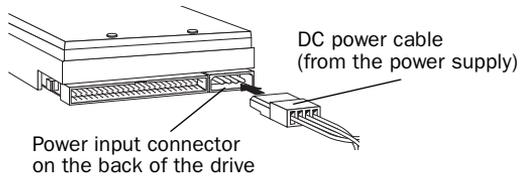
Installation Guide

If indeed you've only one device, you must attach it to the end of the cable. Remove (or disable) terminators on all devices that you plan to install in the middle of the cable (as shown in the figure at the bottom of page 5).

On most internal SCSI devices, the termination setting is controlled by setting a jumper or a switch, or by physically removing or installing a resistor module(s). Refer to the device's documentation to determine how to enable or disable termination on your particular device.

STEP 6

Connect an available DC power cable (from your computer's power supply) to the power input connector on the SCSI device.



STEP 7

Unless you have external devices to connect, replace computer cover, and connect all power cables to the computer. Now you are ready to start your computer.

STEP 8

Windows 95, 98, Me (Millennium Edition), NT, and 2000 will automatically install the appropriate software driver for your operating system from an embedded list in your PC's operating system (OS). (For information regarding the automatic installation of the software driver compatible with your specific OS, go to *Driver Software Installation* on page 10.)

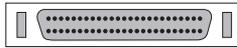
Connecting External SCSI Devices

If you are installing internal SCSI devices only, go back to *Connecting Internal SCSI Devices* on page 4.

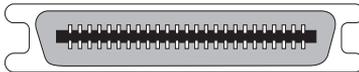
NOTE If only external devices are being connected to the AVA-2904 SCSI Card, do not use the 50-pin ribbon cable. Set this cable aside for use with internal devices you might wish to connect in the future.

External Connector Types

Several different types of SCSI connectors are used on SCSI devices and each type requires a different kind of cable. The card has a 50-pin high-density connector. 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, and similar devices.

* Connectors not portrayed to scale.

If you have a SCSI device with a DB25 connector, you can order a DB25 cable from Adaptec to connect it to the AVA-2904 SCSI Card. No external cables are provided with this kit. You can order cables to fit your specific requirements from Adaptec or any computer products supplier.

Installation Guide

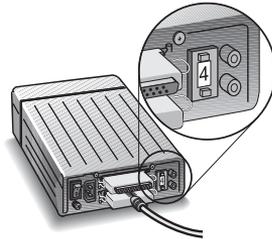
Procedure for Connecting External Devices

You must prepare each external SCSI device for installation.

STEP 1

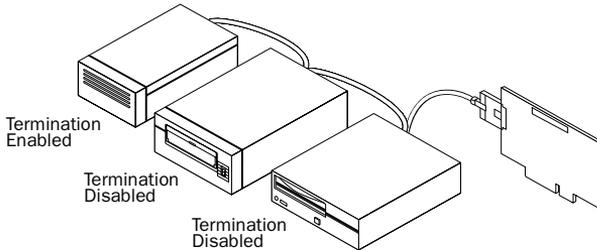
Using the SCSI ID selector on the back of the device, be certain each external device is assigned a unique ID number ranging from 0 to 6. Refer to the device's documentation for instructions on setting the SCSI ID.

After locating ID selector on the back of the device, click the button on either the top or bottom of the area where number is viewed (or possibly select from a rotary or dial configuration) to select a higher or lower device number that is not being used by any other device. For more information, refer to the device's documentation for instructions on setting the SCSI ID. Remember that the card's SCSI ID is set to 7 and cannot be changed.



STEP 2

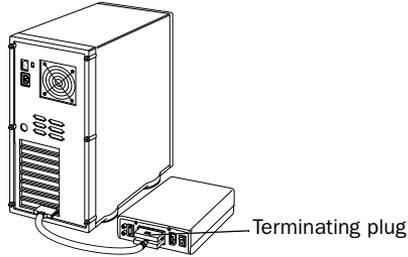
Join the external SCSI device(s), using an external SCSI-2 cable, to the high-density 50-pin external connector.



NOTE For each external SCSI device you install, you must obtain a high-quality, 50-pin external SCSI-2 cable.

