

Acer Aspire 1450 series

User's guide

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Acer Aspire 1450 Series Notebook Computer User's Guide
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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.

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Acer Aspire 1450 series Notebook computer

Model Number : _____

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First things first

Your guides

A set of guides is provided to help you set up and use your Aspire computer.:



The *Just for starters...* poster shows you how to set up your computer.



This *User's Guide* provides clear and concise information on using your computer productively. You are advised to read it thoroughly and keep it handy for future reference.

For more information on our products, services, and support, please visit our web site: www.global.acer.com.

Basic care and tips for using your computer

Turning your computer on and off

To turn on your computer, open the lid and press the power button above the keyboard.

To turn the power off, you can do any of the following:

- Click on the Start button in Windows, and then select **Shut Down** on the popup menu.
- Push the power button.

To use this method, you must first click on the **Power Management** icon in Windows Control Panel, and then check that the power button is set to shut down the computer when pressed. See Windows Help for more information.



Note: If you are unable to shut down the computer in the usual way, press and hold the power button for more than four seconds. You should then wait at least two seconds before turning the computer on again.

Taking care of your computer

Your computer will serve you well if you take care of it.

- Do not expose the computer to direct sunlight. Do not place it near sources of heat, such as a radiator.
- Do not expose the computer to temperatures below 0°C (32°F), or above 50°C (122°F).
- Do not expose the computer to magnetic fields.
- Do not expose the computer to rain or moisture.
- Do not spill water or any liquid on the computer.
- Do not subject the computer to heavy shock or vibration.
- Do not expose the computer to dust or dirt.
- Do not place objects on top of the computer.
- Do not slam the lid shut. Close the computer gently.
- Do not place the computer on unstable or uneven surfaces.

Taking care of your AC adapter

It is important that you look after your AC adapter.

- Do not connect the adapter to any other device.
- Do not step on the power cord or place heavy objects on it. Route the power cord away from areas where people might walk on it or trip over it.
- Do not pull on the power cord when disconnecting from the mains power socket. Grasp and pull the plug instead.
- The total ampere ratings of equipment plugged into a power strip should not exceed the ampere rating for that power strip.

Taking care of your battery pack

It is also important that you look after your computer's battery pack.

- Use the correct battery model for your computer. Do not use other kinds of batteries.
- Turn the power off before removing or replacing the battery.
- Do not tamper with the battery. Keep the battery away from children.
- Dispose of batteries according to local regulations. Recycle if possible.

Cleaning and servicing

When cleaning your computer, it is important that you follow these steps:

- Turn off the computer and remove the battery.
- Disconnect the AC adapter.
- Clean with a soft cloth moistened with a little water. Do not use liquid or aerosol cleaners.

Refer to the chapter entitled "Frequently asked questions" on page 67 if any of the following occurs:

- You drop the computer or damage the case.
- You spill liquid on the computer.
- The computer does not operate normally.

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**Getting familiar with
your computer**

Your Aspire 1450 series notebook computer combines solid performance, versatility, multimedia capabilities and portability with a stylish design. Increase your productivity by working wherever you are.

This chapter provides an in-depth "tour" of your computer's features.

A tour of your computer

After setting up your new Aspire notebook computer, as illustrated in the Just for starters... poster, take a few minutes to explore the unit.

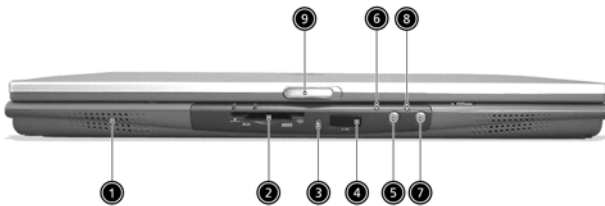
Front open view






#	Item	Description
1	Display screen	Also called LCD (liquid-crystal display), displays computer output.
2	Power button	Turns on the computer.
3	Touchpad	Touch-sensitive pointing device which functions like a computer mouse.

#	Item	Description
4	Click buttons (left, center and right)	The left and right buttons function like the left and right mouse buttons; the center button serves as a 4-way scroll button.
5	Palmrest	Comfortable support area for your hands when you use the computer.
6	Keyboard	Inputs data into your computer.
7	Status indicators	LEDs (light-emitting diode) that turn on and off to show the status of the computer, its functions and components.
8	Microphone	Internal microphone for sound recording.
9	Launch keys	Special keys for launching internet browser, email program and frequently used programs. See "Launch Keys" on page 23 for more details.

Front view



#	Item	Description
1	Speaker	Outputs sound.

#	Item	Description
2	4-in-1 card reader ¹	Reads cards from Smart Media, Memory Stick, MultiMedia, and Secure Digital cards.
3	4-in-1 card reader ¹ indicator	Displays activity of 4-in-1 card reader.
4	Infrared port 	Interfaces with infrared devices (e.g., infrared printer, IR-aware computer).
5	Bluetooth button ²	Enables or disables Bluetooth functionality.
6	Bluetooth indicator ² 	Indicates that (optional) Bluetooth is enabled.
7	InviLink button ³	Enables or disables wireless LAN feature.
8	InviLink indicator ³ 	Indicates status of wireless LAN communication.
9	Latch	Latch for opening and closing the laptop.









Notes:

1. Four-in-one card reader is a manufacturing option, subject to configuration. Only one card can operate at any given time.
2. Bluetooth button and indicator work on models with Bluetooth only.
3. InviLink button and indicator work on models with wireless LAN only.

Left view



#	Item	Description
1	Four USB 2.0 ports 	Connect to Universal Serial Bus devices (e.g., USB mouse, USB camera).
2	IEEE 1394 port 	Connects to IEEE 1394 devices.
3	Line-in jack 	Accepts audio line-in devices (e.g., audio CD player, stereo walkman).
4	Microphone jack 	Accepts input from external microphones.
5	Headphone/ Speaker/ Line-out jack 	Connect to headphones or other line-out audio devices (speakers).
6	PC Card eject button	Ejects the PC Card from the slot.
7	PC Card slot 	The slot supports a standard Type II CardBus PC Card.






Right view



#	Item	Description
1	Optical drive	Depending on your model, the optical drive is one of the following: <ul style="list-style-type: none"> • DVD-ROM drive for reading CDs and DVDs. • DVD/CD-RW combo drive for reading CDs and DVDs and writing to CD-RWs. • DVD dual for reading both DVD+/-RWs and writing to DVD+/-RWs.
2	Optical disc access indicator	LED that indicates when an optical disc is being read or written.
3	Optical drive eject button	Press the eject button to remove a disc from the optical drive.
4	Optical drive emergency eject hole	Used to eject an optical disc when the computer is turned off.
5	Power jack	Connects to an AC adapter.

Rear view



#	Item	Description
1	Modem jack 	Connects to a phone line.
2	Network jack 	Connects to an Ethernet 10/100-based network.
3	External display port 	Connects to a display device (e.g., external monitor, LCD projector) .
4	S-video 	Connects to a television or display device with S-video input.
5	Security keylock 	Connects to a Kensington-compatible computer security lock.

