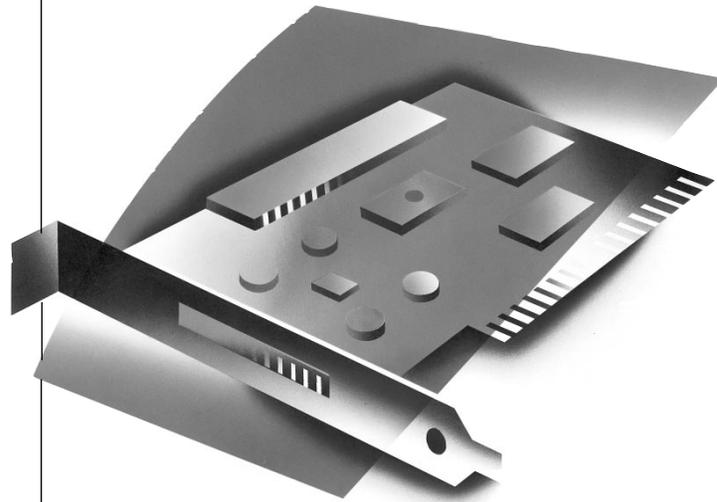# ADAPTEC

INSTALLATION GUIDE

SCSI CARD 1505

INTRODUCTION

With the SCSI Card 1505, you can connect up to seven SCSI peripher-
als to any IBM-compatible computer with ISA expansion slots.

This installation guide provides step-by-step instructions for:
- Installing the SCSI Card 1505
- Connecting internal SCSI peripherals
- Connecting external SCSI peripherals
- Installing the SCSI Card 1505 software

See the *SCSI Card 1505 User's Reference* included in this package for
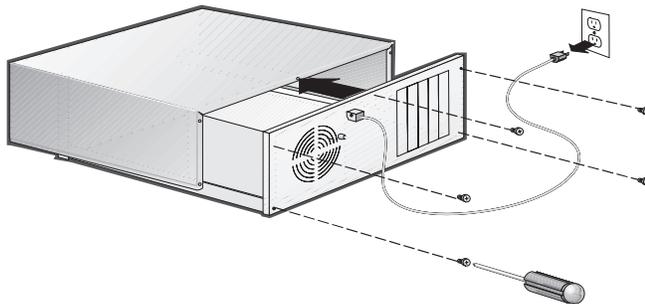additional information on using the SCSI Card 1505.

INSTALLING THE SCSI CARD 1505

STEP 1

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

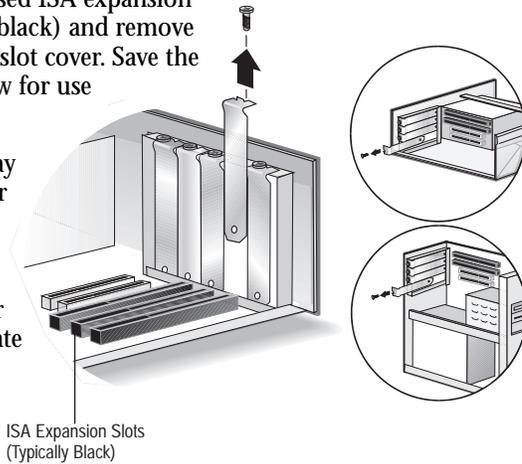**WARNING** **Turn OFF power to the computer and disconnect the
power cord.**

STEP 2

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

Refer to your computer manual if you need instructions on
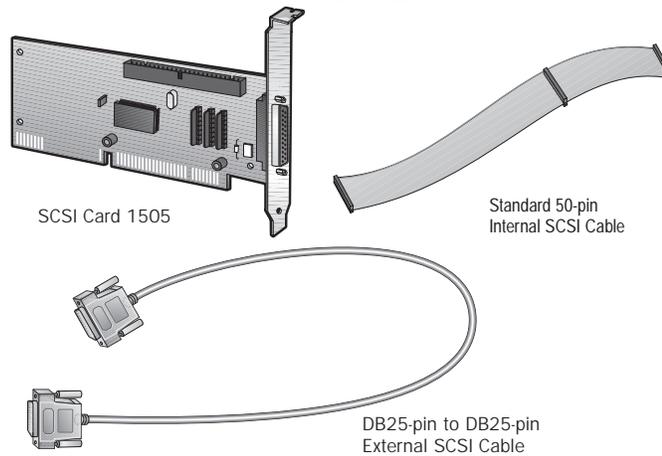removing the cover.

