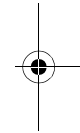
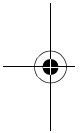
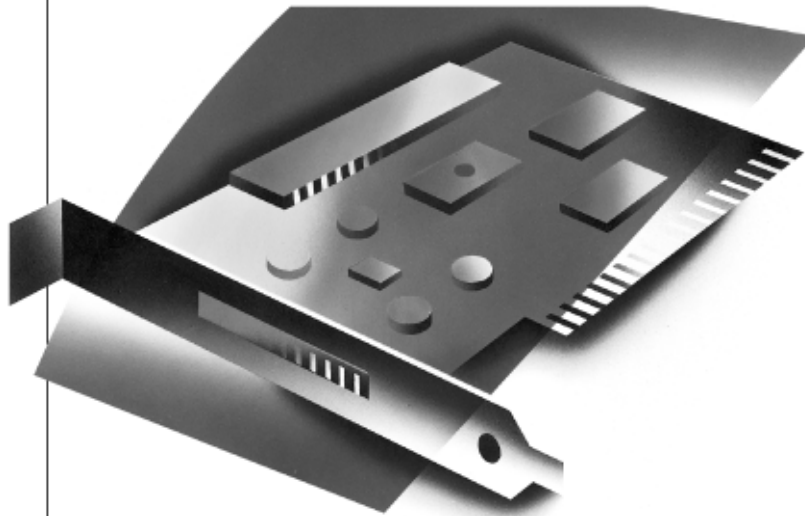
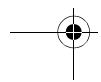
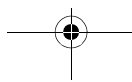
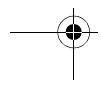
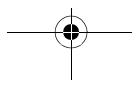
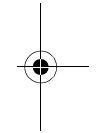
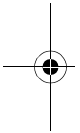
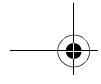


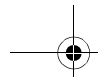
INSTALLATION GUIDE



ADAPTEC POWERDOMAIN[®] 29160/29160N
SCSI PCI CARD FOR THE POWER MACINTOSH







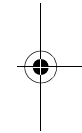
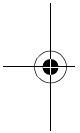
INTRODUCTION

This installation guide tells you how to install either the Adaptec® PowerDomain® 29160 or 29160N SCSI PCI card in the Power Macintosh® and how to connect internal and external SCSI devices to it.

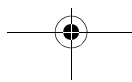
The 29160/29160N card is fully compatible with Mac OS 8.6 through 9.X; it will support Mac OS X when available.

You can connect up to 15 SCSI devices to the Adaptec PowerDomain 29160 and 29160N cards. Both cards are capable of a maximum data throughput rate of 160 MB/sec. for newer LVD (Low Voltage Differential) SCSI devices that can operate at that speed.

The cards also support older SE (Single-Ended) SCSI devices that run at slower speeds. The term *SE SCSI devices* includes SCSI-1, SCSI-2, Fast, and Ultra SCSI devices. Adaptec's SpeedFlex™ technology makes it possible to connect both older and newer SCSI devices to your Adaptec PowerDomain 29160 or 29160N card and to operate all devices at their maximum possible throughput. This is explained in detail in the sections on connecting various kinds of SCSI devices.



NOTE In this Installation Guide, the term “LVD SCSI devices” means both Ultra2 SCSI and Ultra160-LVD SCSI devices.

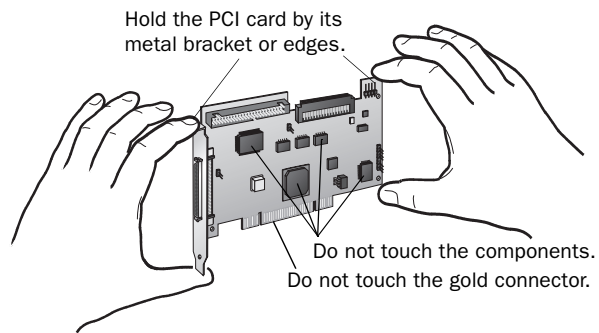
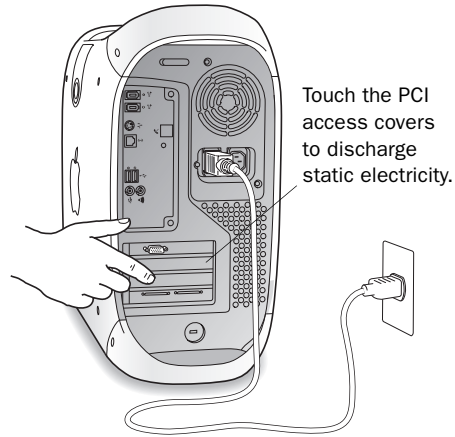


Installation Guide

PREVENTING DAMAGE TO THE ADAPTEC POWERDOMAIN 29160/29160N

Take the following precautions while you work with either the Adaptec PowerDomain 29160 or the Adaptec PowerDomain 29160N:

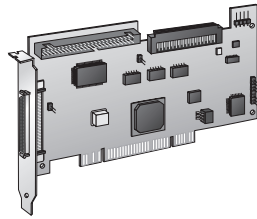
1. Turn OFF power to the computer and all devices connected to it.
2. Touch the metal PCI access covers on the back of the computer to discharge static electricity from your body and clothes.
3. Always handle the SCSI PCI card by its metal bracket or by its edges. *Do not* touch the gold connector or any of the components on the SCSI PCI card.



Adaptec PowerDomain 29160/29160N

TAKING INVENTORY

The box that contains the Adaptec PowerDomain 29160/29160N kit includes the items pictured below. The cables are located in compartments at each end of the box. Two internal cables are included with the 29160 package; two come with the 29160N.