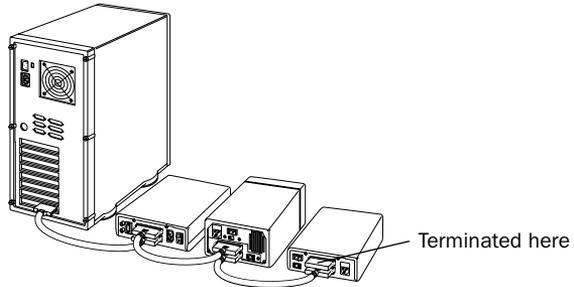
STEP 3

Plug one end of the external SCSI cable into the card's external SCSI connector, and plug the other end of the cable into either one of the SCSI connectors on the external SCSI device. (If you are installing only one external device, attach a terminating plug to the device.)



STEP 4

Connect other external SCSI devices by connecting each device to the previous device until all external SCSI devices have been connected. Install (or enable) terminators on the last device in the chain. Remove (or disable) terminators on all devices that you plan to attach in the middle of the SCSI chain. (The device at the end of the chain *must* be terminated.)



On most external SCSI devices, termination is controlled by installing or removing a terminating plug. Refer to the device's documentation to determine how to enable or disable termination on your particular device.

STEP 5

Reposition your computer cover on your PC. Connect all power cables to the external devices and the computer. Turn on the external devices, then turn ON the computer.

STEP 6

Windows 95, 98, Me, NT, and 2000 will automatically install the appropriate software driver for your OS from an embedded list in your PC's OS. (For information regarding the automatic installation of the software driver compatible with your specific OS, go to *Driver Software Installation* on page 10.)

DRIVER SOFTWARE INSTALLATION

As mentioned in the steps for connecting internal and external devices, the OS will automatically install its compatible software driver from an embedded list.

To access SCSI devices in DOS, download the `dosdrv.exe` file from Adaptec's support Web site and follow the instructions provided.

In other types of situations, the following may be helpful.

Windows 95 or 98

Once your AVA-2904 SCSI Card is installed and you have restarted your system, Windows 95 or 98 prompts you through the rest of the installation process. Follow these steps:

STEP 1

When the Add New Hardware Wizard setup window appears, select the first radio button (instructing the setup wizard to search for the driver best suited for your device), and click **Next**.



STEP 2

When the next setup wizard window appears, select (check) the CD-ROM drive option from the list, and click Next.

NOTE Be sure the Microsoft Windows 9x CD-ROM is in your CD-ROM drive!



STEP 3

Your system locates the device and prompts you to continue with the installation. Click Next.



Installation Guide

STEP 4

With Windows 9x installation, the AVA-2904 SCSI Card is detected as AIC-7850. This is the integrated circuit chip on your AVA-2904 SCSI Card.

Once the driver has been located and installed, the wizard confirms completion. Click **Finish**.



Windows Me and Windows 2000

With Windows Me and Windows 2000, driver software installation is fully automatic, including the identification of compatible drivers.

The most current version of both OSs have embedded driver support for the SCSI card as part of the installation software. When the AVA-2904 SCSI Card is installed and you have rebooted your computer, the Add New Hardware Wizard setup window appears to walk you through the final steps.

For additional instructions on installing embedded driver support, see the OS documentation.

STEP 1

Once Windows Me or Windows 2000 has identified your new hardware device, select the first radio button to launch an automatic search through the list of embedded drivers for the driver most suitable, and click **Next**.



STEP 2

Your OS locates the appropriate driver for the newly detected device and automatically processes the installation.

STEP 3

The AVA-2904 SCSI Card is detected as AIC-7850. This is the integrated circuit chip on your AVA-2904 SCSI Card. Once installed, the wizard confirms completion. Click **Finish**.



With completion of this section, installation of your AVA-2904 SCSI Card and selection of drivers is complete. For more useful information on configuring your SCSI devices and using your AVA-2904 SCSI Card, refer to *Using Your SCSI Card and SCSI Devices* on page 16.

