TravelMate 6460/6410 Series

User's Guide

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Model number: _____

Place of purchase: _____

Serial number: ___

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.

Replacing the battery pack

The notebook uses lithium batteries. Replace the battery with the same type as that which came bundled with your product. Use of another battery may present a risk of fire or explosion.



Warning! Batteries may explode if not handled properly. Do not disassemble or dispose of them in fire. Keep them away from children. Follow local regulations when disposing of used batteries.

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.



Warning! For safety reasons, do not use non-compliant parts when adding or changing components. Consult your reseller for purchase options.

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/environmental.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 "Regulations and safety notices" on page 99 in the AcerSystem User's Guide.

First things first

We would like to thank you for making an Acer notebook your choice for meeting your mobile computing needs.

Your guides

To help you use your Acer notebook, we have designed a set of guides:



First off, the **Just for Starters...** poster helps you get started with setting up your computer.



The printed **User's Guide** introduces you to the basic features and functions of your new computer. For more on how your computer can help you to be more productive, please refer to the **AcerSystem User's Guide.** This guide contains detailed information on such subjects as system utilities, data recovery, expansion options and troubleshooting. In addition it contains warranty information and the general regulations and safety notices for your notebook. It is available in Portable Document Format (PDF) and comes preloaded on your notebook. Follow these steps to access it:

- 1 Click on Start, All Programs, AcerSystem.
- 2 Click on AcerSystem User's Guide.

Note: Viewing the file requires Adobe Reader. If Adobe Reader is not installed on your computer, clicking on **AcerSystem User's Guide** will run the Adobe Reader setup program first. Follow the instructions on the screen to complete the installation. For instructions on how to use Adobe Reader, access the **Help and Support** menu.

Basic care and tips for using your computer

Turning your computer on and off

To turn on the computer, simply press and release the power button below the LCD screen beside the easy-launch buttons. See **"Front view" on page 17** for the location of the power button.

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

- Use the Windows shutdown command
 Click on Start, Turn Off Computer, then click on Turn Off.
- Use the power button

You can also shut down the computer by closing the display cover, or by pressing the sleep hotkey **<Fn> + <F4>**.



Note: If you cannot power off the computer normally, press and hold the power button for more than four seconds to shut down the computer. If you turn off the computer and want to turn it on again, wait at least two seconds before powering up.

Taking care of your computer

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

- Do not expose the computer to direct sunlight. Do not place it near sources
 of heat, such as a radiator.
- Do not expose the computer to temperatures below 0 °C (32 °F) or above 50 °C (122 °F).
- Do not subject the computer to magnetic fields.
- Do not expose the computer to rain or moisture.
- Do not spill water or any liquid on the computer.
- Do not subject the computer to heavy shock or vibration.
- Do not expose the computer to dust or dirt.
- Never place objects on top of the computer.
- Do not slam the computer display when you close it.
- Never place the computer on uneven surfaces.

Taking care of your AC adapter

Here are some ways to take care of your AC adapter:

- Do not connect the adapter to any other device.
- Do not step on the power cord or place heavy objects on top of it.
 Carefully route the power cord and any cables away from foot traffic.
- When unplugging the power cord, do not pull on the cord itself but pull on the plug.
- The total ampere ratings of the equipment plugged in should not exceed the ampere rating of the cord if you are using an extension cord. Also, the total current rating of all equipment plugged into a single wall outlet should not exceed the fuse rating.

Taking care of your battery pack

Here are some ways to take care of your battery pack:

- Use only batteries of the same kind as replacements. Turn the power off before removing or replacing batteries.
- Do not tamper with batteries. Keep them away from children.
- Dispose of used batteries according to local regulations. Recycle if possible.

Cleaning and servicing

When cleaning the computer, follow these steps:

- 1 Turn off the computer and remove the battery pack.
- 2 Disconnect the AC adapter.
- 3 Use a soft, moist cloth. Do not use liquid or aerosol cleaners.

If either of the following occurs:

- the computer has been dropped or the body has been damaged;
- the computer does not operate normally

please refer to "Frequently asked questions" on page 77.