Adaptec PowerDomain 29160 or 29160N



Installation guide,
registration card,
and other literature



50-pin internal Ultra SCSI cable
(29160N)



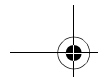
68-pin internal LVD SCSI cable
(29160 and 29160N)



68-pin internal Ultra/Wide SE cable (29160)



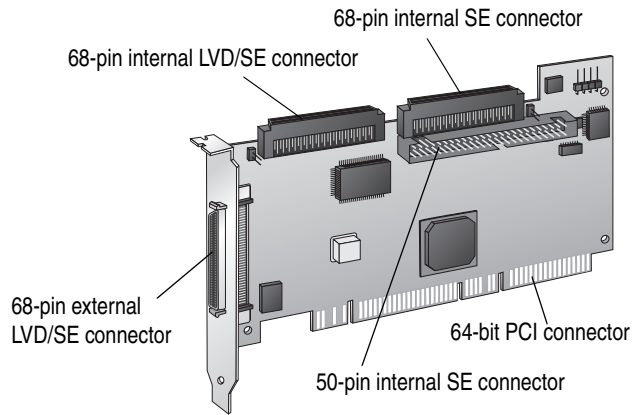
CD with the PowerDomain
Control Utility and other
Adaptec SCSI utilities



Installation Guide

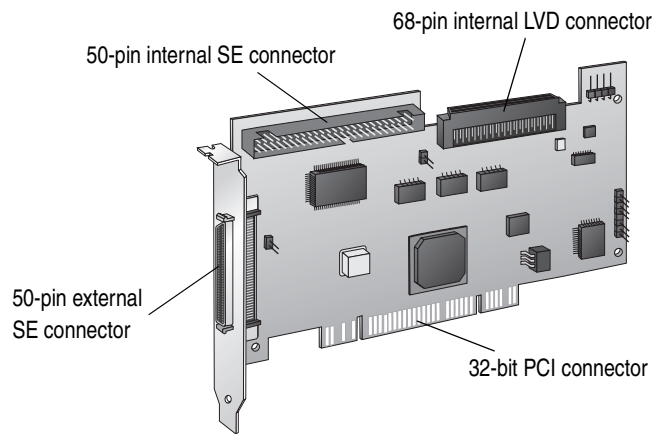
**LOCATING CONNECTORS ON THE
ADAPTEC POWERDOMAIN 29160/29160N**

The following illustration identifies the connectors on the Adaptec PowerDomain 29160 card:

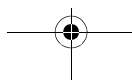


29160 SCSI PCI Card

The following illustration identifies the connectors on the Adaptec PowerDomain 29160N card:



29160N SCSI PCI Card



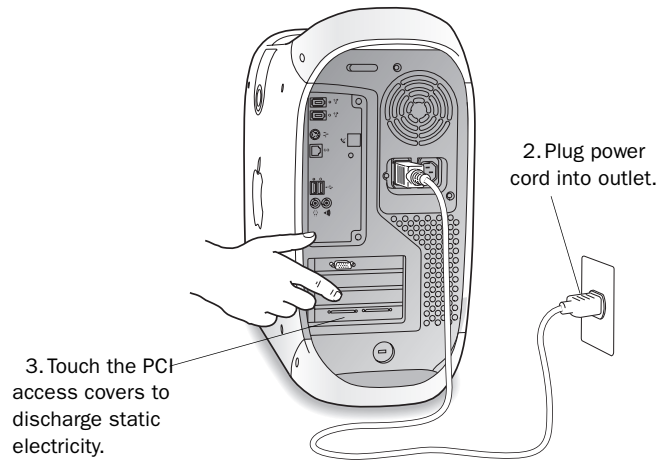
Adaptec PowerDomain 29160/29160N

INSTALLING THE ADAPTEC POWERDOMAIN 29160/29160N

STEP 1

Turn OFF the power to the computer and any attached devices.

1. Turn off the power to the computer and to all devices attached to it.



STEP 2

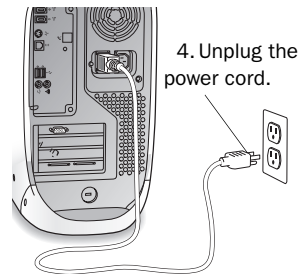
If you've not already done so, plug the power cord into a convenient electrical outlet.

STEP 3

Touch the metal PCI access covers on the back of the computer to discharge static electricity from your body and clothes.

STEP 4

Unplug the power cord, and open the cover—or remove the cover from the computer case. (Refer to the instructions in *Setting Up Your Power Macintosh*®.)



Installation Guide

WARNING To prevent injury from electrical shock, be sure to complete Step 4 before you continue!

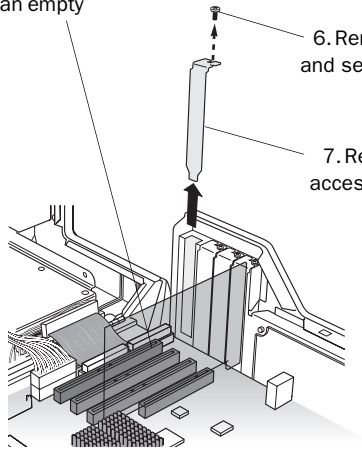
STEP 5

Locate an empty PCI slot.

5. Locate an empty PCI slot.

6. Remove the screw, and set it aside.

7. Remove the port access cover.



STEP 6

Remove the screw that secures its port access cover. Set the screw aside; you'll use it later.

STEP 7

Remove the port access cover.

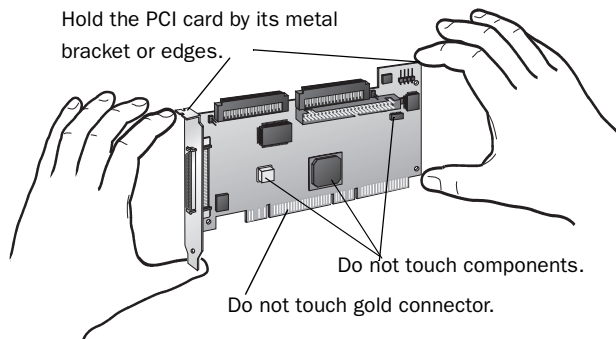
Adaptec PowerDomain 29160/29160N

STEP 8

Remove the Adaptec PowerDomain 29160 or 29160N from its antistatic bag.

CAUTION To prevent damage to the Adaptec PowerDomain 29160/29160N, always handle the PCI card by its metal bracket or its edges. *Do not* touch the gold connector or any of the components on the SCSI PCI card. Also, be sure you have discharged the static electricity from your body and clothes (see Step 3 above).