Windows NT 4.0

The most current version of the Windows NT 4.0 OS has embedded driver support for the AVA-2904 SCSI Card as part of the installation software. Before you install the Windows NT driver from the embedded list, download either the latest Microsoft service pack or the Adaptec driver file: 7800wnt.exe from the Adaptec support Web site at <http://www.adaptec-europe.com> or <http://www.adaptec.com>.

For additional instructions on installing embedded driver support, refer to the OS documentation.

After you have installed the AVA-2904 SCSI Card and have restarted your computer, follow these steps:

STEP 1

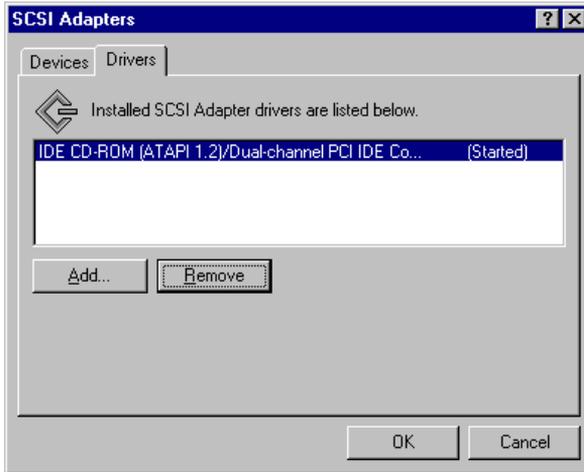
Click the **Start** button, point to **Settings**, then select **Control Panel**. From the Control Panel window, double-click **SCSI Adapters**. The SCSI Adapters window opens.

NOTE Although the title of the Control Panel window is *SCSI Adapters*, the window also displays IDE buses. If a line mentions IDE, ATA, ATAPI, UDMA, or Ultra DMA, the bus referred to is not a SCSI bus.

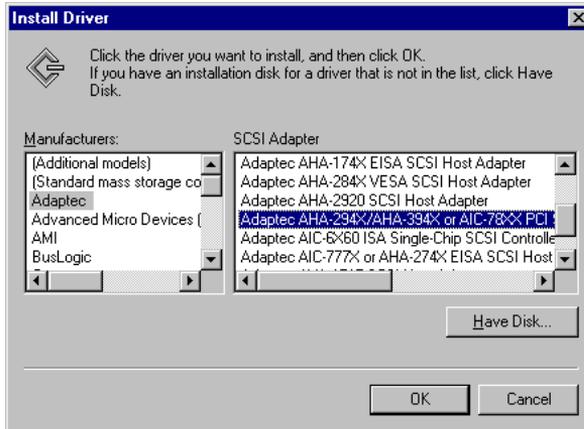
Ignore the presence of these other buses as you configure the Adaptec controller.

STEP 2

Go to the **Drivers** tab. Click **Add**.

**STEP 3**

The Install Driver window opens. From the Manufacturers: list on the left, select **Adaptec**. From the SCSI Adapter list on the right side, highlight the driver you wish to install, then click **OK**. If the AVA-2904 SCSI Card does not show up in the list, select the **Adaptec AHA-294X/AHA-394X or AIC-78XX PCI SCSI Controller**. The AVA-2904 belongs to this family with its AIC-7850 SCSI integrated circuit chip.



USING YOUR SCSI CARD AND SCSI DEVICES

Configuring SCSI Devices

- You may need to install the manufacturer's proprietary device drivers if you use SCSI devices other than hard disk and CD-ROM drives. (See your device's documentation.)
- For all SCSI devices connected to the AVA-2904 SCSI Card, especially external devices, make sure to use high-quality SCSI-2 cables to ensure reliable data transfer.
- When one or more Fast SCSI devices (SCSI devices that support a data transfer rate of up to 10 MB/sec) are connected to the AVA-2904 SCSI Card, the total length of all cables (internal and external) must not exceed 3 m (9.8 ft). See your device's documentation to determine if it is a Fast SCSI device.

Hard Disk Drives

- The AVA-2904 SCSI Card does not support the Boot option, *and therefore does not display any Adaptec banner or Ctrl-A message at computer initialization.* To boot your system, a bootable hard disk drive must already be installed on a *different disk controller card.*
- Every SCSI hard disk must be physically low-level formatted, partitioned, and logically formatted before it can be used to store data.

