#### Fast infrared

The computer's fast infrared (FIR) port allows you to do wireless data transfer with other IR-aware computers and peripherals such as PDAs (personal digital assistants), mobile phones, and infrared printers. The infrared port can transfer data at speeds of up to 4 Mb/s at a distance of up to one meter.

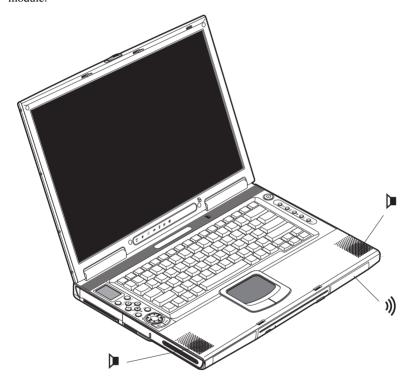


To use FIR, position two IR-aware devices such that their IR ports are no more than one meter apart and offset no more the 15 degrees.

When the two computers are in position, simply begin the data transfer as you normally would. See your file transfer software for details.

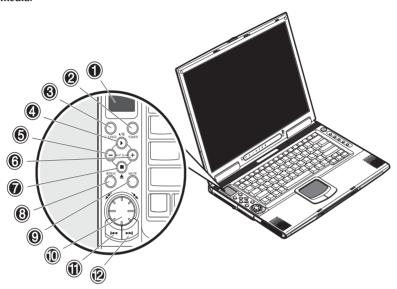
## Audio

Your computer includes 16-bit high-fidelity stereo audio. The speaker located near the keyboard, direct sound towards you to further enhance sound output. There are audio ports on the rear panel of the computer. See "Rear view" on page 7 for the location of these ports. Also see "Audio devices" on page 54 for more information on connecting external audio devices. Your computer has an optional subwoofer module which can be inserted into the expansion module on the front of the computer. See "Front view" on page 5 for the location of the expansion module.



# AV control panel

The AV control panel is a special feature of this computer. Through this AV control panel, you could play most of your audio/video CD, DVD, MP3 and SD media.

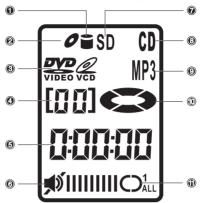


#	Item	Description
1	LCD display	Liquid-crystal display (LCD) displays current media status.
2	Power button POWER	Turns on or off the power of the av control panel.
3	Source button SOURCE	Selects the playback source (CD/DVD, hard disk or SD memory card).
4	Play/eject button	Plays and pauses the media playback.

#	Item	Description
5	Volume down button	Turns down the volume of the speakers during playback.
6	Volume up button	Turns up the volume of the speakers during playback.
7	Stop/Eject button ■ ▲	Stops playback or ejects the CD/DVD-ROM disc.
8	Repeat button REPEAT	Selects the options: no repeat, repeat the currently playing track or repeat all tracks during playback.
9	Mute button MUTE	Mutes the sound coming out of the speakers.
10	Fast rewind/fast forward dial	Use this dial to fast rewind or fast forward the track currently playing.
11	Previous track button	Lets you jump to the previous track on the playlists.
12	Next track button  ▶▶	Lets you jump to the next track on the playlists.

#### Understanding the AV control panel LCD screen

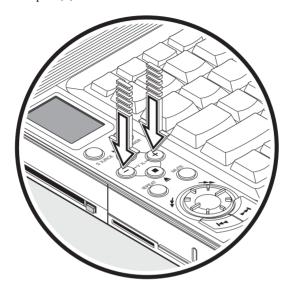
The AV control panel LCD screen displays all the information pertaining to the audio/video media that's being played in the computer.



#	Item	Description
1	Media source	Indicate from what source your media is being accessed.
2	Media type	Indicate what type of media is being played.
3	Track number	Displays the track number currently playing.
4	Elapsed time	Displays how long the track has been playing.
5	Volume level, mute/ unmute	Displays the volume level, whether the volume is muted or not.
6	Repeat track display	Displays if the media being played is repeat none, repeat one track or repeat all tracks.
7	Playback status	Displays if the track is playing or in pause mode.

#### Adjusting the volume

Adjusting the volume on the computer is as easy as pressing some buttons. Press the minus (-) button on the AV control panel to decrease the volume on the speaker, press the plus (+) button to increase the volume.



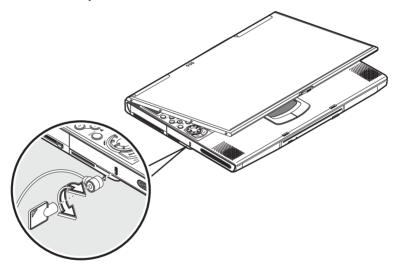
# Securing your computer

Security features include hardware and software locks — a security notch and password.