8. Remove the SCSI PCI card from its antistatic bag.

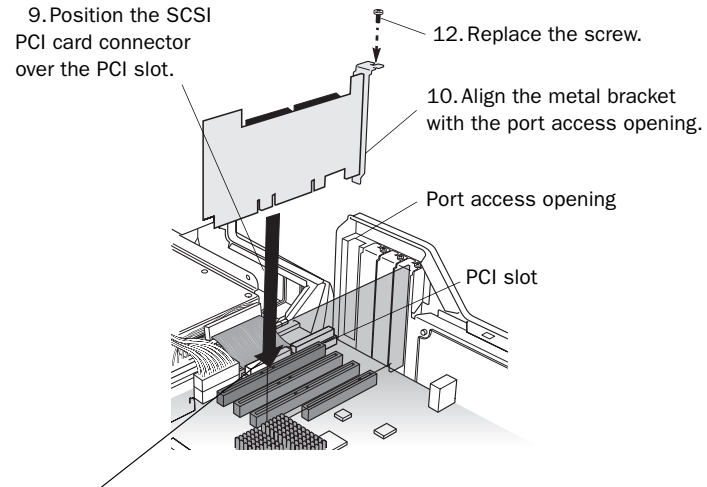


Installation Guide

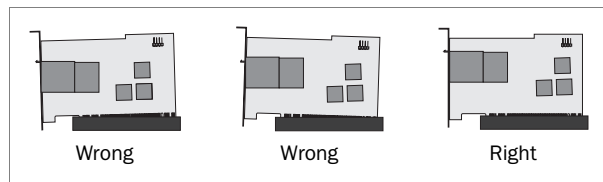
STEP 9

Position the SCSI PCI card connector over the PCI slot.

9. Position the SCSI PCI card connector over the PCI slot.



11. Firmly press the SCSI PCI card all the way into the slot. The SCSI PCI card should stand perpendicular to the PCI slot.



STEP 10

Align the metal bracket with the port access opening.

STEP 11

Firmly press the Adaptec PowerDomain 29160/29160N all the way into the slot. The SCSI PCI card should stand perpendicular to the PCI slot.

STEP 12

To secure the Adaptec PowerDomain 29160/29160N in place, replace the screw that you removed in Step 6.

Adaptec PowerDomain 29160/29160N

SETTING UP SCSI DEVICES

NOTE If you are not familiar with SCSI concepts or terminology, or if you would like a quick review of SCSI technology, read this section. If you know what SCSI is all about, skip to the next section, *Connecting SCSI Devices* on page 12.

You can connect as many as 15 SCSI devices—such as hard disk drives, scanners, and CD-ROM drives—to each Adaptec PowerDomain 29160/29160N installed in your Power Macintosh. However, before connecting the devices, you may need to do the following:

- Change SCSI IDs if two or more devices share the same SCSI ID
- Enable or disable termination

Following are some guidelines for setting SCSI IDs and termination on SCSI devices. Because setup can vary from device to device, always refer to the device documentation for specific instructions.

Understanding SCSI

SCSI (pronounced “scuzzy”) is an acronym for Small Computer System Interface. 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 card*, such as the Adaptec PowerDomain 29160 and 29160N, installed in a computer and one or more SCSI devices connected to the card by SCSI cables.

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

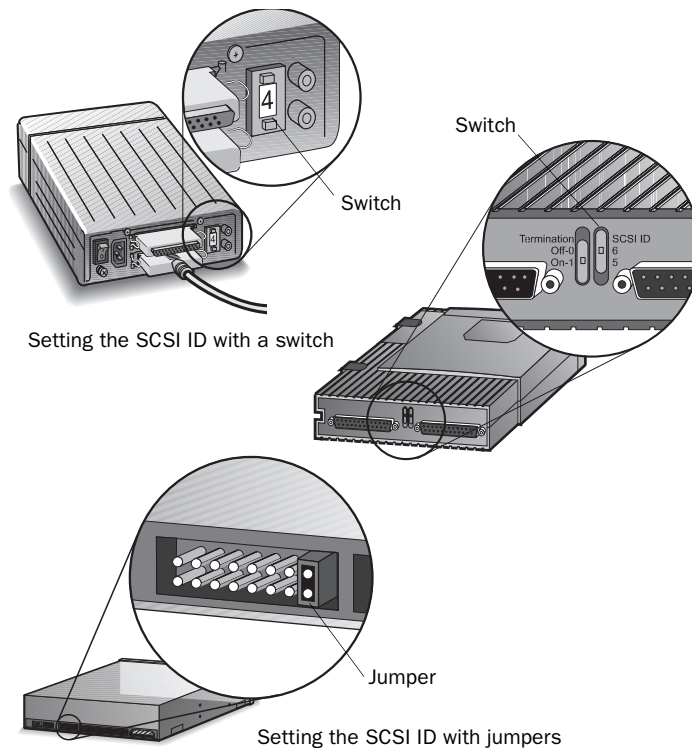
Installation Guide

Setting SCSI IDs

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.

Each device attached to the Adaptec PowerDomain 29160 or 29160N, as well as the SCSI PCI card itself, must be assigned a unique SCSI ID from 0 to 15. The Adaptec PowerDomain 29160 and 29160N IDs are preset to SCSI ID 7—the highest priority on the SCSI bus—and should not be changed. Most SCSI hard disk drives come from the factory preset to SCSI ID 0 or 6.

The SCSI IDs for internal devices are usually set with jumpers (small removable plugs whose location determines some aspect of a device's configuration); external devices are usually set with a switch on the back of the device. See the illustrations below for examples of three methods for setting the SCSI ID.



Adaptec PowerDomain 29160/29160N

Terminating the SCSI Bus

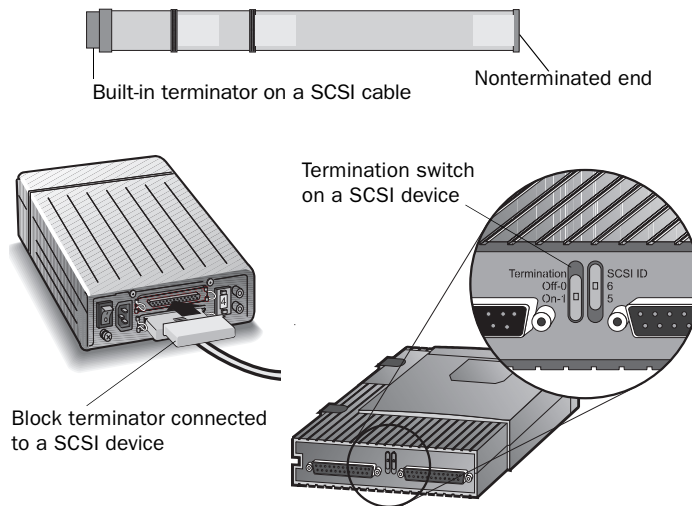
To ensure reliable communication on the SCSI bus, *terminators* must be installed (or enabled) on the devices at the physical ends of the SCSI bus. The terminators on all devices between the physical ends of the SCSI bus must be removed (or disabled).