Bottom view



#	Item	Description
1	Battery bay	Houses the computer's battery pack.
2	Battery release latch	Unlatches the battery to remove the battery pack.
3	Battery lock	Locks the battery in place.
4	Mini-PCI slot	Slot for adding mini-PCI cards.
5	Hard disk protector	Protects the hard disk from accidental bumps and vibration.
6	Hard disk bay	Houses the computer's hard disk (secured by a screw).
7	Memory compartment	Houses the computer's main memory.

#	Item	Description
8	Cooling fan	Helps keep the computer cool. Note: Don't cover or obstruct the opening of the fan.
9	Personal identification slot	Insert a business card or similar-sized identification card to personalize your computer.

Features

Performance

- AMD Athlon™ XP-M processor at available in 1800+~2400+ and higher.
- Memory upgradeable up to 2 GB with 2 slots (Only one slot for user accessible)
- High-capacity, Enhanced-IDE hard disk
- Li-ion main battery pack
- Microsoft Windows XP operating system

Display

- Thin-Film Transistor (TFT) liquid crystal display (LCD) displaying 32-bit high color up to 1024 x 768 eXtended Graphics Array (XGA) resolution for 14.1"/15"
- 3D graphics engine
- Simultaneous LCD and CRT display support
- S-video for output to a television or display device that supports S-video input
- "Automatic LCD dim" feature that automatically decides the best settings for your display and conserves power
- DualView™

Multimedia

- AC'97 stereo audio
- Built-in dual speakers.
- Built-in microphone.
- High-speed optical drive
- Built-in optical drive (DVD-ROM, DVD/CD-RW combo or DVD dual).
- 14.1" or 15.0" TFT XGA(1024x768 resolution) panel.
- Audio input and output jacks.

Connectivity

- High-speed fax/data modem port
- Ethernet/Fast Ethernet port

- Fast infrared wireless communication
- Four USB 2.0 (Universal Serial Bus) ports
- IEEE 1394 port
- InviLink 802.11g wireless LAN (manufacturing optional)
- Bluetooth ready (manufacturing optional)
- SD/MMC/SM/MS memory slot (manufacturing optional)

Human-centric design and ergonomics

- Internet 4-way scroll button
- Sleek, smooth and stylish design
- Acer FinTouch full-sized curved keyboard
- Ergonomically-centered touchpad pointing device

Expansion






- One type II CardBus PC Card slot
- Upgradeable memory

Indicators

The computer has three easy-to-read status indicators below the display screen, and two on the front of the computer.



The Power and Battery status indicators are visible even when the display is closed.

Icon	Function	Description
	Caps lock	Lights when Caps Lock is activated.
	Num lock	Lights when Num Lock is activated.
	Media Activity	Lights when the disc or optical drive is activated.
	Power	Lights green when the power is on and orange when the computer is in standby mode.
	Battery	Lights orange when the battery is charging.

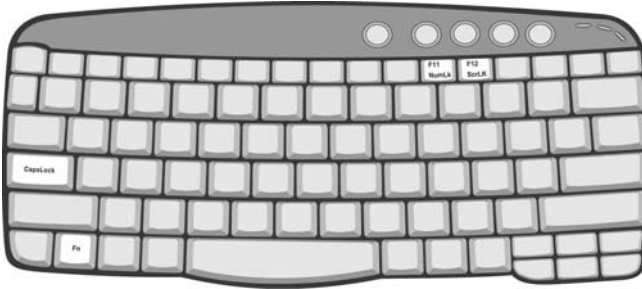
Using the Keyboard

The full-sized keyboard includes an embedded numeric keypad, separate cursor keys, two Windows keys and twelve function keys.

Special keys

Lock keys

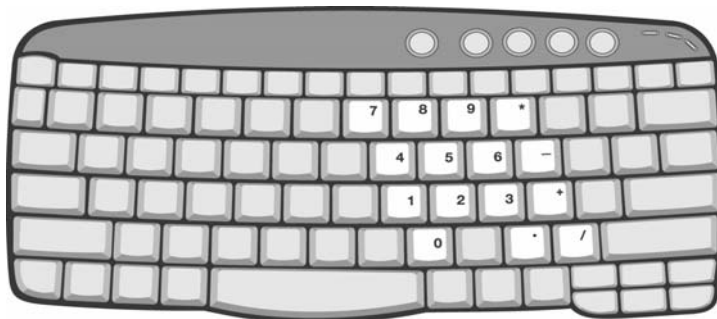
The keyboard has three lock keys which you can toggle on and off.



Lock Key	Description
Caps Lock	When Caps Lock is on, all alphabetic characters are typed in uppercase. Toggle on and off by pressing the Caps Lock key on the left side of the keyboard.
Num Lock	When Num Lock is on, the embedded numeric keypad can be used. Toggle on and off by pressing the Fn + F11 keys simultaneously.
Scroll Lock	When Scroll Lock is on, the screen toggles up or down one line at a time when the up and down cursor control keys are pressed.

Embedded numeric keypad

The embedded numeric keypad functions like a desktop numeric keypad. It is indicated by small characters located on the upper right corner of the keycaps. To simplify the keyboard legend, cursor-control key symbols are not printed on the keys.











Desired Access	Num lock On	Num lock Off
Number keys on embedded keypad	Type numbers in a normal manner.	
Cursor-control keys on embedded keypad	Hold Shift while using cursor-control keys.	Hold Fn while using cursor-control keys.
Main keyboard keys	Hold Fn while typing letters on embedded keypad.	Type the letters in a normal manner.

Windows keys

The keyboard features two keys that provide Windows-specific functions.



Key	Description
Windows logo key 	Start button. Combinations with this key perform shortcut functions. Below are a few examples:  + Tab (Activates next taskbar button)  + E (Explores My Computer)  + F (Finds Document)  + M (Minimizes All) Shift +  + M (Undoes Minimize All)  + R (Displays the Run... dialog box)
Application key 	Opens a context menu (same as a right-click).

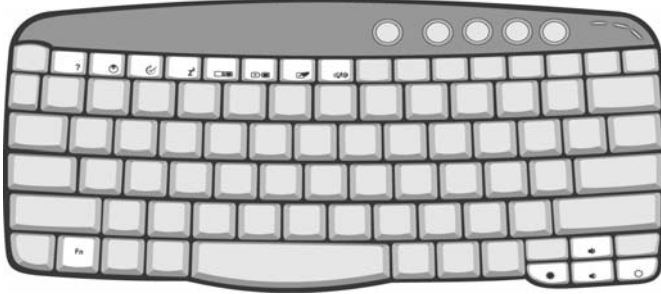


Note : If an external keyboard or keypad is connected to the computer, the Num Lock feature automatically shifts from the internal keyboard to the external keyboard or keypad.




Hot keys









Using the Fn key with another key creates a hot key, providing a quick and convenient method for controlling various functions.

To use a hot key, first hold down the Fn key. Next, press the second key in the combination. Finally, release both keys.



