User's Guide

Aspire G7700 Series 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.

Aspire G7700 Series Desktop Computer

Model number: _____

Serial number: _____

Purchase date: _____

Place of purchase: _____

Information for your safety and comfort

Safety instructions

Read these instructions carefully. Keep this document for future reference. Follow all warnings and instructions marked on the product.

Turning the product off before cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Warnings

- Do not use this product near water.
- Do not place this product on an unstable cart, stand or table. If the product falls, it could be seriously damaged.
- 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.
- 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 onto or into the product.
- To avoid damage of internal components and to prevent battery leakage, do not place the product on a vibrating surface.

Using electrical power

- 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.
- Do not allow anything to rest on the power cord. Do not locate this product where people will walk on the cord.
- 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.

- Do not overload a power outlet, strip or receptacle by plugging in too many devices. The overall system load must not exceed 80% of the branch circuit rating. If power strips are used, the load should not exceed 80% of the power strip's input rating.
- This product's AC adapter is equipped with a three-wire grounded plug. The plug only fits in a grounded power outlet. Make sure the power outlet is properly grounded before inserting the AC adapter plug. Do not insert the plug into a non-grounded power outlet. Contact your electrician for details.

Warning! The grounding pin is a safety feature. Using a power outlet that is not properly grounded may result in electric shock and/or injury.

Note: The grounding pin also provides good protection from unexpected noise produced by other nearby electrical devices that may interfere with the performance of this product.

- Use the product only with the supplied power supply cord set. If you need to replace the power cord set, make sure that the new power cord meets the following requirements: detachable type, UL listed/CSA certified, type SPT-2, rated 7 A 125 V minimum, VDE approved or its equivalent, 4.6 meters (15 feet) maximum length.

Product servicing

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.

Unplug this product from the wall outlet and refer servicing to qualified service personnel when:

- The power cord or plug is damaged, cut or frayed
- Liquid was spilled into the product
- The product was exposed to rain or water
- The product has been dropped or the case has been damaged
- The product exhibits a distinct change in performance, indicating a need for service
- The product does not operate normally after following the operating instructions

Note: 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.

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

Telephone line safety

- Disconnect all telephone lines from the equipment when not in use and/or before servicing.
- To avoid the remote risk of electric shock from lightning, do not connect the telephone line to this equipment during lightning or thunderstorms.

Disposal instructions

Do not throw this electronic device into the trash when discarding.
To minimize pollution and ensure utmost protection of the global environment, please recycle. For more information on the Waste from Electrical and Electronics Equipment (WEEE) regulations, visit
http://global.acer.com/about/sustainability.htm.

Mercury advisory

For projectors or electronic products containing an LCD/CRT monitor or display: Lamp(s) inside this product contain mercury and must be recycled or disposed of according to local, state or federal laws. For more information, contact the Electronic Industries Alliance at www.eiae.org. For lamp-specific disposal information, check www.lamprecycle.org.

Tips and information for comfortable use

Computer users may complain of eyestrain and headaches after prolonged use. Users are also at risk of physical injury after long hours of working in front of a computer. Long work periods, bad posture, poor work habits, stress, inadequate working conditions, personal health and other factors greatly increase the risk of physical injury.

Incorrect computer usage may lead to carpal tunnel syndrome, tendonitis, tenosynovitis or other musculoskeletal disorders. The following symptoms may appear in the hands, wrists, arms, shoulders, neck or back:

- numbness, or a burning or tingling sensation
- aching, soreness or tenderness
- pain, swelling or throbbing
- stiffness or tightness
- coldness or weakness

If you have these symptoms, or any other recurring or persistent discomfort and/or pain related to computer use, consult a physician immediately and inform your company's health and safety department.

The following section provides tips for more comfortable computer use.

Finding your comfort zone

Find your comfort zone by adjusting the viewing angle of the monitor, using a footrest, or raising your sitting height to achieve maximum comfort. Observe the following tips:

- refrain from staying too long in one fixed posture
- avoid slouching forward and/or leaning backward
- stand up and walk around regularly to remove the strain on your leg muscles
- take short rests to relax your neck and shoulders
- avoid tensing your muscles or shrugging your shoulders
- install the external display, keyboard and mouse properly and within comfortable reach
- if you view your monitor more than your documents, place the display at the center of your desk to minimize neck strain

Taking care of your vision

Long viewing hours, wearing incorrect glasses or contact lenses, glare, excessive room lighting, poorly focused screens, very small typefaces and low-contrast displays could stress your eyes. The following sections provide suggestions on how to reduce eyestrain.

Eyes

- Rest your eyes frequently.

- Give your eyes regular breaks by looking away from the monitor and focusing on a distant point.
- Blink frequently to keep your eyes from drying out.

Display

- Keep your display clean.
- Keep your head at a higher level than the top edge of the display so your eyes point downward when looking at the middle of the display.
- Adjust the display brightness and/or contrast to a comfortable level for enhanced text readability and graphics clarity.
- Eliminate glare and reflections by:
  - placing your display in such a way that the side faces the window or any light source
  - minimizing room light by using drapes, shades or blinds
  - using a task light
  - changing the display's viewing angle
  - using a glare-reduction filter
  - using a display visor, such as a piece of cardboard extended from the display's top front edge
- Avoid adjusting your display to an awkward viewing angle.
- Avoid looking at bright light sources, such as open windows, for extended periods of time.

Developing good work habits

Develop the following work habits to make your computer use more relaxing and productive:

- Take short breaks regularly and often.
- Perform some stretching exercises.
- Breathe fresh air as often as possible.
- Exercise regularly and maintain a healthy body.

Warning! We do not recommend using the computer on a couch or bed. If this is unavoidable, work for only short periods, take breaks regularly, and do some stretching exercises.

Note: For more information, please refer to **"FCC notice" on page 112**.

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1 First things first

English

Specifications

Operating system	Genuine Windows Vista® Ultimate (32/64-bit) Genuine Windows Vista® Home Premium (32/64-bit)
Processor	Intel® Core™2 Extreme quad-core processor (up to 1333 MHz FSB) Intel® Core™2 Quad processor Overclock capable (CPU, RAM, and GPU)
Chipset	NVIDIA® nForce® 780i SLI®
System memory	Up to 8 GB DDR2 800/1066 MHz SDRAM (dual-channel support on four DIMMs)
Hard drives	Serial ATA hard disk up to 1 TB RAID 0, 1, 5, 0+1— capable with NVIDIA® MediaShield™ Storage Technology[1] Four 3.5" Easy-swap HDD drive bays
Optical drive	Two 5.25" drive bays Optical drive options: • BD/HD DVD reader + SuperMulti DVD burner • SuperMulti
Card reader	Multi-in-one card reader, supporting: • CompactFlash® (Type I and II) • CF+™ Microdrive • MultiMediaCard (MMC) • MMC*mobile*™ • Reduced-Size MultiMediaCard (RS-MMC) • Secure Digital™ (SD) Card • miniSD™ Card • xD-Picture Card™ • Memory Stick® • Memory Stick PRO™ • Memory Stick Duo™ • Memory Stick PRO Duo™

Graphics	Enabled NVIDIA® 3-way SLI®, Enabled NVIDIA® 2-way SLI® PCI Express® 2.0 x16 graphics card support
TV-tuner card[2]	Hybrid analog (NTSC/PAL/SECAM) and digital (DVB-T or ATSC format) TV-tuner card, supporting software MPEG-2 stream encoding
Audio	Dolby® system Embedded high-definition audio with 7.1-channel and EAX 4.0 audio support Optional Creative® Sound Blaster® X-Fi audio card S/PDIF (Sony/Philips Digital Interface) support
Networking	Gigabit Ethernet, Wake-on-LAN ready WLAN: IEEE 802.11b/g Modem: 56K ITU V.92, Wake-on-Ring ready
I/O ports	Front I/O ports: • Four USB 2.0 ports • Multi-in-one card reader [one USB 2.0 port and one IEEE 1394 port (4-pin) included] • Headphone and microphone jacks Rear I/O ports: • Four USB 2.0 ports • IEEE 1394 port (6-pin) • PS/2 keyboard and mouse ports • Two Ethernet (RJ-45) ports • Two eSATA ports • Six audio jacks • S/PDIF jack • Clear CMOS button
I/O ports	Graphics card I/O ports (each card): • Two DVI ports (up to six with three-way SLI®) • TV-out port (optional)

English

I/O expansion	Three PCI Express® x16 slots (including two PCI Express® 2.0 with 5 Gb/s) Two PCI Express® x1 slots PCI Express® x8 slot PCI 2.3 5V slot
Software	Acer Empowering Technology (Acer eRecovery Management) Acer Arcade™ Live McAfee® Internet Security Suite 2008 Trial version Adobe® Reader® eSobi™ NTI MediaMaker™
Dimensions	490 (L) x 430 (H) x 190 (W) mm
BIOS	AMI PnP BIOS compatible with SMBIOS 2.4
Power supply	1000 W/750 W
System compliance	PC 2001
Certification	FCC, CE, BSMI, CCC, C-tick, Nemko (CB & Bauart), UL, VCC1
Optional accessories	Logitech® G11 gaming keyboard and G5 gaming mouse Acer G series LCD monitor Acer stereo speakers Remote control

1 Support for RAID 0 and 1 requires two hard drives, RAID 5 requires three, RAID 0+1 requires four or more (in multiple drives of two).

2 Optional.

Note: The specifications listed above are for reference only. The exact configuration of your PC depends on the model purchased.

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:

- Aspire G7700
- Items contained in the accessory box
  - USB keyboard
  - USB mouse
- User's Guide and installation poster
- Other user documentation and third-party software

Accessing the User's Guide

This User's Guide is also available on your computer as an Adobe Acrobat PDF file.

To access the User's Guide

1 On the Windows Vista taskbar, click on the **Start** button then select **All Programs**.

2 Double-click **AcerSystem User's Guide**.

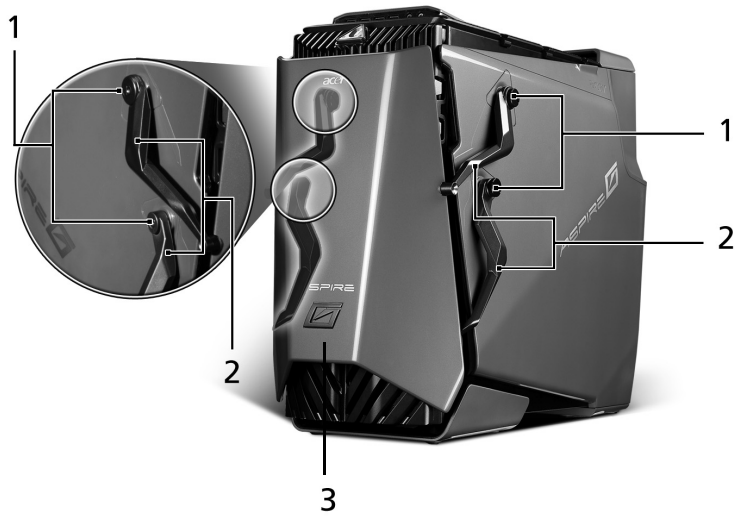
English

2 System tour

English

External and internal structure

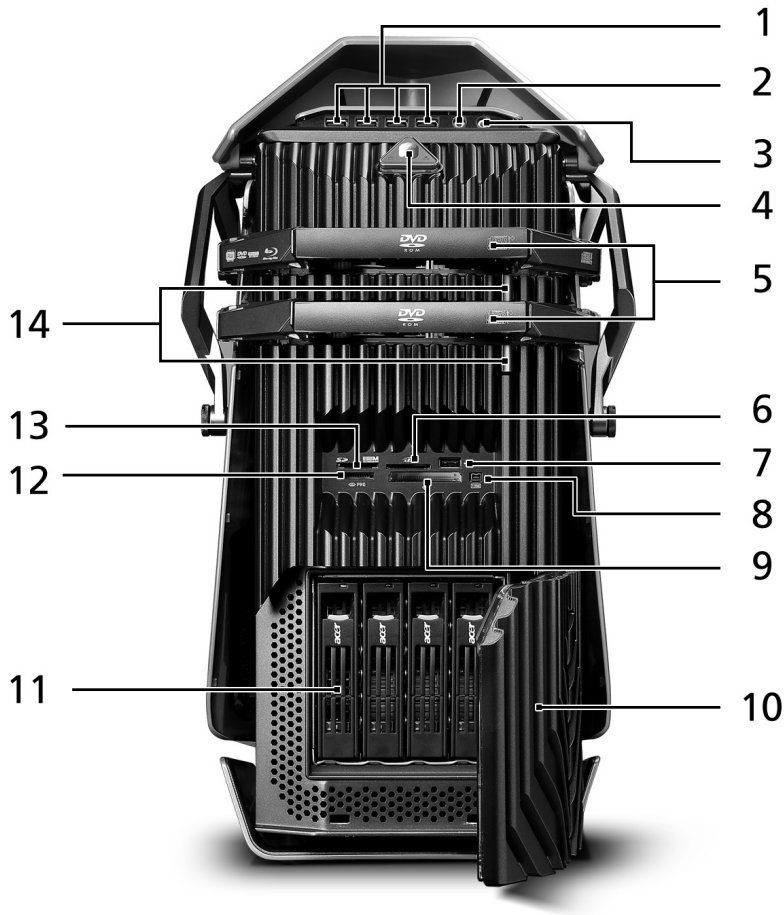
Closed front panel



No	Component
1	Hinge screws x 4
2	Door hinges x 4
3	Bezel door

English

Front panel



No	Icon	Component
1		USB 2.0 ports
2		Microphone/line-in jack
3		Headphone/line-out jack
4		Power button/power indicator
5		Optical disk drives
6		XD (eXtreme Digital) slot
7		USB 2.0 port
8		IEEE 1394 port (4-pin)
9		CF I/II (CompactFlash Type I/II) slot
10		Drive bay door
11		Easy-swap hard disk drive (1~4)
12		SD/MMC (SecureDigital/MultimediaCard) slot
13		MS/MS Pro (Memory Stick/Memory Stick Pro Duo) slot
14		Optical disk drive eject buttons

English

Using the memory card reader

Your computer supports multi-media card slots.

These slots are useful for transferring data to and from the following memory cards to your computer.

- CompactFlash® (Type I and II)
- CF+™ Microdrive
- MultiMediaCard (MMC)
- MMC*mobile*™
- Reduced-Size MultiMediaCard (RS-MMC)
- Secure Digital™ (SD) Card
- miniSD™ Card
- xD-Picture Card™
- Memory Stick®
- Memory Stick PRO™
- Memory Stick Duo™
- Memory Stick PRO Duo™

Memory cards are used in a variety of digital devices such as digital camera, digital camcorders, handheld game consoles, and mobile phones.