Following are general guidelines for terminating a SCSI bus:

- 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.
- Some SCSI devices come from the factory with termination enabled, but most LVD SCSI devices come with termination disabled.

There are various methods for terminating hard disks and other SCSI devices. If you are not sure how to set termination for your particular device, refer to the device documentation.

The illustration below shows three possible areas where a SCSI bus is terminated:



Installation Guide

Bus Segments on the Adaptec SCSI Card

The Adaptec PowerDomain 29160/29160N SCSI PCI cards feature Adaptec's SpeedFlex technology. SpeedFlex technology allows newer, faster LVD SCSI devices and slower SE SCSI devices to run simultaneously on different segments of the SCSI bus. (See *Achieving Maximum Performance with SpeedFlex* on page 26 for more information.)

CONNECTING SCSI DEVICES

You can connect a total of 15 SCSI devices to either the Adaptec PowerDomain 29160 or 29160N.

NOTE SCSI devices can be connected to all four SCSI connectors on the Adaptec PowerDomain 29160, or all three connectors on the PowerDomain 29160N, at the same time.

Connecting Internal 68-Pin LVD SCSI Devices

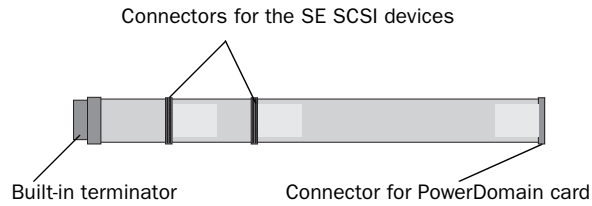
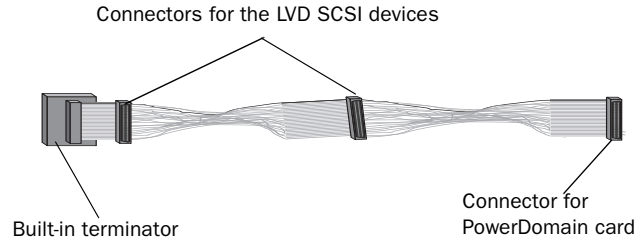
Use a 68-pin LVD cable to connect internal LVD SCSI devices to the 68-pin internal LVD/SE connector on the Adaptec PowerDomain 29160 or 29160N. The cable should look similar to the ones shown in Step 1 following.

NOTE We recommend that you connect *only* LVD SCSI devices to the 68-pin LVD/SE connectors. If you try to connect SE SCSI devices and LVD SCSI devices to the same SCSI bus segment, all devices will run at the slower Ultra SCSI speed. (See *Achieving Maximum Performance with SpeedFlex* on page 26 for more information about bus segments.)

Adaptec PowerDomain 29160/29160N

STEP 1

Locate the 68-pin internal LVD SCSI cable, which should look similar to one of the cables shown below. Cables can have twisted wires (first example) or flat, laminated wires (second example).

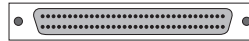


NOTE Internal cable connectors are *keyed* or shaped so you can attach them only one way.

To attach a trapezoidal-shaped cable connector such as the 68-pin connector, align the cable connector with the SCSI card connector or SCSI device connector, and press the cable connector firmly into the SCSI card or SCSI device connector.

Shaped cable connector

1. Align the shaped cable connector with the device connector.



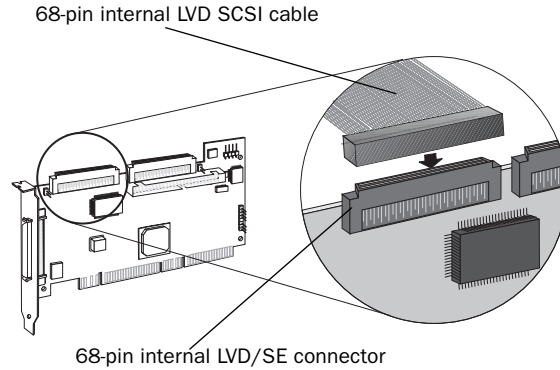
(68-pin connector)

2. Press the cable connector firmly into the device connector.

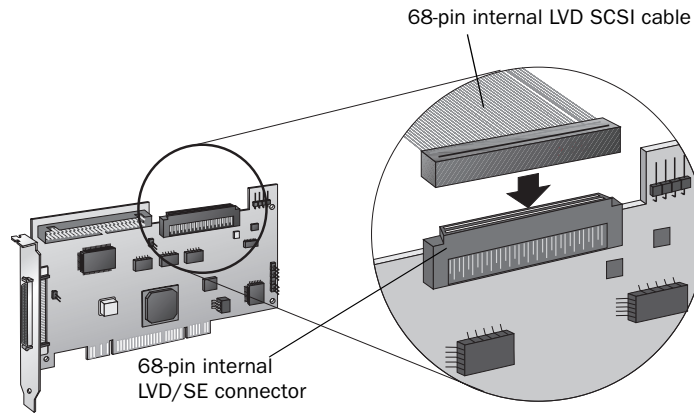
Installation Guide

STEP 2

Plug the nonterminated end of the cable into the LVD/SE or LVD SCSI connector on the Adaptec PowerDomain 29160 (first illustration below) or 29160N (second illustration below).



Adaptec PowerDomain 29160



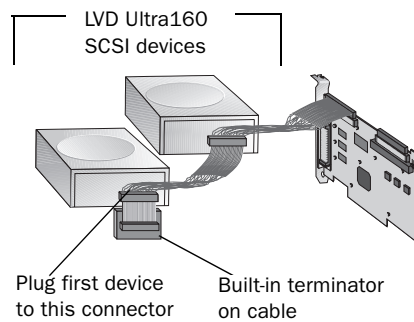
Adaptec PowerDomain 29160N

Adaptec PowerDomain 29160/29160N

STEP 3

Plug the remaining connector(s) into the internal LVD SCSI devices.

NOTE The illustration shows the 29160 card. The procedure is the same for the 29160N.



