

AcerPower Sd

User's guide

Copyright © 2002 Acer Incorporated
All Rights Reserved.

AcerPower Sd
User's guide

Changes may be made periodically to the information in this publication without obligation to notify any person of such revision or changes. Such changes will be incorporated in new editions of this manual or supplementary documents and publications. This company makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims the implied warranties of merchantability or fitness for a particular purpose.

Record the model number, serial number, purchase date, and place of purchase information in the space provided below. The serial number and model number are recorded on the label affixed to your computer. All correspondence concerning your unit should include the serial number, model number, and purchase information.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopy, recording, or otherwise, without the prior written permission of Acer Incorporated.

Model Number : _____

Serial Number: _____

Purchase Date: _____

Place of Purchase: _____

Acer and the Acer Logo are registered trademarks of Acer Inc. Other company's product names or trademarks are used herein for identification purposes only and belong to their respective companies.

Notices

FCC notice

This device 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 device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device 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 the device and receiver
- Connect the device into 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

Notice: Shielded cables

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

Notice: Peripheral devices

Only peripherals (input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this equipment. Operation with noncertified peripherals is likely to result in interference to radio and TV reception.



.....

Caution! Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this computer.

Use conditions

This part 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.

Notice: Canadian users

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

Remarque à l'intention des utilisateurs canadiens

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

Important safety instructions

Read these instructions carefully. Save these instructions for future reference.

1. Follow all warnings and instructions marked on the product.
2. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
3. Do not use this product near water.
4. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
5. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
6. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
7. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
8. If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
10. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.
11. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the power cord or plug is damaged or frayed
 - b. If liquid has been spilled into the product
 - c. If the product has been exposed to rain or water
 - d. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.
 - e. If the product has been dropped or the cabinet has been damaged
 - f. If the product exhibits a distinct change in performance, indicating a need for service.
12. Replace the battery with the same type as the product's battery we recommend. Use of another battery may present a risk of fire or explosion. Refer battery replacement to a qualified serviceman.
13. **Warning!** Batteries may explode if not handled properly. Do not disassemble or dispose of them in fire. Keep them away from children and dispose of used batteries promptly.
14. Use only the proper type of power supply cord set (provided in your accessories box) for this unit. It should be a detachable type: UL listed/CSA certified, type SVT, rated 7A 125V minimum, VDE approved or its equivalent. Maximum length is 15 feet (4.6 meters).

Laser compliance statement

The CD or DVD drive in this computer is a laser product. The CD or DVD drive's classification label (shown below) is located on the drive.

CLASS 1 LASER PRODUCT

CAUTION: INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.

Lithium battery statement

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Year 2000 compliance statement

The AcerPower Sd computer carries the "Hardware NSTL Tested Year 2000 Compliant" logo, which certifies that this model has been tested by NSTL using the YMark2000 test, and has been found to meet NSTL's standards for Year 2000 hardware compliance.



For more details, check the Acer Year 2000 Resource Center at <http://global.acer.com/service/pcy2000.html>

Contents

Notices	iii
FCC notice	iii
Important safety instructions	v
Laser compliance statement	vii
Lithium battery statement	vii
Year 2000 compliance statement	vii
1 First things first	1
Package contents	3
Taking care of your computer	4
Important tips	4
Cleaning and servicing	4
Asking for technical assistance	5
Accessing the online guide	6
2 System tour	7
Features	9
Performance	9
Multimedia	9
Connectivity	9
Front panel	11
Rear panel	13
Keyboard	15
Function keys	16
Lock keys	16
Windows keys	17
Cursor keys	17
Palm rest	17
Volume control/Mute knob	18
Multimedia keys	18
Internet/Suspend keys	19
Programmable keys	19
Mouse	20
Disk drives	21
Floppy drive	21
CD-ROM/DVD-ROM/CD-RW drive	22
Hard disk	24
3 Setting up your computer	25
Arranging a comfortable work area	27
Adjusting your chair	27

Positioning your PC	27
Positioning your monitor	28
Positioning your keyboard	28
Positioning your mouse	28
Connecting peripherals	29
Mouse	29
Keyboard	31
Monitor	33
Power cable	34
Turning on your computer	35
Turning off your computer	37
Connecting options	38
Printer	38
Serial mouse	40
LCD Monitor	41
Network	42
Multimedia devices	43
USB devices	47
4 Upgrading your computer	49
Installation precautions	51
ESD precautions	51
Preinstallation instructions	51
Post-installation instructions	52
Opening your computer	53
To remove the side panel	53
To replace the side panel	55
Internal components	57
System boards	58
Mainboard	58
Audio board	61
Upgrading your computer	62
Installing additional memory	62
Replacing the hard disk	64
Replacing the CD-ROM/DVD-ROM/CD-RW drive	68
Installing an expansion card	71
5 Software	73
Acrobat Reader	76
Norton AntiVirus	77
NTI CD-Maker (for models with CD-RW)	78
PowerDVD (for models with DVD)	79
Reinstalling programs	80

Recovering your system	80
6 Q & A	81
Index	87

1 First things first

This chapter describes the contents of your computer package and also provides important tips on how to take care of your computer.

Package contents

Before you unpack your computer, make sure that you have enough space to set up your computer.

Carefully unpack the carton and remove the contents. If any of the following items are missing or damaged, contact your dealer immediately:

- AcerPower Sd
- Items contained in the accessory box
 - USB or PS/2 keyboard
 - USB or PS/2 mouse
- User's guide
- Other user documentation and third-party software

Taking care of your computer

Please read the important instructions listed in this section. Following these instructions will help you maximize the durability of your computer.

Important tips

- Do not expose the computer to direct sunlight. Do not place it near sources of heat, such as a radiator.
- Do not subject the computer to magnetic fields.
- Do not expose the computer to rain or moisture.
- Do not spill water on the computer.
- Do not subject the computer to heavy shock or vibration.
- Do not expose the computer to dust and dirt.
- Never place the system on uneven surfaces.
- Do not step on the power cord or place heavy objects on top of it. Carefully route the power cord and any cables away from personal traffic.
- When unplugging the power cord, do not pull on the cord itself but pull on the plug.
- The total ampere rating of the equipment plugged in should not exceed the ampere rating of the cord if you are using an extension cord. Also, the total current rating of all equipment plugged into a single wall outlet should not exceed the fuse rating.
- Check the documentation that came with your software programs to see if you can select other combinations of resolution and color. These adjustments could make viewing the screen more comfortable.

Cleaning and servicing

To clean your computer and keyboard

1. Turn off the computer and unplug the power cord.
2. Use a soft cloth moistened with water and gently wipe the exterior of the computer and the keyboard. Do not use liquid or aerosol cleaners.

To clean your pointing device

To clean your regular mouse (with rubber ball)

1. Open the circular cover underneath the mouse.
2. Take out the rubber ball and wipe it with a soft, damp cloth.
3. Put the ball back and close the cover.

To clean your optical mouse

For users of an optical mouse, refer to the documentation that came with your mouse for maintenance instructions.

To clean your monitor

Make sure that you keep your screen clean. For cleaning instructions, refer to the documentation that came with your monitor.

When to contact a service technician

- If you dropped and damaged the computer.
- If liquid has been spilled into the computer.
- If the computer is not operating normally.

Asking for technical assistance

For technical assistance, contact your local dealer or distributor. You may also access the Acer Web site (www.acer.com) for information on how and where to contact the service centers available in your area.

Accessing the online guide

You may also refer to the AcerPower Sd online guide for information about your computer.

To access the online guide (for Windows XP)

1. On the Windows XP taskbar, click on the Start button, highlight and select Help and Support Center.
2. On the Help and Support Center home page, double-click the AcerPower Sd Online icon.

To access the online guide (for Windows 2000)

1. Double-click on the AcerPower Sd Online icon on your Windows desktop.

2 System tour

This chapter discusses the features and components of your computer.

Features

Here are just a few of your computer's many features:

Performance

- Intel Pentium® 4 processor
- System memory expandable to a maximum of 2GB using DDR (Double Data Rate) SDRAM (Synchronous Dynamic Random Access Memory) DIMM modules



Note: To capitalize on the system memory capacity mentioned above, you must use 1-GB capacity memory modules which are not yet available in the market. The biggest capacity memory module type currently available is 512-MB which allows a maximum of 1GB.

- Power management function
- 3.5-inch floppy drive
- DVD-ROM, CD-ROM or CD-RW drive
- High-capacity, Enhanced-IDE hard disk

Multimedia

- Integrated 256-bit graphics accelerator
- 3-D quality audio system via onboard audio controller
- Audio-in/Line-in, Audio-out/Line-out, Headphone-out, Mic-in, and Game/MIDI interfaces



Note: The system has two microphone-in jacks (front and rear). However, you can not use both of them at the same time. By default, your system enables the microphone-in jack in front and disables the one at the back.

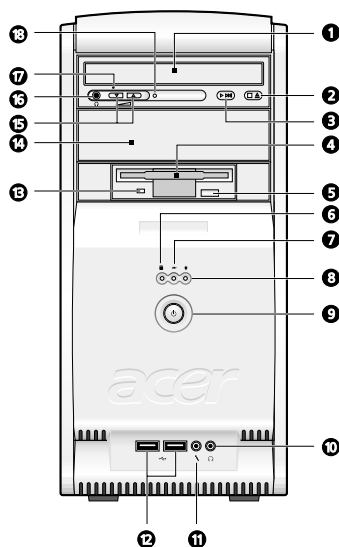
Connectivity

- Two PS/2 interfaces for mouse and keyboard
- One serial and one parallel interfaces

- One VGA port
- Universal Serial Bus (USB) ports (two on the front and two on the rear panel)
- High-speed fax/data PCI modem (optional)
- 10Base-T/100Base-TX network support with remote wake-up function

Front panel

Your computer's front panel consists of the following:



Label	Icon	Component
1		CD-ROM/DVD-ROM/CD-RW tray
2		Stop/Eject button
3		Play/Forward button
4		3.5-inch floppy drive
5		Floppy drive eject button
6		Hard disk activity light-emitting diode (LED)

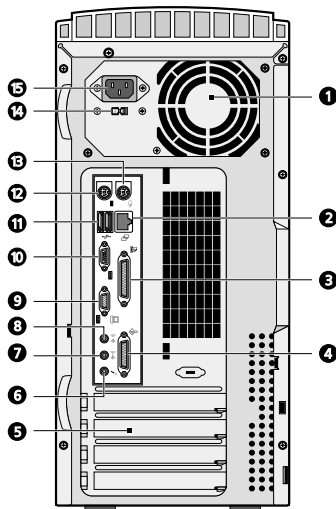
Label	Icon	Component
7		LAN activity LED
8		Power LED
9		Power switch
10		Speaker-out/Line-out port
11		Microphone-in jack (front) ^{see note}
12		USB ports
13		Floppy drive LED
14		5.25-inch drive bays
15		Volume control button
16		CD-ROM/DVD-ROM/CD-RW Headphone/Earphone port
17		CD-ROM/DVD-ROM/CD-RW emergency eject hole
18		CD-ROM/DVD-ROM/CD-RW LED



Note: The system has two microphone-in jacks (front and rear). However, you can not use both of them at the same time. By default your system enables the microphone-in jack in front and disables the one at the back.