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STEP 3

Locate an unused ISA expansion slot (typically black) and remove the expansion slot cover. Save the slot cover screw for use in Step 5.

Computers may have vertical or horizontal expansion slots. Refer to your computer manual to locate the ISA slots.

ISA Expansion Slots
(Typically Black)

STEP 4

Remove the SCSI Card 1505 from its antistatic packaging. Always handle the card by its edges.
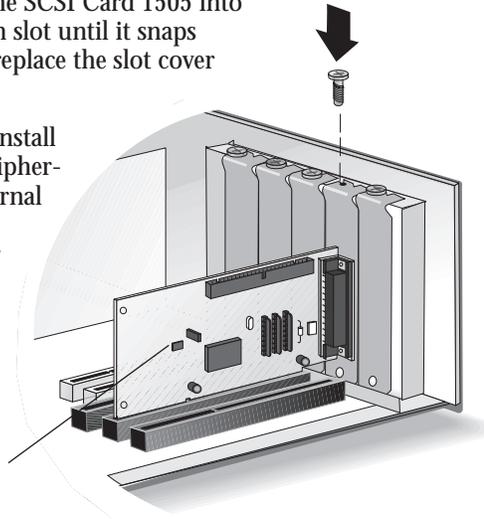
The hardware included in your package is shown below.

SCSI Card 1505

Standard 50-pin
Internal SCSI Cable

DB25-pin to DB25-pin
External SCSI Cable

NOTE **To connect more than two internal SCSI peripherals or more than one external SCSI peripheral, you need additional cables not included in this package. For a description of these cables, see the SCSI Card 1505 User's Reference (page 17, *Obtaining SCSI Cables*)**

STEP 5 Carefully insert the SCSI Card 1505 into the ISA expansion slot until it snaps into place. Then replace the slot cover screw.

You are ready to install internal SCSI peripherals. To install external SCSI peripherals only, replace your computer cover and skip to *Connecting External SCSI Peripherals.*

SCSI Card 1505 Installed in an ISA Expansion Slot

CONNECTING INTERNAL SCSI PERIPHERALS

STEP 1 Verify each internal SCSI peripheral you are installing is set to a unique SCSI ID from 0 to 6. Refer to the peripheral's documentation to determine the SCSI ID setting.

If any two SCSI peripherals (internal or external) you are connecting to the SCSI Card 1505 have the same SCSI ID, change the SCSI ID on one peripheral. The SCSI Card 1505 is preset to SCSI ID 7 and should not be changed. See the *SCSI Card 1505 User's Reference* (page 2, *SCSI IDs*) for additional information on SCSI IDs.

STEP 2 If you are installing only one internal SCSI peripheral, terminate that peripheral. If you have two or more internal peripherals, terminate one peripheral only; the remaining peripherals must not be terminated. (The terminated peripheral must be connected to the end of the cable, as explained in Step 5 below.)

The termination setting usually is controlled by setting a jumper or a switch, or by physically removing or installing a terminator module(s). Refer to the peripheral's documentation to enable or disable termination on your peripheral.
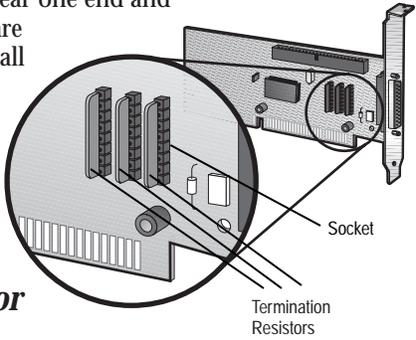
STEP 3 If you are installing both internal and external peripherals remove the three termination resistor packs on the SCSI Card 1505. See the *SCSI Card 1505 User's Reference* (page 3, *Terminating the SCSI Bus*) for additional information on termination.

> **NOTE** **If the resistor packs are being removed for the first time, they will be tightly seated in the sockets. Tweezers (i.e. needle-nose) can be used to remove the resistor packs more easily.**

Removing the Resistor Packs

Grasp the resistor pack near one end and gently lift until the pins are exposed. Do not remove all the way. Repeat for the other end. Grasp the resistor pack from the center and remove. Repeat for the remaining two resistor packs.
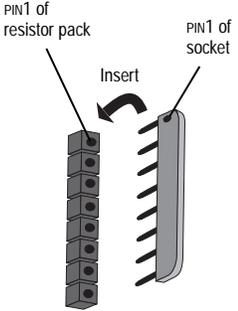
Socket

Termination Resistors

Storing the Resistor Packs

Place the resistor packs in a safe place. When connecting *only* internal or external SCSI devices, the resistor packs will need to be reinstalled.