Your computer provides the following hot keys:

Hot key	Icon	Function	Description
Fn-F1	?	Hot key help	Displays help on hot keys.
Fn-F2		Setup	Accesses the computer's configuration utility.
Fn-F3		Power management scheme toggle	Switches the power management scheme used by the computer (function available if supported by operating system). See "Connectivity options" on page 28.
Fn-F4		Sleep	Puts the computer in Sleep mode. See "Connectivity options" on page 28.

Hot key	Icon	Function	Description
Fn-F5		Display toggle	Switches display output between the display screen, external monitor (if connected) and both the display screen and external monitor.
Fn-F6		Screen blank	Turns the display screen backlight off to save power. Press any key to return.
Fn-F7		Touchpad toggle	Turns the internal touchpad on and off.
Fn-F8		Speaker toggle	Turns the speakers on and off.
Fn-↑		Volume up	Increases the speaker volume.
Fn-↓		Volume down	Decreases the speaker volume.
Fn-→		Brightness up	Increases the screen brightness.
Fn-←		Brightness down	Decreases the screen brightness.

The Euro symbol

If your keyboard layout is set to United States-International or United Kingdom or if you have a keyboard with a European layout, you can type the Euro symbol on your keyboard.



Note for US keyboard users: The keyboard layout is set when you first set up Windows. For the Euro symbol to work, the keyboard layout has to be set to United States-International.

To verify the keyboard type in Windows XP, follow the steps below:

- 1 Click on **Start, Control Panel**.
- 2 Double-click on **Regional and Language Options**.
- 3 Click on the **Language** tab and click on **Details**.
- 4 Verify that the keyboard layout used for "En English (United States)" is set to United States-International.

If not, select and click on **ADD**; then select **United States-International** and click on **OK**.

- 5 Click on **OK**.

To type the Euro symbol:

- 1 Locate the Euro symbol on your keyboard.
- 2 Open a text editor or word processor.
- 3 Hold **Alt Gr** and press the Euro symbol.



Note: Some fonts and software do not support the Euro symbol. Please refer to www.microsoft.com/typography/faq/faq12.htm for more information.

Touchpad

The built-in touchpad is a pointing device that senses movement on its surface. This means the cursor responds as you move your finger on the surface of the touchpad. The central location on the palmrest provides optimum comfort and support.



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Note: When using an external USB mouse, you can press **Fn-F7** to disable the touchpad.



Touchpad basics

The following items teach you how to use the touchpad:



- Move your finger across the touchpad to move the cursor.
- Press the left (1) and right (3) buttons located on the edge of the touchpad to do selection and execution functions. These two buttons are similar to the left and right buttons on a mouse.

Tapping on the touchpad produces similar results.

- Use the 4-way scroll (2) button (top/bottom/left and right) to scroll a page up, down, left or right. This button mimics your cursor pressing on the vertical and horizontal scroll bars of Windows applications.

Function	Left button	Right button	Center buttons	Tap
Execute	Click twice quickly			Tap twice (at the same speed as double-clicking a mouse button)
Select	Click once			Tap once
Drag	Click and hold, then use finger to drag the cursor on the touchpad			Tap twice (at the same speed as double-clicking a mouse button) then hold finger to the touchpad on the second tap and drag the cursor
Access context menu		Click once		
Scroll			Click and hold the button in the desired direction (up/down/left/right)	



Note: Keep your fingers dry and clean when using the touchpad. Also keep the touchpad dry and clean. The touchpad is sensitive to finger movements. Hence, the lighter the touch, the better the response. Tapping harder will not increase the touchpad's responsiveness.

Launch Keys

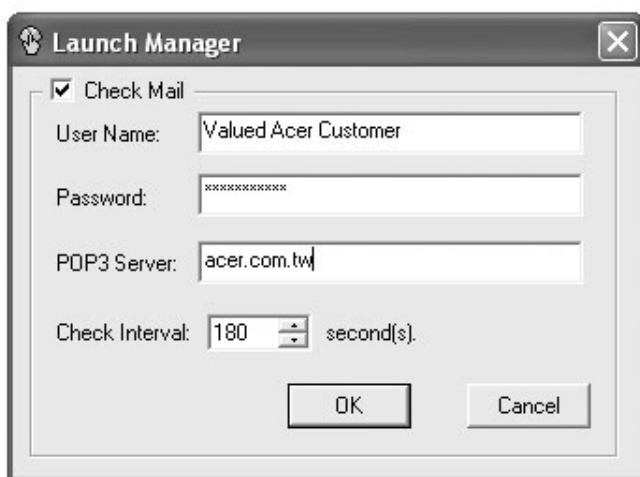
Located above the keyboard are five buttons. The left-most button is the power button. To the right of the power button are the four launch keys. They are designated as the mail button, the web browser button, and two programmable buttons (P1 and P2).



Launch key	Default application
Mail	Email application
Web browser	Internet browser application
P1	User-programmable
P2	User-programmable

E-Mail Detection

Click right button at the Launch Manager icon on the taskbar and click on E-Mail Detection. In this dialog box, you have the option to enable/disable mail checking, set the time interval for mail checking, etc. If you already have an email account, you can fill in User Name, Password and POP3 Sever in the dialog box. The POP3 Sever is the mail server where you get your email.



Aside from the email checking function, there is a mail button that is used to launch the email application. It is located above the keyboard right below the LCD.

Storage

This computer supplies you with the following media storage:

- The High-capacity Enhanced-IDE hard disk
- The high speed optical drive

Hard disk

The high-capacity hard disk is the answer to your storage needs. This is where your programs and data are stored.

Optical drive

Depending on your model, you have a CD-ROM, DVD-ROM, DVD/CD-RW combo drive, DVD-R, or DVD dual drive. The optical drive provides increased storage capacity, as well as offering a host of multimedia possibilities.

Ejecting the optical drive tray

To eject the optical drive tray when the computer is turned on, press the drive eject button.



To load an optical disc:

- Place a CD or DVD on the open tray. Align the disc's center hole with the tray's spindle.
- Gently push down on the disc until it clicks in place on the spindle.
- Gently push in the tray until it clicks closed.

Emergency ejection of the optical drive tray

If you need to eject the optical drive tray when the computer is turned off, push a straightened paper clip into the optical drive emergency eject hole. The tray will be released, and partially pop open.



Audio

The computer comes with 16-bit high-fidelity AC'97 stereo audio, and includes a built-in sensitive microphone and dual stereo speakers.



There are audio ports on the left of the computer. See “Left view” on page 6 for more information on connecting external audio devices.

Adjusting the volume

Adjusting the volume on the computer is as easy as pressing some buttons. See “Hot keys” on page 17 for more information on adjusting the speaker volume.

Connectivity options

Your computer has built-in connectivity options, enabling you to hook up to a network or communicate over a phone line.

Ethernet and LAN

The built-in network feature allows you to connect your computer to an Ethernet-based (10/100Mbps) network.

To use the network feature, connect an Ethernet cable from the network jack on the rear of the computer to a network jack or hub on your network.



See Windows Help for information on setting up a network connection.

Fax/data modem

Your computer has a built-in V.92 56Kbps AC'97 Link fax/data modem.



Warning: This modem port is not compatible with digital phone lines. Plugging the computer into a digital phone system will damage the modem.

To use the fax/data modem port, connect a phone cable from the modem port to a telephone jack.