NOTE Internal LVD SCSI devices come from the factory with termination disabled and cannot be changed. Proper SCSI bus termination is provided by the terminator at the end of the LVD SCSI cable.

STEP 4

After you have connected all your internal LVD SCSI devices to the Adaptec PowerDomain 29160 or 29160N, plug a power cord bundle from the computer into each device.

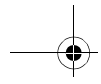
Power cord bundle from the computer



STEP 5

If you want to install internal Fast/Ultra-SE SCSI devices, go to the next section, *Connecting Internal 50-Pin Fast/Ultra-SE SCSI Devices* on page 17.

If you want to install internal Ultra/Wide SCSI devices on the 29160, go to the section *Connecting Internal 68-Pin SE SCSI Devices (29160 only)* on page 20.



Installation Guide

STEP 6

When you have installed all your internal devices, close the cover or replace the cover on the computer case. (Refer to the instructions in *Setting Up Your Power Macintosh*.)

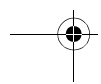
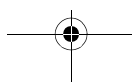
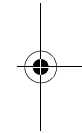
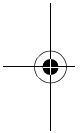
STEP 7

If you will not be installing external devices, connect all power cables to the computer and any previously attached external devices, and plug the cables into an electrical outlet. Turn ON all external devices first—before you turn ON the computer.

If you intend to install external devices, go to the section titled *Connecting External 68-pin LVD/SE SCSI Devices (29160 only)* on page 22 or the section titled *Connecting External 50-pin Fast/Ultra-SE SCSI Devices (29160N only)* on page 25.

STEP 8

If the computer or the devices *do not* work properly, turn to *Troubleshooting* on page 28.



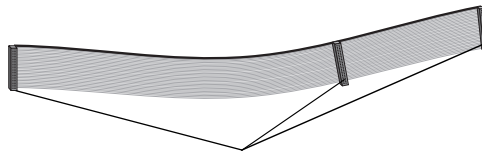
Adaptec PowerDomain 29160/29160N

Connecting Internal 50-Pin Fast/Ultra-SE SCSI Devices

Use a 50-pin internal Ultra SCSI cable to connect Fast/Ultra-SE SCSI devices that have standard 50-pin connectors to the 50-pin internal Fast/Ultra-SE connector on the Adaptec PowerDomain 29160 or 29160N.

STEP 1

Locate a 50-pin internal Ultra SCSI cable. It should look similar to the cable in the following illustration.



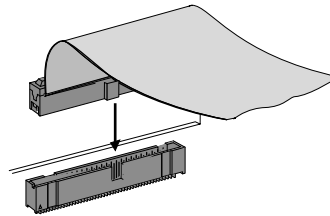
Nonterminated connectors for Ultra/Fast devices

NOTE Internal cable connectors are *keyed* or shaped so you can attach them only one way.

To attach a keyed cable connector, align the cable connector with the notch on the SCSI PCI card connector or SCSI device connector, and press the cable connector firmly into the SCSI PCI card or SCSI device connector.

Keyed cable connector

1. Align the cable connector tab with the device connector notch.

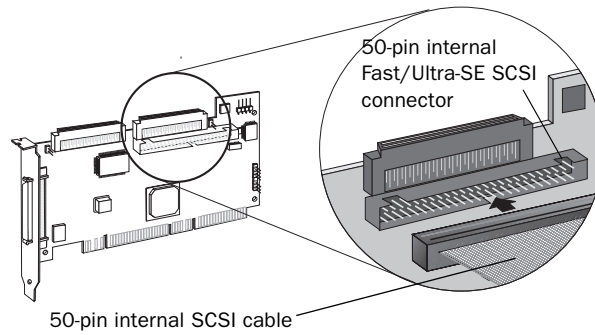


2. Press the cable connector firmly into the device connector.

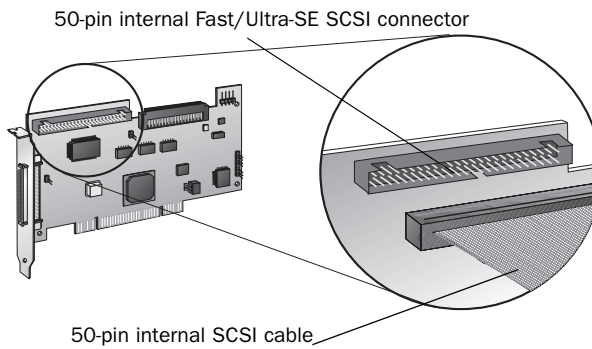
Installation Guide

STEP 2

Plug the long end of the cable into the 50-pin internal Fast/Ultra-SE SCSI connector on the Adaptec PowerDomain 29160 or 29160N, as shown in the following illustrations.



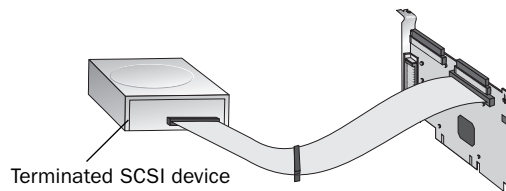
Adaptec PowerDomain 29160



Adaptec PowerDomain 29160N

STEP 3

Plug the other end of the cable into a terminated internal Fast/Ultra-SE SCSI device.

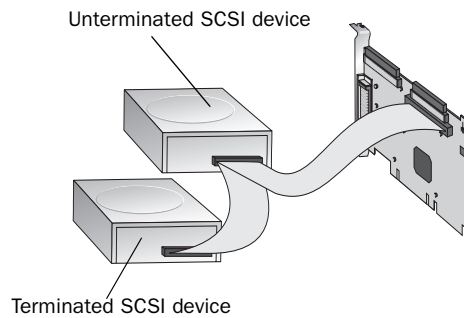


Adaptec PowerDomain 29160/29160N

STEP 4

To connect a second internal Fast/Ultra-SE SCSI device, plug the middle connector of the cable into the device. The device must *not* be terminated.

NOTE The illustration shows the 29160 card. The procedure is the same for the 29160N.



STEP 5

After you have connected all your internal Fast/Ultra-SE SCSI devices to the Adaptec PowerDomain 29160/29160N, plug a power cord bundle from the computer into each device.

Power cord bundle from the computer



STEP 6

If you want to install internal LVD SCSI devices, go to the previous section, *Connecting Internal 68-Pin LVD SCSI Devices* on page 12. If you want to install internal 68-pin SE SCSI devices, go to *Connecting Internal 68-Pin SE SCSI Devices (29160 only)* on page 20.