Contents

Information for your safety and comfort	iii
Safety instructions	iii
Disposal instructions	V
Tips and information for comfortable use	vi
First things first	viii
Your guides	viii
Basic care and tips for using your computer	viii
Turning your computer on and off	viii
Taking care of your computer	ix
Taking care of your AC adapter	ix
Taking care of your battery pack	Х
Cleaning and servicing	X
Acer Empowering Technology	1
Empowering Technology password	1
Acer eNet Management	2
Acer ePower Management	4
Acer ePresentation Management	7
Acer TPM-based eDataSecurity Management	8
Acer eLock Management Acer eRecovery Management	11 13
Acer execovery Management Acer eSettings Management	15
Acer esettings Management Acer ePerformance Management	16
Your Acer notebook tour	17
Front view	17
Closed front view	17
Left view	19
Right view	20
Rear view	21
Base view	22
Specifications	23
Indicators	27
Easy-launch buttons	28
FineTrack and FineTrack buttons	29
FineTrack basics	29
Touchpad	30
Touchpad basics	30
Using Acer FineTouch keyboard	32
Lock keys and embedded numeric keypad Windows keys	32 33
windows keys Hotkeys	33 33
Special keys	35 35
Ejecting the optical (CD or DVD) drive tray	36
, , , ,	
Audio	37
Adjusting the volume	37 20
Acer OrbiCam	38
Launching the Acer OrbiCam	39

	Changing the Acer OrbiCam settings	39
	Capturing photos/videos	41
	Using the Acer OrbiCam as webcam	42
	Enabling the Acer VisageON	
	(for 1.3 megapixel camera models only)	42
Jsin	g the system utilities	44
	Acer GridVista (dual-display compatible)	44
	Launch Manager	45
	Norton AntiVirus	46
Secu	ıring your computer	49
	Using a computer security lock	50
	Acer GraviSense	50
	Using Acer GraviSense	50
	Protecting the HDD	51
	Anti-Theft	51
	Acer Trusted Platform Module (TPM)	53
	User roles	53
	Initialization and Administration of the Acer Security P	latform54
	User Authentication	54
	Migrating Keys to other Systems	56
	Acer TPM-based fingerprint reader	57
	Password choice	57
	Correct scanning procedure	57
	User's Fingers and additional encryption performed by	TPM chip58
	Using boot security	62
	Fingerprint system boot authentication	62
	Biomenu	63
	Lock computer	64
	Registered Sites	64
	Register	64
	Control Center	66
	How to restore your data from systemboard crash?	66
	Using the SmartCard	67
	Registering your SmartCard	68
	Running PlatinumSecure	69
	Running PlatinumKey	71
	Using passwords	72
	Entering passwords	73
	Setting passwords	73
	BIOS utility	73
	Boot sequence	74
	Password on boot	74
	Setting up passwords when using fingerprint recogniti	
	Enabling or disabling Acer TPM security	75 76
	Enabling disk-to-disk recovery	
-req	uently asked questions	77
	Requesting service	80
	International Travelers Warranty (ITW)	80

Before you call	80
Taking your notebook PC with you	81
Disconnecting from the desktop	81
Disconnecting from Acer ezDock II/II+	81
Moving around	81
Preparing the computer	81
What to bring to meetings	82
Taking the computer home	82
Preparing the computer	82
What to take with you	83
Special considerations	83
Setting up a home office	83
Traveling with the computer	83
Preparing the computer	84
What to take with you	84
Special considerations	84
Traveling internationally with the computer	84
Preparing the computer	84
What to bring with you	84
Special considerations	85
Expanding through options	86
Connectivity options	86
Fax/data modem	86
Built-in network feature	87
Fast Infrared (FIR)	87
Universal Serial Bus (USB)	88
IEEE 1394 port	88
PC Card slot	89
ExpressCard	90
Installing memory	91
BIOS utility	91
Boot sequence	91
Enable disk-to-disk recovery	92
Password	92
Using software	92
Playing DVD movies	92
Power management	93
Acer eRecovery Management	93
Create backup	94
Restore from backup	94
Create factory default image CD	95
Re-install bundled software without CD	95
Change password	96
Troubleshooting	97
Troubleshooting tips	97
Error messages	97
Regulations and safety notices	99