#### Security notch

A security notch located on the left panel of the computer lets you connect a Kensington-compatible computer security lock.

Wrap a computer security lock cable around an immovable object such as a table or locked drawer handle. Insert the lock into the notch and turn the key to secure the lock. Some keyless models are also available.



#### **Passwords**

Passwords protect your computer from unauthorized access. When set, no one can access the computer without entering the correct password.

There are three types of passwords you can set:

- Setup Password secures your computer against unauthorized entry to and use
  of the BIOS Utility.
- Power-on Password secures your computer against unauthorized use.
- Hard Disk Password protects your data by preventing unauthorized access to your hard disk.

See "BIOS Utility" on page 71 for details.

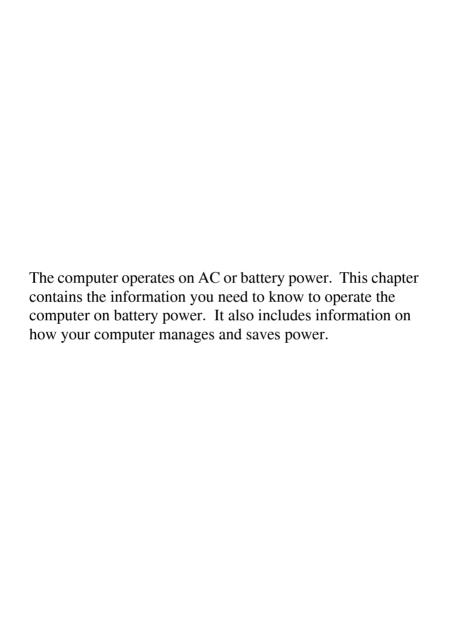


**Important**: Do not forget your Setup and Hard Disk password! If you forget your password, please get in touch with your dealer or an authorized service center.

#### Setting a password

You can set the password using the BIOS Utility. See page 71.

# 2 Operating on battery power



# Battery pack

The computer uses a battery pack that gives you long use between charges.

#### Battery pack characteristics

The battery pack has the following characteristics:

- Employs current battery technology standards
  - The computer uses a Lithium-Ion battery pack which does not have the memory effect problem of Nickel Cadmium (NiCd) batteries. Li-Ion batteries consistently provide the longest battery life, best-suited for road warriors.
- · Battery-low warning

When the battery charge level becomes low, the status indicator of the computer flashes at regular intervals. This tells you that the battery power is critically low (and you should save your work). You can correct this situation by recharging the battery pack.

Whenever possible, use the AC adapter. The battery will come in handy when you travel or during a power failure. It is advisable to have an extra fully-charged battery pack available as backup. The computer supports a secondary battery pack, swappable with the optical drive. See your dealer for more details.

#### Using a battery pack for the first time

When using a battery pack for the first time, follow these steps:

- 1. Connect the AC adapter to a power source and to the computer and fully recharge the battery.
- 2. Disconnect the adapter to use up the battery before recharging again. You only need to do this once or twice with a new battery or with a battery that's been stored without being used for a long time. If the computer is to be stored for more than two weeks, we suggest you remove the battery pack. Battery power from a fully charged battery pack depletes in roughly a day with the computer in Standby mode, a month in Hibernation mode or when power is off.



**Warning!** Do not expose battery packs to temperatures below  $0^{\circ}$ C (32°F) or above  $60^{\circ}$ C (140°F). This may adversely affect the battery pack.

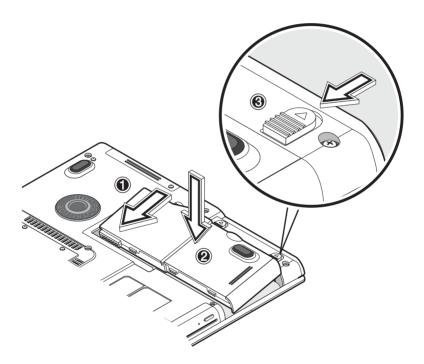
## Installing and removing the battery pack



**Important!** Before removing the battery pack, make sure that you have an AC adapter connected to the computer; otherwise, turn off the computer.

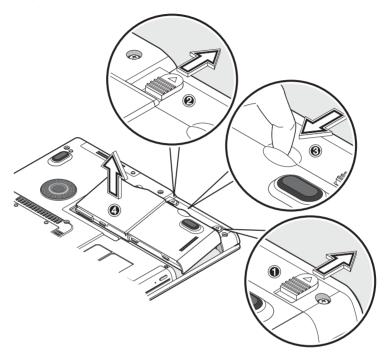
#### To install a battery pack:

Insert the battery at an angle (1); press gently on the battery (2) until it click into place. Then slide the lock/unlock latch into the lock position (3).