STEP 7

When you have installed all your internal devices, close the cover or replace the cover on the computer case. (Refer to the instructions in the *Setting Up Your Power Macintosh*.)

STEP 8

If you will not install external devices, connect all power cables to the computer and any previously attached external devices and plug the cables into an electrical outlet. Turn ON all external devices first; then turn ON the computer.

Installation Guide

If you want to install external devices, go to the section *Connecting External 50-pin Fast/Ultra-SE SCSI Devices (29160N only)* on page 25 or *Connecting External 68-pin LVD/SE SCSI Devices (29160 only)* on page 22.

STEP 9

If the computer or the devices *do not* work properly, turn to *Troubleshooting* on page 28.

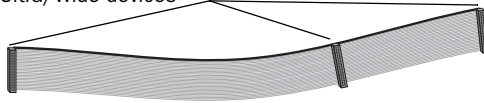
Connecting Internal 68-Pin SE SCSI Devices (29160 only)

Internal Ultra/Wide SCSI devices are connected to the 68-pin internal SE Wide SCSI connector. To do this use a 68-pin Wide SCSI cable like the one shown in Step 1 below. Continue following the steps to connect any SE devices.

STEP 1

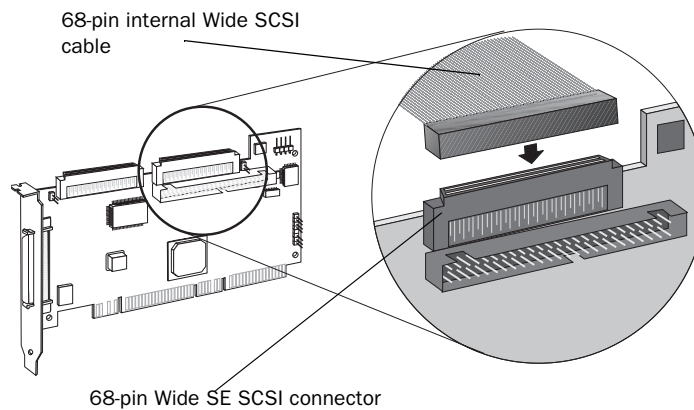
Locate a 68-pin internal Wide SCSI cable.

Nonterminated connectors for
Ultra/Wide devices



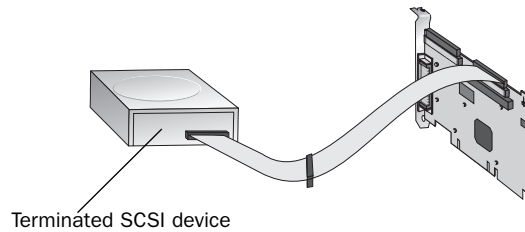
STEP 2

Plug one end of the cable to the Wide SCSI connector on the Adaptec PowerDomain 29160.

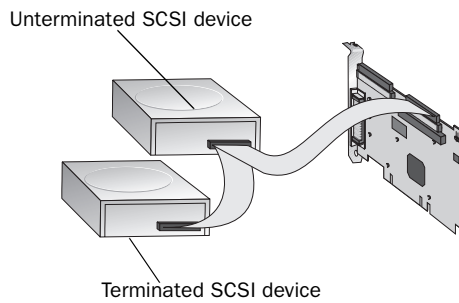


Adaptec PowerDomain 29160/29160N

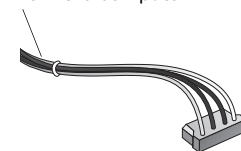
- STEP 3** Plug the other end of the cable to a *terminated* Ultra/Fast Wide SCSI device.



- STEP 4** If you have other Ultra/Fast Wide SCSI devices, attach them to the connectors between the two ends of the cable. Be sure these other devices are *unterminated*.



- STEP 5** After you have connected all your internal SE SCSI devices to the Adaptec PowerDomain 29160, plug a power cord bundle from the computer into each device.



- STEP 6** When you have installed all your internal devices, close the cover or replace the cover on the computer case. (Refer to the instructions in the *Setting Up Your Power Macintosh* that came with your computer.)

Installation Guide

STEP 7

If you will not install external devices, connect all power cables to the computer and any previously attached external devices, and plug the cables into an electrical outlet. Turn ON all external devices first; then turn ON the computer.

If you intend to install external devices, see *Connecting External 68-pin LVD/SE SCSI Devices (29160 only)* below.

STEP 8

If the computer or the devices *do not* work properly, turn to *Troubleshooting* on page 28.

Connecting External 68-pin LVD/SE SCSI Devices (29160 only)

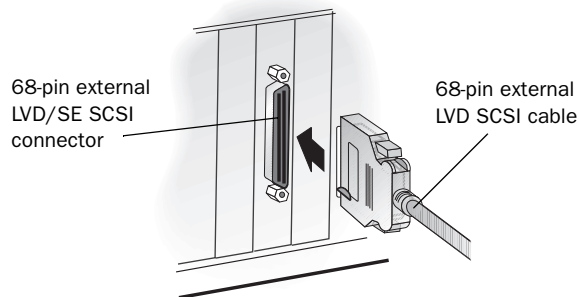
Connect external LVD SCSI devices to the 68-pin external LVD/SE SCSI connector. Each External device will require a 68-pin external LVD SCSI cable.

NOTE We recommend that you connect *only* LVD SCSI devices to the external SCSI connector. If you also attach older Ultra SCSI devices, the data transfer speed of the LVD SCSI devices will drop to the speed of the older devices—including those connected to the internal LVD connector. (See *Achieving Maximum Performance with SpeedFlex* on page 26 for more information on this subject.)

Follow these steps to connect the external devices:

STEP 1

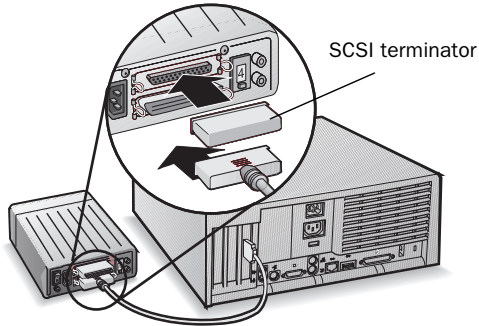
Connect one end of the external LVD SCSI cable to the external LVD/SE connector on the PowerDomain 29160 Card.