Installing the Resistor Packs

To reinstall a resistor pack, PIN1 of the resistor pack *MUST* be aligned with PIN1 of the socket. The resistor packs are marked on a side with either an arrow or a dot which indicates the PIN1 location.
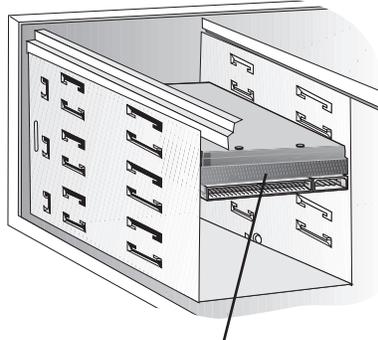
- Align the dot (or arrow) of the resistor pack with the marking on the board as shown. Be sure all pins of the resistor pack are aligned with a hole of the socket.
- Press down evenly until the resistor pack pins are no longer visible; the resistor pack is seated in the socket.
- Repeat for the remaining resistor modules.

PIN1 of resistor pack

PIN1 of socket

Insert

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STEP **4**

Mount each internal SCSI peripheral in an available drive bay inside your computer.

Refer to your computer and peripheral documentation for instructions on installing peripherals inside your computer.

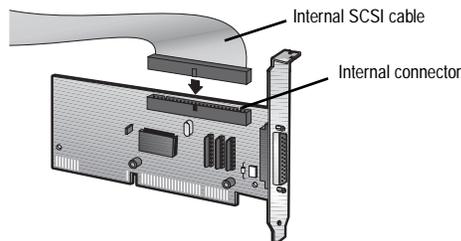Internal SCSI Peripheral Mounted in Drive Bay Inside Your Computer

NOTE **If it is difficult to reach the back of your internal SCSI peripherals when they are mounted in a drive bay, you may want to connect the internal SCSI peripherals to the SCSI cable and power supply (Steps 5-7 below) *before* installing and mounting each peripheral inside your computer.**
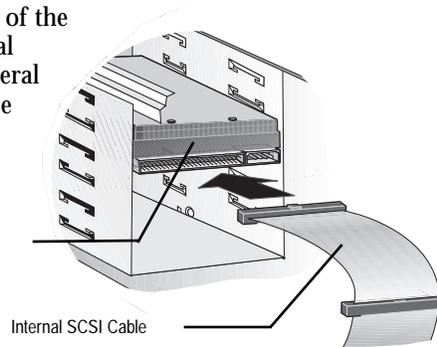
STEP **5**

Connect one end of the internal SCSI cable to the SCSI Card 1505's internal SCSI connector.

To connect more than two internal SCSI peripherals to the SCSI Card 1505, you will need an internal SCSI cable with enough connectors to accommodate all of your peripherals. See the *SCSI Card 1505 User's Reference* (page 9, *Hard Disk Drives* and page 17, *Obtaining SCSI Cables)* for additional information on connecting your SCSI peripherals and ordering cables.

Internal SCSI cable

Internal connector

STEP 6 Connect the other end of the cable to the last internal peripheral (this peripheral must be terminated; see Step 2 above).

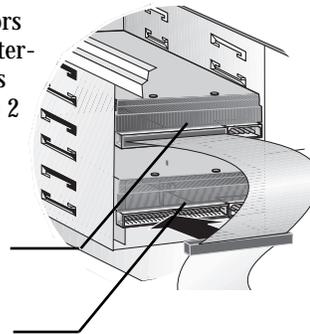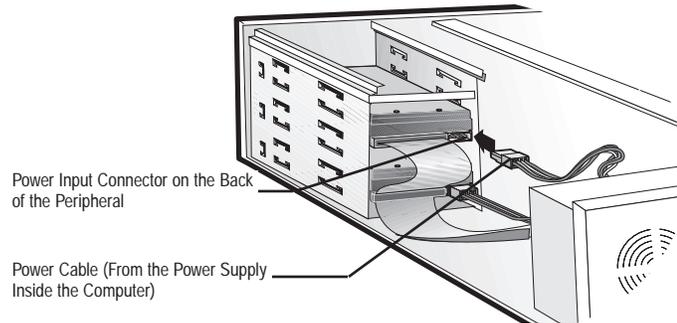Terminated Internal SCSI Peripheral

Internal SCSI Cable

STEP 7 Connect the remaining connectors on the cable to any remaining internal peripherals (these peripherals must not be terminated; see Step 2 above).