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 four megabits per second (Mbps) at a distance of up to one meter.



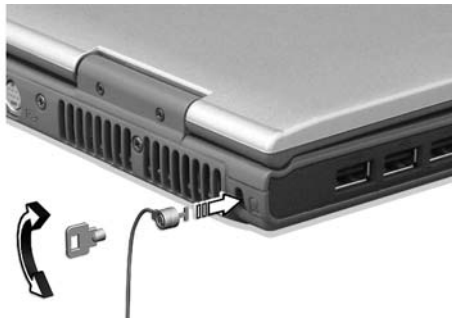
Securing your computer

Your computer is a valuable investment that you need to take care of. Learn how to protect and take care of your computer.

Security features include hardware and software locks — a security notch, Smart Card and passwords.

Using a computer security lock

A security keylock 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.

Using passwords

Passwords protect your computer from unauthorized access. Setting these passwords creates several different levels of protection for your computer and data:

- Supervisor Password prevents unauthorized entry into the BIOS Utility. Once set, you must key-in this password to gain access to the BIOS Utility. See “BIOS Setup Utility” on page 64.
- User Password secures your computer against unauthorized use. Combine the use of this password with password checkpoints on boot-up and resume from hibernation for maximum security.
- Password on Boot secures your computer against unauthorized use. Combine the use of this password with password checkpoints

on boot-up and resume from hibernation for maximum security.

- Hard Disk Password protects your data by preventing unauthorized access to your hard disk. Even if the hard disk is removed from the computer and moved to another computer, it cannot be accessed without the Hard Disk Password.



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

Entering passwords

When a password is set, a password prompt appears in the left-hand corner of the display screen.

- When the Supervisor Password is set, a prompt appears when you press **F2** to enter the BIOS Utility at boot-up.
- Type the Supervisor Password and press **Enter** to access the BIOS Utility. If you enter the password incorrectly, a warning message appears. Try again and press **Enter**.
- When the User Password is set and the Password on boot parameter is enabled, a prompt appears at boot-up.
- Type the User Password and press **Enter** to use the computer. If you enter the password incorrectly, a warning message appears. Try again and press **Enter**.
- When the Hard Disk Password is set, a prompt appears at boot-up.
- Type the Hard Disk Password and press **Enter** to use the computer. If you enter the password incorrectly, a warning message appears. Try again and press **Enter**.



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Important! You have three chances to enter a password. If you fail to enter the password correctly after three tries, the system halts. Slide and hold the power switch for four seconds to shut down the computer. Then turn on the computer again, and try again. If you fail to enter the Hard Disk Password, please contact your dealer or an authorized service center.

Setting passwords

You can set passwords using the BIOS Utility.

**Operating on
battery power**

Your Aspire 1450 series notebook computer operates on battery or AC power.

This chapter provides information for operating on battery power, as well as information on how your computer manages and saves power.

Battery pack

The computer uses a re-chargeable Li-Ion battery pack.

Battery pack characteristics

The battery pack has the following characteristics:

- Employs current battery technology standards.
- Delivers a battery-low warning.

The battery is recharged whenever you connect the computer to the mains power supply. Your computer supports charge-in-use, enabling you to recharge the battery while you continue to operate the computer. However, recharging with the computer turned off results in a significantly faster charge time.

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. Contact your dealer for details on ordering a spare battery pack.

Maximizing the battery's life

Like all other batteries, your computer's battery will degrade over time. This means that the battery's performance will diminish with time and use. To maximize your battery's life, you are advised to adhere to the recommendations set out below.

Conditioning a new battery pack

Before you use a battery pack for the first time, there is a "conditioning" process that you should follow:

- 1 Insert the new battery without turning the computer on.
- 2 Connect the AC adapter and fully charge the battery.
- 3 Disconnect the AC adapter.
- 4 Turn on the computer and operate using battery power.
- 5 Fully deplete the battery until the battery-low warning appears.
- 6 Reconnect the AC adapter and fully charge the battery again.

Follow these steps again until the battery has been charged and discharged three times.

Use this conditioning process for all new batteries, or if a battery hasn't been used for a long time. If the computer is to be stored for more than two weeks, you are advised to remove the battery pack from the unit.



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Warning: Do not expose battery packs to temperatures below 0°C (32°F) or above 60°C (140°F). Extreme temperatures may adversely affect the battery pack.

By following the battery conditioning process you condition your battery to accept the maximum possible charge. Failure to follow this procedure will prevent you from obtaining the maximum battery charge, and will also shorten the effective lifespan of the battery.

In addition, the useful lifespan of the battery is adversely affected by the following usage patterns:

- Using the computer on constant AC power with the battery inserted. If you want to use constant AC power, you are advised to remove the battery pack after it is fully charged.
- Not discharging and recharging the battery to its extremes, as described above.
- Frequent use; the more you use the battery, the faster it will reach the end of its effective life. A standard computer battery has a life span of about 500 charges.

Installing and removing the battery pack



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Important! Before removing the battery from the unit, connect the AC adapter if you want to continue using your computer. Otherwise, turn off the computer first.

To install a battery pack:

- 1 Align the battery with the open battery bay; make sure that the end with the contacts will enter first, and that the top surface of the battery is facing up.
- 2 Slide the battery into the battery bay and gently push until the battery locks in place.

To remove a battery pack:

- 1 Slide the battery release latch to release the battery.
- 2 Pull the battery from the battery bay.

Charging the battery

To charge the battery, first make sure that it is correctly installed in the battery bay. Plug the AC adapter into the computer, and connect to a mains power outlet. You can continue to operate your computer on AC power while your battery is charging. However, charging the battery with the computer turned off results in a significantly faster charge time.



Note: You are advised to charge the battery before retiring for the day. Allowing the battery to charge overnight before traveling enables you to start the next day with a fully charged battery.

Checking the battery level

The Windows Power Meter indicates the current battery level. Rest the cursor over the battery/power icon on the taskbar to see the battery's present charge level.

Optimizing battery life

Optimizing battery life helps you get the most out of battery operation, prolonging the charge/recharge cycle and improving recharging efficiency. You are advised to follow the suggestions set out below:

- Purchase an extra battery pack.
- Use AC power whenever possible, reserving your battery for on-the-go use.
- Eject a PC card if it is not being used, as it will continue to draw power.
- Store the battery pack in a cool, dry place. The recommended temperature is 10°C to 30°C. Higher temperatures cause the battery to self-discharge faster.
- Excessive recharging decreases the battery life.
- Look after your AC adapter and battery.

Battery-low warning

When using battery power pay attention to the Windows Power Meter.



Warning: Connect the AC adapter as soon as possible after the battery-low warning appears. Data will be lost if the battery to become fully depleted and the computer shuts down.