Rear panel

Your computer's rear panel consists of the following:



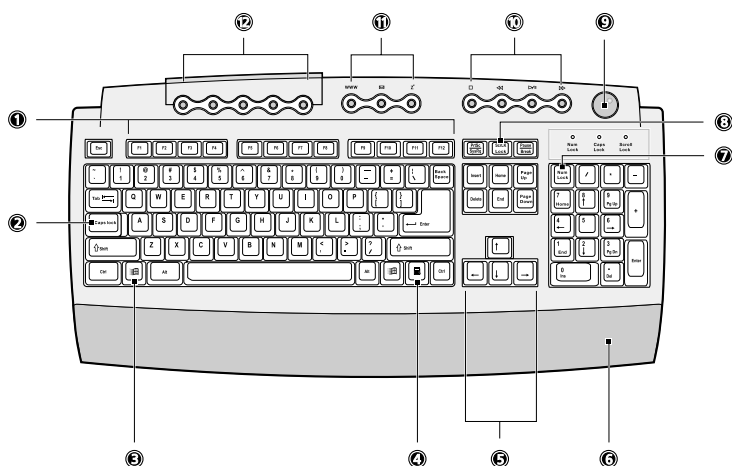
Label	Icon	Color	Component
1			Power supply
2			Network port
3		Burgundy	Parallel/Printer port
4		Gold	Game/MIDI port
5			Expansion slots
6		Pink	Microphone-in jack (rear)

Label	Icon	Color	Component
7		Light blue	Audio-in/Line-in jack
8		Lime	Audio-out/Line-out jack
9		Blue	VGA port
10		Teal or Turquoise	Serial port
11		Black	USB ports
12		Purple	PS/2 keyboard port
13		Green	PS/2 mouse port
14			Voltage selector switch
15			Power cord socket

For information on how to connect the peripherals, see “Connecting peripherals” on page 29 and “Connecting options” on page 38.

Keyboard

The keyboard has full-sized keys that include separate cursor keys, two Windows keys, and twelve function keys.



No.	Description
1	Function keys
2	Caps lock
3	Windows logo key
4	Application key
5	Cursor keys
6	Palm rest
7	Num lock key
8	Scroll lock key
9	Volume control/Mute knob
10	Multimedia keys

No.	Description
11	Internet/Suspend keys
12	Programmable keys

Function keys

The function keys, F1 - F12, lets you perform specific functions, depending on the application that uses them.

Lock keys

The keyboard has three lock keys which you can toggle on and off to switch between two functions.

Lock key	Description
Caps Lock	When activated, all alphabetic characters typed appear in uppercase (same function as pressing Shift + <letter>).
Num Lock	When activated, the keypad is set to numeric mode; i.e., the keys function as a calculator (complete with arithmetic operators such as +, -, * and /).
Scroll Lock	When activated, the screen moves one line up or down when you press the up arrow or down arrow respectively. Take note that Scroll Lock may not work with some applications.

Windows keys

The keyboard has two keys that perform Windows-specific functions.

Key	Description
Windows logo key 	Start button. Combinations with this key perform special functions, such as: • Windows + Tab: Activate the next Taskbar button • Windows + E: Explore My Computer • Windows + F: Find Document • Windows + M: Minimize All • Shift + Windows + M: Undo Minimize All • Windows + R: Display Run dialog box
Application key 	Opens the applications context menu (same function as clicking the right button of the mouse).

Cursor keys

The cursor keys, also called the arrow keys, let you move the cursor around the screen. They serve the same function as the arrow keys on the numeric keypad when the Num Lock is toggled off.

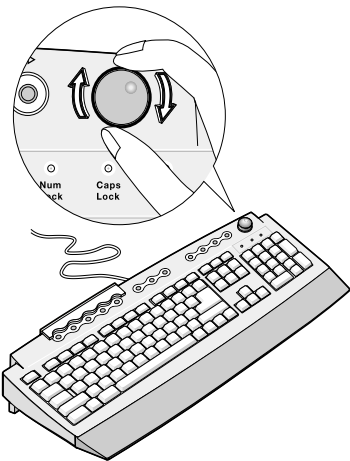
Palm rest

The detachable palm rest provides you a comfortable place to rest your hands while typing.

Volume control/Mute knob



The volume control/mute knob controls the speaker volume. Turn it clockwise or counterclockwise to adjust the volume. Press it to toggle between mute and sound.



Multimedia keys

Allow you to conveniently play, pause, stop, step forward, or step back a song or movie using your keyboard.

Icon	Key	Description
▶▶ /	Play/Pause	Press to start playing the audio track or video file. Press again to pause.
■	Stop	Press to stop playing the audio track or video file.
▶▶	Forward	Press to skip forward to the next track or video file and start playing.

Icon	Key	Description
	Backward	Press to skip backward to the previous track or video file and start playing.

Internet/Suspend keys

The Internet/Suspend keys consist of three buttons:

Icon	Key	Description
	Email	Launches your email application.
WWW	Web browser	Launches your current default browser.
Z	Suspend	Press this button to put system to sleep.

Programmable keys

The programmable keys help you directly access a URL (Web site) or launch any program, files, or application in your system. The fifth key is set to launch the Windows Media Player. If you want to configure the settings of each key, right click on the Magic Keyboard icon located on the desktop.

Mouse

Your mouse has one ratchet wheel and two buttons: a left button and a right button. Quickly pressing and releasing the buttons is called clicking. Sometimes, you will need to do a double-click (clicking the same button twice quickly) or a right-click (clicking the right button quickly).

The ratchet wheel in between the two buttons is added to provide easier scrolling capability. By simply moving the wheel with your index finger, you can quickly move through multiple pages, lines, or windows. The wheel may also function as a third button allowing you to quickly click or double-click an icon or a selected item.

For information on how to clean your mouse, see “To clean your pointing device” on page 5.

PS/2 Mouse



USB Mouse



Note: If you are left-handed, refer to your Windows manual for instructions on how to set up your mouse for left-handed use.

Disk drives

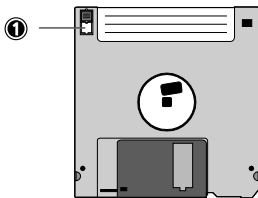
Your computer comes with the following disk drives:

Floppy drive

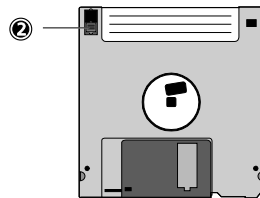
Your computer's 3.5-inch floppy drive accepts 720-KB and 1.44-MB capacity diskettes.

The floppy diskettes are compact, lightweight, and easy to carry around. Here are some tips on how to take care of your diskettes:

- Always make backup copies of the diskettes that contain important data or program files.
- Keep diskettes away from magnetic fields and sources of heat.
- Avoid removing a diskette from a drive when the floppy drive activity light is on.
- Write-protect your diskettes to prevent accidental erasure. To do this, slide the write-protect tab to the write-protect position.



1-Write-protected



2-Not Write-protected

- When you put a label on a 3.5-inch diskette, make sure that the label is properly attached (flat on the surface) and within the labeling area (area with a slight surface depression) on the diskette. An improperly attached label may cause a diskette to get stuck in a drive when you are inserting or removing it.

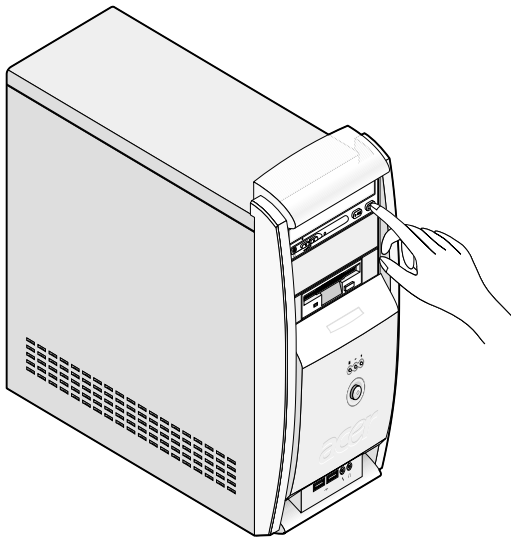
CD-ROM/DVD-ROM/CD-RW drive

Your computer may come with a CD-ROM, DVD-ROM or a CD-RW drive. This drive is located on the front panel of your computer. The CD-ROM drive allows you to play different types of compact discs (CDs). The DVD-ROM drive allows you to play not only old CD-ROMs, CD-I discs, and video CDs, but new digital video discs (DVDs) as well. The CD-RW drive allows you to record or burn CD-RW (recordable or rewritable) discs. DVD or DVD-ROM is a type of disc media that holds a minimum of 4.7-GB (gigabytes), enough for a full-length movie. It may eventually replace CD-ROMs, as well as VHS video cassettes and laser discs.

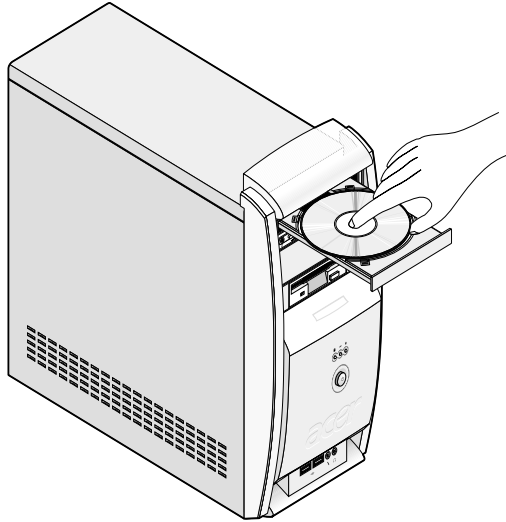
CDs and DVDs, like diskettes, are also compact, lightweight, and easy to carry around. However, they are more delicate than diskettes and must be handled with extra care.

To insert a CD or DVD into your computer's CD-ROM or DVD drive:

1. Gently push the eject button located on the front panel.



2. When the disc tray slides open, insert the CD or DVD. Make sure that the label or title side of the disc is facing upward. When holding a disc, hold it by the edges to avoid leaving smudges or fingerprints.



3. Push the eject button again to close the tray.

To take care of your CDs and DVDs

- Keep your disc in its case when not in use to avoid scratches or other damage. Any kind of dirt or damage can affect the data on the disc, impair the disc lens reader on the CD or DVD drive, or stop the computer from successfully reading the disc.
- When handling discs, always hold them by the edges to avoid smudges or fingerprints.
- When cleaning discs, use a clean, dust-free cloth and wipe in a straight line from the center to the edge. Do not wipe in a circular motion.
- Clean your CD or DVD drive periodically. You may refer to the Cleaning kit for instructions. Cleaning kits can be purchased in any computer or electronics shop.

Hard disk

Your computer is preinstalled with a high-capacity Enhanced-IDE (E-IDE) hard disk. If you want to replace your hard disk or upgrade it, contact your dealer or a qualified service technician for support.