To insert a memory card:

1 Hold the card label-side up with the card facing the computer.

2 Slide the card into the slot until it is seated.

To remove a memory card:

1 Before ejecting a card:

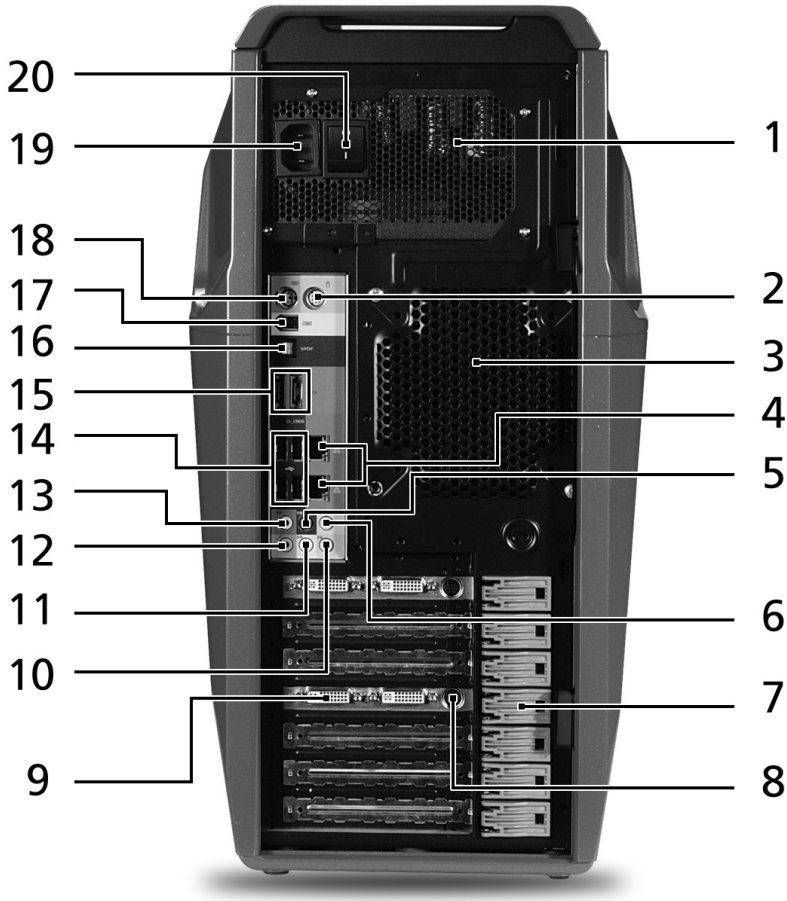
- Exit the application using the card.
- Left-click on the Safely Remove Hardware icon on the Windows taskbar and stop the card operation.

2 Gently press the card further into the slot to pop it out.

3 Pull out the card from the slot.

English

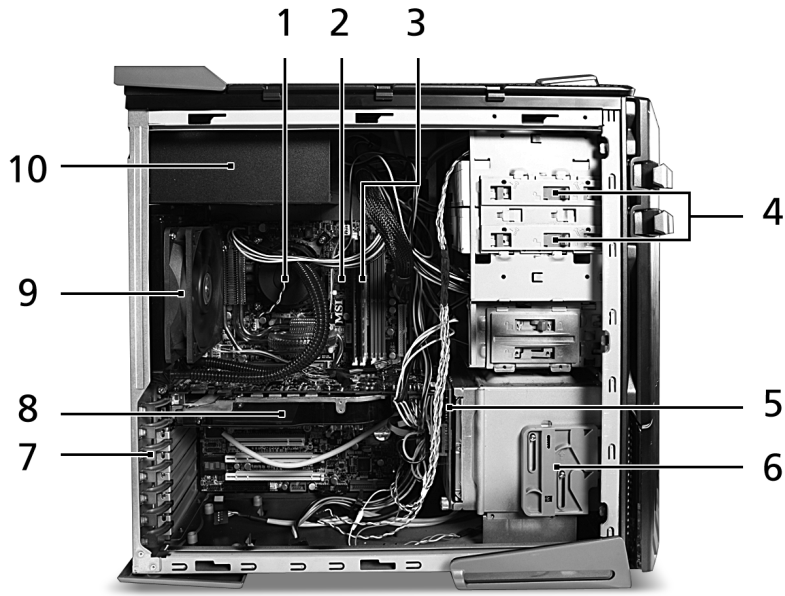
Rear panel



No	Icon	Component
1		Power supply
2		PS/2 mouse port
3		System fan
4		Network ports
5		Rear speaker jack
6		Center speaker/subwoofer jack
7		Expansion slot locks
8		S-video port
9		DVI port
10		Audio-in/line-in jack
11		Headphone/line-out/front speaker jack
12		Microphone/line-in jack
13		Side speaker/line-out jack
14		USB ports
15		eSATA (External Serial Advanced Technology Attachment) ports
16	CL_CMOS	CMOS (Complementary Metal Oxide Semiconductor) reset button
17		IEEE 1394 port (6-pin)
18		PS/2 keyboard port
19		Power connector
20		Main power switch

English

Internal components

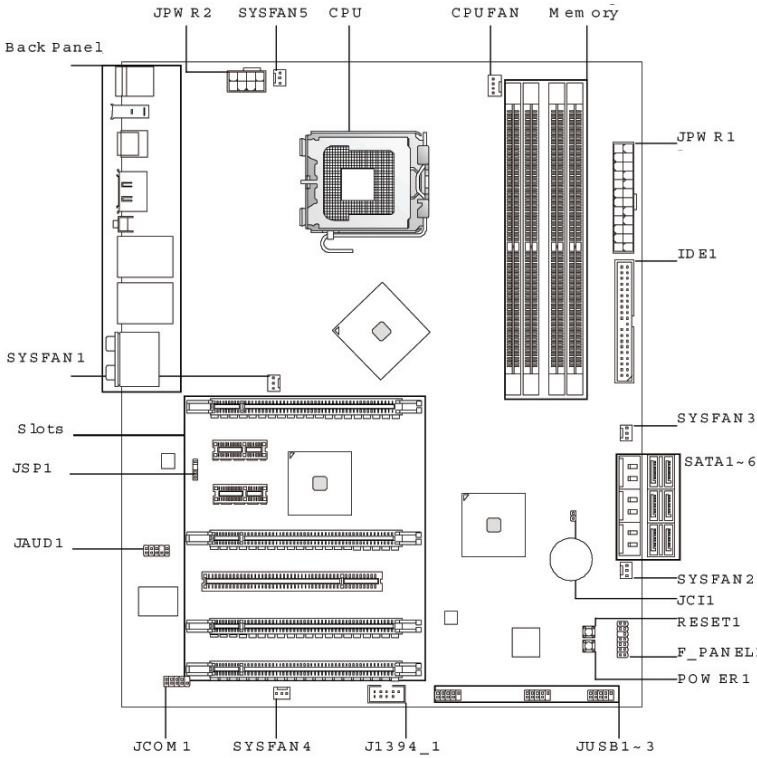


No	Component
1	Liquid cooling
2	Mainboard
3	System memory
4	Release sliders for optical drives
5	Hard drive backplane board
6	Release sliders for HDD drives
7	Expansion slot lock levers
8	Expansion card
9	System fan
10	Power supply module

English

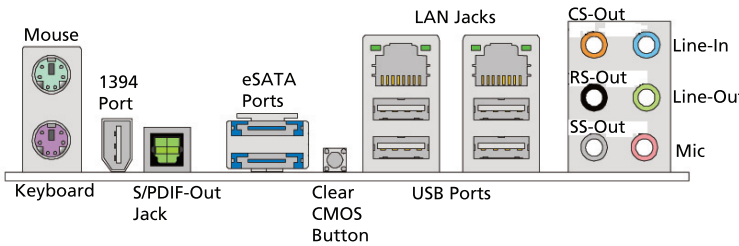
System board

Mainboard



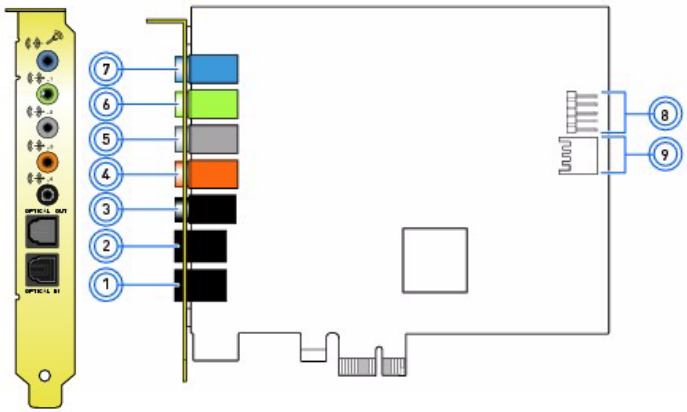
Code	Component
JPWR2	8-pin ATX power connector
SYSFAN5	System fan 5 cable connector
CPU	Processor socket
CPUFAN	Processor fan cable connector
Memory	System memory slots
JPWR1	24-pin ATX power connector
IDE1	IDE cable connector
SYSFAN3	System fan 3 cable connector
SATA1-6	SATA data cable connectors
SYSFAN2	System fan 2 cable connector
JCI1	Chassis intrusion connector
RESET1	Reset button
F PANEL_1	Front panel connector
POWER1	Power button
JUSB1-3	Front USB connectors
J1394_1	IEEE 1394 connector
SYSFAN4	System fan 4 cable connector
JCOM1	Serial port connector
JAUD1	Front panel audio connectors
JSP1	S/PDIF-Out connector
Slots	PCI Express x8 slot (PCI_E6)
	PCI Express x16 slot (PCI_E5)
	PCI 2.3 5V slot (PCI1)
	PCI Express x16 expansion slots (supports PCI-E 2.0x 16 speed) (PCI_E1 and PCI_E4)
	PCI Express x1 slots (PCI_E2 and PCI_E3)
SYSFAN1	System fan 1 cable connector

Back panel I/O



Code	Color	Component
Mouse	Green	PS/2 mouse port
Keyboard	Purple	PS/2 keyboard port
1394 port		IEEE 1394 port (6-pin)
S/PDIF-out jack		USB ports
eSATA ports		eSATA ports
Clear CMOS Button		CMOS reset button
LAN Jacks		Network ports
USB ports		USB ports
CS-Out	Orange	Center speaker/subwoofer jack (in 5.1/7.1 channel mode)
RS-Out	Black	Rear speaker/surround out jack (in 4/5.1/7.1 channel mode)
SS-Out	Gray	Side speaker/surround out jack (in 7.1 channel mode)
Line-In	Blue	Audio-in/line-in/side-surround out jack (in 7.1 channel mode) This jack connects to an external CD player, tape player, or other audio devices.
Line-Out	Green	Headphone/line-out/front speaker jack This jack connects to speakers or headphones.
Mic	Pink	Microphone/line-in jack This jack connects to a microphone.

Audio card (optional)



No	Component
1	S/PDIF line-in jack
2	S/PDIF line-out jack
3	Rear speaker/line-out jack
4	Center speaker/subwoofer/line-out jack
5	Side speaker/line-out jack
6	Front speaker/line-out jack
7	Microphone/line-in jack
8	Front panel header audio connector
9	HDMI (High-Definition Multimedia Interface) header audio connector

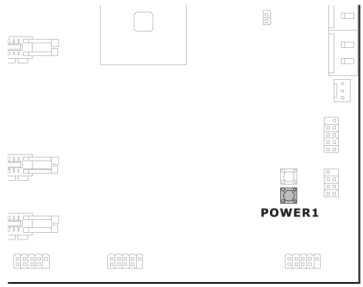
English

System board switches and connectors

The System board switches are easy to turn off or reset the computer when user testing the system.

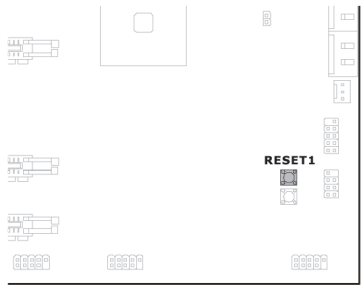
Power button

Press the power button (POWER1) on the mainboard to turn the system on or off.



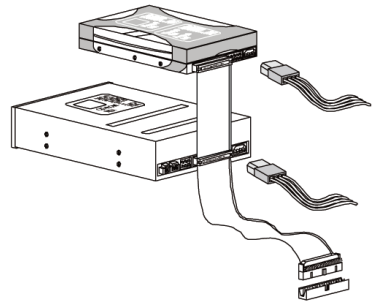
Reset button

Press this reset button (RESET1) on the mainboard to reset the system.



IDE connector

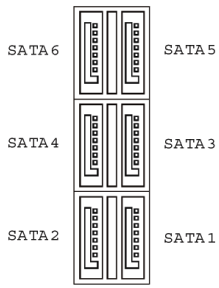
The IDE1 connector supports IDE hard disk drives, optical disk drives, and other IDE devices.

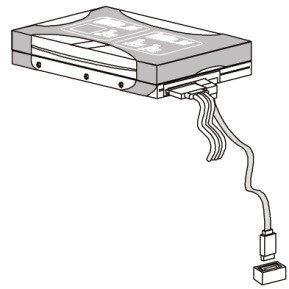


Important: If you install two IDE devices on the same cable, you must configure the drives separately to master / slave mode by setting jumpers. Refer to IDE device's documentation supplied by the vendors for jumper setting instructions.

Serial ATA connector: SATA1~6

The six serial ATA connectors (SATA1-6) is a high-speed Serial ATA interface port. Each connector can connect to one Serial ATA device.



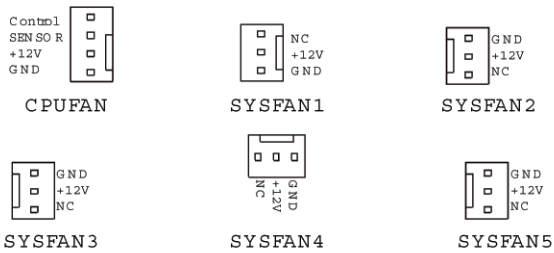


Important: Please do not fold the Serial ATA cable into 90-degree angle. Otherwise, data loss may occur during transmission.

English

Fan power connectors

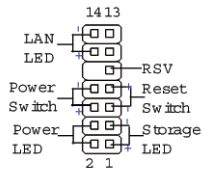
The fan power connectors (CPUFAN and SYSFAN1-5) support system cooling fan with +12V. When connecting the wire to the connectors, always note that the red wire is the positive and should be connected to the +12V; the black wire is ground and should be connected to GND.



Important: CPUFAN supports fan control. You can install Dual Core Center utility that will automatically control the these fan speed according to the actual CPU and system temperature. Fan/heat sink with 3 or 4 pins are both available for CPUFAN.

Front panel connectors

The front panel connectors (F_PANEL1) are for electrical connection to the front panel switches and LEDs.



F_PANEL1 front panel pin definition

PIN	SIGNAL	DESCRIPTION
1	Storage_LED +	Hard disk LED pull-up
2	FP PWR/SLP	MSG LED pull-up
3	Storage_LED -	Hard disk active LED
4	FP PWR/SLP	MSG LED pull-up
5	RST_SW -	Reset Switch low reference pull-down to GND
6	PWR_SW+	Power Switch high reference pull-down to GND

PIN	SIGNAL	DESCRIPTION
7	RST_SW +	Reset Switch high reference pull-up
8	PWR_SW-	Power Switch low reference pull-up
9	RSVD_DNU	Reserved. Do not use
10	None	No pin
12	LAN_LED+	LAN LED pull-up
14	LAN_LED-	LAN LED pull-up

Serial port connector

The serial port connector (JCOM1) is a 16550A high speed communication port that sends/receives 16 bytes FIFOs and connects to a serial device.