Adaptec PowerDomain 29160/29160N

STEP 2

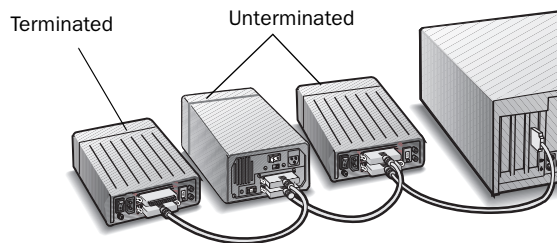
Connect the other end of the external SCSI cable to a SCSI connector on the back of an external SCSI device. If you are installing only one external device, terminate the device and skip to Step 4.

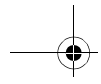


NOTE An LVD terminator must be used for LVD SCSI devices to ensure optimum performance. See *Terminating the SCSI Bus* on page 11 for more information.

STEP 3

Connect other external devices by cabling each device to the previous one, as shown below. Terminate only the device at the end of the chain.

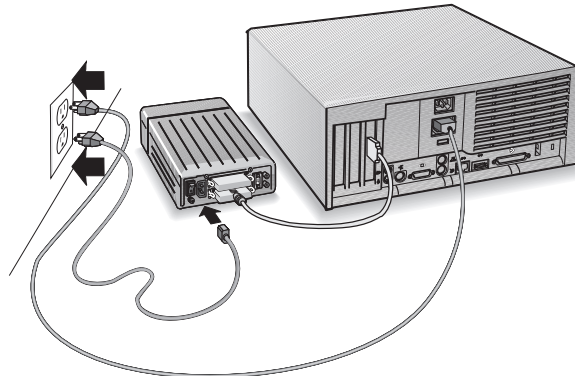




Installation Guide

STEP 4

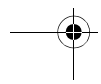
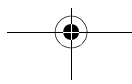
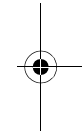
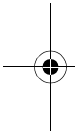
Connect power cables to all external devices and to the computer, and plug the cables into an electrical outlet.



STEP 5

When you have installed your internal and external devices, turn ON all external devices; then turn ON the computer.

If the computer or the devices do not work properly, turn to *Troubleshooting* on page 28.



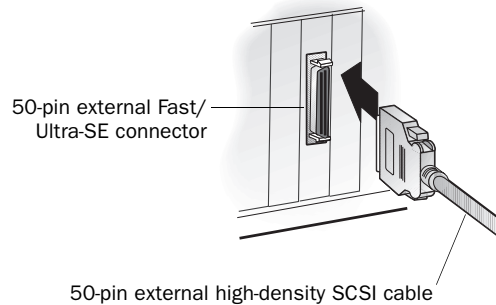
Adaptec PowerDomain 29160/29160N

Connecting External 50-pin Fast/Ultra-SE SCSI Devices (29160N only)

Use a 50-pin external Fast/Ultra-SE cable to attach external Fast/Ultra-SE SCSI devices that have standard 50-pin connectors to the Fast/Ultra-SE external connector of the Adaptec PowerDomain 29160N.

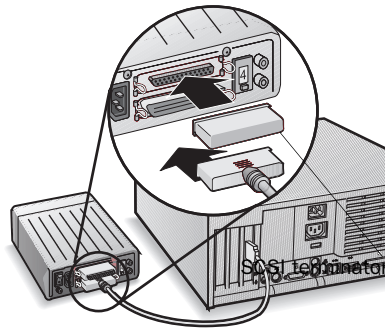
STEP 1

Connect one end of a 50-pin external high-density SCSI cable to the 50-pin external Fast/Ultra-SE connector on the Adaptec PowerDomain 29160N.



STEP 2

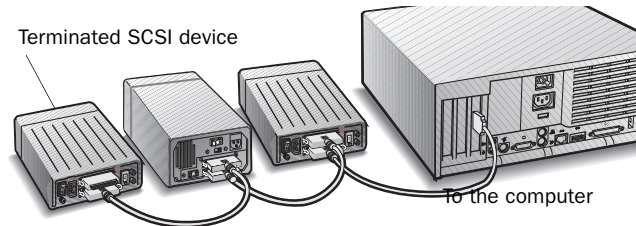
Connect the other end of the cable to the SCSI connector on the back of an external Fast/Ultra-SE SCSI device. If you are installing only one external device, terminate the device and skip to Step 4.



Installation Guide

STEP 3

Connect other external Fast/Ultra-SE SCSI devices by attaching each device to the previous one with a 50-pin external SCSI cable until all devices are connected. The device at the end of the chain must be the only external device that is terminated.



STEP 4

Connect all power cables to the computer and external devices, and plug the cables into an electrical outlet.

STEP 5

When you have installed your internal and external devices, turn ON all external devices; then turn ON the computer.

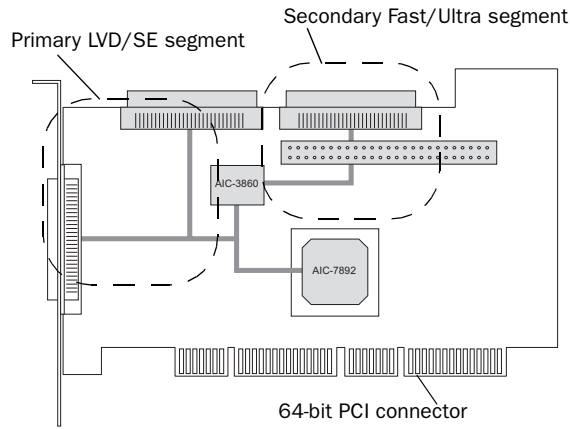
If the computer or the devices *do not* work properly, turn to *Troubleshooting* on page 28.