3 Setting up your computer

This chapter contains step-by-step instructions on how to set up your computer and connect additional peripherals.

Arranging a comfortable work area

Working safely begins with the arrangement of your work space and the proper use of equipment. For this reason, it is very important to take time and think about how you are going to arrange your work area.

Here are some points to consider:

Adjusting your chair

Having the right kind of chair does not necessarily mean that you'll be properly supported. It is necessary to adjust your chair to fit your body. Proper body posture will make you more comfortable and productive.

- Avoid tilting your chair. If you have a chair that tilts, lock the tilt knobs so that your chair will not tilt forward or backward while you are using your computer.
- Adjust your chair height in such a way that you can sit on it with your thighs parallel to the floor and your feet resting flat on the floor.
- Rest your body on the chair back. Your torso works harder to maintain balance if you do not rest your body on the chair back.

Positioning your PC

Take note of the following when selecting a location for your computer:

- Do not put your computer near any equipment that might cause electromagnetic or radio frequency interference such as radio transmitters, televisions, copy machines, or heating and air-conditioning equipment.
- Avoid dusty areas and extremes of temperature and humidity.
- You may place your computer beside your desk or under your table, as long as it does not block the space that you need for working and moving.

Positioning your monitor

Place your monitor at a comfortable viewing distance, usually 50 to 60 centimeters away. Adjust the display in such a way that the top of the screen is at or slightly below eye level.

Positioning your keyboard

The location of the keyboard is a very important factor to your posture. Placing it too far away will make your body lean forward forcing you to sit in an unnatural position. Placing it too high will add tension to your shoulder muscles.

- The keyboard should be placed just above your lap. Adjust the keyboard height by flipping the folding stands located under the keyboard.
- Keep your lower arms parallel to the floor as you type. Your upper arms and shoulders should be relaxed. Then try typing with a light touch. If you feel any shoulder or neck strain, stop for a while and check your posture.
- Position your keyboard in front of your monitor. Putting your keyboard beside your monitor will make you turn your head while you type which could add tension to your neck muscles that may later result in neck strain.

Positioning your mouse

- The mouse should be placed on the same surface as your keyboard so that you can reach it with ease.
- Adjust its position to allow enough space for movement without making you stretch or lean over.
- Use your arm to move the mouse. Do not rest your wrist on the table when moving the mouse.

Connecting peripherals

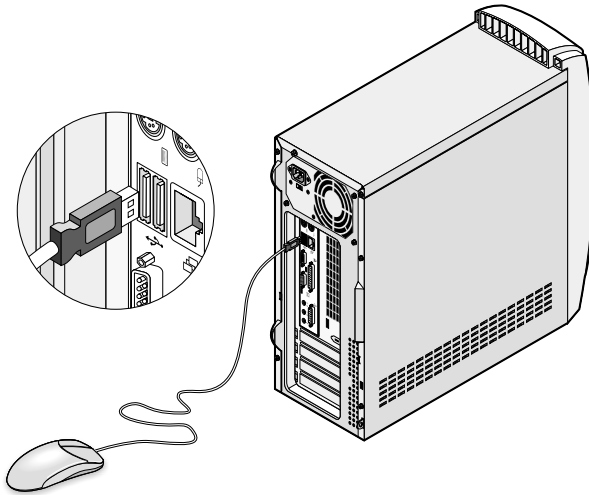
Setting up your computer is easy. For the most part, you only have four things to connect: the mouse, the keyboard, the monitor, and the power cable.

Mouse

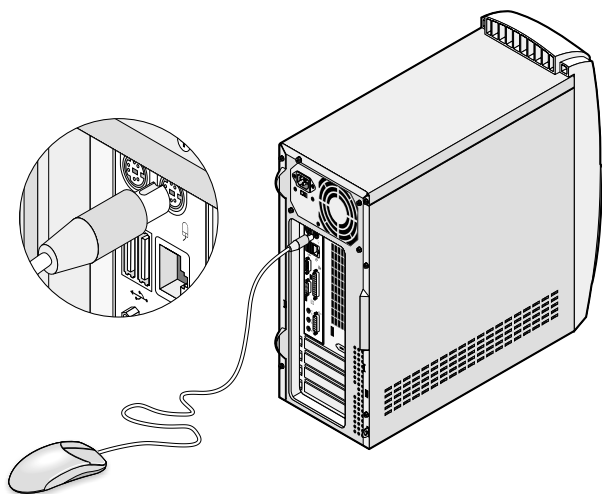
Plug the mouse cable into the the USB port  (black port) or the

PS/2 mouse port  (green port) located on the rear panel of your computer.

Connecting the USB mouse



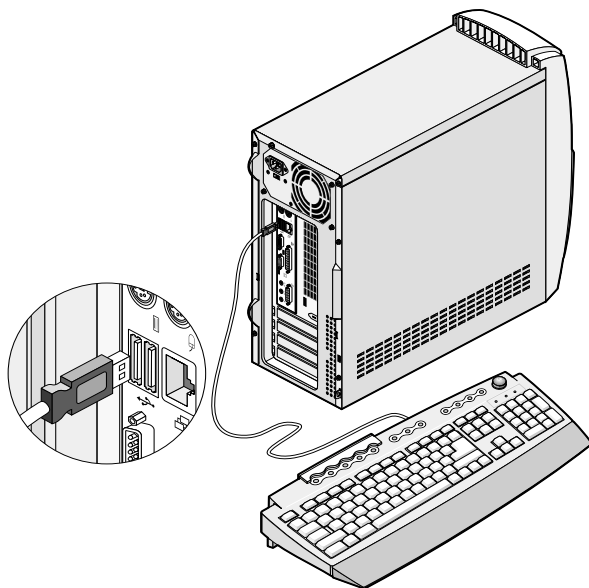
Connecting the PS/2 mouse



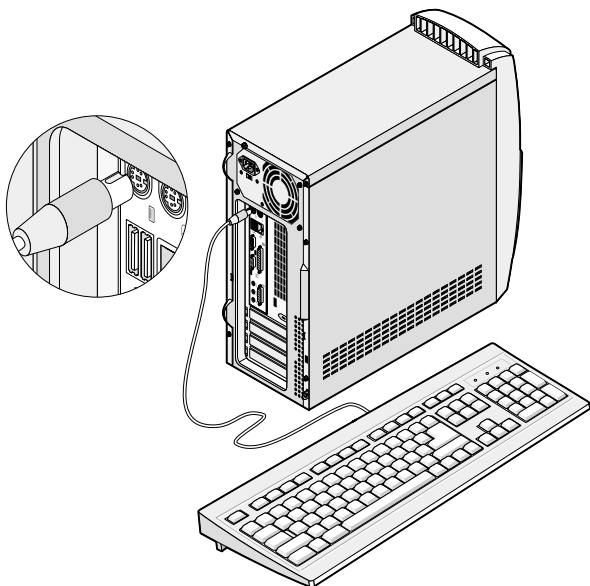
Keyboard

Plug the keyboard cable into the USB port  (black port) or the PS/2 keyboard port  (purple port) located on the rear panel of your computer.

Connecting the USB keyboard



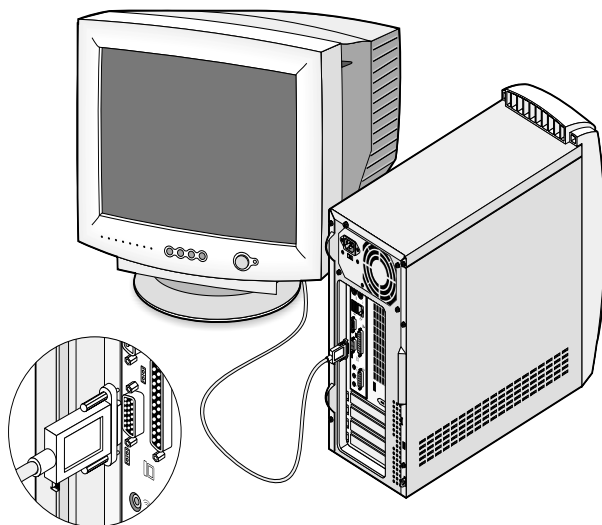
Connecting the PS/2 keyboard



Monitor

To connect a monitor, simply plug the monitor cable into the VGA port

 (blue port) located on the rear panel of your computer.



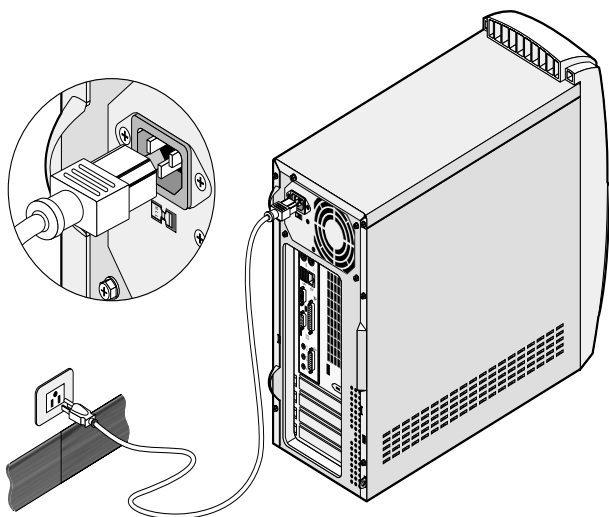
Note: Refer to the monitor manual for additional instructions and information.

Power cable



Caution: Before you proceed, check the voltage range in your area. Make sure that it matches your computer's voltage setting (refer to page 13 for the location of the voltage selector switch on the rear panel of your computer). If they don't match, change your computer's voltage setting according to your area's voltage range.

Plug the power cable into the power cable socket located on the rear panel of your computer. Then plug the other end of the power cable into a power outlet.



Turning on your computer

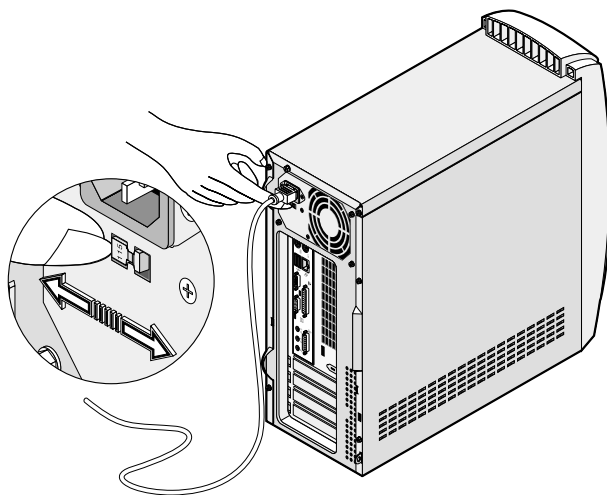
After connecting the necessary peripherals and plugging in the power cable, you are now ready to turn the computer on and get to work.