JCOM 1

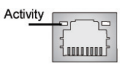
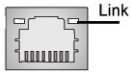
Serial port pin definition

Pin	Signal	Description
1	DCD	Data Carry Detect
2	SIN	Serial In or Receive Data
3	SOUT	Serial Out or Transmit Data
4	DTR	Data Terminal Ready
5	GND	Ground
6	DSR	Data Set Ready
7	RTS	Request To Send
8	CTS	Clear To Send
9	RI	Ring Indicate

English

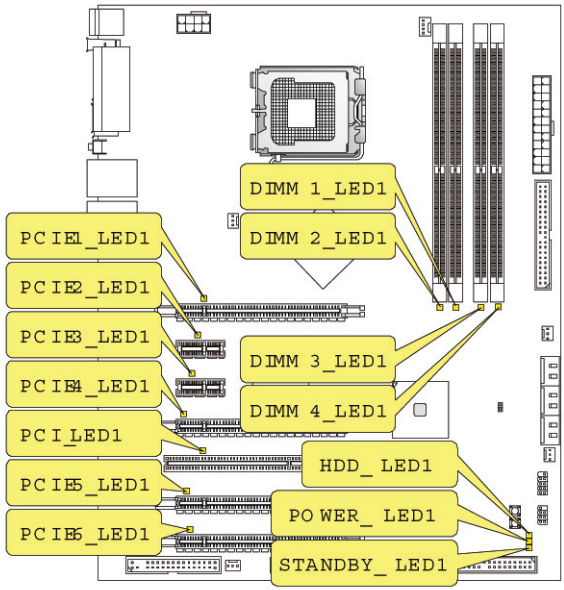
System LED indicators

Front and rear panel LED indicators

Indicator	Location	Color	Status	Description
Power	Front panel (Power button)	Blue	On	System has AC power and is powered on
			Blinking	System is in standby mode
HDD	Front panel (Easy-swap HDD)	Green	Blinking	Ongoing HDD activity
		Amber	On	Easy-swap HDD failure
		Green/ Amber	Flashing	HDD is rebuilding
Network activity 	Rear panel (Network port)	Orange	Off	Off-line network
			On	Active network link
			Blinking	Ongoing network data activity.
Network link 	Rear panel (Network port)	Green	Off	10 Mbps link network access
			On	100 Mbps link network access
		Orange	On	1000 Mbps link network access

Mainboard LED indicators

The mainboard LED indicators are easy to check the system status when user open the cover or testing the system board...



Indicator	Status
PCIE1 (blue)	Lights when PCI E1 slot is functional.
PCIE2 (blue)	Lights when PCI E2 slot is functional.
PCIE3 (blue)	Lights when PCI E3 slot is functional.
PCIE4 (blue)	Lights when PCI E4 slot is functional.
PCI (blue)	Lights when PCI1 slot is functional.
PCIE5 (blue)	Lights when PCI E5 slot is functional.
PCIE6 (blue)	Lights when PCI E6 slot is functional.
DIMM1 (orange)	Lights when the DIMM1 slot is functional.
DIMM2 (green)	Lights when the DIMM2 slot is functional.
DIMM3 (green)	Lights when the DIMM3 slot is functional.
DIMM4 (orange)	Lights when the DIMM4 slot is functional.
HDD (pink)	Lights when the HDD is functional.

Indicator	Status
Power (blue)	Lights when the system is powered on.
Standby (pink)	Lights when the system is in standby mode.

3 Setting up your computer

English

Arranging a comfortable work area

Working safely and comfortably 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. Refer to the diagram on the following page as you set up your system.

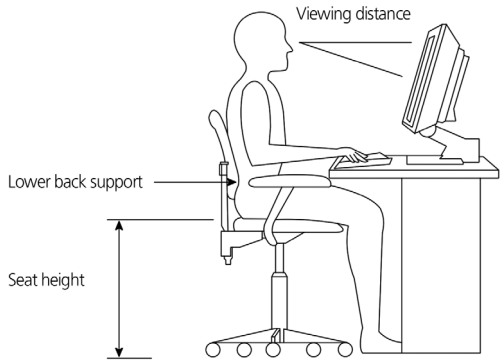
Here are some points to consider:

Adjusting your chair

Having the right kind of chair does not necessarily mean 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 you need for working and moving.

Positioning your monitor

Place your monitor at a comfortable viewing distance, usually 50 to 60 cm 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 for 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.

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.

English

Connecting the computer

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.

Note: The peripherals shown in the connections below are for your reference only. Actual device models may vary in select countries.

Connect your mouse and keyboard

PS/2 interface

Plug the PS/2 mouse and keyboard cable into the PS/2 keyboard port (purple port) and mouse port (green port) located on the rear panel of your computer.

USB interface

You can also plug a USB mouse or a USB keyboard cable into any of the USB ports located on the front and rear panels of your computer.

Connect a monitor

To connect a monitor, simply plug the monitor cable into the DVI port located on the rear panel of your computer. If you have a monitor that supports S-video, plug the monitor cable to the S-video port located on the rear panel of your computer.

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

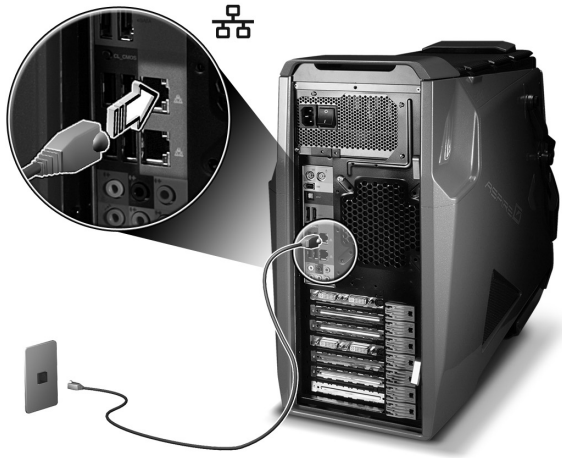
English

Connect to a broadband network

The two Gigabit Ethernet ports on the rear of the computer can be used individually, combined, or configured in a number of ways depending on your needs. With the system's onboard NVIDIA nForce chipset and DualNet technology, you can combine the two network ports to work as one. It also allows your computer to serve as a home gateway and it provides advanced networking features including teaming, load balancing, fail-over, and TCP/IP acceleration.

Individual network configuration

Connect one end of the network cable on the network port on the rear of the computer, then connect the other end of the network cable into the cable modem or network jack or hub on your network.



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

Installing the WLAN antenna (optional)

Locate an unused PCI slot and place the card on top. Gently push card down into the slot. When the card is correctly in position, screw the card securely on to the case.

1 Install antenna to the system by fastening the threaded end of the antenna into the WLAN antenna connector on the rear panel of the system.

2 Rotate the antenna clockwise until tight.

3 Flip up the antenna.

Combined network configuration

One way sharing an Internet connection is connecting a video game console to your computer. See page 56 for more information.

Note: Refer to the documentation that came with your video game console for detailed connection and configuration information.

Connect to power

Caution: Before you proceed, check the voltage range in your area. Make sure that it matches your computer's voltage setting. If they don't match, change your computer's voltage setting according to your area's voltage range.

1 Plug the power cable into the power cable socket located on the rear panel of your computer.

2 Plug the other end of the power cable into a power outlet.

English

Turning on your computer

After making sure that you have properly set up the system, applied power, and connected all the necessary peripherals, you can now power on the system. Follow the procedure below.

1 Turn on the main power switch located on the rear of the computer.

2 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.

English

Turning off your computer

The software procedure below applies to system running a Windows OS. For other OS shutdown procedures, refer to the related user documentation.

1 On the Windows Vista taskbar, click on the **Start** button, and click  , then click **Shut Down**.

2 Turn off all peripherals connected to your computer.

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

4 Using your desktop

English

Using the keyboard

The gaming keyboard has several types of keys and buttons. It features blue-backlit characters on every key, 18 programmable G keys, convenient media control buttons, Macro button, separate cursor keys, and 12 function keys that takes care of your everyday keyboarding and gaming requirements.

No.	Item	Description
1	USB ports	Plug USB gaming devices to these ports.
2	Multimedia keys	Allow you to conveniently play, pause, stop, advance or rewind a song or movie using your keyboard. A volume control dial allows you to increase or decrease the volume.
3	Backlight key	Toggles the backlight key on or off.
4	Indicators	Show if the Num Lock, Caps Lock, or Scroll lock keys are activated. Press the corresponding keys to activate the function.
5	Function keys (F1 - F12)	Lets you perform specific functions, depending on the application that uses them.
6	Numeric keypad	Press these keys to type numbers when Num Lock is turned on.
7	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.
8	Application/Shortcut key	This key has the same effect as clicking the right mouse button; it opens the application's context menu.

No.	Item	Description
9	Windows logo key	Pressed alone, this key has the same effect as clicking on the Windows Start button; it launches the Start menu. It can also be used with other keys to provide a variety of functions: • **< > + <Tab>** — Activates the next Taskbar button. • **< > + <E>** — Opens the My Computer window. • **< > + <F1>** — Opens Help and Support. • **< > + <F>** — Opens the Find: All Files dialogue box. • < > + **<R>** — Opens the Run dialogue box. • **< > + <M>** — Minimizes all windows. • **<Shift>** + < > + **<M>** — Undoes the minimize all windows action.
10	Programmable G keys	Execute complex macros with a single keypress. Allows you to set 54 custom programmed keys per game.
11	Macro keys	Creates and saves new macros while playing a game.
12	Game mode switch	Puts the keyboard in normal computer or gaming mode. When in gaming mode, the Start and Application/Shortcut keys are disabled. All other keys in the keyboard will function normally. When in normal mode, the Start and Application/Shortcut keys are enabled.

For more information on how to use the Logitech G11 keyboard, refer to the Logitech help files.

English

Using the mouse

The mouse controls the pointer movement on the computer display.

No.	Item	Description
1	Tilt wheel	Push wheel to either side to scroll horizontally. Program wheel to mimic keyboard commands.
2	In-game dpi increase	Press button to increase dpi (tracking sensitivity).
3	In-game dpi decrease	Press button to decrease dpi (tracking sensitivity).
4	dpi LEDs[1]	Activated by dpi buttons.
5	Programmable side buttons	Launch Logitech SetPoint[2] to customize button
6	Programmable left and right mouse buttons	Launch Logitech SetPoint[2] to customise button and tilt wheel assignments.

1 The dpi LEDs show dpi settings of mouse when dpi buttons are used. For more information about the dpi LEDs refer to the documentation that came with the mouse.

2 Refer to the software help system to learn more about the SetPoint software.

For more information on how to use the gaming mouse, refer to the Logitech help files.

Using the optical drive

Your computer may come with a Blu-ray/HD reader + SuperMulti burner. This drive is located on the front panel of your computer. The BD and HD drive allows you to play not only old CD-ROMs, CD-I disks, and video CDs, DVD-RAM/-RW, DVD-ROMs, DVD+R/-R disks, but play BD disks and HD DVD disk as well.

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

To insert a disk into your computer's optical drive:

1. Press the optical drive’s eject button located on the front panel.

2. When the disk tray slides open, place the disk gently on the tray. Make sure that the label or title side of the disk is facing upward.
When holding a disk, hold it by the edges to avoid leaving smudges or fingerprints.

3. Push the tray and it will close automatically or press the eject/load button.

Taking care of your optical disks

- Keep your disk 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 disk, impair the disk lens reader on the optical drive, or stop the computer from successfully reading the disk.
- When handling disks, always hold them by the edges to avoid smudges or fingerprints.
- When cleaning disks, 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 you optical drive periodically with a cleaning kit; cleaning kits may be purchased at any computer or electronics shop.

Connecting options

Your computer offers excellent expansion capabilities with its built-in ports and connectors. This section describes how to make connections through various options. When connecting peripherals, read the manual included with the peripheral for operating instructions.

Printer

You can connect a USB printer to an available USB port . See your printer manual for operating instructions.

IEEE 1394 devices

You can connect IEEE 1394 supported devices like a digital video camera, external storage devices, or external optical drives to the 4-pin and 6-pin fast IEEE 1394 located on the front and rear panel of your computer.

English

eSATA devices

The computer's eSATA (External Serial ATA) port allows you to connect external SATA device.

Audio devices

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

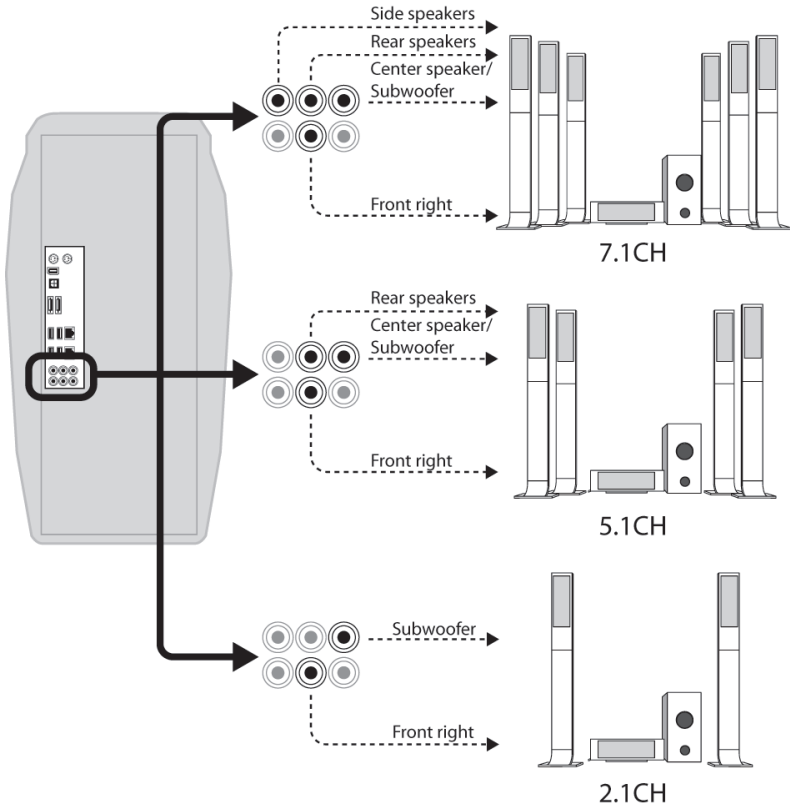
Audio devices are easy to connect with the audio ports accessible from the front and rear of the computer.

- Microphone — Plug an external microphone (or an audio line-in device) into the microphone/line-in jack (pink jack) located on the front and rear of the computer.

- Amplified stereo speakers, headset, or heaphone — Plug amplified speakers, headset, or headphone to the headphone/line-out/front speaker

jack (green jack) located on the front and rear of the computer.

- Analog speaker system — You can connect the front left and right speaker to the headphone/line-out/front speaker jack (green jack), center speaker or subwoofer to the center speaker/subwoofer jack (orange jack), rear left and right speaker to the rear speaker jack (black jack), and side left and right speaker to the side speaker/line-out jack (gray jack).



Refer to the table below for different channel speaker setup.