#### To remove the battery pack:

Slide the lock/unlock latch into the unlock position (1); slide and hold the battery release latch (2); remove the battery pack by using the built-in slot in the battery pack (3).



## Charging the battery

To charge the battery, install the battery pack and plug the AC adapter into the computer and an electrical outlet.

#### Charging modes

The adapter has two charging modes:

Rapid mode

The computer uses rapid charging when power is turned off and a powered AC adapter is connected to it. In rapid mode, a fully depleted battery gets 95% charged in approximately 2.5 hours.

• Charge-in-use mode

When the computer is in use with the AC adapter plugged in, the computer also charges the battery pack if installed. This mode will take longer to fully charge a battery than rapid mode. In charge-in-use mode, a fully depleted battery gets 95% charged in approximately 4 hours.



**Note**: We suggest that you charge the battery pack before retiring for the day, letting it charge overnight before traveling. This ensures a fully charged battery for use the next day.

#### Checking the battery level

The Windows battery meter indicates the present battery level. Simply rest your cursor on the battery meter (or AC plug) icon on the taskbar to see the present charge level of your battery.

### Optimizing battery life

This section helps you get the most out of battery operation. Optimizing battery life prolongs the charge/recharge cycle and improves recharge efficiency. Follow these suggestions to optimize and maximize battery power:

- Purchase an extra battery pack.
- Use the AC adapter whenever possible so that the battery is reserved for onthe-go computing.
- Keep the battery pack in the computer powered by the AC adapter. The
  constant trickle charge maintains the battery level to eliminate the battery
  self-discharge effect. The charge-in-use function also charges the battery
  pack.
- Eject the PC card from the card slot when it is not in use, since the PC card draws extra power. See "Ejecting a card" on page 56.
- Store the battery pack in a cool, dry place. The recommended storage temperature for battery packs ranges from 10 to 30 degrees Celsius. The higher the storage temperature, the faster the battery pack self-discharges.
- The batteries can be recharged about 400 times when used as directed. Excessive recharging decreases battery life.
- Take care of your battery pack and AC adapter. See "Care and maintenance" on page ix of the preface.

#### Battery-low warning

You never have to worry about battery power as long as you are using the AC adapter. However, when you operate the computer on battery power, pay extra attention to the power indicator on the display panel.

During a battery-low condition, the power indicator flashes at regular intervals until battery power is depleted.



**Warning!** Connect the AC adapter to the computer as soon as possible. Data is lost when computer power is cut off during Standby mode.

The following table shows the recommended course of action to take when you encounter a battery-low condition.

Situation	Recommended Action
AC adapter and power	1. Connect the AC adapter to the computer.
outlet available	2. Save all necessary files.
	3. Resume work.
	Power off the computer if you wish to recharge the battery rapidly.
An extra fully-charged	1. Save all necessary files.
battery pack available	2. Exit the application.
	3. Power off the computer.
	4. Replace the battery pack.
	5. Power on the computer and resume work.
AC adapter or power	1. Save all necessary files.
outlet not available	2. Exit the application.
	3. Power off the computer.

# Power management

This computer has a built-in power management unit that monitors system activity. System activity refers to any activity involving one or more of the following devices: keyboard, mouse, floppy drive, hard disk, peripherals connected to the serial and parallel ports, and video memory. If no activity is detected for a period of time (called an inactivity timeout), the computer stops some or all of these devices in order to conserve energy.

This computer employs a power management scheme that supports ACPI (Advanced Configuration and Power Interface) which allows for maximum power

conservation and maximum performance at the same time. Windows handles all power-saving chores for your computer.

#### Advanced Configuration and Power Interface

Advanced Configuration and Power Interface (ACPI) is a power management specification jointly developed by Compaq/Intel/Microsoft/Phoenix/Toshiba. ACPI enables Windows to control the amount of power given to each device attached to the computer. With ACPI, Windows can turn off peripheral devices when they are not in use, thereby saving power.



**Note**: We recommend you enable power management to prolong your battery life.

Refer to Windows help for more details.

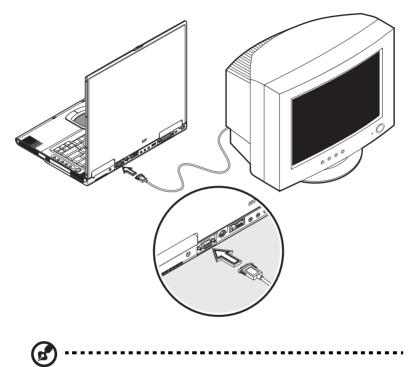
# 3 Peripherals and options

Your computer offers excellent expansion capabilities with its built-in ports and connectors. This chapter describes how to connect peripherals and hardware options that help you use your computer with ease. When connecting peripherals, read the manual included with the peripheral for operating instructions. You can purchase most of these and other options directly from authorized dealers.