To turn on your computer:

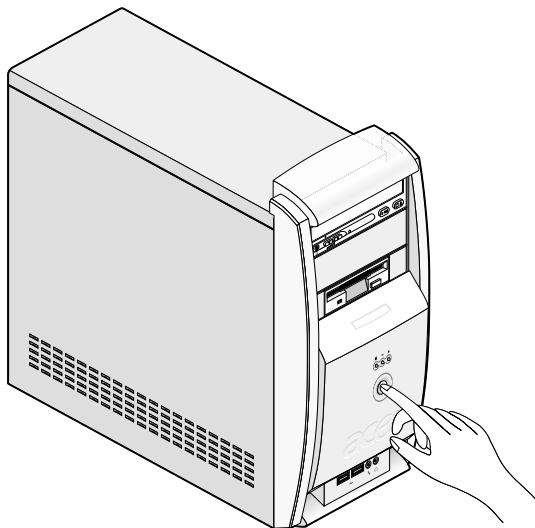
1. Turn on all peripherals connected to your computer such as the monitor, printer, fax, speakers, etc.
2. On the rear panel of your computer, set the voltage selector switch to the voltage range applicable to your area. Refer to page 13 for the location of the voltage selector switch on the rear panel of your computer.



Note: The illustration of the computer's rear panel shown below may be different from your computer model. If your computer model comes with a main power switch located above the voltage selector switch, first set the voltage selector switch to the voltage range applicable to your area before turning on the main power switch.



3. On the front panel of your computer, press the power button.



Important: Make sure that the power cable is properly plugged into an electrical outlet. If you are using a power strip or an AVR (Auto-Voltage Regulator), make sure that it is plugged in and turned on.

Turning off your computer

To turn off your computer, on the Windows taskbar click on the **Start** button, highlight **Shut Down**, select **Shut down**; then click on **OK**. You can then turn off all peripherals connected to your computer.

If you cannot shut down your computer normally, press the power button for at least four seconds. Quickly pressing the button may put the computer in Suspend mode only.



.....
Note: You do not need to turn off the main power switch every time you turn off your computer. Turn off the main power switch only if:

- you will not use your computer for a long time or
- your computer needs servicing.

Connecting options

Printer

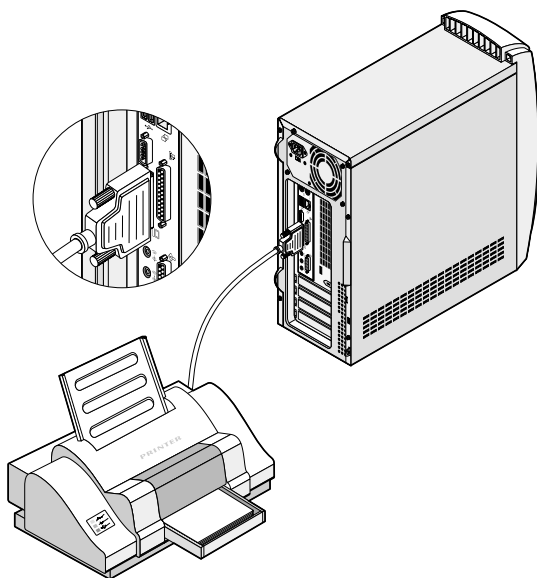
Your computer supports parallel, USB and serial printer.



.....
Note: The printers shown below are for your reference only.
Actual device model may vary in select countries.

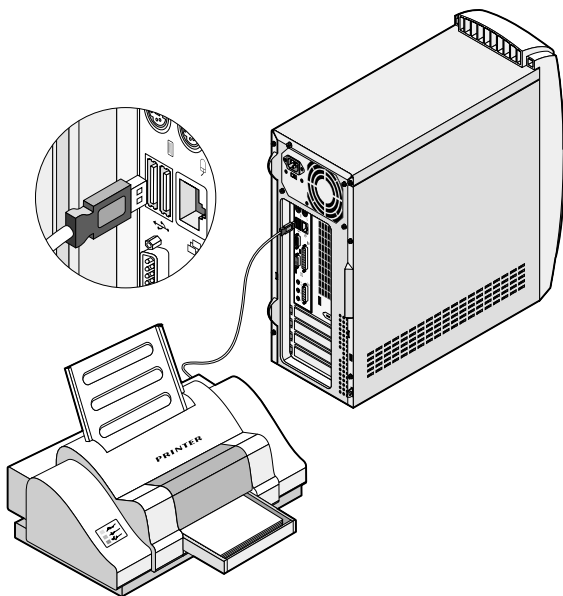
Parallel printer

To connect a printer, plug the printer cable into the parallel port (burgundy port) located on the rear panel of your computer. 



USB printer

To connect a printer, plug the printer cable into the USB port (black port) located on the rear panel of your computer. 

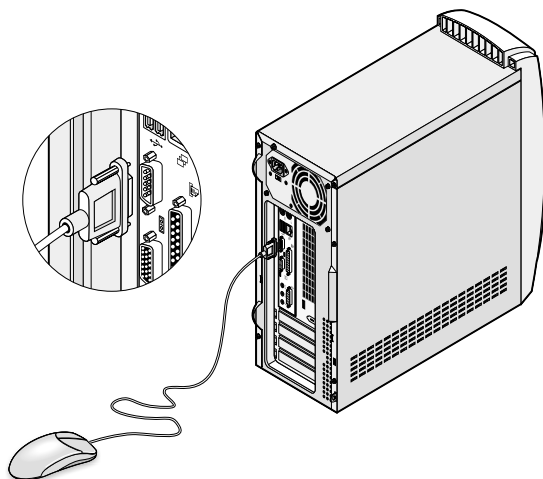


Serial printer

To connect a printer, plug the printer cable into the serial port (teal or turquoise) located on the rear panel of your computer. See  "Rear panel" on page 13 for the location of the serial port.

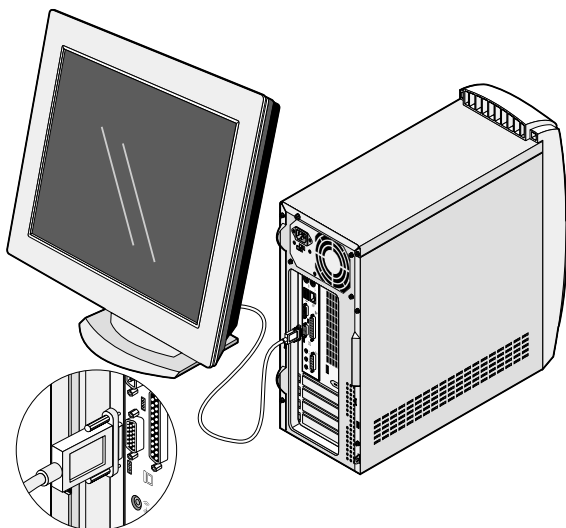
Serial mouse

To connect a serial mouse, plug the serial mouse cable into the serial port  (teal or turquoise port) located on the rear panel of your computer.



LCD Monitor

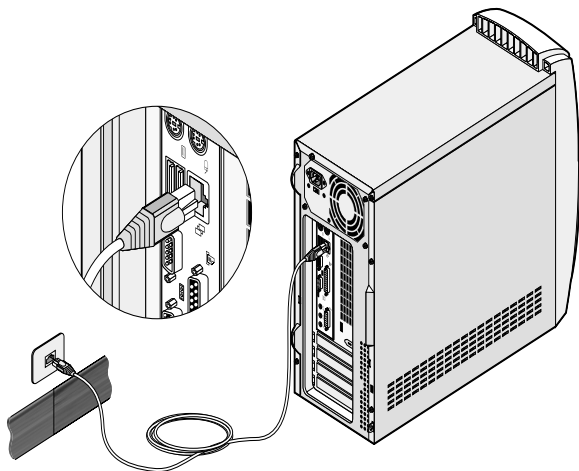
To connect an LCD monitor, plug the LCD monitor's VGA cable into the VGA port  (blue port) located on the rear panel of your computer.



Network

You can connect your computer to a Local Area Network (LAN) using a network cable. To do so, simply plug the network cable into the

network port  on the rear panel of your computer.



Note: Consult your operating system manual for information on how to configure your network setup.

Multimedia devices

You can connect multimedia devices such as microphone, earphone or headphone, external speakers, audio line-in device and a joystick (for games). These devices will allow you to take advantage of your computer's multimedia features.



Note: The multimedia devices shown below are for your reference only. Actual device models may vary in select countries.

Plug the devices in as follows:

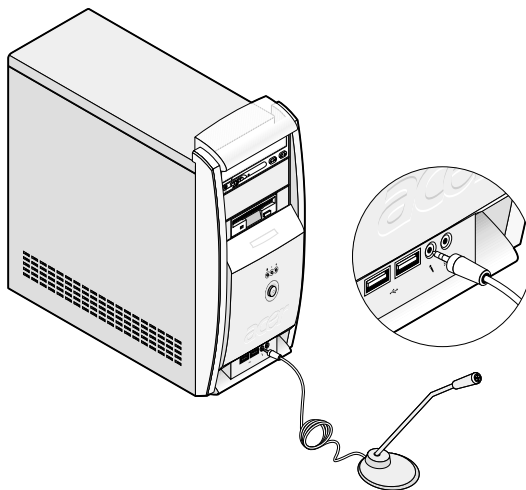


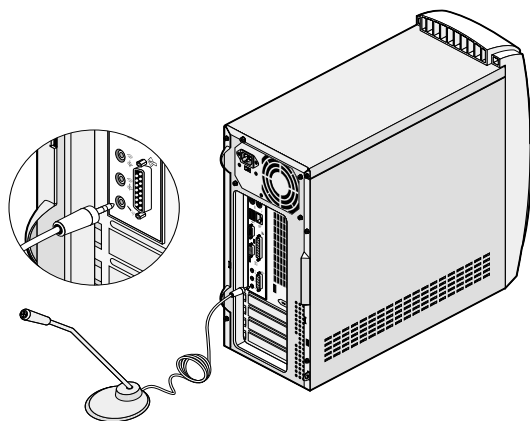
Note: For information on how to configure multimedia devices, consult the documentation that came with each device.

- microphone: connects to the Microphone-in jack  (pink jack) located on the front and rear panel of your computer.



Note: The system has two microphone-in jack (front and rear). However, you cannot use both of them at the same time. By default, your system enables the microphone-in jack in front and disables the one at the back.



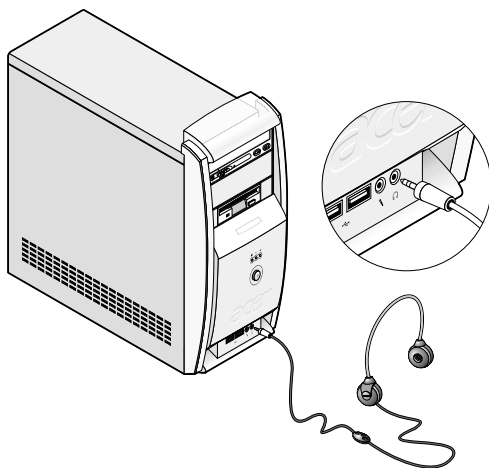


- earphones, headphones: connect to the Headphone-out jack (lime jack) located on the front panel of your computer 

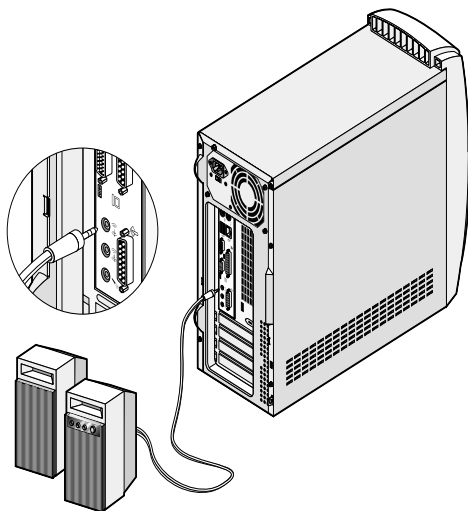


.....