Speaker system	Audio ports				
	Side speaker/ line-out (Gray)	Rear speaker (Black)	Center speaker/ subwoofer (Orange)	Microphone /line-in (Pink)	Headphone /line-out/ front speaker (Green)
1.1	X	X	X	O	O
2.1	X	X	O	X	O
4.1	O	O	X	X	O
5.1	X	O	O	X	O
7.1	O	O	X	X	O

O - Denotes an audio device connection to an audio jack

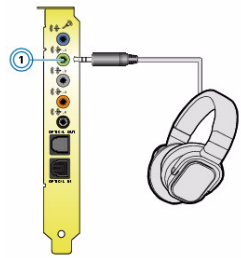
X - Denotes no connection made

Audio devices to an optional audio card

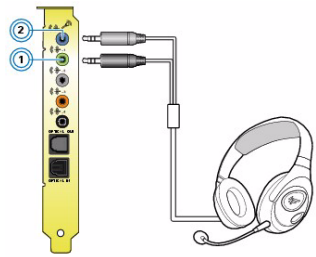
The optional Sound Blaster X-Fi 2 audio card allows you to connect a wide variety of audio devices and speaker system transforming your computer into entertainment center. You can also enjoy digital audio surround sound with Dolby Digital Live in your games, music, and movies.

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

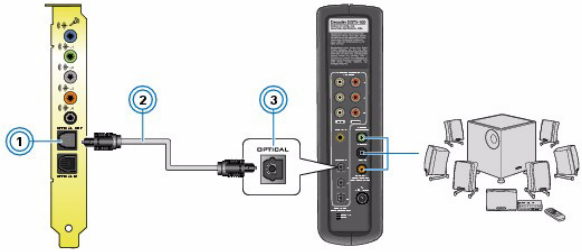
- Headphone — Plug the headphone to the front speaker/line-out jack (green jack).



- Headset — Plug the headset to the speaker/line-out jack (green jack) **(1)** and the microphone/line-out jack (blue jack) **(2)** located on the front and rear of the computer.



- Digital speakers — Plug one end of the optical cable **(2)** to the S/PDIF line-out jack cable on the audio card **(1)** then plug the other end of the optical cable to the S/PDIF line-out jack on the digital speaker **(3)**.



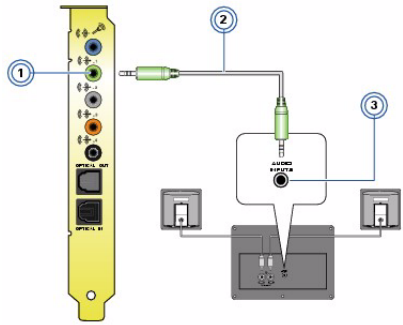
- Analog speaker system

  The audio card supports analog systems up to 7.1 channels. To learn more about different channel speaker systems, consult the following sections.

  - 2.1 channel analog speakers

    (1) Plug one end of the 2 channel audio cable **(2)** to the front speaker/line-out jack (green jack) **(1)**

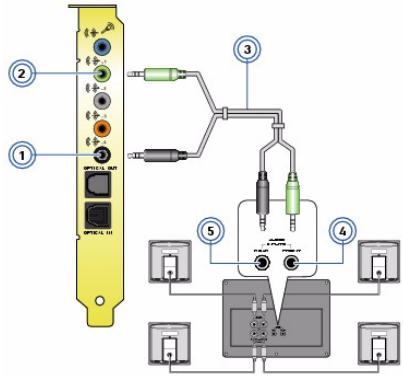
    (2) Plug the other end of the audio cable **(2)** to the audio input jack on the analog speaker **(3)**.



- 4.1 channel analog speakers

  (1) Plug the gray end of the 4 channel audio cable **(3)** to the rear speaker/line-out jack (gray jack) **(1)** then plug the other end of the audio cable to the rear (audio input) jack on the analog speaker **(5)**.

  (2) Plug the green end of the audio cable **(3)** to the front speaker/ line-out jack (green jack) **(2)** then plug the other end of the audio cable to the front (audio input) jack on the analog speaker **(4)**.

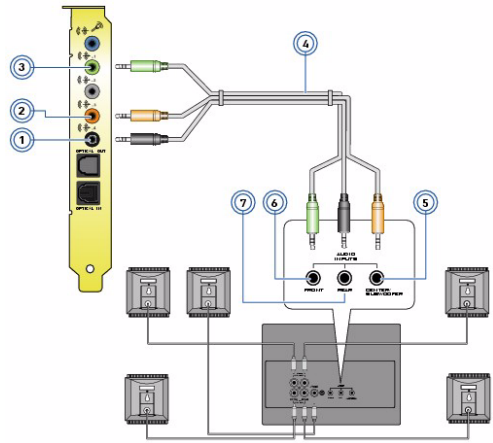


- 5.1 channel analog speakers

  (1) Plug the gray end of the 5.1 channel audio cable **(4)** to the rear speaker/line-out jack (gray jack) **(1)** then plug the other end of the audio cable to the rear (audio input) jack on the analog speaker **(7)**.

  (2) Plug the orange end of the audio cable **(4)** to the center speaker/subwoofer/line-out jack (orange jack) **(2)** then plug the other end of the audio cable to the center/subwoofer (audio input) jack on the analog speaker **(5)**.

  (3) Plug the green end of the audio cable **(4)** to the front speaker/line-out jack (green jack) **(3)** then plug the other end of the audio cable to the front (audio input) jack on the analog speaker **(6)**.



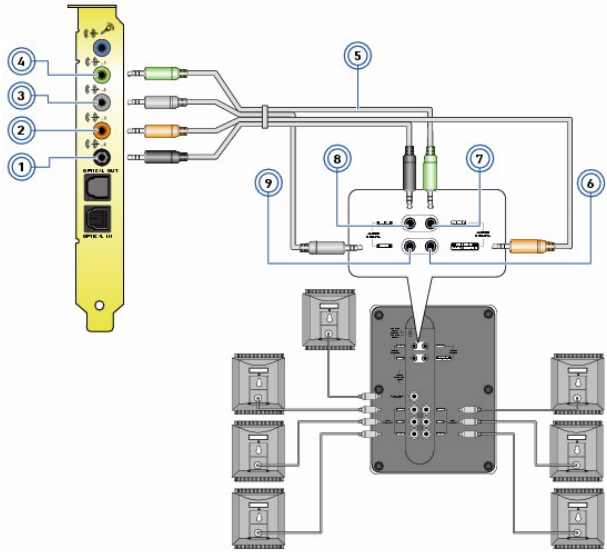
- 7.1 channel analog speakers

  (1) Plug the gray end of the 7.1 channel audio cable **(5)** to the rear speaker/line-out jack (gray jack) **(1)** then plug the other end of the audio cable to the rear (audio input) jack on the analog speaker **(8)**.

  (2) Plug the orange end of the audio cable **(5)** to the center speaker/subwoofer/line-out jack (orange jack) **(2)** then plug the other end of the audio cable to the center/subwoofer (audio input) jack on the analog speaker **(6)**.

  (3) Plug the gray end of the audio cable **(5)** to the side speaker/line-out jack (green jack) **(3)** then plug the other end of the audio cable to the side (audio input) jack on the analog speaker **(9)**.

  (4) Plug the green end of the audio cable **(5)** to the front speaker/line-out jack (green jack) **(4)** then plug the other end of the audio cable to the front (audio input) jack on the analog speaker **(7)**.



USB devices

Universal Serial Bus (USB) is a serial bus design capable of cascading peripherals such as a digital camera, keyboard, mouse, scanner, printer, modem, flash drives, VoIP phones, and gaming devices (such as joystick, steering wheels, rumble pads, or foot pedals). With USB, complex cable connections can be eliminated.

Your computer comes with several external USB ports: one on the multi-media card slot, four on the front and four on the rear panel. These ports support USB 2.0 high-performance external devices such as webcams and digital still cameras. They also allow you to connect additional USB devices to your computer without using up its resources.

To connect a USB device, simply plug the device cable into any of the USB ports located on the front and rear panels of your computer.

Note: The USB devices shown below are for reference only. Actual device models may vary by geographic region.

Note: Some USB devices have a built-in USB port which permits you to connect more USB devices.

English

Connecting a video game console

The computer's DualNet feature allows you to use your computer as a router and share Internet connection with a video game console, such as an Xbox console.

To connect and share Internet connection with a video game console:

1. Before connecting any cables, turn off your computer and video game console.
2. Connect the computer to the network. See page 34 for detailed instructions.
3. Connect one end of the network cable on the network port on the rear of the computer, then connect the other end of the network cable to the network jack on the rear of the video game console.
4. Turn on your computer.
5. Configure the Windows ICS (Internet Connection Sharing) to share your Internet connection. Refer to the help documentation of your operating system for more information.

Note: Refer to the documentation that came with your video game console for detailed connection and configuration information.

5 Advanced hardware setup

English

Video card configuration

When you have two identical graphics cards supporting NVIDIA SLI® (Scalable Link Interface) technology installed in your computer, you can set the SLI configuration to share the workload between the two graphic cards when rendering a 3D scene.

This section includes procedures for setting up video cards to support SLI Antialiasing, SLI technology, and multiple displays.

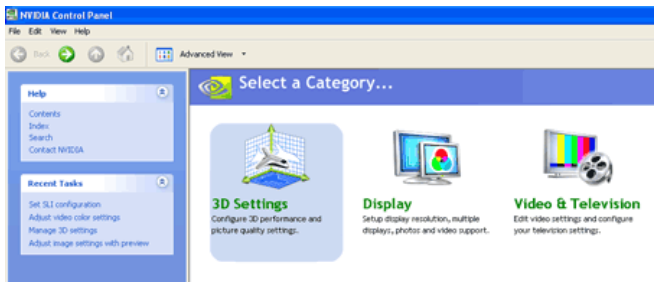
Enabling SLI Antialiasing

SLI Antialiasing is a standalone rendering mode that doubles anti-aliasing performance by splitting the workload between two graphic cards, offering superior picture quality. When SLI Antialiasing is enabled, it offers two new anti aliasing settings: SL18x and SL16x.

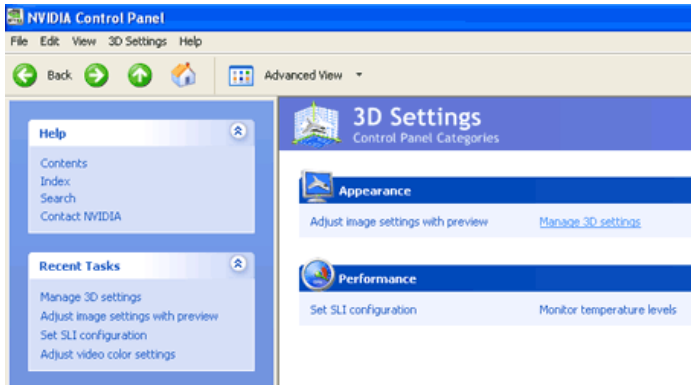
To enable SLI Antialiasing:

1 Open the NVIDIA Control Panel by right-clicking on the desktop and selecting **NVIDIA Control Panel**.

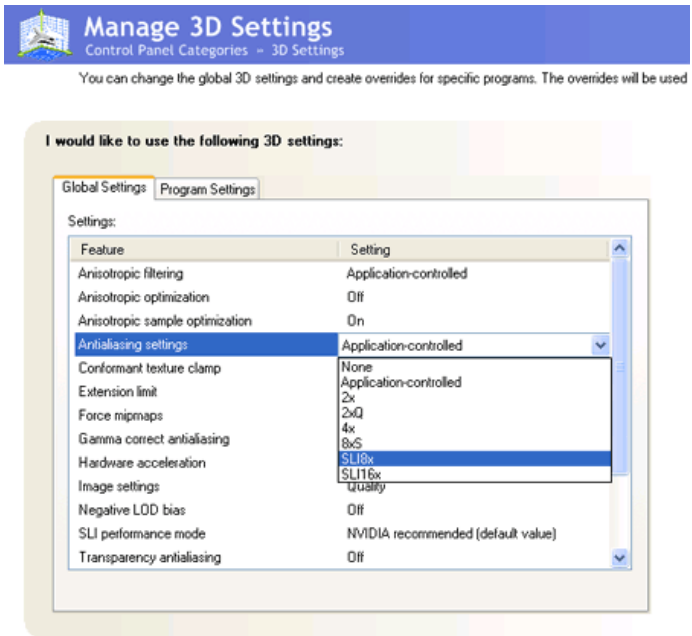
2 Select **3D Settings**.



3 Select **Manage 3D settings**.



4 Click on **Antialiasing settings** and select your desired mode.



5 Click **Apply**.

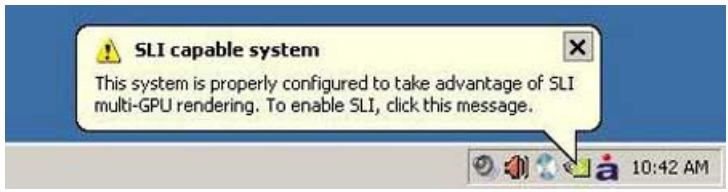
Note: Remember, when you use one of the SLI Antialiasing modes, your SLI performance mode will no longer be active. The modes cannot be applied together.

English

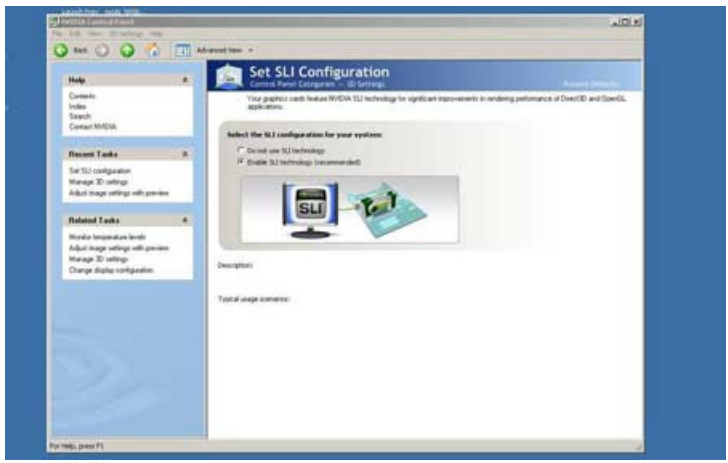
Setting up an SLI configuration

To enable the SLI technology:

1 When you reboot the computer after installing the SLI components, you will be greeted with a "pop up" bubble in the lower right hand corner, telling you that you have an SLI-enabled PC.



2 Click on the **SLI capable system message** to open the following window.



2 Select the **Enable SLI technology** checkbox, then click **Apply**.

Note: Currently, SLI technology does supports one display when enabled. If you have multiple displays and wish to use more than 1 display, you will need to disable SLI technology in the same desktop properties menu. You can enable SLI technology at any time, but note that you will only be able to power 1 display when enabled.

You can also access the Set SLI Configuration page by opening the NVIDIA Control Panel. Perform steps 1 through 3 of the "Enabling SLI Antialiasing" on page 58.

Setting up multiple monitors

To enable, disable, or configure multiple-monitor support:

Note: Before you can enable an additional monitor, make sure the monitor is connected to your system's video card and powered on.

1 Open Display Properties.
   - Right-click an empty area of the desktop and select **Properties**.
   - Click **Start** > **Control Panel** > **Display** icon.

2 Click the **Settings** tab to display the multiple -monitor configuration dialog box.

3 Enable the secondary monitor.
   a Click on the **Monitor** icon or click the **Display** drop-down menu to select the monitor.
   b Click the **Extend my Windows desktop onto this monitor** check box.

4 Select a primary monitor.

   By default, the first monitor is recognized by Windows OS as the primary monitor. If you want to set a different monitor as a primary, click the "Use this device as the primary monitor" check box.