ENERGY STAR guidelines compliance	99
FCC notice	99
Modem notices	100
Laser compliance statement	103
LCD pixel statement	103
Macrovision copyright protection notice	103
Radio device regulatory notice	104
General	104
European Union (EU)	104
The FCC RF safety requirement	105
Canada — Low-power license-exempt radio	
communication devices (RSS-210)	106
Federal Communications Comission	
Declaration of Conformity	107
Declaration of Conformity for CE Marking	108
LCD panel ergonomic specifications	109
Index	110

Acer Empowering Technology

Acer's innovative Empowering Technology toolbar makes it easy for you to access frequently used functions and manage your new Acer computer. Displayed by default in the upper-right corner of your screen, it features the following handy utilities:

- Acer eNet Management hooks up to location-based networks intelligently.
- Acer ePower Management extends battery power via versatile usage profiles.
- Acer ePresentation Management connects to a projector and adjusts display settings conveniently.
- Acer TPM-based eDataSecurity Management protects data with passwords and advanced encryption algorithms in TPM.
- Acer eLock Management limits access to external storage media and removable data devices.
- Acer eRecovery Management backs up and recovers data flexibly, reliably and completely.
- Acer eSettings Management accesses system information and adjusts settings easily
- Acer ePerformance Management improves system performance by optimizing disk space, memory and registry settings..



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

Empowering Technology password

Before using Acer eLock Management and 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 do not initialize the Empowering Technology password, you will be prompted to do so when running Acer eLock Management or Acer eRecovery Management for the first time.



If you lose your password, there is no method to reset it except by reformatting your notebook or taking your notebook to an Acer Customer Service Center. Be sure to remember or write down your password.

Acer eNet Management 🚱



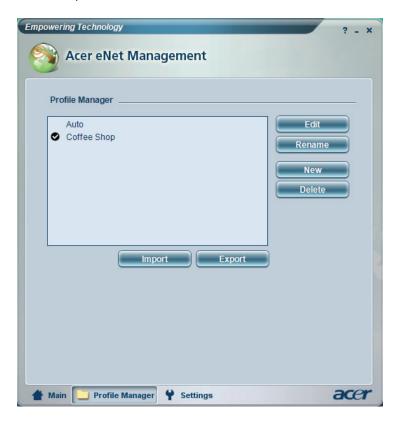
Acer eNet Management helps you to quickly and easily connect to both wired and wireless networks in a variety of locations. To access this utility, either click on the "Acer eNet Management" icon on your notebook, or start the program from the Start menu. You also have the option to set Acer eNet Management to start automatically when you boot up your PC.

Acer eNet Management automatically detects the best settings for a new location, while offering you the freedom to manually adjust the settings to match your needs.



Acer eNet Management can save network settings for a location to a profile, and automatically switch to the appropriate profile when you move from one location to another. Settings stored include network connection settings (IP and DNS settings, wireless AP details, etc.), as well as default printer settings.

Security and safety concerns mean that Acer eNet Management does not store username and password information.



Acer ePower Management

Acer ePower Management features a straightforward user interface. To launch it, select Acer ePower Management from the Empowering Technology interface.

AC mode (Adapter mode)

The default setting is "Maximum Performance." You can adjust CPU speed, LCD brightness and other settings, or click on buttons to turn the following functions on/off: Wireless LAN, Bluetooth, CardBus, FireWire(1394), Wired LAN and Optical Device if supported.

DC mode (Battery mode)

There are four pre-defined profiles — Entertainment, Presentation, Word Processing, and Battery Life. You can also define up to three of your own.

To create a new power profile:

- 1 Change power settings as desired.
- 2 Click "Save as ..." to save to a new power profile.
- 3 Name the newly created profile.
- 4 Select whether this profile is for Adapter or Battery mode, then click **OK**.
- 5 The new profile will appear in the profile list.