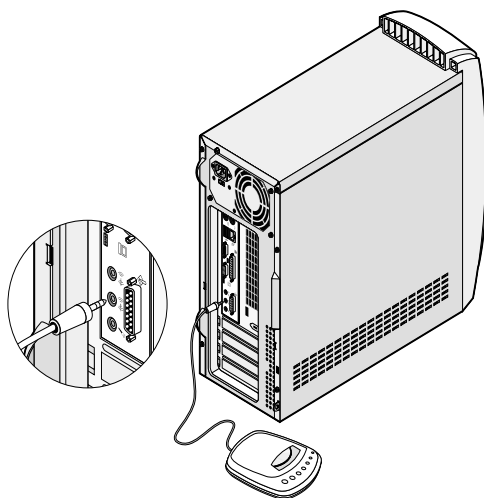
Note: To adjust the volume of the headphones, click on the Volume icon located on the taskbar at the bottom of your screen. When the volume control pops up, drag the Volume control lever to the desired level. You can also use the Volume control button on the keyboard.



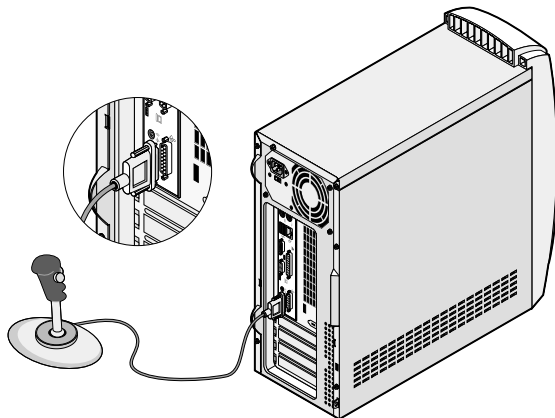
- external speakers: connect to the Audio-out/Line-out jack (lime jack) located on the rear panel of your computer. 



- audio line-in device: connects to the Audio-in/Line-in jack (light blue jack) located on the rear panel of your computer. 



- joystick: connects to the Game/MIDI port  (gold port) located on the rear panel of your computer.



USB devices

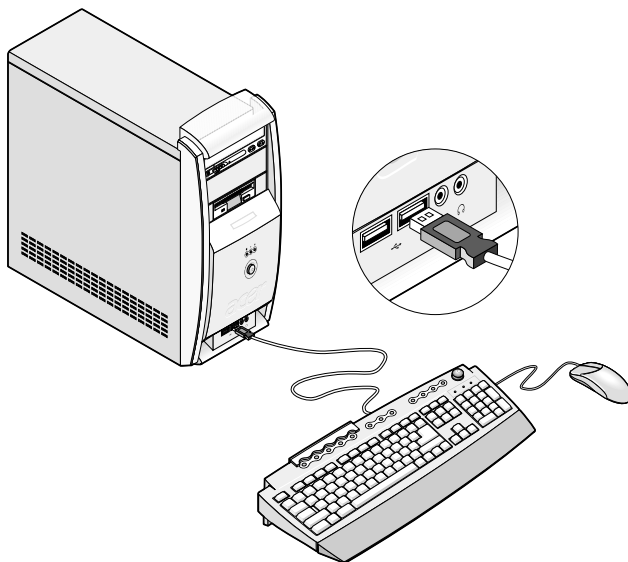
Universal Serial Bus (USB) is a new serial bus design that is capable of cascading peripherals such as a digital camera, keyboard, mouse, joystick, scanner, printer and modem. With USB, complex cable connections can be eliminated.

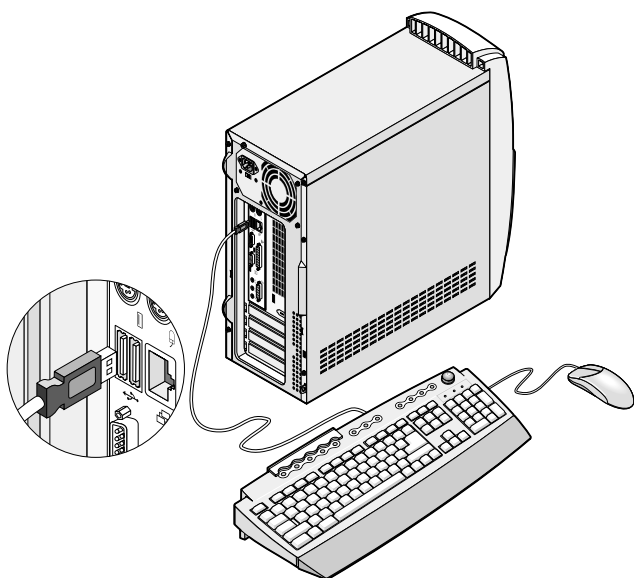
Your computer comes with four USB ports: two each on both the front and rear panels. These ports allow you to connect additional serial devices to your computer without using up its system resources.

To connect a USB device, simply plug the device cable into any of the USB ports  (black port).



Note: The USB devices shown below are for your reference only. Actual device models may vary in select countries.





Note: Most USB devices have a built-in USB port which allows you to connect or daisy-chain more USB devices.

4 Upgrading your computer

This chapter contains instructions on how to upgrade your computer and basic information about your system boards that you will find helpful when performing the upgrade process.

Installation precautions

Before you install any computer component, we recommend that you read the following sections. These sections contain important ESD precautions along with preinstallation and post-installation instructions.

ESD precautions

Electrostatic discharge (ESD) can damage your processor, disk drives, expansion boards, and other components. Always observe the following precautions before you install a computer component:

1. Do not remove a component from its protective packaging until you are ready to install it.
2. Wear a wrist grounding strap and attach it to a metal part of the computer before handling components. If a wrist strap is not available, maintain contact with the computer throughout any procedure requiring ESD protection.

Preinstallation instructions

Always observe the following before you install any component:

1. Turn off your computer and all the peripherals connected to it before opening it. Then unplug all cables from the power outlets.
2. Open your computer according to the instructions on page 53.
3. Follow the ESD precautions described above before handling a computer component.
4. Remove any expansion boards or peripherals that block access to the DIMM sockets or component connector.
5. See the following sections for specific instructions on the component you wish to install.



.....

Warning! Not turning off the computer properly before you start installing the components may cause serious damage.

Do not attempt the procedures described in the following sections unless you are a qualified service technician.

Post-installation instructions

Observe the following after installing a computer component:

1. See to it that the components are installed according to the step-by-step instructions in their respective sections.
2. Replace any expansion boards or peripherals that you removed earlier.
3. Replace the computer cover.
4. Connect the necessary cables and turn on your computer.

Opening your computer

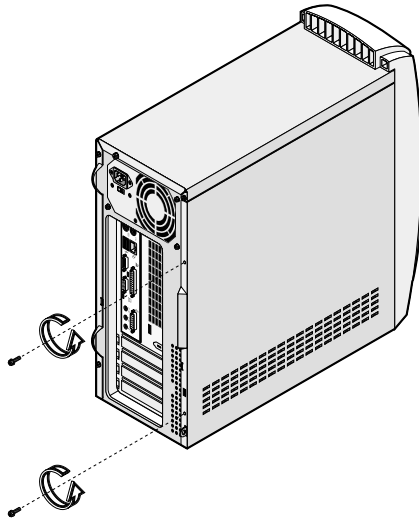


Caution: Before you proceed, make sure that you have turned off your computer and all peripherals connected to it. Read the "Preinstallation instructions" on page 51.

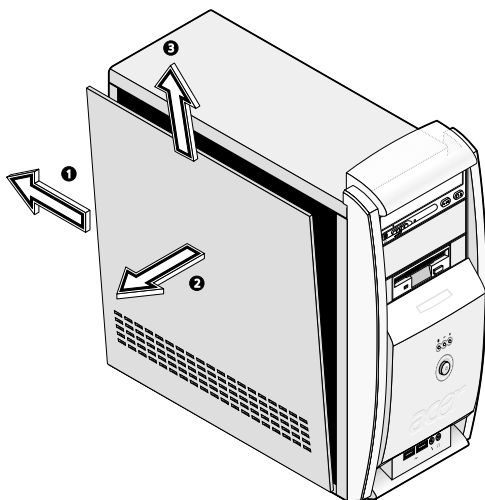
You need to open your computer before you can install additional components. See the following section for instructions.

To remove the side panel

1. Turn off your computer and unplug all cables.
2. Place your computer on a flat, steady surface.
3. Remove the two screws from the rear panel using a screwdriver. Set the screws aside.

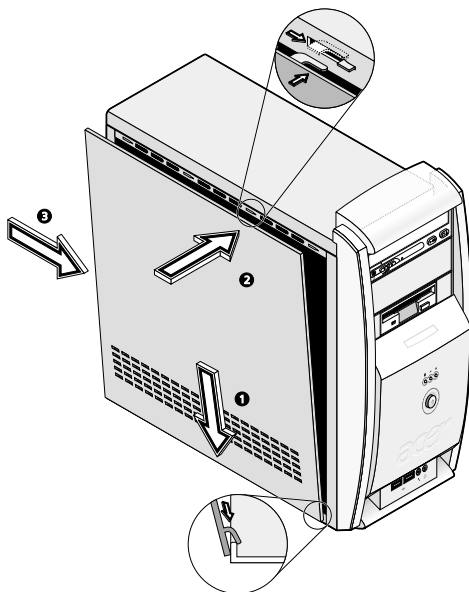


4. Slide the panel slightly backward (1), tilt it away from the housing (2) before pulling it upward to detach it from the chassis (3).