   If you change your primary monitor, you might want to drag the monitor icons to match the physical layout of the new primary/secondary monitor assignments.

5 Click **OK**.

English

Setting up the multichannel audio output (optional)

Select the correct speaker setup option in the Creative® Media Source utility to get the best audio experience.

To select the correct speaker setup to support multichannel audio:

1 Launch Creative Media Source Go by performing either of the following:
   - Double-click on the **Creative volume control audio** icon on the system tray.
   - Move the mouse cursor on top of screen. The Creative MediaSource Go quick start bar appears on the desktop.
2 Click the **Entertainment Mode** icon.
3 Click the **Speaker** button.
4 In the Speakers and Headphone drop-down menu, select the type of your speaker system.
5 Exit the application.

For more information and usage details of the Creative Media Source Go utility, refer to its online help.

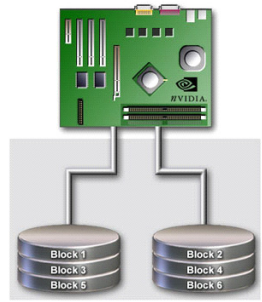
Setting up RAID

RAID technology uses multiple drives to either increase total disk space or to offer data protection. RAID techniques are divided into different levels and it optimizes storage solutions by using multiple disks grouped together and treating them as single storage resource. With NVIDIA MediaShield storage technology you can easily set up and configure the SATA drives for even higher performance and security.

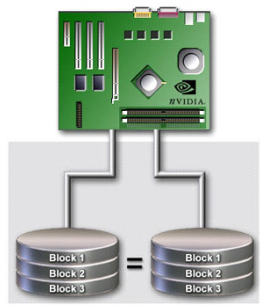
RAID arrays

NVIDIA MediaShield supports the following types of RAID arrays:

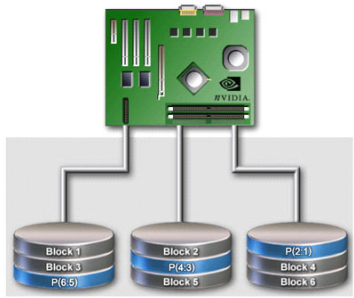
- RAID 0 (Stripe): Defines a disk striping scheme that improves the disk read and write times for many applications. Data is split up across all the drives, delivering unmatched storage performance and capability.



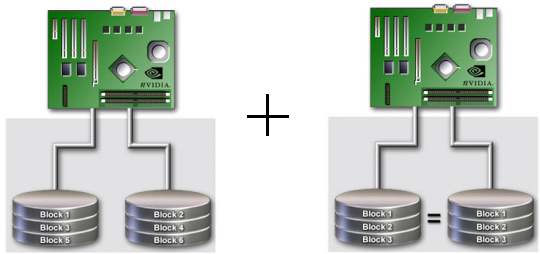
- RAID 1 (Mirror) : Defines techniques for mirroring data. Data is stored twice on both the data disk and mirror disk.



- RAID 5 : Defines techniques for parity data. Data is striped and parity is distributed across three or more drives, improving disk performance and fault tolerance.



- RAID 0+1 : Combines RAID 0 and RAID 1 in a single system with disk striping for optimized performance and disk mirroring for fault tolerance.



RAID 0 RAID 1

Enabling RAID

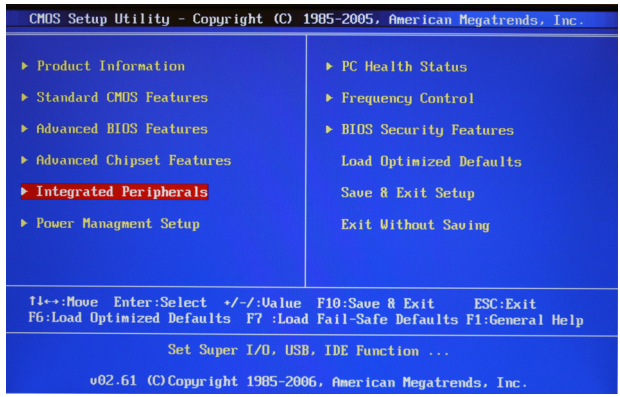
The RAID feature must be enabled in the BIOS before you can configure RAID.

To enable RAID:

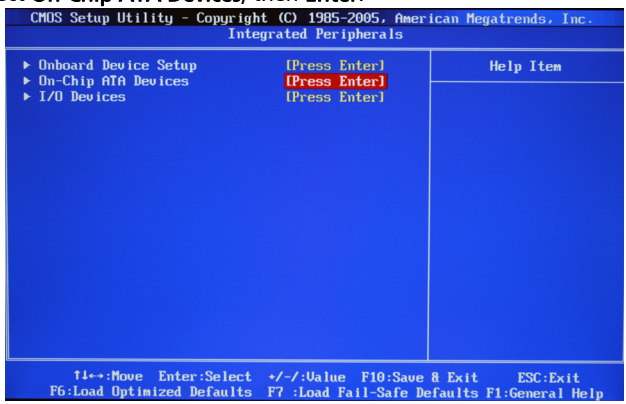
1 Reboot your computer.

2 Press the **Delete** key to enter the BIOS setup.

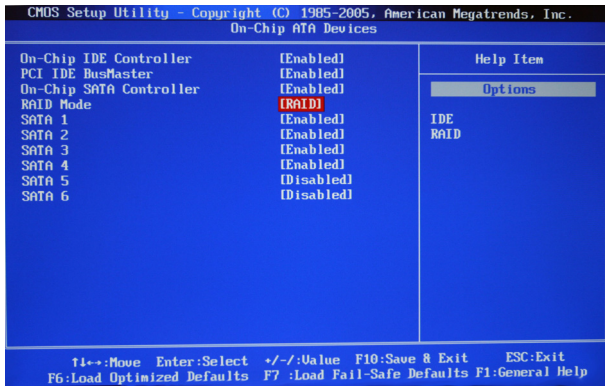
3 Use the arrow keys to select **Integrated Peripherals**, then press **Enter**.



4 Select **On-Chip ATA Devices**, then **Enter**.



5 Select **RAID Mode**, then press **RAID**.



6 Use the arrow keys to select **Enabled** option for each SATA port.

7 Press **F10** to save the configuration and exit.

Creating a RAID array

You can use RAID BIOS or the MediaShield utility to create the following types of RAID array.

- Non-bootable array

  This is the standard method of using non bootable disks in a RAID array.
- Bootable array

  You can configure a RAID array and then install the OS over it.

To create a non-bootable RAID array using RAID BIOS:

1 Enable RAID in the system BIOS. See page 64.

2 After rebooting the system, wait until you see the RAID software prompting you to press **F10**.

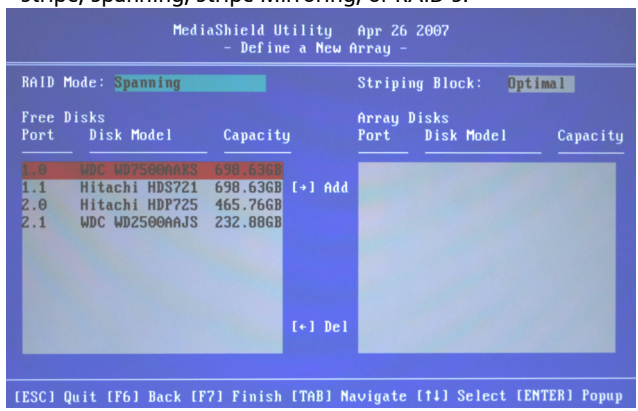
  The RAID prompt appears as part of the system POST and boot process prior to loading of the OS. You have a few seconds to press **F10** before the prompt disappears.

3 Press **F10** to save the configuration and exit.

4 Create the RAID array.

Note: If you have not already created a RAID array, the Define a New Array screen appears. By default, RAID mode is set to **Mirroring** and Stripe Block is set to **Optimal**.
If you have already created a RAID array, the MediaShield BIOS- Array List screen appears, listing the arrays in the system. Press **N** to go to the MediaShield BIOS- Define a New Array screen.

a In the RAID Mode box, select the mode you want — either Mirroring, Stripe, Spanning, Stripe Mirroring, or RAID 5.

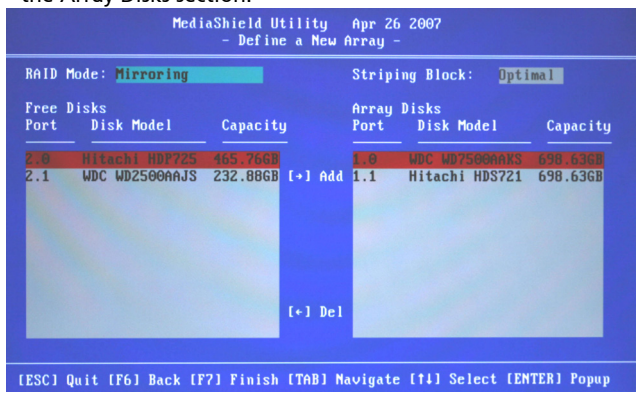


b In the Stripe Block box, enter the stripe block size. It is recommended to leave this value at the default Optimal, which is 64 KB, but the values can be between 4 KB and 128 KB (4, 8, 16, 32, 64, 128 KB).

Note: Stripe block size selection is not available for Mirroring or Spanning RAID arrays.

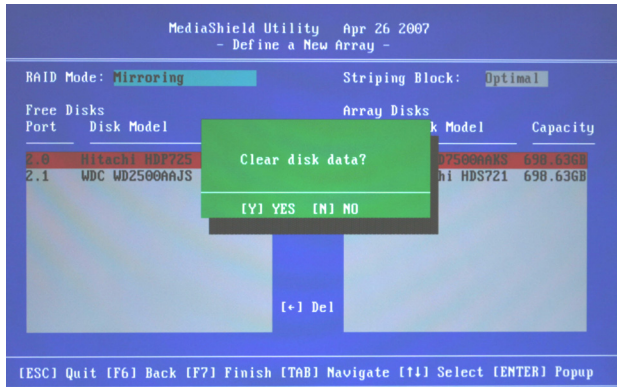
c In the Free Disks section, select a disk and click the arrow key to move it to the Array Disks section.

d Continue until all disks that you want to use as RAID array appear in the Array Disks section.



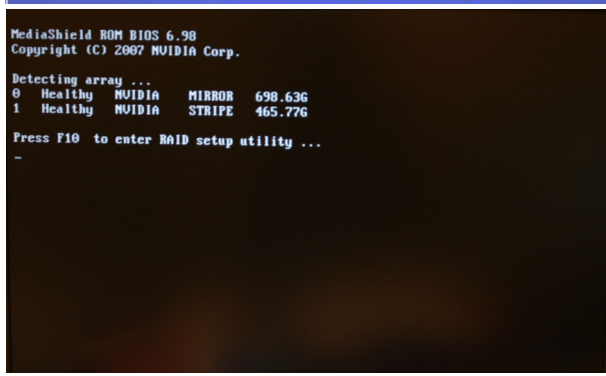
e Press **F7**.

f Press **Y** to clear the disk data.



g Press **Y** to clear MBR (Master Boot Record).

The Array List screen appears, where you can review the RAID arrays that you have set up.

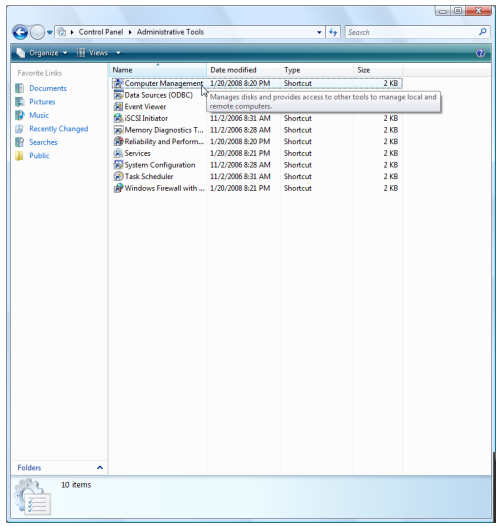


h Press **F10** to save the configuration and exit.

5 Initialize the RAID array.

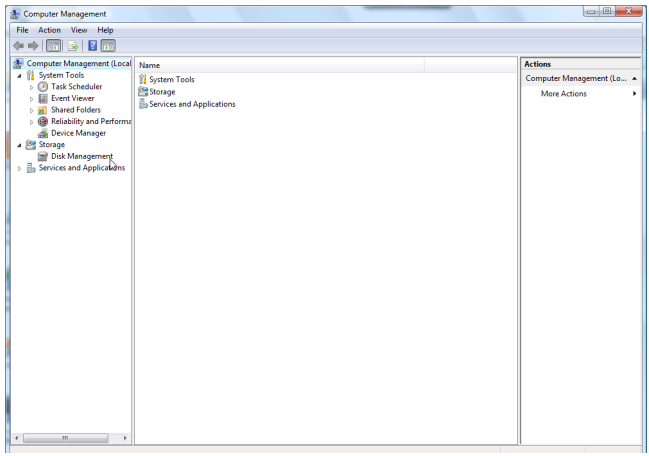
After creating the array, reboot the computer and then initialize the newly created array under Windows as follows:

a Launch Computer Management by clicking **Start** > **Control Panel** > **Administrative Tools** > **Computer Management**.



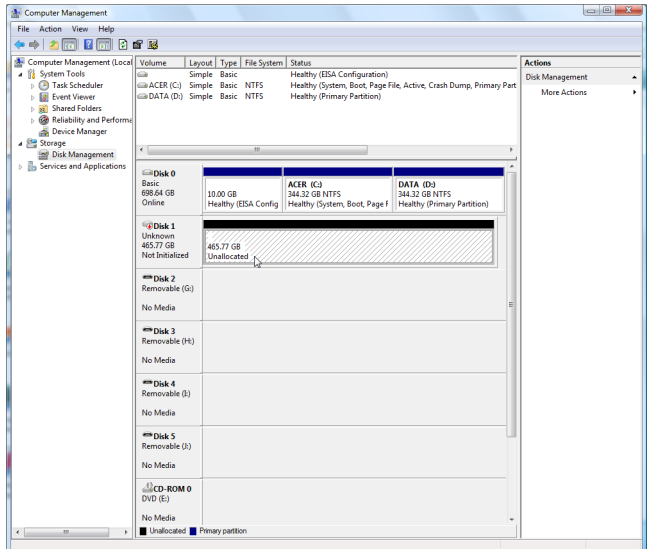
b Click **Disk Management**.

Under Windows Vista, the Initialize Disk dialog box appears, follow the instructions on the dialog box to initialize your disk.



6 Format the unallocated disk space.

For additional information on initializing, partitioning, and formatting the newly created array, refer to the section on Disk Management in your system's Help and Support Center.



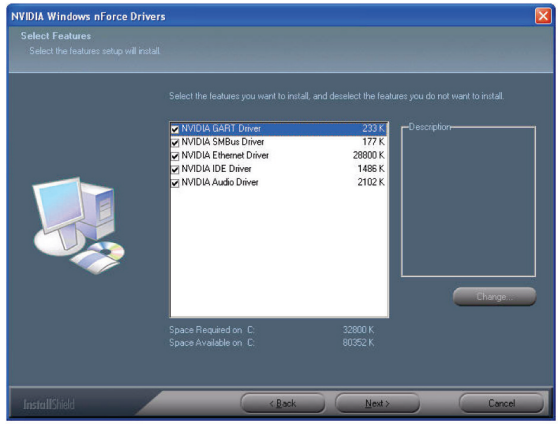
To create a non-bootable RAID array using MediaShield:

1 Enable RAID in the system BIOS. See page 64.

2 Create the RAID array.

a Install the NVIDIA RAID drivers.