When the battery-low warning appears, the recommended course of action depends on your situation:

Situation	Recommended Action
The AC adapter and a power outlet are available.	<ol style="list-style-type: none"> 1. Plug the AC adapter into the computer, and then connect to the mains power supply. 2. Save all necessary files. 3. Resume work. <p>Turn off the computer if you want to recharge the battery rapidly.</p>
An extra fully charged battery pack is available.	<ol style="list-style-type: none"> 1. Save all necessary files. 2. Close all applications. 3. Shut down the operating system to turn off the computer. 4. Replace the battery pack. 5. Turn on the computer and resume work.
The AC adapter or a power outlet is unavailable. You have no spare battery pack.	<ol style="list-style-type: none"> 1. Save all necessary files. 2. Close all applications. 3. Shut down the operating system to turn off the computer.

Power management

Your computer features a built-in power management unit that constantly monitors system activity. System activity refers to any activity involving one or more of the following devices: keyboard, touchpad/mouse, floppy disk drive, hard disk drive, optical drive, peripherals connected to the computer, and video memory. If no activity is detected for a period of time (the settings are controlled in Windows Power Management), the computer turns off some, or all, of these devices in order to conserve power.

Your computer employs a power management scheme that supports ACPI (Advanced Configuration and Power Interface), enabling maximum power conservation without compromising system performance. ACPI allows Windows to control the amount of power given to each device attached to the computer. In this way, Windows handles all power-saving chores for your computer. Refer to Windows Help for more information.

Peripherals and options

Your Aspire 1450 series notebook computer offers good expansion capabilities.

This chapter provides information on connecting peripherals to expand your system. It also describes how to upgrade key components to enhance system performance and keep your computer in step with the latest technology.

You are advised to consult your dealer for information on peripherals. In addition, make sure that you read the manuals and other documentation provided with new hardware.

External display devices

You can connect an external (VGA) monitor or projector to your computer's external display port. See the section entitled "Display" for information on using the computer's simultaneous display and multi-display features.

Use the Fn + F5 hot key to toggle the display setting between the computer's LCD panel and the external display device. See "Hot keys" on page 17 for more information.

External input devices

You can connect a variety of input devices to your computer's USB ports, providing increased functionality and greater ease-of-use. In addition, the USB ports can be used to connect many other peripheral devices, such as digital cameras, printers and scanners. See "Expansion devices" on page 47 for more information on connecting USB devices.

External keyboard

Your computer features a full-size keyboard. However, if you prefer, you can connect an external keyboard to one of your computer's USB ports. This enables you to enjoy the comfort and added features of a full-size desktop system keyboard when inputting typed data on your notebook computer.

External keypad

Your computer features an embedded keypad that, when combined with the Num Lock feature, enables you to easily input typed numeric data. Alternatively, you can connect a 17-key numeric keypad to one of your computer's USB ports. This enables you to enjoy the benefits of a numeric keypad without interfering with your use of the computer's keyboard for typing text.

External pointing device

Your computer features a sensitive touchpad pointing device with two click buttons and a scroll key. However, if you prefer to use a conventional mouse or other pointing device, you can connect it to one of your computer's USB ports.

USB devices

Your computer features four USB (Universal Serial Bus) 2.0 ports for connecting a range of USB peripherals. See “External input devices” on page 43 and “Printer” on page 46 for information on connecting a USB keyboard, keypad, mouse or printer. Other common USB devices include digital cameras, scanners, and external storage devices.



USB is plug and play, which means that you can connect and start using a USB device without having to restart your computer. You can also disconnect the device at any time.

A further advantage of USB is the ability to use USB hubs. This means that several devices can share a USB port simultaneously.

IEEE 1394 Port

The computer's IEEE 1394 port allows you to connect to an IEEE 1394 supported device like a digital video camera.



See your video or digital camera's documentation for details.

Printer

Your computer supports USB printers.

Refer to the printer's manual for information on:

- Setting up the hardware.
- Installing the necessary drivers in Windows.
- Operating instructions.

To use a USB printer, simply connect the device to one of your computer's USB ports, and then wait for Windows to find the new hardware.

Audio devices

Your computer offers built-in stereo speakers. See the section entitled "Audio" on page 25 for more information on these features. However, in addition to the integrated devices, the two audio ports on the left side of the unit enable you to connect external audio input and output devices.

You can plug an external microphone into your computer's microphone-in jack. This offers the convenience of greater freedom of movement, as well as improved audio input quality.

Connect headphones to the headphone jack for private listening and improved audio output quality.

Expansion devices

PC Card

Your computer features a PC card slot that supports a standard Type II PC card (PCMCIA or CardBus). This greatly increases your computer's usability and expandability. A variety of PC cards are available, such as flash memory, SRAM, fax/data modem, LAN, and SCSI cards. Consult your dealer for information on PC card options for your computer.



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

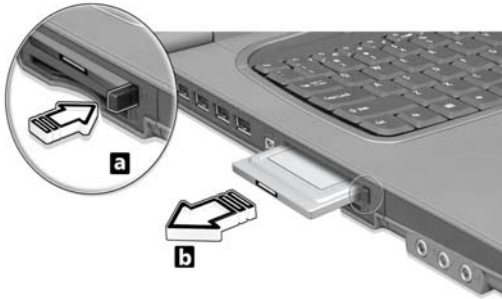
To insert a PC card:

- 1 Align the card with your computer's PC card slot. Make sure that the edge with the connectors is facing the slot, and that the card is the right way up. Many cards are marked with an arrow to help you insert them correctly.
- 2 Slide the card into the slot, and push gently until the card connects.
- 3 If necessary, connect the card's cable to the jack on the outer edge of the card.
- 4 Windows will automatically detect the card's presence.



To remove a PC card:

- 1 Close the application that is using the PC card.
- 2 Double click on the PC card icon on the taskbar, and then select the option to safely remove the card. Wait for the message telling you that it is now safe to remove the card.
- 3 Press the PC card eject button to partially eject the card.
- 4 Pull the card from the slot.



Miscellaneous options

Battery pack

It is a good idea to have a spare battery, especially when you travel with your computer. This greatly increases your productive range when you are on the move.

AC adapter

Having a spare AC adapter allows you to keep one in two different places. For example, you could have one AC adapter at home and another at work. This means that you don't have to carry an AC adapter when traveling between your two base locations.

Key component upgrades

Your computer is designed to deliver solid performance. However, in time, you might find that your applications demand even more computing power. For this reason, you are able to upgrade key components.



Note: Contact your authorized dealer if you decide to perform a key component upgrade.

Memory upgrade

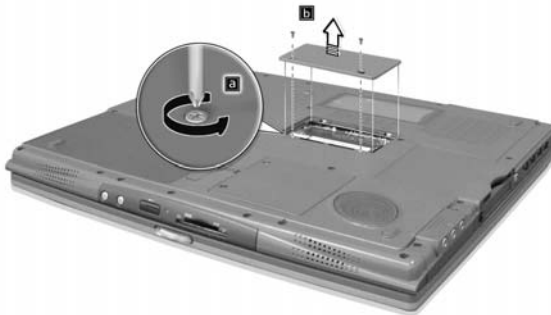
Memory is expandable to 2GB, employing 256/512 MB or 1 GB industry standard soDIMMs (Small Outline Dual Inline Memory Modules). The computer supports DDR (Double Data Rate) DRAM.

There are two memory slots on your computer, one of which is occupied by standard memory. You can upgrade memory by installing a memory module into the other available slot, or replacing the standard memory with a higher-capacity memory module.