ACHIEVING MAXIMUM PERFORMANCE WITH SPEEDFLEX

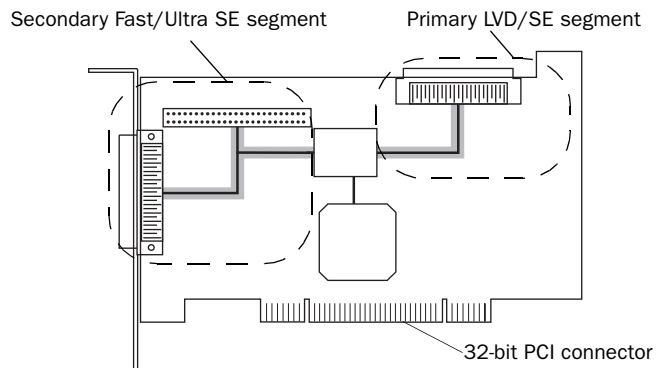
The Adaptec PowerDomain 29160/29160N features Adaptec SpeedFlex technology. SpeedFlex technology ensures that you get the most performance from your LVD SCSI devices by electronically isolating the LVD portion (segment) of the SCSI bus from the Ultra SCSI segment of the SCSI bus. When you attach only LVD SCSI devices to the LVD connector(s), all LVD devices should operate at their maximum potential data transfer rates, that is, 80 MB/sec for Ultra2-LVD devices and 160 MB/sec for Ultra160-LVD devices. The device driver being used with the device is also somewhat responsible for the final negotiated speed. Ultra SCSI (and slower) devices attached to either of the Fast/Ultra-SE connectors operate at speeds up to 20 MB/sec. With the SpeedFlex advantage, the Adaptec PowerDomain 29160/29160N supports both LVD and non-LVD SCSI devices—all on one SCSI bus.

Adaptec PowerDomain 29160/29160N

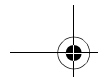
The following illustrations shows the Ultra SCSI and LVD bus segments on the Adaptec PowerDomain 29160 and the Adaptec PowerDomain 29160N.



Bus Segments on the Adaptec PowerDomain 29160



Bus Segments on the Adaptec PowerDomain 29160N



Installation Guide



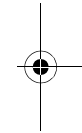
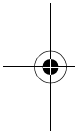
NOTE If you attach any non-LVD SCSI devices to an LVD connector, the data transfer rate for all devices on that segment is reduced to the maximum Ultra SCSI speed. However, if you attach only LVD devices to the LVD connector(s), all devices should operate at their maximum potential data transfer rates: Ultra2 SCSI devices operate at a maximum of 80 MB/sec, and Ultra160 devices operate at a maximum of 160 MB/sec.

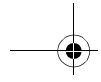
TROUBLESHOOTING

If you encounter any problems after installation, check the following items first:

- Are all SCSI devices powered on?
- Are all SCSI cables and power cables properly connected?
- Does each device on the SCSI bus have a unique SCSI ID?
- Is the SCSI chain properly terminated? Refer to your device documentation and to the following sections in this installation guide:
 - *Terminating the SCSI Bus* on page 11
 - *Connecting Internal 68-Pin LVD SCSI Devices* on page 12
 - *Connecting Internal 50-Pin Fast/Ultra-SE SCSI Devices* on page 17
 - *Connecting Internal 68-Pin SE SCSI Devices (29160 only)* on page 20
 - *Connecting External 50-pin Fast/Ultra-SE SCSI Devices (29160N only)* on page 25
 - *Connecting External 68-pin LVD/SE SCSI Devices (29160 only)* on page 22

If you are still unable to resolve a problem, refer to the Adaptec Web site at <http://www.adaptec.com> for additional troubleshooting information and direction.





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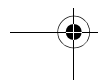
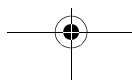
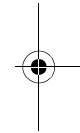
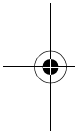
Changes

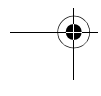
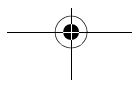
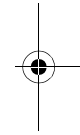
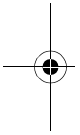
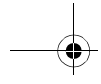
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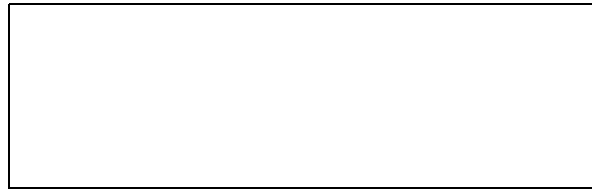


Adaptec Customer Support

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, use the support options listed below.

Technical Support Identification (TSID) Number

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



Support Options

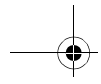
- Search the Adaptec Support Knowledgebase (ASK) at <http://ask.adaptec.com> for articles, troubleshooting tips, and frequently asked questions for your product.
- For support via Email, submit your question to Adaptec's Technical Support Specialists at <http://ask.adaptec.com>.

North America

- Visit our Web site at <http://www.adaptec.com>.
- For information about Adaptec's support options, call +1 408-945-2550, 24 hours per day, 7 days per week.
- To speak with a Technical Support Specialist, call +1 408-934-7274, Monday–Friday, 6:00 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 3460To 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 or fax +32 11 300 375



Australia and New Zealand

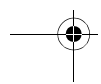
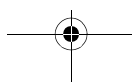
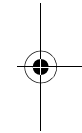
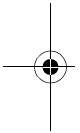
- Visit our Web site at <http://www.adaptec.com.au>.
- To speak with a Technical Support Specialist, call +612 9416 0698, Monday–Friday, 10:00 A.M. to 4:30 P.M., Eastern Australia Time. To expedite your service, have your computer in front of you.

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.

Adaptec, Inc. PowerDomain 29160
PowerDomain 29160N

 Tested to Comply
With FCC Standards

FOR HOME OR OFFICE USE

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

Australian/New Zealand Compliance Statement

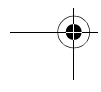
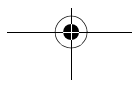
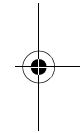
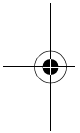
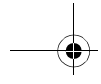
This device has been tested and found to comply with the limits for a Class B digital device, pursuant to the Australian/New Zealand standard AS/NZS 3548 set out by the Spectrum Management Agency.

Canadian Compliance Statement

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

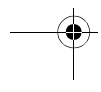
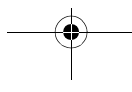
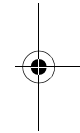
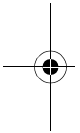
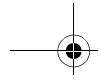
Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

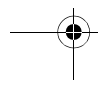
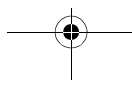
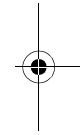
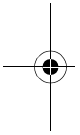
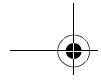
Japanese Compliance (Voluntary Control Council Initiative)

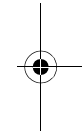
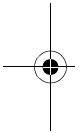
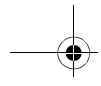


Limited 5-Year Warranty

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.







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