This chapter also includes sections on how to upgrade key components. Key component upgradeability helps keep your computer in step with the latest technology.

## External monitor

You can connect an external monitor to the CRT port. Read the monitor manual for additional instructions.



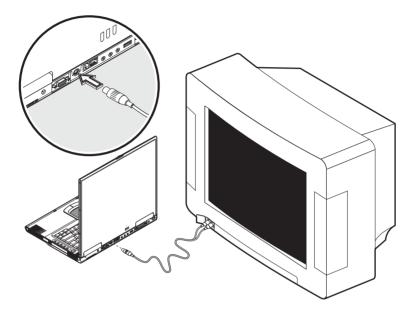
**Note**: If an external monitor is not connected, closing the display cover puts the computer into Standby mode.

## Using simultaneous display

Your computer takes advantage of Windows multi-display capability, allowing you to use your computer for presentation purposes. So whatever is displayed in your computer will likewise be displayed on the other external display. To use simultaneous display, you can choose to connect other display devices to the computer through the CRT port.

# S-video

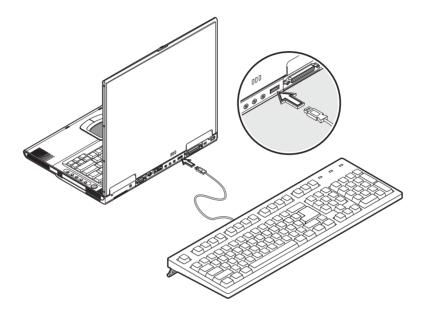
The S-video port allows you to output to a television or display devices that support S-video input. This is important if you want to do some presentations.



# External keyboard

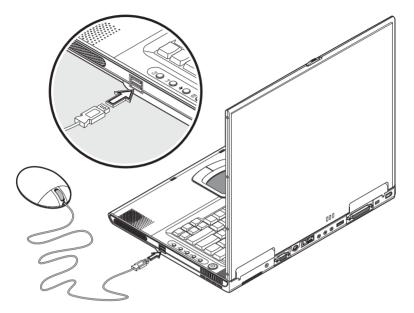
This computer has a keyboard with full-sized keys and an embedded keypad. If you feel more comfortable using a desktop keyboard, you can connect a USB external keyboard.

To connect an external keyboard, plug the external keyboard into the USB port.



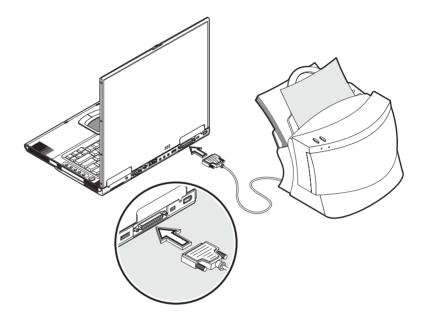
# External pointing device

This computer accepts either a USB mouse or a similar pointing device.



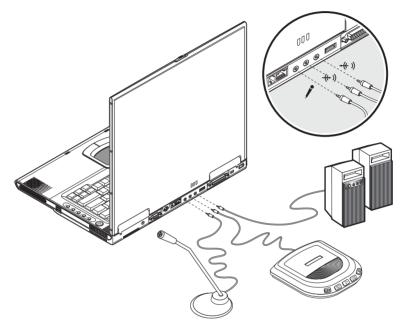
# Printer

You can also connect a printer to your computer port. See your printer manual for operating instructions.



## Audio devices

Audio devices are easy to connect with the audio ports accessible from the rear side of the computer. You can plug an external microphone into the microphone jack. Audio line-in device into the line-in jack. Amplified speakers or headphones connect to the line-out jack.



You can also install an optional subwoofer module into your computer's expansion module, see "Front view" on page 5 for the location of the expansion module bay. The subwoofer module carries low-frequency sound to give a bass boost and create a rumbling effect for certain special effects sounds, such as explosions and trains. See your dealer for more details on the subwoofer module.

#### PC Card

The computer has a built-in CardBus PC Card slot that can accommodate one type II PC Card. Please consult your dealer for PC Card options available that you can purchase for your computer.

#### PC Card slot

The type II CardBus PC Card slot found on the left panel of the computer accepts credit-card-sized cards that enhance the usability and expandability of the computer.

PC Cards (formerly PCMCIA) are add-on cards for portable computers, giving you expansion possibilities long afforded by desktop PCs. Popular type II cards include flash memory, SRAM, fax/data modem, LAN and SCSI cards. CardBus improves on the 16-bit PC card technology by expanding the data path to 32 bits.



**Note:** Refer to your card's manual for details on how to install and use the card and its functions.

#### Inserting a card

Insert the card into the slot and make the proper connections (e.g., network cable), if necessary. See your card manual for details.