(1) Start the **nForce Setup** program to open the NVIDIA Windows nForce Drivers page.



(2) Select the modules you want to install, then follow the onscreen instructions to finish installation.

b Open the NVIDIA Control Panel by right-clicking on the desktop and selecting **NVIDIA Control Panel**.

c From the Select a Task pane under the Storage category, select **Create array** to start the Create Array Wizard and follow the onscreen instructions to complete disk array creation.

Press **F1** to access the online help for more information on array creation process.

3 Perform steps 5 and 6 of the "To create a non-bootable RAID array using the RAID BIOS" section.

To create a bootable RAID array using RAID BIOS:

1 Perform steps 1 through 4 of the "To create a non-bootable RAID array using the RAID BIOS" section.

2 Create a bootable array.

a Use the arrow keys to select the array that you want to set up as a bootable disk.

b Press **B** to specify the array as bootable.

c Press **Enter** to view and verify details for the selected array.

The Array Detail screen shows various information about the array that you selected, such as Stripe block, RAID mode, Stripe width, Disk model name, and Disk capacity.

From the Array Detail screen, you can do the following:

- Rebuild the array - Press **R** then use the arrow keys to select the disk to rebuild and then press **F7**.
- Delete the array - Press **D** then press **Y** at the prompt.
- Clear the MBR - Press **C** then press **Y** at the prompt.
- Remove the volume - Press **V**, then use the arrow keys to select the disk volume to remove and then press **F7**.

  For Mirroring (RAID 1), single-disk Stripe (RAID 0), and single-disk Spanning arrays, removing a volume is a way to remove a disk from an array and convert it to a basic disk without deleting any data. In Mirroring array, the array becomes degraded (if there are still disks in the array) and must be rebuilt.

  The Remove Vol option is not available with systems that do not support NVIDIA's RAID pass-through disk management.

d Press **Enter** to go back to the previous screen.

e Press **F10** to save the configuration and exit.

3 Install the RAID drivers. See page 72.

4 Initialize the RAID array. Perform step 5 of the "To create a non-bootable RAID array using the RAID BIOS" section.

Installing the RAID drivers

To install a RAID driver under Windows Vista:

1 After you complete the RAID BIOS setup, boot from the Windows CD.

2 Click **Install Now** then continue the installation process until you get to the Which type of installation do you want screen.

3 Click **Custom (advanced)**.

4 Click **Load Driver**.

5 At the Load Driver dialog box, click **Browse** then navigate to the folder containing the installation files.

6 Select **NVIDIA nForce RAID Controller**, then click **Next**.

7 Click **Load Driver**.

8 At the Load Driver dialog box, click **Browse** then navigate to the folder containing the installation files.

9 Select **NVIDIA nForce Serial ATA Controller**, then click **Next**.

Note: You do not need to install the nForce RAID Device. Windows handles it automatically as part of the RAID and SATA controller installation process.

10 Select the disk where you want to install Windows and follow all onscreen instructions to complete installation.

Important: After Windows Vista is completely installed, it is recommended to install the nForceWare software in order to access the MediaShield Storage interface.

For more information on how to use NVIDIA MediaShield, refer to its online help.

English

Overclocking the CPU

An overclocking option is available for manually changing CPU clock speed and memory clock speed.

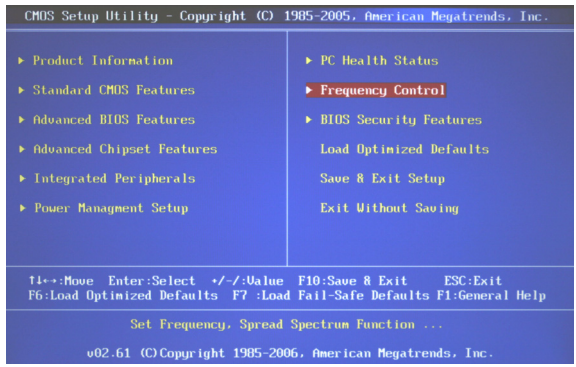
Important: Your system is designed to support overclocking. However, make sure your components are able to tolerate an abnormal setting, while doing overclocking. Any attempt to operate beyond product specifications is not recommended. Overclocking may result in system instability.

To manually change the clock speed of your CPU:

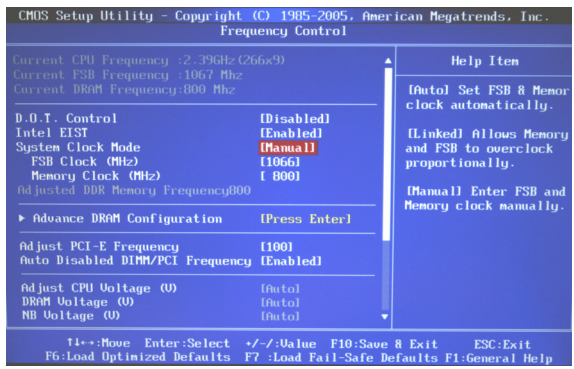
1 Reboot your computer.

2 Press **Delete** to enter the BIOS setup.

3 Use the arrow keys to select **Frequency Control**, then press **Enter**.



4 Use the arrow keys to set the **System Clock Mode** to **Manual**, then press **Enter**.



5 Use the arrow keys to select **FSB Clock**, then press **Enter**.

6 Use the arrow keys to select the value overclocking, then press **Enter**.

7 Press **F10** to save the configuration and exit.

Note: You can also use NVIDIA nTune to overclock your system. To launch NVIDIA nTune, click Start > All Programs > NVIDIA Control Panel > Performance. Refer to the online help for more information.

Clearing the CMOS settings

The onboard CMOS RAM stores the system configuration data and has an onboard battery power supply. The CMOS RAM records the correct time and setting of the system hardware configuration. If you want to clear the system configuration data, such as power-on password or the setup password from the CMOS RAM, do the following.

1 On the rear panel of your computer, locate the CMOS reset button.

2 Press the CMOS reset button.

3 Reboot the computer and run the Setup utility to reconfigure the system.

Adjusting event logging and monitoring settings

Use NVIDIA monitor to monitor and log system events. NVIDIA can display dynamic graphs that track various performance usage and temperatures, and the voltages, fan speeds, and bus speeds for various system hardware components.

To adjust the event logging settings:

1 Launch NVIDIA Monitor.

From the Windows desktop, click **Start** > **All Programs** > **NVIDIA Corporation** > **NVIDIA Monitor**.

2 Right-click the **NVIDIA Monitor** then select **Settings**.

3 On the left pane, select **Event Log**.

4 Under the Update log file every drop-down menu, specify the time interval for tracking selections.

5 Under the Set maximum file size to drop-down menu, specify the maximum file length of the log file settings.

NVMonitor starts a new log file when the maximum file length of the current log file is reached.

6 Under Log these events, check one or more of the items that you want to track — profile changes, bus speeds, and temperature.

7 Click **Apply**.

To launch the event logger:

1 Launch NVIDIA Monitor.

2 Right-click the **NVIDIA Monitor** then select **Start event logging.**

To view a log file:

1 Launch NVIDIA Monitor.

2 Right-click the **NVIDIA Monitor** then select **View event log.**

To adjust the NVIDIA monitoring settings:

1 Launch NVIDIA Monitor.

From the Windows desktop, click **Start** > **All Programs** > **NVIDIA Corporation** > **NVIDIA Monitor**.

2 Right-click the **NVIDIA Monitor** then select **Settings**.

3 On the Update monitor display every drop-down list, specify how often the utility will update the temperature values.

Note: Because of SMI traffic and CPU utilization, faster polling times may impact performance. This may be particularly noticeable when playing WAV files.

4 Select the **Always on top** check box if you want to display NVIDIA monitor application in the foreground while running other tasks.

5 Move the Transparency level slider to adjust the transparency of the NVIDIA Monitor window.

6 Choose which temperature scale to use - Celsius or Fahrenheit.

7 Select the check boxes of the components that you want to track - CPU, System, and chipset temperatures. If unavailable, the check box is grayed-out.

8 Specify how the system alerts you when a measured temperature exceeds the limit specified in the BIOS - either with a visual or audio alert.

9 Click **Apply**.

System tuning

The NVIDIA tuning engine lets you tune the system using NVIDIA developed benchmarks to determine the current performance level of the system. You can also tune the system to various performance criteria. The tuning takes effect during the current Windows session only. To use the tuned settings in future Windows sessions, you can create a profile.

Note: Close all applications and save all work before performing any benchmarking tests or tuning processes.

To tune your system:

1 Open the NVIDIA Control Panel by right-clicking on the desktop and selecting **NVIDIA Control Panel**.

2 From the Select a Category page, click **Performance**.

3 Select a tuning type.

4 Click **Tune**.

During the course of tuning, the system may stop responding or reboot. NVIDIA recommends checking Automatically continue at reboot ... to disable prompts on reboot during the tuning process.

A progress bar shows the tuning progress. You can cancel at any time by clicking **Stop**.

The tuning results appear in the Results box as a text description of the number of passes and adjustments made. To view a graph of the results, click **Graph View**.

The effects of the tuning apply to the current Windows session only.

5 To use the tuned settings in another Windows session, do the following:

a Click **Save** to save the tuned settings in a profile.

b When needed, click **Load** to load the tuned settings.

Options available to customize tuning process, refer to the NVIDIA nTune online help.

English

Acer Empowering Technology

The Empowering Technology toolbar makes it easy for you to access frequently used functions and manage your new Acer system. Displayed by default in the upper half of your screen, it provides access to the following utility:

Acer eRecovery Management backs up and recovers data flexibly, reliably and completely.

For more information, right click on the Empowering Technology toolbar, then select the **Help** or **Tutorial** function.

Empowering Technology password

Before using Acer eRecovery Management, you must initialize the Empowering Technology password. Right-click on the Empowering Technology toolbar and select **Password Setup** to do so. If you have not initialized the Empowering Technology password and run Acer eRecovery Management, you will be asked to create it.

Note: If you lose the Empowering Technology password, there is no way to reset it except by reformatting your system. Make sure to remember or write down your password!

Acer eRecovery Management

Acer eRecovery Management is a versatile backup utility. It allows you to create full or incremental backups, burn the factory default image to optical disc, and restore from previously created backups or reinstall applications and drivers. By default, user-created backups are stored to the D:\ drive.

Acer eRecovery Management provides you with:

- Password protection (Empowering Technology password)
- Full and incremental backups to hard disk or optical disc
- Creating of backups
  - Factory default image
  - User backup image
  - Current system configuration
  - Application backup

- Restore and recovery
  - Factory default image
  - User backup image
  - From previously-created CD/DVD
  - Reinstall applications/drivers

6 Upgrading your computer

English

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 86.

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 connectors.

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 side panel.

4 Replace the bezel door.

5 Connect the necessary cables.

6 Turn on your computer.

English

Opening your Aspire G7700

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 84.

You need to open your computer before you can install upgrade components. The side panel is removable to allow access to the computer's internal components. Refer to the following section for instructions.

Removing and installing the bezel door

To remove the bezel door:

1 Turn off your computer and unplug all cables.

2 Remove the four screws that hold the door hinges to the side panels.

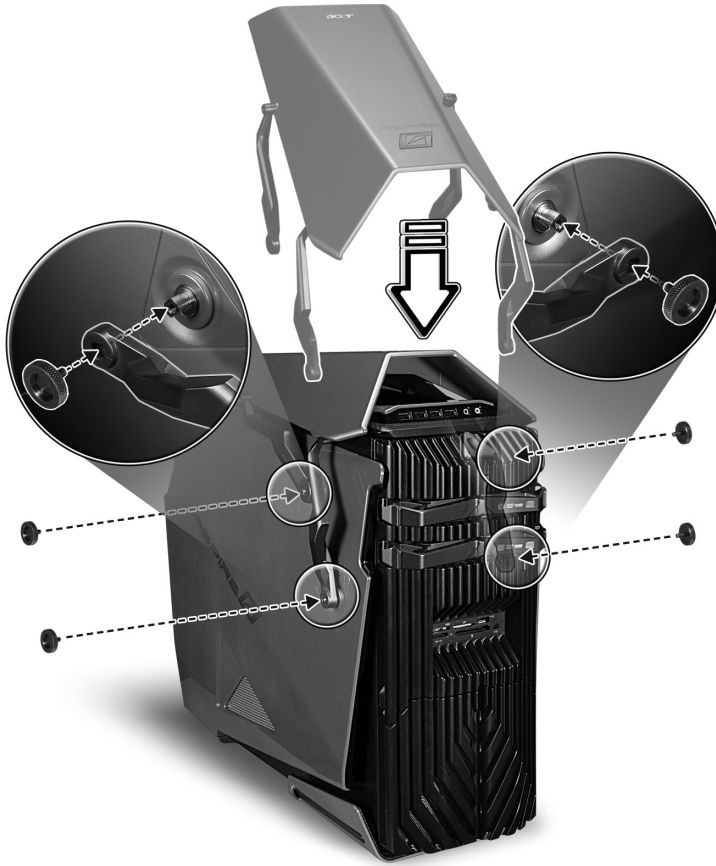
3 Detach the bezel door and hinges from the system.

To install the bezel door:

1 Perform the preinstallation instructions described on page 84.

2 Align the door hinges to the screw holes on the side panels.

3 Secure the hinges on the panels with the four screws you removed earlier.



Removing and installing the side panel

To remove the side panel:

1 Remove the bezel door. Refer to the previous section for instructions.

2 Remove the side panel.

(1) Release the locks on the rear side

(2) Hold the rear edge of the panel with both hands then slide the panel towards the rear of the chassis.

(3) Lift the panel upward to detach it.

To install the side panel:

1 Perform the preinstallation instructions described on page 84.

2 Align the tabs on the panel with the slots on the chassis.

3 Slide the panel toward the front of the chassis until it is fully closed.

4 Lock the side panel.

English

Removing and installing a hard drive

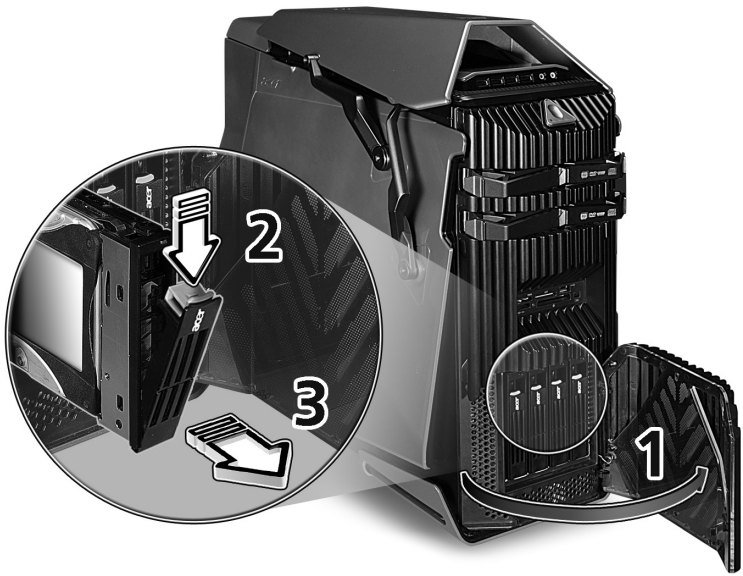
The computer supports up to four easy-swap hard disk drives. Each hard disk is mounted in a carrier that holds a standard 3.5-inch Serial ATA hard drive and connects to a SATA interface on the disk cage backplane.