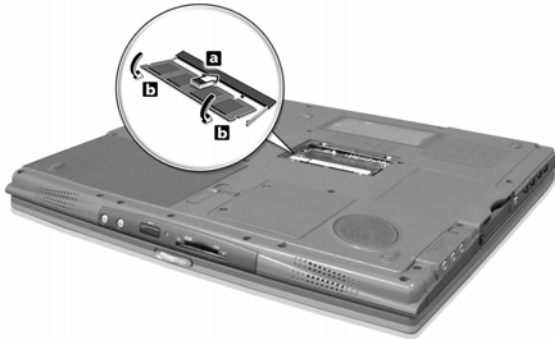
Installing memory:

Follow these steps to install memory:

- 1 Turn off the computer, unplug the AC adapter (if connected) and remove the battery pack. Then turn the computer over to access its base.
- 2 Remove the screws from the memory cover (a); then lift up and remove the memory cover (b).



- 3 Insert the memory module diagonally into the slot (a), then gently press it down (b) until it clicks into place.



- 4 Replace the memory cover and secure it with the screw.
- 5 Reinstall the battery pack, and reconnect the AC adapter.
- 6 Turn on the computer.

The computer automatically detects and reconfigures the total memory size.

Hard disk upgrade

It is possible to replace your hard disk with a higher capacity drive when you need more storage space. Your computer uses a 9.5mm 2.5-inch Enhanced-IDE hard disk. Consult your dealer if you need to perform a hard disk upgrade.

**Moving with your
computer**

Your Aspire 1450 series notebook computer is ideal for taking with you when you move around.

This chapter provides tips on things to consider when traveling with your computer.

Disconnecting from the desktop

Before moving with your computer, you must turn it off and disconnect all peripherals:

- 1 Save your work and close all applications.
- 2 Shut down Windows to turn off your computer.
- 3 Unplug the AC adapter from the mains outlet, and then disconnect it from the computer.
- 4 Disconnect any external devices, such as a keyboard, mouse, or printer, that are attached to your computer.
- 5 If you are using a security lock cable, disconnect the lock from the computer.
- 6 Pack your computer in a strong, waterproof bag or case.

Moving around

Sometimes you might need to move your computer a short distance. For example, you might need to move from your office desk to a meeting room. In these situations, you don't have to shut down the operating system.

Preparing the computer

First, disconnect any peripherals that you don't want to take with you. Next close the lid, placing your computer in Standby mode. You can now safely carry it around the building with you.

When you are ready to use your computer again, open the lid and then press the power button to bring it out of Standby mode.

What to bring to short meetings

If your battery is fully charged, you probably won't need to take anything else with you to the meeting.

What to bring to long meetings

For longer meetings, take along the AC adapter. You can use mains power throughout the meeting, or you can run down your battery first, and then connect the AC adapter after receiving the battery-low warning.

If the meeting room does not have an available power outlet, reduce your computer's power consumption by putting it in Standby mode during long periods of inactivity. It is advisable to take along a spare battery if you have one.

Taking the computer home

When you move between your office and home you will need to prepare your computer for the short trip.

Preparing the computer

After disconnecting your computer from the desktop, prepare the unit as follows:

- 1 Remove all media from the drives. Loaded media can damage the drive heads during transit.
- 2 Pack the computer in a protective case that is padded to guard against knocks. Make sure that the unit cannot slide around inside the case.



Caution: Avoid packing items next to the top of the computer, as this could result in damage to the screen.

What to bring with you

If you don't have spare items at home, it is advisable to take along the AC adapter and this User's Guide.

Special considerations

To protect your computer in transit, it is advisable to pay attention to the following:

- Minimize the effect of temperature changes. Keep your computer with you instead of placing it in storage holds.
- Avoid leaving your computer in a hot car.
- Changes in temperature and humidity can cause condensation to form in your computer. Before turning the computer on, allow it to return to room temperature, and then check the screen for signs of condensation. If the temperature change is greater than 10°C (18°F), allow the computer to come to room temperature slowly by placing it in a room with a temperature between the outside and room temperatures.

Setting up a home office

If you frequently work on your computer at home, as well as at work, it may be worthwhile purchasing a second AC adapter. This will allow you to travel lighter, as you can keep an AC adapter in each location.

You might also find it worthwhile keeping a second set of peripherals at home, such as a keyboard, keypad, mouse and printer.

Traveling with the computer

Sometimes you might need to make longer trips with your computer.

Preparing the computer

Prepare the computer as you would for moving between your office and home. It is advisable to make sure that the battery is fully charged. If you are traveling by air, you might be required to turn on the computer during security checks.

What to take with you

It is advisable to take the following items with you:

- AC adapter.
- Spare, fully charged battery packs.
- Additional printer driver files (if you plan to use another printer).
- Phone and network cables (if you plan to use the computer's modem and network connections).

Special considerations

In addition to the considerations for taking your computer home, keep the following in mind:

- Always take your computer as carry-on luggage.
- If possible, have your computer manually inspected at security checks. Although the computer can pass safely through security X-ray machines, you should never expose it to a metal detector.
- If carried separately, avoid exposing floppy disks to hand-held metal detectors.

Traveling internationally with your computer

Occasionally you might need to travel between countries with your computer.

Preparing the computer

Prepare the computer as you would for normal travel. Remember to take special precautions for air travel.

What to take with you

It is advisable to take the following items with you:

- AC adapter.
- Power cords that are appropriate for the countries you plan to visit.
- Spare, fully charged battery packs.
- Additional printer driver files (if you plan to use another printer).
- Phone and network cables (if you plan to use the computer's modem and network connections). Check that your modem is suitable for the telephone system in the countries you plan to visit. You might have to use a PC card modem in some locations.

Special considerations

In addition to the considerations for normal travel with your computer, keep the following in mind when traveling internationally:

- Check that your power cord is suitable for the local power supply. If necessary, purchase a power cord that meets local requirements. Avoid using converter kits.
- If you plan to connect over a phone line, check that the computer's modem and your phone cord are suitable for the local phone system. If necessary, purchase a PC card modem that meets local requirements.
- If carried separately, avoid exposing floppy disks to hand-held metal detectors.

Software

Your Aspire 1450 series notebook computer includes system utilities.

This chapter provides information on the important software that comes with your computer.

System software

Your computer comes preloaded with the following software:

- Microsoft Windows operating system.
- Hardware BIOS setup utility.
- System utilities, drivers and application software.