If you connected a new SCSI hard disk drive to your SCSI card, you must partition and logically format the drive. For Windows 95 or 98, refer to your computer and Windows 95 or 98 documentation. For other OSs, see your OS documentation. SCSI hard disks are physically formatted at the factory and do not usually need to be physically formatted again.

Installing Multiple SCSI Cards

- Multiple SCSI cards can be installed in your computer; you are limited only by the available system resources (for example, IRQ settings, I/O port addresses, BIOS addresses, and so forth) not used by other cards installed in your computer.
- Each SCSI card you install forms a separate SCSI bus with a different set of SCSI devices. SCSI IDs can be reused as long as the ID is assigned to a device on a different SCSI card (for example, each card can have a device with SCSI ID 2).

Verifying that the Windows 95, 98, or Me (Millennium Edition) Driver is Installed

To verify that the driver for the AVA-2904 SCSI Card is installed properly in Windows 95, Windows 98, or Windows Me, follow these steps:

STEP 1

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

STEP 2

Double-click the **System** icon.

STEP 3

Click the **Device Manager** tab.

STEP 4

Double-click the **SCSI Controller** icon.

STEP 5

If an exclamation point in a yellow circle or a red "X" appears along with the driver, this indicates that the device is in a problem state (usually a hardware conflict). Double-click the icon to see the error message, then correct the problem.

Verifying that the Windows NT 4.0 Driver is Installed

To verify that the Windows NT 4.0 driver for the AVA-2904 SCSI Card is installed properly, follow these steps:

STEP 1

From the **Start** menu, go to **Settings**, and select **Control Panel**.

STEP 2

From the Control Panel window, double-click **SCSI Adapters**. The SCSI Adapters window opens.

STEP 3

Go to the **Devices** tab. If the adapter is displayed, the driver is loaded. (Expanding the plus sign next to the adapter displays a list of the devices connected to the adapter.)

Verifying that the Windows 2000 Driver is Installed

To verify that the Windows 2000 driver for the AVA-2904 SCSI Card is installed properly, follow these steps:

STEP 1

Right click on the **My Computer** icon on your desktop.

STEP 2

Select **Manage**.

STEP 3

Click on **Device Manager**.

STEP 4

Go to the SCSI and RAID Controllers category. Be sure the AVA-2904 SCSI Card is listed and that it doesn't have any red X's, yellow !'s, or yellow ?'s.

SCSI Card Settings

The default SCSI card settings listed in the table below are fixed and cannot be changed. These settings are appropriate for most systems.

SCSI Card Settings	Default
Card SCSI ID	7
SCSI Parity Checking	Enabled
Transfer Rate	10.0 MB/sec
SCSI Card SCSI Termination	Automatic
Enable Sync Negotiation	Yes (Enabled)
Enable Fast SCSI	Yes (Enabled)
Enabled Disconnection	Yes (Enabled)

TROUBLESHOOTING

Most problems that occur with your SCSI card results from errors in preparing and connecting devices on the SCSI bus. If you encounter any problems either during or after installation, check the following items first, as these situations are covered in this installation guide:

- Are all SCSI devices powered on?
- Are all SCSI bus cables and power cables properly connected?
- Is the AVA-2904 SCSI Card firmly seated and secured in the PCI expansion slot?
- Is pin 1 orientation maintained throughout the SCSI bus?
- Do the SCSI card and all devices on the SCSI bus have unique SCSI IDs?
- Are all devices on the SCSI bus terminated properly?
- Does your system CMOS setup require you to enable PCI bus parameters? If so, refer to your computer's documentation for instructions. Check that IRQ channel assignment, board, and BIOS settings have been made.

Some configuration options apply to a specific PCI bus slot, so if you change these options, be sure you are applying them to the slot in which the SCSI card is installed.

Check your computer documentation to verify which slot corresponds to what number.