Terminated Internal SCSI Peripheral

Unterminated Internal SCSI Peripheral

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STEP 8 Connect a power cable from your computer's power supply to the power input connector on each SCSI peripheral.

Power Input Connector on the Back of the Peripheral
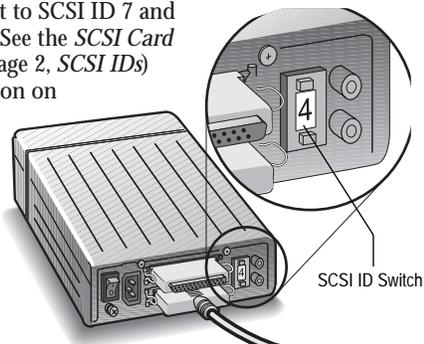
Power Cable (From the Power Supply Inside the Computer)

STEP 9 Replace your computer cover.

If you are installing external SCSI peripherals, continue with the next section; otherwise, skip to *Installing the SCSI Card 1505 Software.*

CONNECTING EXTERNAL SCSI PERIPHERALS

STEP 1 Verify each external SCSI peripheral you are installing has a unique SCSI ID from 0 to 6. Refer to the peripheral's documentation to determine the SCSI ID setting.

If any two SCSI peripherals you are connecting to the SCSI Card 1505 share the same SCSI ID, change the SCSI ID on one peripheral. The SCSI Card 1505 is preset to SCSI ID 7 and should not be changed. See the *SCSI Card 1505 User's Reference* (page 2, *SCSI IDs*) for additional information on SCSI IDs.
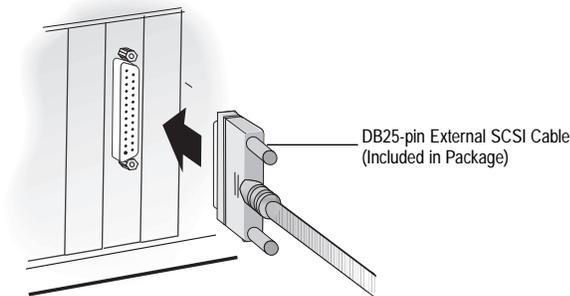
The SCSI ID is usually set with a switch on the back of the peripheral.

SCSI ID Switch

STEP 2

Connect one end of the external SCSI cable to the SCSI Card 1505's external SCSI connector. Secure the cable to the connector on the SCSI Card 1505 by tightening the thumb screws on the cable's connector.
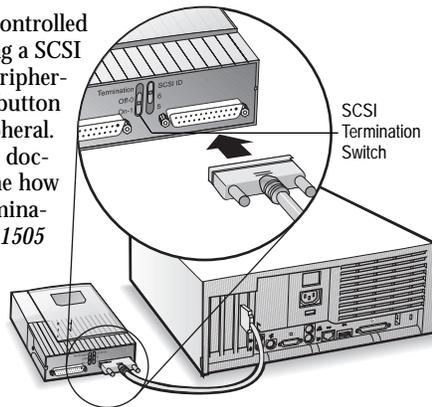
For each external SCSI peripheral you install, you need a high-quality external SCSI cable. See the *SCSI Card 1505 User's Reference* (page 17, *Obtaining SCSI Cables)* for additional information on ordering cables.

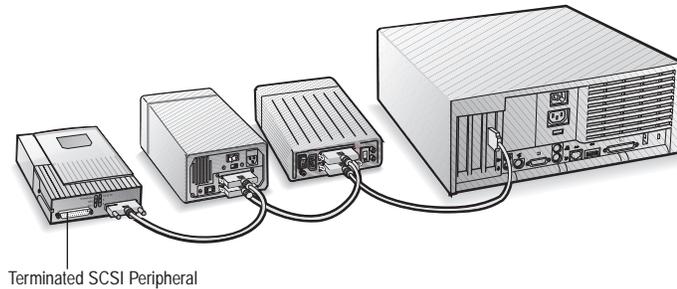DB25-pin External SCSI Cable
(Included in Package)

STEP 3

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

Termination usually is controlled by installing or removing a SCSI terminator. On some peripherals, you use a switch or button on the back of the peripheral. Refer to the peripheral's documentation to determine how to enable or disable termination. See the *SCSI Card 1505 User's Reference* (page 3, *Terminating the SCSI Bus)* for additional information on termination.