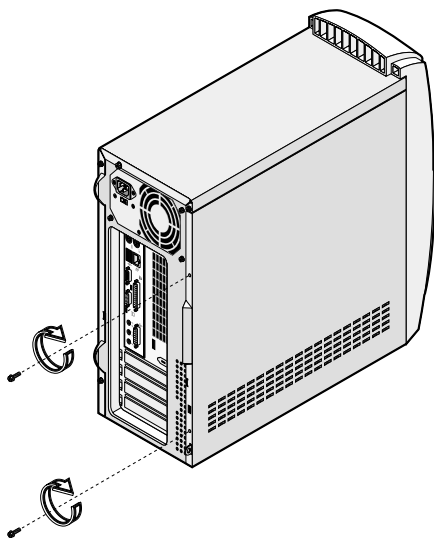


To replace the side panel

1. Align the side panel to the housing (1), insert the latches into the slots (2) and slide it forward into place (3).

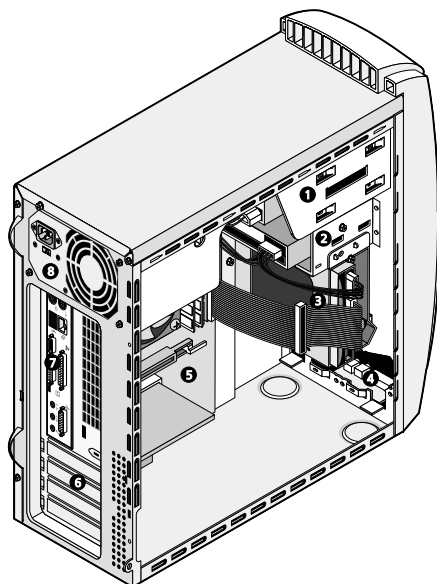


2. Secure the side panel with two screws.



Internal components

The figure below shows what your computer looks like once you remove the cover:



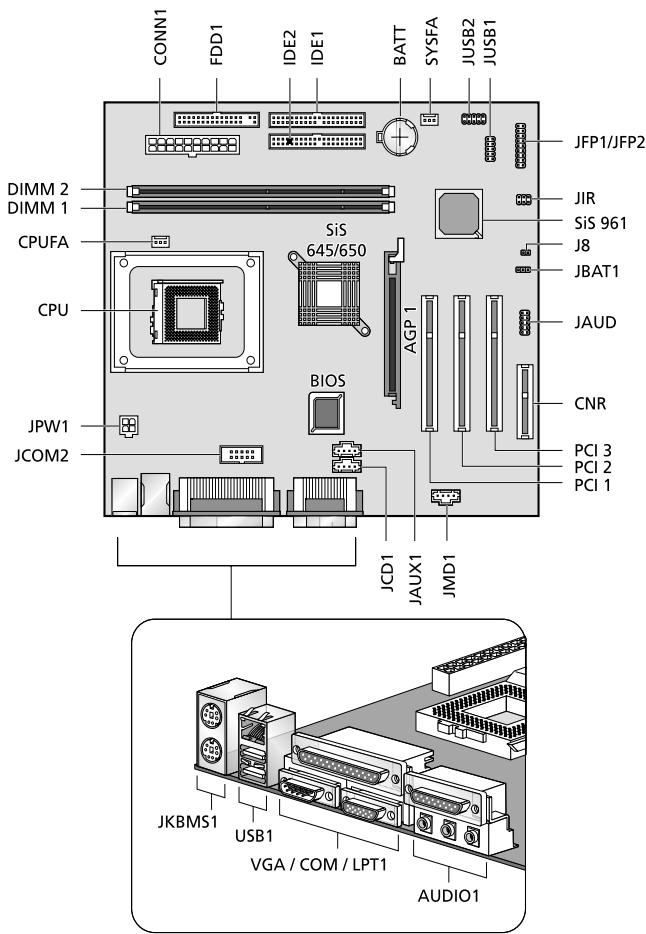
No.	Component
1	5.25-inch drive bays (two bays)
2	3.5-inch drive bays (two bays)
3	Hard disk
4	Daughterboard
5	Mainboard
6	Expansion slots
7	Connectors
8	Power supply

System boards

Mainboard

The layout below shows all the connectors and jumpers of the mainboard. Refer to the table for a brief description of each connectors and jumpers.

The mainboard becomes accessible once you open your computer. It should look like the figure shown below:

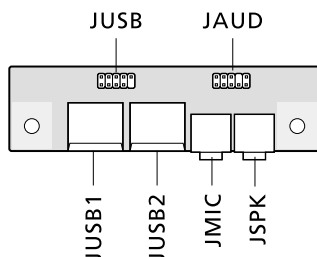


Label	Component
AGP1	AGP slot
AUDI01	MIDI/game (upper), line-out (left), line-in (middle), and rear mic-in (right) ports
BATT	Battery
BIOS	BIOS chipset
CNR	Communication network riser
CONN1	ATX Power supply
CPU	CPU socket
CPUFA	3-pin CPU fan connector
DIMM 1	DIMM sockets 1
DIMM 2	DIMM sockets 2
FDD1	FDD Connector
IDE1	IDE 1 connector
IDE2	IDE 2 connector
J8	Chassis intrusion switch connector
JAUD	Front audio connector
JAUX1	Audio FPIO connector
JBAT1	Clear CMOS jumper
JCD1	CD-in connector
JCOM2	Internal serial port for COM2

Label	Component
JFP1/	JFP1 1,3 HDD LED connector 2,4 Power LED connector 5,7 Reset switch connector 6,8 Power switch connector
JFP2	JFP2 2,8 Speaker connector 4,6 Buzzer connector 1,3,5 Power LED connector
JIR	IrDA infrared module connector
JKBMS1	PS/2 mouse (upper) and keyboard (lower) ports
JMD1	Modem-in connector
JPW1	Power connector (12 V power)
JUSB1	Front USB connector
JUSB2	Front USB connector
PCI1	PCI slots 1
PCI2	PCI slots2
PCI3	PCI slots 3
SiS 645/650	SiS 645/650 chipset
SiS 961	SiS 961 chipset
SYSFA	3-pin system fan connector
USB1	Network (upper) and USB (lower) ports
VGA/COM/LPT1	Serial port and VGA port (lower left and right) and parallel port (upper)

Audio board

The audio board that came with your computer should look like the figure that follows.



Label	Description
JAUD	Audio connector - connects to the JAUD connector of the mainboard
JMIC	Microphone-in jack (front) ^{see note}
JSPK	Audio-out port
JUSB	USB connector - connects to the JUSB1, JUSB2 connector of the mainboard
JUSB1	USB ports
JUSB2	USB ports



Note: The system has two microphone-in jacks (front and rear). However, you cannot use both of them at the same time. By default, your system enables the microphone-in jack in front and disables the one at the back.

Upgrading your computer

Certain components of your computer are upgradeable such as the memory, the hard disk, the CPU and the expansion cards. However, for safety purposes, we do not recommend that you perform these upgrades yourself. If you want to replace or upgrade any of these components, contact your dealer or a qualified service technician for assistance.



Note: Observe the “Installation precautions” on page 51 when installing or removing a computer component.

Installing additional memory

The two 184-pin sockets on the mainboard support Double Data Rate (DDR) Synchronous Dynamic Random Access Memory (SDRAM)-type DIMMs. You may install 128-MB, 256-MB, 512-MB or 1-GB DIMMs for a maximum memory capacity of 2 GB.



Note: To capitalize on the system memory capacity mentioned above, you must use 1-GB memory modules which are not yet available in the market. The biggest capacity memory module type currently available is 512-MB which allows a maximum of 1GB.

The DDR DIMMs should work under 2.5 volts. You can install PC1600/DDR200 or PC2100/DDR266 DDR modules on the DDR DIMM sockets. Contact your dealer for qualified DIMM vendors.



Caution! Do not install and use both DDR200 (PC1600) and DDR266 (PC2100) SDRAM together. Combining DDR DIMMs of different types might cause your computer to malfunction.

Each of the DDR DIMM socket is independent from each other. This independence allows you to install DDR DIMMs with different capacities to form different configurations.

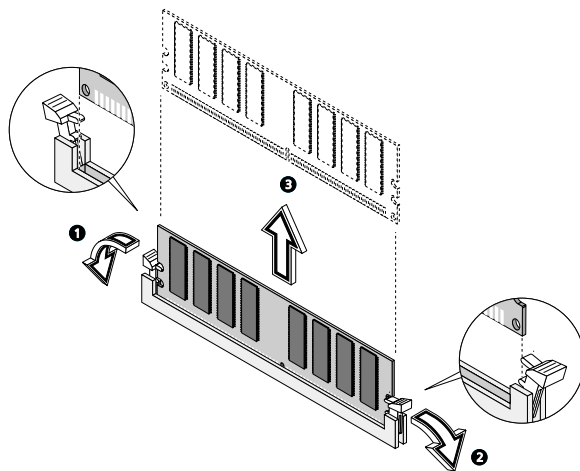
To remove a DDR DIMM

Before you can install a new DDR DIMM, remove first any previously installed DDR DIMM.



Note: The DDR DIMM has only one notch located on the center of the module.

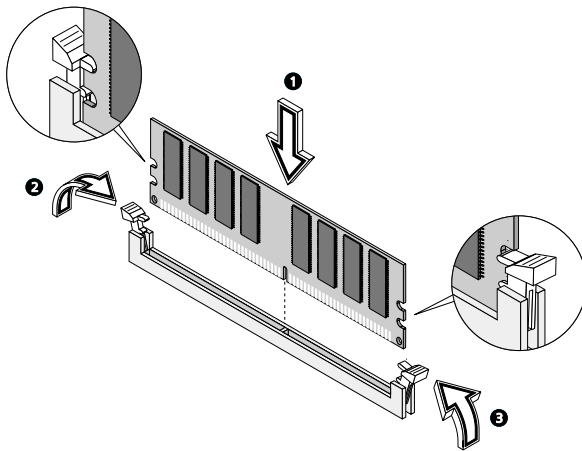
1. Remove the side panel (see page 53).
2. Locate the DDR DIMM socket on the mainboard.
3. Press the holding clips on both sides of the DDR DIMM socket outward to release the DDR DIMM (1,2). Gently pull the DDR DIMM out of the socket (3).



To install a DDR DIMM

1. Locate the DDR DIMM socket on the mainboard.

2. Align the DDR DIMM with the socket (1). Press the DDR DIMM into the socket until the clips lock onto the DDR DIMM (2,3).



Note: The DDR DIMM sockets are slotted to ensure proper installation. If you insert a DDR DIMM but it does not fit easily into the socket, you may have inserted it incorrectly. Turn the DDR DIMM and try to insert it again.

Reconfiguring your computer

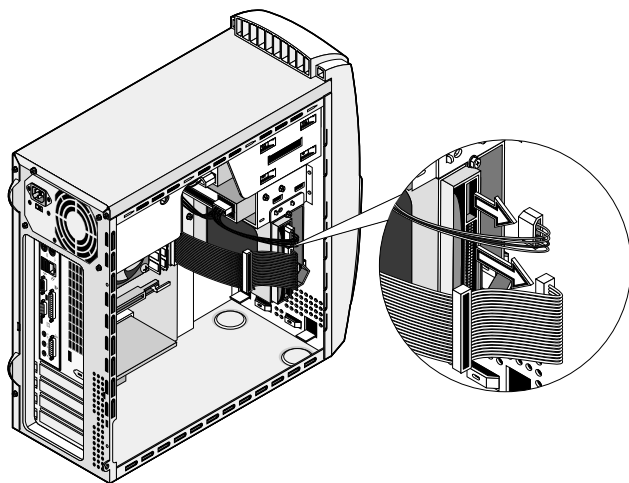
Your computer automatically detects the amount of memory installed. Run the BIOS (Basic Input/Output System) Setup utility to view the new value for total system memory and make a note of it. For more information on BIOS Setup utility, refer to the AcerPower Sd online guide (see "Accessing the online guide" on page 6).