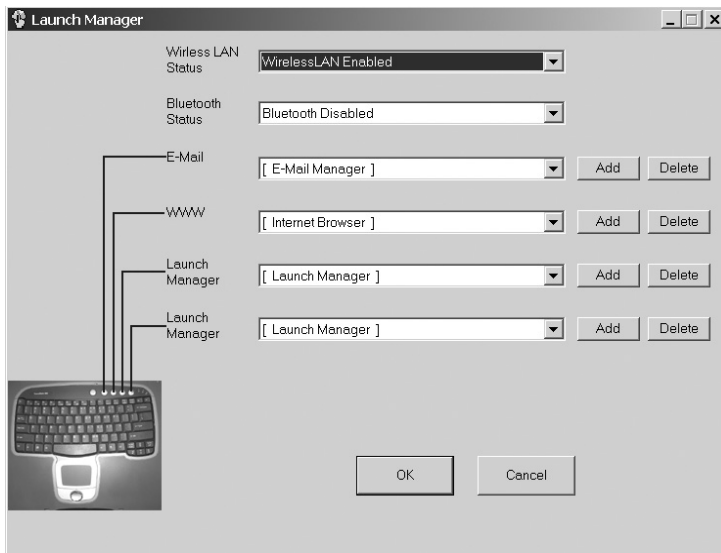


Note: To run software applications in Windows, first click on the Start button. Next, select the appropriate folder, and then click on the application icon. To learn about the software and utility, make use of the online help provided by the software.

Launch Manager

Launch Manager allows you to set the four launch keys located above the keyboard. See “Launch Keys” on page 23 for the location of the launch keys.

You can access the Launch Manager by clicking on Start, All Programs, and then Launch Manager to start the application.



BIOS Setup Utility

The BIOS (basic input/output system) contains important information used to configure the hardware and system software settings. Your computer reads the BIOS when it first starts up, before it loads the operating system.

Your computer's BIOS includes a built-in setup utility called Insyde Software SCU (system configuration utility). It can be started shortly after you turn the computer on, by pressing the F2 key during POST.



The BIOS setup utility displays summary information on your computer, its devices, processor and memory.

Your computer is already configured for optimal performance, and so you should not need to run this utility. However, you may need to change the BIOS settings if you encounter configuration problems in the future. Refer to “Frequently asked questions” on page 67 if a problem arises.

Troubleshooting

This chapter instructs you on how to deal with common system problems. Please read it before calling a technician.

Solutions to more serious problems may require opening the computer. Do not attempt to open and service the computer by yourself. Contact your dealer or an authorized service center for assistance.

Frequently asked questions

This section suggests solutions to commonly encountered problems.

I press the power button, but my computer does not start or boot-up. Look at the Power status indicator:

- If it is not lit, no power is being delivered to the computer. Check the following:
 - If you are running on battery power, the battery may be low and unable to power the computer. Connect the AC adapter to recharge the battery pack.
 - If you are running on mains power, make sure that the AC adapter is properly plugged in to the computer and to the power outlet.
- If it is lit, check the following:
 - Make sure that there is not a non-bootable (non-system) diskette in the floppy disk drive. If so, remove the diskette and then press Ctrl-Alt-Del to restart the system.

Nothing appears on the screen.

The computer's power management system automatically blanks the screen to save power. Press any key to turn the display back on.

If pressing a key does not turn the display back on, check the following:

- The brightness level might be too low. Press Fn + → hot key to increase the screen brightness level.
- The display device might be set to an external monitor. Press the Fn + F5 hot key to toggle the display setting.
- The system may be in standby mode. Try pressing the power button to resume.

The image is not full-screen.

Make sure that the resolution is set to a resolution your system supports:

- Right click on your Windows desktop and select Properties to bring up the Display Properties dialog box. Alternatively, click on the Display icon in Control Panel.
- Click on the Settings tab to check the resolution setting. Resolutions lower than the specified resolution result in a display that is less than full-screen.

There is no audio coming from my computer.

Check the following:

- The volume may be muted. In Windows, look at the volume control icon on the taskbar. If it is crossed-out, click on the icon and deselect the Mute option.
- The volume level may be too low. In Windows, click on the volume control icon on the taskbar, and then use the slider control to increase the volume level.
- If headphones are connected to the headphone jack on the computer, your computer's built-in speakers will be turned off.

My external microphone does not work.

Check the following:

- Make sure that the external microphone is properly plugged into the microphone-in jack on the computer.
- Make sure that the volume is not muted or set too low.

I can't eject the optical drive tray with my computer turned off.

The computer needs to be turned on for the optical drive eject button to function. If you need to eject the optical drive tray when the computer is turned off, push a straightened paper clip into the optical drive emergency eject hole. See "Ejecting the optical drive tray" on page 26 for more information.

The keyboard does not respond.

Try attaching an external USB keyboard to one of your computer's USB ports. If it works, the internal keyboard might have become disconnected. Contact your dealer or an authorized service center.

The floppy disk drive cannot read a diskette.

Check the following:

- Make sure the diskette is properly inserted in the floppy disk drive.
- Make sure that the diskette is formatted.
- Try to read a second diskette. If this works, then the first diskette might have a problem.
- If the diskette is not the cause of the problem, then the drive head might be dirty. Clean it using a drive head cleaning kit.

The optical drive cannot read a disc.

Check the following:

- Make sure that the disc is supported by the drive. If your computer has a CD-ROM drive, it can read CDs but cannot read DVDs. If your computer has a DVD drive, it can read CDs and DVDs.
- When placing a disc in the drive tray, make sure that it is secure on the spindle of the drive tray.
- Make sure that the disc is free from scratches or smudges. If the disc is dirty, clean it using a disc cleaning kit.
- If the disc is OK, the drive head might be dirty. Clean it using a drive head cleaning kit.

The printer does not work.

Check the following:

- Make sure that the printer is connected to a power outlet and it is turned on.
- Check that the cable is properly connected to the appropriate ports on both the computer and the printer.
- If you are using a printer connected to your computer's parallel port, restart the computer. Windows needs to find the new hardware and install the necessary drivers.

I want to set up my location to use the internal modem.

Follow these steps:

- Click on **Start**, and then click on **Control Panel**.
- Double-click on **Phone and Modem Options**.
- In the **Dialing Rules** tab, begin setting up your location.

Refer to Windows Help for more information.

When the battery is 95-99% full, it won't charge to 100% capacity. To preserve the life of the battery, the system only lets you charge the battery when its capacity falls below 95%. It is recommended that you run down the battery, and then fully recharge it.

Requesting service

International Travelers Warranty (ITW)

Your computer is backed by an International Travelers Warranty (ITW) that gives you security and peace of mind when traveling. Our worldwide network of service centers are there to give you a helping hand.

An ITW passport comes with your computer. This passport contains all you need to know about the ITW program. A list of available, authorized service centers is in this handy booklet. Read this passport thoroughly.

Always have your ITW passport on hand, especially when you travel to receive the benefits from our support centers. Place your proof-of-purchase in the flap located inside the front cover of the ITW passport.

If the country you are traveling in does not have an Acer-authorized ITW service site, you can still get in contact with our offices worldwide.

There are two ways to access Acer for technical support and information:

- Internet service worldwide (www.acersupport.com)
- Technical support numbers in various countries

You can view a list of technical support numbers by following these steps:

- 1 Click on **Start, Settings, Control Panel**.
- 2 Double-click on **System**.
- 3 Click on the **Support Information** button.

Before you call

Please have the following information available when you call Acer for online service, and please be at your computer when you call. With your support, we can reduce the amount of time a call takes and help solve your problems efficiently.

If there are error messages or beeps reported by your computer, write them down as they appear on the screen (or the number and sequence in the case of beeps).