SCSI
Termination
Switch

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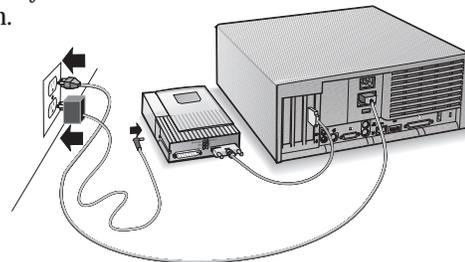**STEP 4** Connect other external SCSI peripherals by connecting each peripheral to the previous one until all peripherals are connected. The peripheral at the end of the chain must be the only peripheral terminated.

Terminated SCSI Peripheral

STEP 5 Connect all power cables to the external peripherals and computer.

Continue with the next section to install the SCSI Card 1505 software driver for your operating system.

INSTALLING THE SCSI CARD 1505 SOFTWARE

To install the SCSI Card 1505 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, you will need to 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 NT or OS/2

These operating systems embed (include) the SCSI Card 1505 driver as part of their installation software package.

Computers with Windows 95

STEP 1 Turn on all external peripherals, if any, and then the computer. Windows 95 now will recognize the SCSI Card 1505 installed in your computer and will install the software driver for it.

> **NOTE** **You may be asked to insert the Windows 95 CD-ROM into the CD-ROM drive. Follow the instructions that appear onscreen.**

STEP 2 If prompted, restart your computer to finish setting up your new hardware.

STEP 3 Click the **Start** button, point to **Settings**, then click **Control Panel**.

STEP 4 Double-click the **System** icon.

STEP 5 Click the **Device Manager** tab.

STEP 6 Double-click the **SCSI Controller** icon. The driver for the SCSI Card 1505 is listed as the "Adaptec AVA-1505 SCSI Host Adapter."

- If the driver is listed, the driver is loading properly.

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

- If the driver is listed but has an "X" inside a red circle, the driver is disabled and isn't loading.

- If the SCSI Controller icon or the SCSI Card 1505 driver is not listed, reinstall the driver.

> **NOTE** **If the driver is not listed or is not loading properly, see the** *SCSI Card 1505 User's Reference* **for troubleshooting information.**

Computers with Windows 3.1

STEP 1 Turn on all external peripherals, if any, and then the computer.

STEP 2 Start Windows 3.1x on your computer.

STEP 3 Insert the Adaptec EZ-SCSI Setup Diskette in your floppy disk drive.

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

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 DOS 6.x or Above

STEP 1 Turn on all external peripherals, if any, and then the computer.

STEP 2 Insert the Adaptec EZ-SCSI Setup Diskette in your floppy disk drive.

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STEP 3 At the DOS prompt, type **a:\dosinst** if you are using the *A* drive, or **b:\dosinst** if you are using the *B* drive. Then press **Enter**.

STEP 4 Follow the instructions that appear onscreen.

CONGRATULATIONS!

You've finished installing SCSI Card 1505. Troubleshooting hints are in the next section. For additional troubleshooting hints and information on using and configuring the SCSI Card 1505 and SCSI peripherals, see the *SCSI Card 1505 User's Reference.*

TROUBLESHOOTING CHECKLIST

Most problems with using the SCSI Card 1505 result from errors in preparing and connecting peripherals on the SCSI bus. If you have problems, check the items below first. Additional troubleshooting information is provided in the *SCSI Card 1505 User's Reference* (page 4, *Troubleshooting*).

> **NOTE** **If you have problems with a specific SCSI peripheral when other SCSI peripherals are working correctly, contact the manufacturer of the problem peripheral for troubleshooting information.**

- Are all SCSI peripherals turned on?

- Are all SCSI cables and power cables properly connected?

- Is the SCSI Card 1505 firmly seated and secured in the ISA expansion slot?

- Are all SCSI peripherals and the SCSI Card 1505 assigned unique SCSI IDs? (See Step 1 in either *Connecting Internal SCSI Peripherals* or *Connecting External SCSI Peripherals.*)

- Are all SCSI peripherals terminated properly? (See Step 2 and Step 3 in *Connecting Internal SCSI Peripherals* or Step 3 in *Connecting External SCSI Peripherals.*)

Thank you!

Thank you for purchasing an Adaptec product,
a great investment to improve your system's
performance. Enjoy your SCSI system!

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moves **your world.**™