Replacing the hard disk

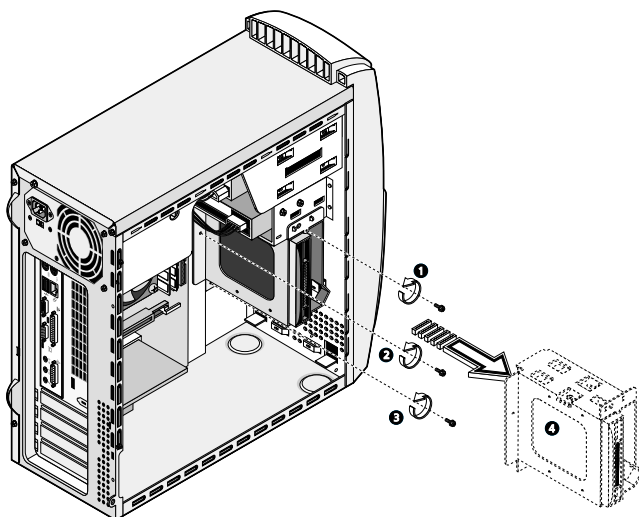
Follow these steps to replace your computer's hard disk:

1. Remove the side panel (see page 53).
2. Locate the hard disk frame.

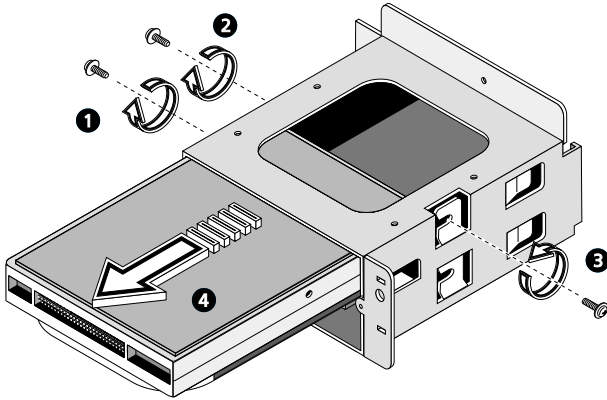
3. Disconnect all hard disk cables (power and signal).



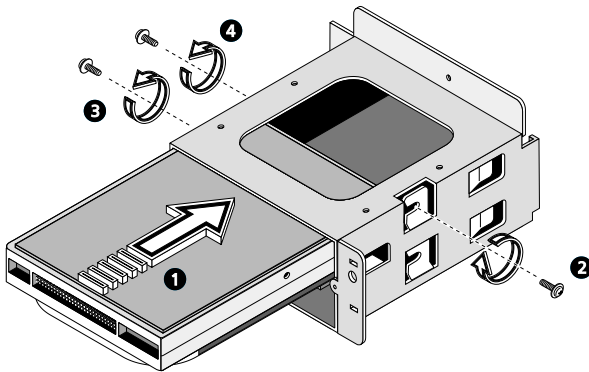
4. Remove the three screws that hold the drive frame to the housing (1,2,3) and pull out the drive frame (4).



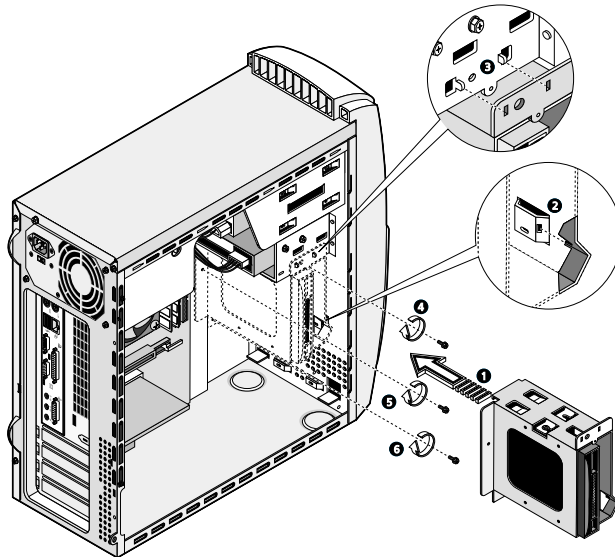
5. Remove the three screws that hold the hard disk to the drive frame (1,2,3) and pull out the hard disk (4).



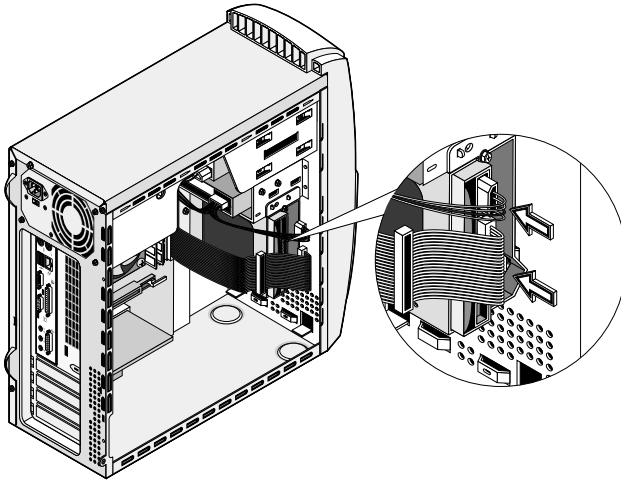
6. Insert the new hard disk (1) and secure it with the three screws you previously removed (2,3,4).



7. Reinstall the drive frame into the housing as shown in the following figure:
 - a. Align the drive frame to the housing notch (1,2).
 - b. Attach the drive frame to the housing by securing it to the floppy drive frame latches (3).
 - c. Secure the drive by using the three screws (4,5,6) you removed earlier.



8. Connect all hard disk cables.



Note: Make sure that the other ends of the disk cables are securely connected to their corresponding connectors on the mainboard.

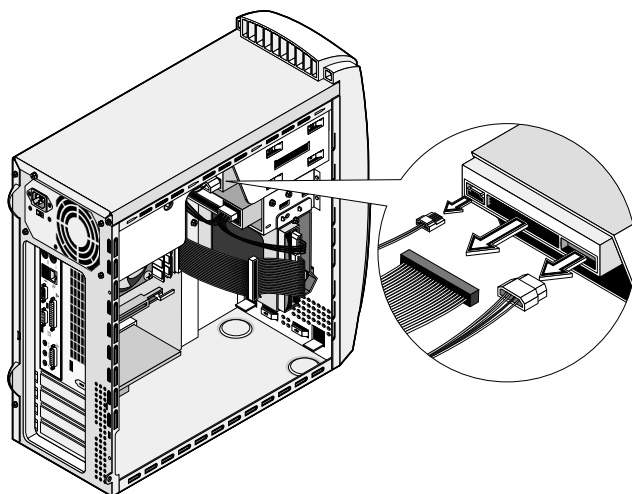
9. Replace the side panel (see page 55).

Replacing the CD-ROM/DVD-ROM/CD-RW drive

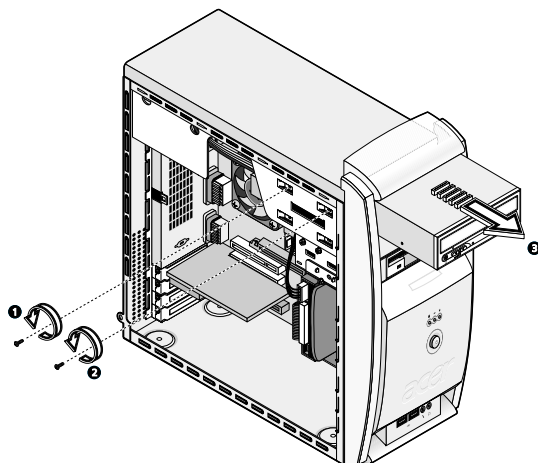
Follow these steps to replace your computer's CD, DVD or CD-RW drive:

1. Remove the side panel (see page 53).
2. Locate the CD/DVD/CD-RW drive.

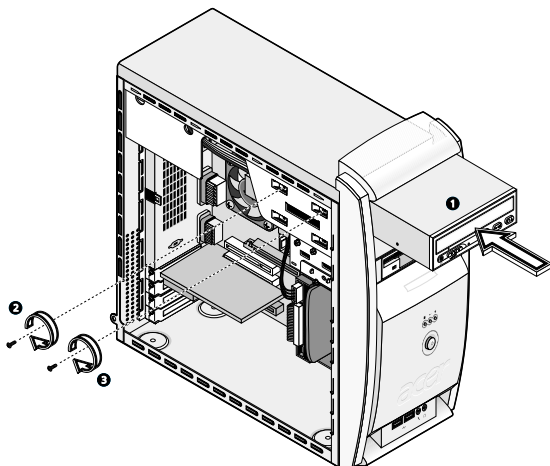
3. Disconnect all CD/DVD/CD-RW drive cables (power, signal and audio).



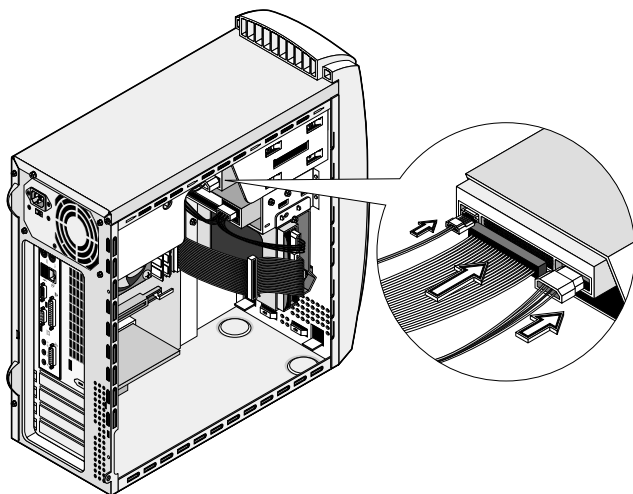
4. Remove the two screws that hold the CD/DVD/CD-RW drive to the disk frame (1,2) and save the screws. Pull out the CD/DVD/CD-RW drive from its bay (3).