Aspire G7700's EasySwap technology allows you to replace hard drives without powering down the system. Easy-swap technology shortens system downtime for changing the hard disk or performing an upgrade.

To remove a hard drive:

1 Observe the ESD precautions described on page 84.

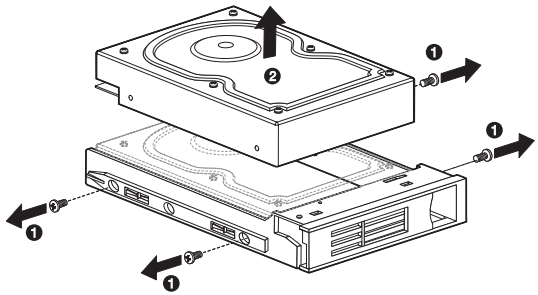
2 Open the drive bay door.



3 Press the HDD carrier latch, then pull the lever and slide the carrier from the chassis.

4 Place the HDD carrier on a clean, static-free network surface.

5 If you are replacing a hard disk, remove the four screws that secure the hard disk to the carrier **(1)**, then remove the disk from the carrier **(2)**.



6 Keep the screws for later installation.

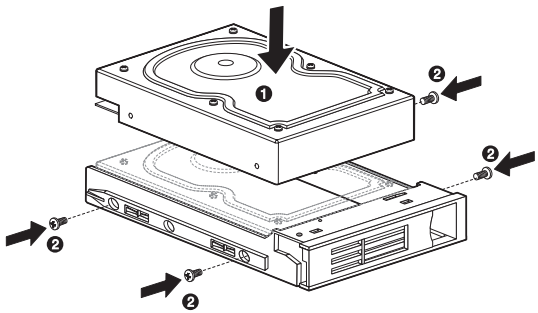
To install a new hard drive to an empty carrier:

1 Perform steps 1 through 5 of the previous section.

2 Remove the four screws. Save the screws for later use.

3 Remove the new HDD from its protective packaging.

4 Install the new hard disk into the HDD carrier. Secure it with the four screws you removed.



5 Install the new hard drive into the drive bay.

(1) Slide the drive into the bay with the carrier handle still extended.

(2) Make sure that the drive is properly inserted before pushing the handle back until it clicks into place.

6 Set up the new hard drive's RAID configuration.

For related instructions, refer to "Setting up RAID" on page 63

Removing and installing an optical drive

The system supports a variety of storage devices for additional storage capacity and scalability.

To remove an optical drive:

1 Perform the preinstallation instructions described on page 84.

2 Remove the front bazel.

3 Disconnect the power and data cables from rear of the old drive.

4 Move the release slider of the selected drive to the unlock position.

5 Pull the drive out of the device bay.

6 Observe the post-installation instructions described on page 85.

To install a new optical drive:

1 Perform steps 1 through 5 of the previous section.

2 Remove the new optical drive from its protective packaging.

3 Slide the new optical drive into the empty drive bay.

4 Move the release slider into the lock position.

5 Connect the power and data cables to the rear of the new drive.

6 Observe the post-installation instructions described on page 85.

Upgrading the system memory

This section explains the procedures for removing and installing a memory module.

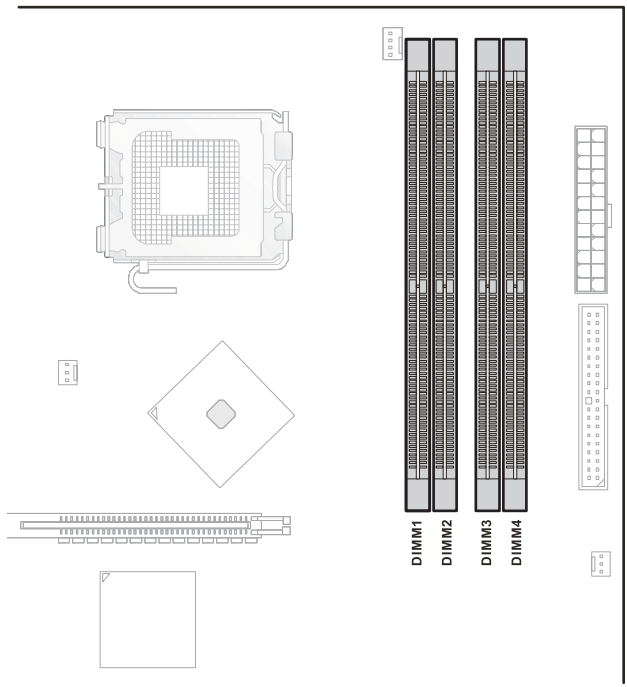
System memory interface

The four 240-pin sockets on the mainboard support Double Data Rate 2 (DDR2) Synchronous Dynamic Random Access Memory (SDRAM)-type DIMMs. You may install 512 MB, 1 GB or 2 GB DIMMs for a maximum memory capacity of 8 GB.

The DDR2 DIMMs require 1.8 volts. You can install PC2 6400/DDR2 800, or PC2 8500/DDR2 1066 modules in the DDR2 DIMM slots. Contact your dealer for qualified DIMM vendors.

The mainboard has four DDR2 DIMM slots divided into two channels. Each channel is made up of two slots.

- Channel A - DIMM 1 and DIMM 2
- Channel B - DIMM 3 and DIMM 4



English

System memory configuration guidelines

- To ensure data integrity, use only Acer-approved modules in 1 GB or 2 GB capacities.
- Use identical modules — same specification for size, speed, and organization.
- In minimum configuration, the FDB should be installed in DIMM 1 slot.
- Install memory pair upgrades in the following sequence:
  - First pair : DIMM 1 and DIMM 3
  - Upgrade 1: DIMM 2 and DIMM 4
  - Upgrade 2: DIMM 1, 2, 3, and 4
- Observe the population sequence illustrated in the table below when installing a memory module.

Channel A		Channel B	
DIMM 1	DIMM 2	DIMM 3	DIMM 4
1 GB			
1 GB		1 GB	
1 GB		1 GB	
1 GB	1 GB	1 GB	1 GB
1 GB	1 GB	1 GB	1 GB
2 GB			
2 GB		2 GB	
2 GB		2 GB	
2 GB	2 GB	2 GB	2 GB
2 GB	2 GB	2 GB	2 GB

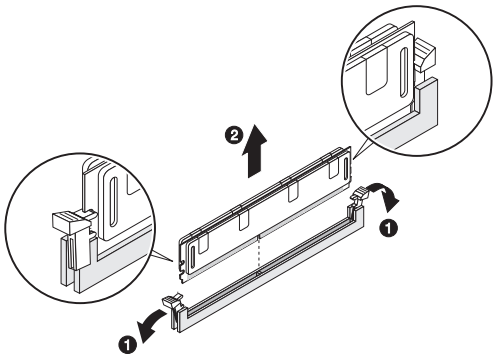
To remove a memory module:

1 Observe the ESD precautions described on page 84.

2 Lay the system on its side (components showing).

3 Press the holding clips on both sides of the DIMM slot outward to release the DIMM **(1)**.

4 Gently pull the DIMM upward to remove it from the DIMM slot **(2)**.



5 If you intend to install a new memory module, proceed to the next section for related procedure, then observe the post-installation instructions described on page 85.

To install a memory module:

Note: DIMM slots on the mainboard must be installed only in certain configurations. Numbers next to DIMM slots correspond to installation sequence. DIMMs may be installed in pairs and in the correct order. See the population sequence table on page 96.

1 Perform steps 1 and 2 of the previous section.

2 Select an empty DIMM slot.

3 Open the holding clips on the DIMM slot.

If you are replacing an existing DIMM, install the new DIMM in the same slot where you removed the DIMM.

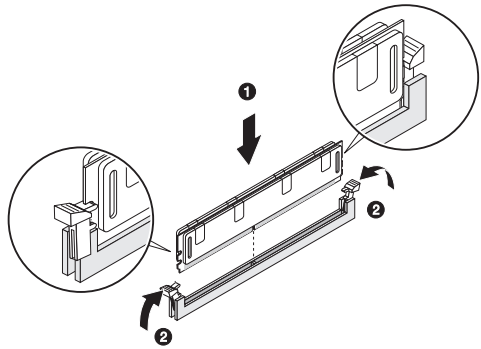
If you are adding a new DIMM, note that the system supports dual channel configuration. The total size of the DIMMs installed in the channel A slots must match the total size of the DIMMs in channel B slots.

4 Remove the new DIMM from its protective packaging, handling it by the edges.

5 Align the DIMM so that the notch on the slot fits the keyed edge of the module, then press the module at both ends to seat it fully into the slot **(1)**.

If you insert a DIMM but it does not fit easily into the slot, you have inserted it incorrectly. Reverse the orientation of the module and insert it again.

6 Firmly press the holding clips inward to lock the DIMM in place **(2)**.



If the holding clips do not close, the DIMM is not properly inserted.

7 Observe the post-installation instructions described on page 85.

The system automatically detects the amount of memory installed. Run the BIOS setup to view the new value for total system memory and make a note of it.

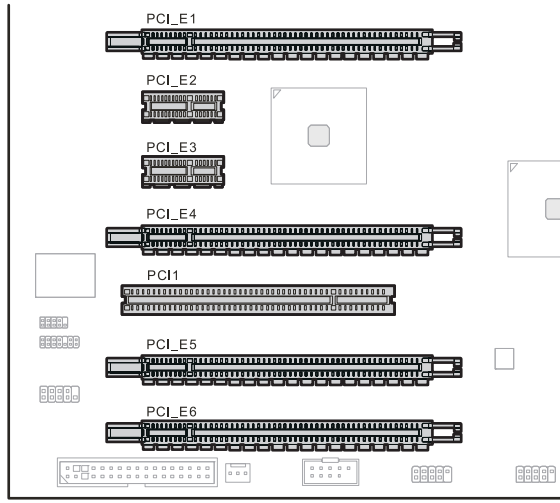
Installing an expansion card

This section explains how to install an expansion card and a second SLI-Ready graphic card.

PCI bus slots interface

The computer has seven PCI bus slots that supports the following transfer rates:

- PCI Express 2.0 x16 supports up to 8.0 GB/s transfer rate.(PCI_E1, E4)
- PCI Express x16 supports up to 4.0 GB/s transfer rate.(PCI_E6)
- PCI Express x8 supports up to 2.0 GB/s transfer rate.(PCI_E5)
- PCI Express 2.0 x1 supports up to 250 MB/s transfer rate.(PCI_E2, E3)



To install an expansion card:

1 Perform the preinstallation instructions described on page 84.

2 If necessary, remove any cables that prevent access to the processor sockets.

3 Locate an empty expansion slot that is compatible with the specification of the card you intend to install.

4 Press the release latch of the slot cover opposite the selected expansion slot.

5 Pull out the slot cover and store it for reassembly later.

Caution: Do not discard the slot cover. If the expansion card is removed in the future, the slot cover must be reinstalled to maintain proper system cooling.

6 Remove the expansion card from its protective packaging, handling it by the edges.

7 Insert the card into the selected slot.

8 Make sure that the card is properly seated.

9 Press the release latch to secure the card in place.

10 Connect the necessary cables to the expansion card as required.

11 Observe the post-installation instructions described on page 85.

When you turn on the system, the BIOS setup automatically detects and assigns resources to the new device (applicable only to Plug-and-Play expansion cards).

To install a second SLI-Ready graphic card:

Note: Make sure the second graphic card supports SLI technology and are of the same brand and GPU (graphics processing unit) specifications.

1 Perform the preinstallation instructions described on page 84.

2 If necessary, remove any cables that prevent access to the processor sockets.

3 Locate an empty expansion slot that is compatible with the specification of the card you intend to install.

4 Press the release latch of the slot cover opposite the selected expansion slot.

5 Pull out the slot cover and store it for reassembly later.

Caution: Do not discard the slot cover. If the expansion card is removed in the future, the slot cover must be reinstalled to maintain proper system cooling.

6 Remove the expansion card from its protective packaging, handling it by the edges.

7 Insert the card into the selected slot.

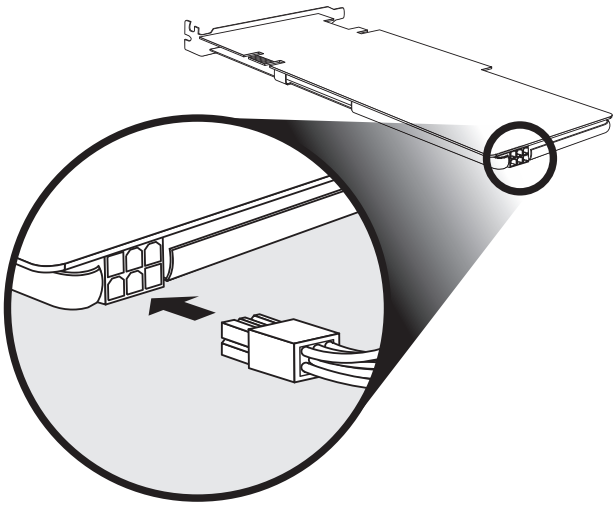
When installing the card, ensure that the gold "fingers" on the card line up with the slot on your motherboard.

While lining up your gold "fingers" with the PCI Express slot, also make sure that you line up the back plate (the part of the graphics card that your monitor plugs into) in between the edge of the motherboard and the back

of the case. This back plate will go where the tabs used to be.

8 Press the release latch to secure the card in place.

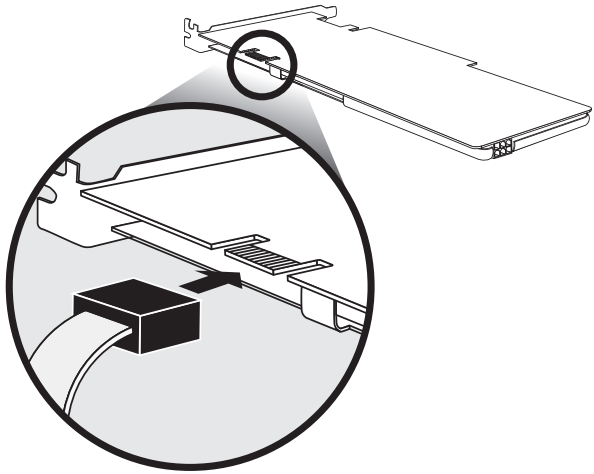
9 Locate the second PCI Express power cord from the SLI-Ready power supply and plug it in to the second graphic card.



10 Attach the SLI connector to connect the two graphic cards.

The system comes with an SLI connector designed to work with that mainboard.

Note: When you power up the PC, you'll want to ensure that the video connector (to your monitor) is plugged into the same card it was before °V the "top" card, or original card that was installed prior to adding this second card.



11 Observe the post-installation instructions described on page 85.

When you turn on the system, you will be greeted with a "pop up" bubble in the lower right hand corner, telling you that you have an SLI-enabled PC. For related instructions on setting up SLI configuration, go to the page 60.

7 Frequently asked questions

English

Frequently asked questions

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

I pressed the power button but the system did not boot up.