- If there is an Interrupt Type or Interrupt Line option in the Setup program, be sure to select **Int-A** or **Interrupt Type = A**. Depending on your system design, you may also be required to change a motherboard jumper setting.
- If there is a Triggering Interrupt option, be sure to select **Level**.
- If there is an option to enable or disable bus mastering for the PCI slots, be sure to select **Enabled**.
- If your computer has a combination of ISA (or EISA) and PCI boards, you may need to mark the IRQs used by ISA/EISA boards as **Used** so the system BIOS will not try to assign these IRQs to other PCI boards.

- In some systems, the BIOS reserves a set of available IRQs for PCI boards, and you must assign these IRQs manually.
- If you have not already done so, we recommend you upgrade your motherboard BIOS by downloading the latest version from the manufacturer's Web site.

NOTE If you are experiencing problems with a specific SCSI device when other SCSI devices are working correctly, please contact the device's manufacturer for troubleshooting information.

If, after addressing the questions in this section, you are still unable to resolve a problem, refer to the Adaptec Web site at <http://www.adaptec-europe.com> or <http://www.adaptec.com> for additional troubleshooting information and direction.

Copyright

© 1997, 2001 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.

Trademarks

Adaptec, the Adaptec logo, AVA, and AIC are trademarks of Adaptec, Inc., which may be registered in some jurisdictions.

Windows 95, Windows 98, Windows Me, Windows NT, and Windows 2000 are trademarks of Microsoft Corporation in the US and other countries, used under license.

All other trademarks are the property of their respective owners.

Changes

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.

Disclaimer

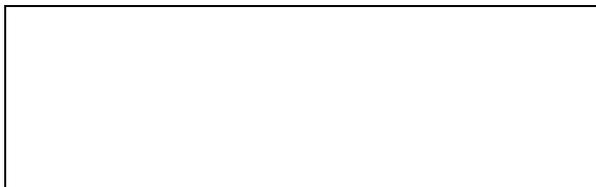
IF THIS PRODUCT DIRECTS YOU TO COPY MATERIALS, YOU MUST HAVE PERMISSION FROM THE COPYRIGHT OWNER OF THE MATERIALS TO AVOID VIOLATING THE LAW WHICH COULD RESULT IN DAMAGES OR OTHER REMEDIES.

Adaptec Customer Support

If you have questions about installing or using your Adaptec product, check this installation guide first—you will find answers to most of your questions here. If you need further assistance, use the support options listed below.

Technical Support Identification (TSID) Number

- Before contacting Technical Support, you'll need your TSID. The TSID helps us provide more efficient service by accurately identifying your product and support status. The 12-digit TSID can be found on the white barcode-type label included inside the box with your product.
- Affix your TSID label here:



Support Options

- Search the Adaptec Support Knowledgebase (ASK) at <http://ask.adaptec.com> for articles, troubleshooting tips, and frequently asked questions for your product.
- For support via Email, submit your question to Adaptec's Technical Support Specialists at <http://ask.adaptec.com>.

North America

- Visit our Web site at <http://www.adaptec.com>.
- For information about Adaptec's support options, call +1 408-957-2550, 24 hours per day, 7 days per week.
- To speak with a Technical Support Specialist,

For **Hardware products** call +1 408-934-7274,
Monday–Friday, 3:00 A.M. to 5:00 P.M., Pacific Time.

For **RAID and Fibre Channel** call +1 321-207-2000
Monday–Friday, 3:00 A.M. to 5:00 P.M., Pacific Time.

To expedite your service, have your computer in front of you.

- To order Adaptec products, including software and SCSI cables, call +1 800-442-7274 or +1 408-957-7274.

Europe

- Visit our Web site at <http://www.adaptec-europe.com>.
- **English and French:** To speak with a Technical Support Specialist, call one of the following numbers, Monday–Thursday, 10:00 to 12:30 and 13:30 to 17:30; Friday, 10:00 to 12:30 and 13:30 to 16:30, Central European Time:
 - **English:** +32 2 352 3470
 - **French:** +32 2 352 3460

To expedite your service, have your computer in front of you.