5. Install a new CD/DVD/CD-RW drive into the drive bay (1) and secure it with two screws you removed earlier (2,3).



6. Connect all CD/DVD/CD-RW drive cables.

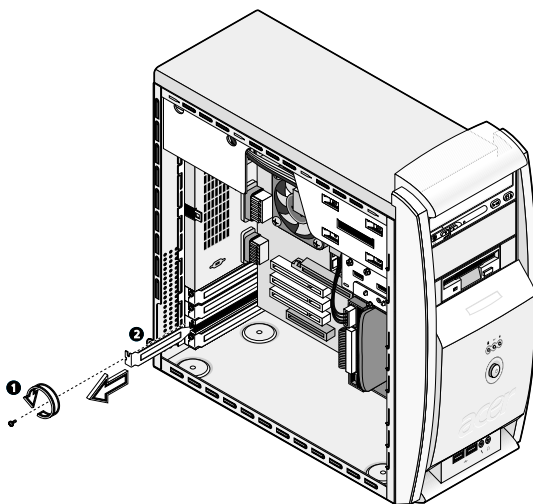


7. Replace the side panel.

Installing an expansion card

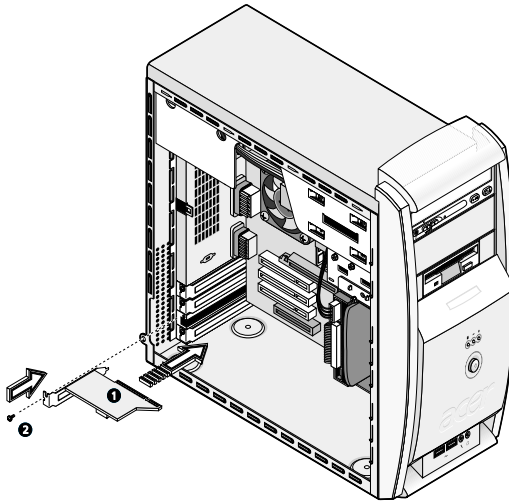
To install an expansion card:

1. Remove the side panel (see page 53).
2. Locate an empty PCI slot on the mainboard.
3. Remove the screw that holds the bracket to the computer and save the screw (1). Pull out the bracket opposite the selected empty slot (2).



4. Remove the expansion card from its protective packaging.

5. Align the card with the empty bracket and then insert it into the slot (1). Make sure that the card is properly seated. Secure the card to your computer with a screw you removed earlier (2).



6. Replace the side panel (see page 55).

When you turn on the computer, BIOS automatically detects and assigns resources to the newly-installed devices. For more information on BIOS, refer to the AcerPower Sd online guide (see "Accessing the online guide" on page 6).

5 Software

This chapter describes the applications that came with your computer.

Your computer comes with the following applications:

- Acrobat® Reader™
- Norton AntiVirus
- NTI CD-Maker
- PowerDVD

All of the applications that came with your computer are very easy to use. However, if you need more help and information, you may refer to the online help documentation provided in each software application.

Acrobat Reader

Acrobat Reader is a software that lets you view, navigate, browse and print Adobe Portable Document Format (PDF) files on all major computer platforms. Acrobat Reader can open your document across a broad range of hardware and software, and it will look exactly as you intended - with layout, fonts, links and images intact.

To run Acrobat Reader, double-click the Acrobat Reader icon on your Windows's desktop.

For more information about Acrobat Reader, you may refer to its Help menu.

Norton AntiVirus

Norton AntiVirus is an anti-virus software which finds and repairs infected files, protects against viruses to keep your computer data safe and secure. It also scans incoming email attachments for viruses. It provides useful virus detection and repair facilities.

To install Norton AntiVirus:

1. Double-click the Norton AntiVirus installer icon on your Windows desktop.
2. Follow all onscreen instructions until you finish installation.



.....

Note: After you finish installing the Norton AntiVirus software, delete the Norton AntiVirus installer icon from your Windows desktop.

For more information about Norton AntiVirus, you may refer to the Norton AntiVirus Help menu.

NTI CD-Maker (for models with CD-RW)

The NTI CD-Maker is a CD-Recording software which allows you to create and copy audio, data and videos to CD-RW discs.

To run NTI CD-Maker:

1. Double-click the NTI CD-Maker icon on your Windows desktop.
2. Follow all onscreen instructions.

For more information on how to use the NTI CD-Maker, refer to the NTI CD-Maker Help menu.

PowerDVD (for models with DVD)

PowerDVD is a high-quality, pure software DVD player which brings high-quality movies and karaoke to your multimedia PC. You can play back high resolution DVD titles or MPEG-2 files with MPEG-2 video and Dolby Digital (AC-3) audio. PowerDVD provides a complete set of commands for navigation and advanced features such as multi-angle switching, multi-language and multi-subtitle selection, and parental control. It also has the i-Power Internet Enabling feature, which links to online DVD resources via the Power DVD Desktop Portal Page.

To run PowerDVD:

1. Double-click the PowerDVD icon on your Windows desktop.
2. Follow all onscreen instructions.

For more information about PowerDVD, refer to the PowerDVD Help menu.

Reinstalling programs

If you uninstall one of the preinstalled programs and want to reinstall it, do the following:

1. Make sure that the system is turned on.
2. Insert the System CD into the CD or DVD drive.
3. Select the application that you want to reinstall.
4. Follow all onscreen instructions until you finish the installation.

Recovering your system

When your operating system files are lost or damaged, the recovery process will require you to restore your system's original factory default settings. Follow the steps below:

1. Insert the System CD into the CD or DVD drive.
2. Reboot the system.
3. Follow all onscreen instructions.
4. Remove the System CD and insert the Recovery CD into the CD or DVD drive.
5. After the operating system has been copied to your hard disk, remove the Recovery CD and insert the System CD into the CD or DVD drive.
6. Follow all onscreen instructions until you finish the installation.



.....

Caution! Using the Recovery CD will erase all files previously saved in your computer so make sure to back up your important files before starting the recovery process.

Make sure that the Systems CD/Recovery CD is properly inserted into the CD or DVD drive. Improper insertion may damage both the CD and the drive.

6 Q & A

This chapter tells you what to do in case your computer is not working properly. However, if a more serious problem arises, contact your dealer or the technical support center (www.acersupport.com) for assistance.

The following questions are possible situations that may arise during the use of your computer and each is followed by easy answers and solutions to the situation.

Q: I pressed the power switch but the system did not boot up.

A: Check the LED located above the power switch.

If the LED is not lit, no power is being applied to the system. Do any of the following:

- Check if the voltage selector switch located on the rear panel of the computer is set to the correct voltage.
- Check if you plugged the power cable properly into an electrical outlet.
- If you are using a power strip or AVR, make sure that it is plugged in and turned on.

If the LED is lit, check the following:

- Is a nonbootable (nonsystem) diskette in the floppy drive? If yes, remove or replace it with a system diskette and press **Ctrl + Alt + Del** to restart your computer.
- The operating system files may be damaged or missing. Insert the startup disk you created during Windows setup into the floppy drive and press **Ctrl + Alt + Del** to restart your computer. This will automatically diagnose your system and make necessary fixes. However, if the diagnostic utility still reports a problem, then you may have to perform the recovery process to restore your system to its original default factory settings.



.....

Note: For more information about recovering your system, refer to page 80.

Q: Nothing appears on the screen.

A: Your computer's power management function automatically blanks the screen to save power. Just press any key to turn the display back on.

If pressing a key does not work, you can restart your computer. If restarting your computer does not work, contact your dealer or the technical support center for assistance.

Q: The printer does not work.

A: Do the following:

- Make sure that the printer is connected to a power outlet and that it is turned on.
- Make sure that the printer cable is connected securely to the system's parallel port and the corresponding port on the printer. See "Printer" on page 38 for information on how to connect the printer to your computer.
- For additional information concerning the printer, refer to the printer's documentation.

Q: No sound comes out from the computer.

A: Check the following:

- The volume may be muted. Look for the Volume icon on the taskbar. If it is crossed-out, click on the icon and deselect the **Mute** option. You can also press the volume control/mute knob on your USB keyboard to toggle from mute to sound on.
- If headphones, earphones, or external speakers are connected to the line-out jack of your computer, the internal or built-in speakers are automatically turned off.

Q: System cannot read diskette, hard disk, CD or DVD information.

A: Check the following:

- Make sure that you are using the correct type of disc or diskettes. See "Disk drives" on page 21.
- Check if the diskette is formatted correctly. If not, format it again.



.....
Caution: If you reformat a diskette, you will lose all data on it.

- Make sure the diskette, CD or DVD is inserted into the drive correctly.
- Check if the CD or DVD is clean and not scratched.
- Check your drive by using a good (i.e., undamaged) diskette or a good disc. If your floppy drive, CD or DVD drive can not read the information on the good diskette, CD or DVD there may be a problem with the drive. Contact your dealer or technical support center for assistance.

Q: System cannot write diskette, hard disk or disc.

A: Check the following:

- Make sure the diskette or hard disk is not write-protected. See "Disk drives" on page 21.
- Make sure that you are using the correct type of diskette. See "Disk drives" on page 21.
- Check if the diskette is formatted correctly. If not, format it again.



.....
Caution: If you reformat a diskette, you will lose all data on it.

Index

A

accessing the online guide 6

C

computer maintenance 4
 cleaning 4
 servicing 4
 connecting options
 lcd monitor 41
 multimedia devices 43
 audio line-in device 45
 earphones/headphones 44
 external speakers 43
 joystick 43
 microphone 43
 network 38, 42
 printer 38
 Parallel printer 38
 Serial printer 39
 USB printer 39
 serial mouse 40

D

disk drives 21
 CD-ROM/DVD-ROM/CD-RW drive
 inserting CDs/DVDs 22
 taking care CDs/DVDs 23
 floppy drive 21
 not write-protect 21
 write-protect 21
 hard disk 24

F

features 9
 connectivity 9
 multimedia 9
 performance 9
 front panel 11

I

internal components 57
 internet/suspend key
 email 19
 suspend 19
 web browser 19

K

keyboard 15
 application key 17
 caps lock 15
 cursor keys 15
 function keys 15
 internet/suspend keys 16
 multimedia keys 15
 num lock key 15
 palm rest 15
 programmable keys 16
 scroll lock key 15
 volume control/mute knob 15
 Windows logo key 15

L

laser compliance vii
 lithium battery vii

M

mouse 20
 buttons 20
 clicking 20
 double-click 20
 ratchet wheel 20
 multimedia key
 forward 18
 play/pause 18
 stop 18

N

notice iii
 fcc notice iii
 peripheral devices iii
 shield cables iii

Q

Q&A 83
 blank screen 84
 no audio 84
 no sound 84
 printer not working 84
 system cannot read disk 85
 system cannot write to disk 85
 system did not boot up 83

R

rear panel 13
 recovering your system 80

remove the side panel 53

S

safety instructions v

setting up computer 27, 29

area 27

chair 27

connecting peripherals

external monitor 33

power cable 34

PS/2 keyboard 32

PS/2 mouse 30

USB keyboard 31

USB mouse 29

keyboard 28

monitor 28

mouse 28

software

Acrobat Reader 76

Norton AntiVirus 77

NTI CD-Maker 78

PowerDVD 79

reinstalling programs 80

system boards 58

audio board 61

mainboard 58

T

turning off computer 37

software shutdown 37

suspend mode 37

turning on computer 35

power button 35

U

upgrade

add memory 62

install DIMM 63

reconfigure computer 64

computer 62

installation precautions 51

ESD 51

post-installation 52

preinstallation 51

open computer

remove side panel 53

replace side panel 55

remove DIMM 63

replace components 62

memory 62

USB devices 47

W

Windows logo key

Shift + Windows + M 17

Windows + E 17

Windows + F 17

Windows + M 17

Windows + R 17

Windows + Tab 17

Y

year 2000 compliance vii