Check the LED on the power button.

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

- Check if you properly plugged the power cable into an electrical outlet.
- If you are using a power strip, make sure it is plugged in and turned on.

If the LED is lit, check the following:

- The operating system files may be damaged or missing. Insert the startup disk you created during Windows setup into the ODD 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, see "Acer eRecovery Management" on page 80.

Nothing appears on the screen.

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 technical support center for assistance.

The printer does not work.

Do the following:

- Make sure the printer is connected to a power outlet and that it is turned on.
- For additional information concerning the printer, refer to the printer's documentation.

No sound comes out from the computer.

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.

System cannot read hard disk or optical disk drive information.

Check the following:

- Make sure you are using the correct type of disk.
- Make sure the disk is inserted into the drive correctly.
- Check if the disk is clean and unscratched.
- Check your drive by using a good (undamaged) disk. If your drive can not read the information on the good disk there may be a problem with the drive. Contact your dealer or technical support center for assistance.

System cannot write data on the hard disk or disk.

Check the following:

- Make sure the hard disk is not write-protected.
- Make sure you are using the correct type of disk.

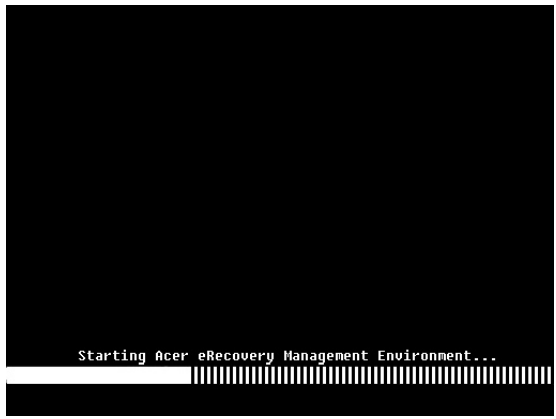
English

Recovering your system

If your operating system files are lost or damaged, the recovery process will restore your system's original factory default settings or last system backup. There are two modes to recovery your system. One is from system's original settings and another is from system backup. You can press Alt + F10 after the BIOS finishes running the Power On Self Test (POST).

Warning: Initiating the recovery operation while the operating system is running will result in abnormal shutdown and may make your current OS unstable or unusable.

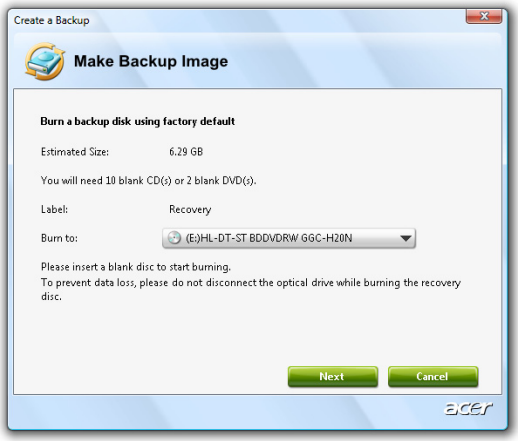
After the POST runs, Press Alt + F10 combine key during BIOS to enter hidden partition. This utility has same password protection with Acer eRecovery. Follow all onscreen instructions.



You can also follow the steps below:

1 Click the eRecovery icon in the Empowering Technology toolbar. You can change the password in Acer eRecovery.

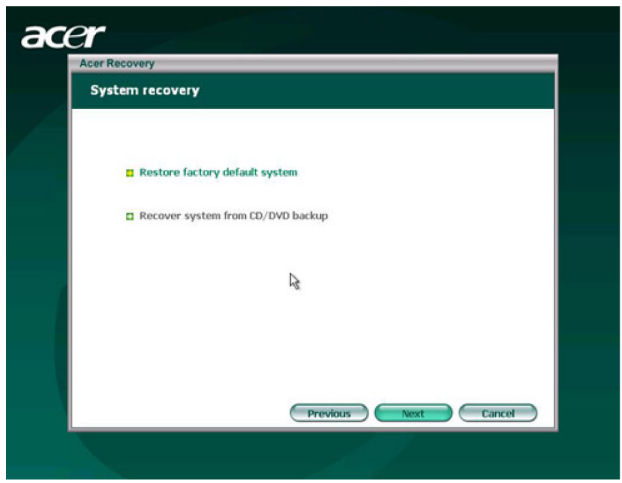
a If you have not yet backed-up your system.



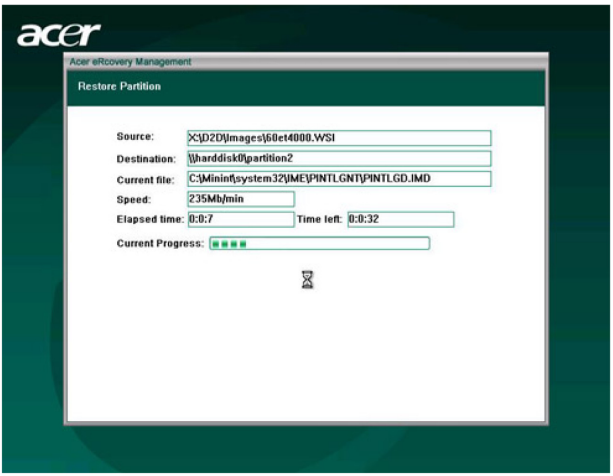
b If you have previously backed-up your system.

2 Select “Recover to Default Settings” to restore your system to the default factory settings. Select “Recover data from last backup” to restore your system to the last system backup.

3 If you chose the recovery option, you should see the following screen. Click **OK** to continue.



4 After 15 seconds the system will reboot and initiate the restore operation.



5 After the recovery operation finishes the system will reboot. You will be required to go through the setup process again.

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

Note: This feature occupies 10 GB in a hidden partition on your hard drive.

8 Regulations and safety notices

English

Regulations and safety 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 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.

Operation conditions

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.

Notice: Canadian users

This Class B digital apparatus complies with Canadian ICES-003.

Remarque à l'intention des utilisateurs canadiens

Cet appareil numérique de la classe B est conforme a la norme NMB-003 du Canada.

Declaration of Conformity for EU countries

Hereby, Acer, declares that this PC series is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. (Please visit **http://global.acer.com/support/certificate.htm** for complete documents.)

Compliant with Russian regulatory certification

ME61

Modem notices

Notice for USA

This equipment complies with Part 68 of the FCC rules. Located on 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.

Caution: To reduce the risk of fire, use only No. 26 AWG or larger UL Listed or CSA Certified Telecommunication Line Cord.

TBR 21

This equipment has been approved [Council Decision 98/482/EC - "TBR 21"] for 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.

List of applicable countries

EU member states as of May 2004 are: Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom Estonia, Latvia, Lithuania, Poland, Hungary, Czech Republic, Slovak Republic, Slovenia, Cyprus and Malta. Usage allowed in the countries of European Union, as well as Norway, Switzerland, Iceland and Liechtenstein. This device must be used in strict accordance with the regulations and constraints in the country of use. For further information, please contact local office in the country of use.

Notice for Australia

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

Notice for New Zealand

1 The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.

2 This equipment is not capable, under all operating conditions, of correct operation at the higher speeds for which it is designed. Telecom will accept no responsibility should difficulties arise in such circumstances.

3 Some parameters required for compliance with Telecom's Telepermit requirements are dependent on the equipment (PC) associated with this device. The associated equipment shall be set to operate within the following limits for compliance with Telecom's Specifications:

   - There shall be no more than 10 call attempts to the same number within any 30 minute period for any single manual call initiation, and
   - The equipment shall go on-hook for a period of not less than 30 seconds between the end of one attempt and the beginning of the next call attempt.

4 Some parameters required for compliance with Telecom's Telepermit requirements are dependent on the equipment (PC) associated with this device. In order to operate within the limits for compliance with Telecom's specifications, the associated equipment shall be set to ensure that automatic calls to different numbers are spaced such that there is not less than 5 seconds between the end of one call attempt and the beginning of another.

5 This equipment shall not be set up to make automatic calls to Telecom's 111 Emergency Service.

6 This device is equipped with pulse dialing while the Telecom standard is DTMF tone dialing. There is no guarantee that Telecom lines will always continue to support pulse dialing.

7 Use of pulse dialing, when this equipment is connected to the same line as other equipment, may give rise to bell tinkle or noise and may also cause a false answer condition. Should such problems occur, the user should NOT contact the telecom Fault Service.

8 This equipment may not provide for the effective hand-over of a call to another device connected to the same line.

9 Under power failure conditions this appliance may not operate. Please ensure that a separate telephone, not dependent on local power, is available for emergency use.

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. EVITTER TOUTE EXPOSITION AUX RAYONS.

LUOKAN 1 LASERLAITE LASER KLASSE 1
VORSICHT: UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHLL AUSSETZEN

English

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 LASERSÅTEILYLLE.
VARNING: LASERSTRÅLNING NÅR DENNA DEL ÅR ÖPPNAD ÅLÅ TUIJOTA SÅTEESEENSTIRRA EJ IN I STRÅLEN

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

ADVARSEL: LASERSTRÅLING NAR DEKSEL ÅPNESSTIRR IKKE INN I STRÅLEN

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.

Radio device regulatory notice

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

General

This product complies with the radio frequency and safety standards of any country or region in which it has been approved for wireless use. Depending on configurations, this product may or may not contain wireless radio devices (such as wireless LAN and/or Bluetooth modules). Below information is for products with such devices.

European Union (EU)

R&TTE Directive 1999/5/EC as attested by conformity with the following harmonized standard:

- Article 3.1(a) Health and Safety
  - EN60950-1:2001
  - EN50371:2002
- Article 3.1(b) EMC
  - EN301 489-1 V1.4.1:2002

- EN301 489-17 V1.2.1:2002
- EN301 489-3 V1.4.1:2002 (Applied to models with 27MHz wireless mouse/keyboard)
- EN301 489-7 V1.2.1:2002 (Applied to models with 3G function)
- EN301 489-24 V1.2.1:2002 (Applied to models with 3G function)

- Article 3.2 Spectrum Usages
  - EN300 328 V1.5.1:2004
  - EN301 893 V1.2.3:2003
  - EN300 220-1 V1.3.1:2000 (Applied to models with 27MHz wireless mouse/keyboard)
  - EN300 220-3 V1.1.1:2000 (Applied to models with 27MHz wireless mouse/keyboard)

 (for EU nations only)

List of applicable countries

EU member states as of May 2004 are: Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom Estonia, Latvia, Lithuania, Poland, Hungary, Czech Republic, Slovak Republic, Slovenia, Cyprus and Malta. Usage allowed in the countries of European Union, as well as Norway, Switzerland, Iceland and Liechtenstein. This device must be used in strict accordance with the regulations and constraints in the country of use. For further information, please contact local office in the country of use.

The FCC RF safety requirement

The radiated output power of the wireless LAN Card and Bluetooth card is far below the FCC radio frequency exposure limits. Nevertheless, the PC series shall be used in such a manner that the potential for human contact during normal operation is minimized as follows:

1 This device is restricted to indoor use due to its operation in the 5.15 to 5.25 GHz frequency range. FCC requires this product to be used indoors for the frequency range 5.15 to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

2 High power radar are allocated as primary users of the 5.25 to 5.35 GHz and 5.65 to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

3 An improper installation or unauthorized use may cause harmful interference to radio communications. Also any tampering of the internal antenna will void the FCC certification and your warranty.

Canada — Low-power license-exempt radio communication devices (RSS-210)

- Common information

  Operation is subject to the following two conditions:

  - This device may not cause interference, and
  - This device must accept any interference, including interference that may cause undesired operation of the device.

- Operation in 2.4 GHz band

  To prevent radio interference to the licensed service, this device is intended to be operated indoors and installation outdoors is subject to licensing.

- Operation in 5 GHz band

Federal Communications Commission Declaration of Conformity

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.

The following local Manufacturer/Importer is responsible for this declaration:

Product:	Personal Computer
Model number:	Aspire G Series
Name of responsible party:	Acer America Corporation
Address of responsible party:	333 West San Carlos St. San Jose, CA 95110 U. S. A.
Contact person:	Acer Representative
Tel:	254-298-4000
Fax:	254-298-4147

English

Declaration of Conformity

We,

Acer Computer (Shanghai) Limited

3F, No. 168 Xizang medium road, Huangpu District,

Shanghai, China

Contact Person: Mr. Easy Lai

Tel: 886-2-8691-3089 Fax: 886-2-8691-3000

E-mail: easy_lai@acer.com.tw

Hereby declare that:

Product: Personal Computer

Trade Name: Acer

Model Number: Aspire G Series

Is compliant with the essential requirements and other relevant provisions of the following EC directives, and that all the necessary steps have been taken and are in force to assure that production units of the same product will continue comply with the requirements.

EMC Directive 2004/108/EC, amended by 92/31/EEC and 93/68/EEC as attested by conformity with the following harmonized standards:

- EN55022:1998 + A1:2000 + A2:2003, AS/NZS CISPR22:2002, Class B
- EN55024:1998 + A1:2001 + A2:2003
- EN55013:2001 + A1:2003 (for AV product)
- EN55020:2002 + A1:2003 (for AV product)
- EN61000-3-2:2000 + A2:2005, Class D
- EN61000-3-3:1995 + A1:2001

Low Voltage Directive 2006/95/EC as attested by conformity with the following harmonized standard:

- EN60950-1:2001 + A11:2004
- EN60065:2002 for AV product

Council Decision 98/482/EC (CTR21) for pan- European single terminal connection to the Public Switched Telephone Network (PSTN).

RoHS Directive 2002/95/EC on the Restriction of the Use of certain Hazardous Substances in Electrical and Electronic Equipment.

R&TTE Directive 1999/5/EC as attested by conformity with the following harmonized standard:

- Article 3.1(a) Health and Safety
  - EN60950-1:2001
  - EN50371:2002 (SAR, general RF device)
  - EN50360:2001 (SAR, for mobile phone)
- Article 3.1(b) EMC
  - EN301 489-1 V1.4.1 (Common technical requirements)
  - EN301 489-3 V1.4.1 (For Short-Range Devices)
  - EN301 489-7 V1.2.1 (For GSM and DCS)
  - EN301 489-17 V1.2.1 (For Wideband Data and HIPERLAN Equipment)
  - EN301 489-24 V1.2.1 (For UMTS band)
- Article 3.2 Spectrum Usages
  - EN300 220-1 V1.3.1 (For short range device, 25~1000MHz, part 1).
  - EN300 220-2 V2.1.1 (For short range device, 25~1000MHz, part 3).
  - EN 300 440-2 V1.1.2 (For short range device, 1G~20GHz, part 2).
  - EN300 328 V1.6.1 (For Data transmission equipment operating in the 2,4 GHz ISM band).
  - EN301 511 V9.0.2 (For GSM and DCS).
  - EN301 893 V1.2.3 (5GHz high performance RLAN).
  - EN301 908-1 V2.2.1 (For UMTS band, introduction and common requirements).
  - EN301 908-2 V2.2.1 (Harmonized EN for IMT-2000,CDMA Direct Spread (UTRA FDD)
  - EN300 220-3 V2.1.1 (Short range device, 25~1000MHz, part 3.)
  - EN300 328 V1.6.1 (Data transmission equipment operating in the 2.4 GHz ISM band)
  - EN301 893 V1.2.3 (5GHz high performance RLAN)

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