You are required to provide the following information:

Name: _____

Address: _____

Telephone number: _____

Machine and model type: _____

Serial number: _____

Date of purchase: _____

Appendix A
Specifications

This appendix lists the general specifications of your computer.

Microprocessor

- AMD Athlon™ XP-M processors at 1800⁺~2400⁺ and higher

Memory

- Main memory expandable to 2GB
- Dual 200-pin soDIMM sockets
- Support 256M, 512M & 1GB DDR 333 RAM
- 512 KB flash ROM BIOS

Data storage

- One high-capacity E-IDE hard disk
- One high speed optical drive

Display and video

- Thin-Film Transistor (TFT) liquid crystal display (LCD) displaying 32-bit true color up to 1024 x 768 eXtended Graphics Array (XGA) resolution for 14.1" / 15.0"
- Simultaneous LCD and CRT display support
- DualView™
- S-video for output to a television or display device that support S-video input
- "Automatic LCD dim" feature that automatically selects the best setting for the display in order to conserve power

Audio

- AC'97 stereo audio
- Dual speakers and one internal microphone
- Separate audio ports for headphone-out, line-in and microphone-in devices

Keyboard and pointing device

- 84-/85-/88-key Windows keyboard
- Ergonomically-centered touchpad pointing device with 4-way scroll button

I/O ports

- One type II CardBus PC Card slot
- One RJ-45 network jack (Fast Ethernet 10/100)
- One RJ-11 modem jack (V.92, 56K)
- One DC-in jack
- One parallel port (ECP/EPP)
- One VGA port for external monitor
- One speaker/headphone-out jack (3.5mm mini jack)
- One audio line-in jack (3.5mm mini jack)
- One microphone-in jack
- One IEEE 1394 port
- One S-video TV-out port
- Four USB 2.0 ports
- One FIR port (IrDA)
- 4-in-1 Card Reader (Manufacture optional)

Weight and dimensions

- 14.1"-display model:
 - 2.87 kg (6.32 lbs)
 - 330(W) x 272(D) x 28.9(H) mm
- 15.0"-display model:
 - 2.93 kg (6.45 lbs)
 - 330(W) x 272(D) x 31.8(H) mm

Environment

- Temperature:
 - Operating: 5°C ~ 35°C
 - Non-operating: -20°C ~ 65°C
- Humidity (non-condensing):
 - Operating: 20% ~ 80% RH
 - Non-operating: 10% ~ 90% RH

System

- ACPI support
- SMBIOS 2.3 support with asset tag capability
- Microsoft Windows operating system

Power

- 65Wh 8-cell Li-Ion battery pack
- 90-Watt AC adapter, auto sensing 100–240 Vac, 50–60Hz

Options

- 256/512 MB or 1 GB memory upgrade module
- Additional AC adapter
- Additional battery pack
- USB Floppy drive
- 802.11g wireless LAN
- Bluetooth

Appendix B

Notices

This appendix lists the general notices for your computer.

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 non-certified 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.

Modem notices

FCC

This equipment complies with Part 68 of the FCC rules. Located on the bottom side of the modem is a label that contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. Upon request, you must provide this information to your telephone company.

If your telephone equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But, if advance notice is not practical, you will be notified as soon as possible. You will also be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If this equipment should fail to operate properly, disconnect the equipment from the phone line to determine if it is causing the problem. If the problem is with the equipment, discontinue use and contact your dealer or vendor.

TBR 21

This equipment has been approved [Council Decision 98/482/EC - "TBR 21"] for pan-European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN termination point. In the event of problems, you should contact your equipment supplier in the first instance.

Telecommunications notices

A-Tick notice

For safety reasons, only connect headsets with a telecommunications compliance label. This includes customer equipment previously labelled permitted or certified.

Note: Below regulatory information is for models with wireless LAN and/or Bluetooth only.

Regulatory Information

The Wireless module must be installed and used in strict accordance with the manufacturer's instructions. This device complies with the following radio frequency and safety standards.

Canada - Industry Canada (IC)

- This device complies with RSS 210 of Industry Canada.

Europe - EU Declaration of Conformity

This device complies with the standards listed below, following the provisions of the EMC Directive 89/336/EEC:

- ETSI EN 301 489-1/17
- ETSI EN 300 328-2
- EN 300 328 V1.4.1.

USA - Federal Communications Commission (FCC)

This device complies with Part 15 of FCC Rules. Operation of the devices in an Wireless LAN System is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference that may cause undesired operation.

Exposure to Radio Frequency Radiation

The radiated output power of the Wireless module is far below the FCC radio frequency exposure limits. Nevertheless, the Wireless module shall be used in such a manner that the potential for human contact during normal operation is minimized.

The transmitter and the antenna are permanently installed inside the notebook, and are specific for this model (not for generic computer). The antenna of this device is installed on the top of the LCD display. For compliance with FCC radiation exposure limits. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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 instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment (example - use only shielded interface cables when connecting to computer or peripheral devices).

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.

Important safety instructions

Read these instructions carefully. Save them 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 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 case 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.
 - 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 SPT-2, 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 used with 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.

APPAREIL A LASER DE CLASSE 1 PRODUIT

LASERATTENTION: RADIATION DU FAISCEAU LASER INVISIBLE EN CAS D'OUVERTURE. EVITER TOUTE EXPOSITION AUX RAYONS.

LUOKAN 1 LASERLAITE LASER KLASSE 1

VORSICHT: UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN

PRODUCTO LÁSER DE LA CLASE I

ADVERTENCIA: RADIACIÓN LÁSER INVISIBLE AL SER ABIERTO. EVITE EXPONERSE A LOS RAYOS.

ADVARSEL: LASERSTRÅLING VEDÅBNING SE IKKE IND I STRÅLEN.

VARO! LAVATTAESSA OLET ALTTINA LASERSÄTEILYLLE.

VARNING: LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD ÄLÅ TUIJOTA SÄTEESEENSTIRRA EJ IN I STRÅLEN

VARNING: LASERSTRÅLNING NAR DENNA DEL ÄR ÖPPNADSTIRRA EJ IN I STRÅLEN

ADVARSEL: LASERSTRÅLING NAR DEKSEL ÅPNESSTIRR IKKE INN I STRÅLEN

Lithium battery statement

The Aspire 1450 series uses the lithium battery, models SQ-1100 and SQU-202 only.

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.

ADVARSEL!

Lithiumbatteri - Eksplosjonsfare ved feilagtig håndtering. Udsiftning må kun ske med batteri af samme fabrikat og type. Léver det brugte batteri tilbage til leverandøren.

ADVARSEL

Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

VARNING

Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS

Päristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

VORSICHT!

Explosionsgefahr bei unsachgemäßen Austausch der Batterie Ersatz nur durch denselben oder einem vom Hersteller empfohlenem ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

LCD pixel statement

The LCD unit is produced with high-precision manufacturing techniques. Nevertheless, some pixels may occasionally misfire or appear as black or red dots. This has no effect on the recorded image and does not constitute a malfunction.

Macrovision copyright protection notice

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights

owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, 4,819,098, and 4,907,093 licensed for limited viewing uses only.

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