- **German:** To speak with a Technical Support Specialist, call +49 89 456 40660, Monday–Thursday, 09:30 to 12:30 and 13:30 to 16:30; Friday, 09:30 to 12:30 and 13:30 to 15:00, Central European Time. To expedite your service, have your computer in front of you.
- To order Adaptec products, including accessories and SCSI cables:
 - **UK:** +0800 96 65 26 or fax +0800 731 02 95
 - **Other European countries:** +32 11 300 379

Australia and New Zealand

- Visit our Web site at <http://www.adaptec.com.au>.
- To speak with a Technical Support Specialist, call +612 9416 0698, Monday–Friday, 10:00 A.M. to 4:30 P.M., Eastern Australia Time. To expedite your service, have your computer in front of you.

Hong Kong and China

- Visit our Web site at <http://www.adaptec.com>.
- To speak with a Technical Support Specialist, call +852 2869 7200, Monday–Friday, 10:00 to 17:00.
- Fax Technical Support at +852 2869 7100.

Singapore

- Visit our Web site at <http://www.adaptec.com>.
- To speak with a Technical Support Specialist, call +65 245 7470, Monday–Friday, 10:00 to 17:00.

Regulatory Compliance Statements

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.



European Union Compliance Statement

This Information Technology Equipment has been tested and found to comply with the following European directives:

EMC Directive 89/336/EEC, as amended by 92/31/EEC and 93/68/EEC

- EN 50081-1 (1992)
- EN55022 (1994) Class B
- EN 50082-1 (1992)
- EN61000-4-2 (1998)
- EN61000-4-3 (1998)
- EN61000-4-4 (1995)
- EN61000-4-5 (1995) Surges
- EN61000-4-6 (1996) Conducted immunity
- EN61000-4-11 (1994) Supply dips of variation

Limited 5-Year Warranty

1. Adaptec, Inc. ("Adaptec") warrants to the purchaser of this product that it will be free from defects in material and workmanship for a period of five (5) years from the date of purchase. If the product should become defective within the warranty period, Adaptec, at its option, will repair or replace the product, or refund the purchaser's purchase price for the product, provided it is delivered at the purchaser's expense to an authorized Adaptec service facility or to Adaptec.
2. Repair or replacement parts or products will be furnished on an exchange basis and will either be new or reconditioned. All replaced parts or products shall become the property of Adaptec. This warranty shall not apply if the product has been damaged by accident, misuse, abuse or as a result of unauthorized service or parts.
3. 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.
4. For more information on how to obtain warranty service, write or telephone Adaptec at 691 South Milpitas Boulevard, Milpitas, CA 95035, (800) 959-7274.
5. THIS LIMITED WARRANTY DOES NOT EXTEND TO ANY PRODUCT WHICH HAS BEEN DAMAGED AS A RESULT OF ACCIDENT, MISUSE, ABUSE, OR AS A RESULT OF UNAUTHORIZED SERVICE OR PARTS.
6. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES WHICH NOW OR HEREAFTER MIGHT OTHERWISE ARISE RESPECT TO THIS PRODUCT. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT SHALL (A) HAVE NO GREATER DURATION THAN 5 YEARS FROM THE DATE OF PURCHASE, (B) TERMINATE AUTOMATICALLY AT THE EXPIRATION OF SUCH PERIOD AND (C) TO THE EXTENT PERMITTED BY LAW BE EXCLUDED. IN THE EVENT THIS PRODUCT BECOMES DEFECTIVE DURING THE WARRANTY PERIOD, THE PURCHASER'S EXCLUSIVE REMEDY SHALL BE REPAIR, REPLACEMENT OR REFUND AS PROVIDED ABOVE. INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOSS OF DATA, ARISING FROM BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ARE NOT THE RESPONSIBILITY OF ADAPTEC AND, TO THE EXTENT PERMITTED BY LAW, ARE HEREBY EXCLUDED BOTH FOR PROPERTY DAMAGE, AND TO THE EXTENT NOT UNCONSCIONABLE, FOR PERSONAL INJURY DAMAGE.
7. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CONSUMER PRODUCTS, AND SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSIONS MAY NOT APPLY TO YOU.
8. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



© 1997, 2001 Adaptec, Inc. All rights reserved.

P/N.: 512859-06UK, Ver. AA LOC 05/01