Battery status

For real-time battery life estimates based on current usage, refer to the panel in the upper half of the window.



For additional options, click "Settings" to:

- Set alarms.
- Re-load factory defaults.
- Select what actions to be taken when the cover is closed or the power button is pressed.
- Set passwords for accessing the system after Hibernation or Standby.
- View information about Acer ePower Management.



Acer ePresentation Management

Acer ePresentation Management lets you project your computer's display to an external device or projector using the hot key: Fn + F5. If the external display supports auto-detection, your system display will be automatically switched out when an external display is connected to the system. For projectors and external devices that are not auto-detected, launch Acer ePresentation Management to choose an appropriate display setting.





If the restored resolution is not correct after disconnecting a projector, or you need to use an external resolution that is not supported by Acer ePresentation Management, adjust your display settings using Display Properties or the utility provided by the graphics vendor.

Acer TPM-based eDataSecurity Management



Acer TPM-based eDataSecurity Management is a handy file encryption utility that protects your files from being accessed by unauthorized persons. It is conveniently integrated with Windows Explorer as a shell extension for quick and easy data encryption/decryption and also supports on-the-fly file encryption for MSN Messenger and Microsoft Outlook.

The Acer eDataSecurity Management setup wizard will prompt you for a supervisor password and default encryption. This encryption will be used to encrypt files by default, or you can choose to enter your own file-specific password when encrypting a file.

Acer eDataSecurity Management can be integrated with TPM on computers equipped with the TPM hardware. On computers equipped with the TPM hardware, there will be additional Acer eDataSecurity Management system setup and administration procedures which allow the user to utilize TPM for the PSD and the File/Folder encryption functions. If the "Use TPM" option is selected during Acer eDataSecurity Management's initial system setup or system administration, the PSD and the File/Folder encryption functions will be protected by TPM.



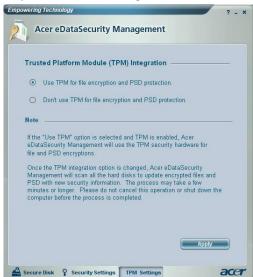


Note: The password used to encrypt a file is the unique key that the system needs to decrypt it. If you lose the password, the supervisor password is the only other key capable of decrypting the file. If you lose both passwords, there will be no way to decrypt your encrypted file! **Be sure to safeguard all related passwords!**





If the TPM hardware is detected, there will be an additional 'TPM Settings' button at the bottom of the System Administration panel. Clicking 'TPM Settings' will switch to the form for the TPM protection option selection, as shown below. The user will have to enter the supervisor password whenever the TPM integration option needs to be changed.



Acer eLock Management

Acer eLock Management is a security utility that allows you to lock your removable data, optical and floppy drives to ensure that data can't be stolen while your notebook is unattended.

- Removable data devices includes USB disk drives, USB pen drives, USB flash drives, USB MP3 drives, USB memory card readers.
- Optical drive devices includes any kind of CD-ROM or DVD-ROM drives.
- Floppy disk drives 3.5-inch disks only.

To activate Acer eLock Management, a password must be set first. Once set, you can apply locks to any of the devices types. Lock(s) will immediately be set without any reboot necessary, and will remain locked after rebooting, until unlocked.



Note: Be sure to remember or write down your password. Be sure to well record your Acer eLock Management password. Password can only be reset by reformatting your disk or seeking assistance from Acer Customer Service.

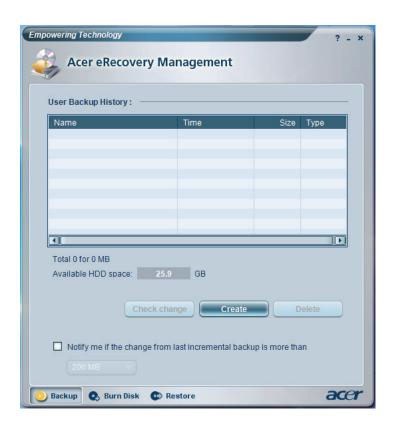


Acer eRecovery Management 🕥

Acer eRecovery Management is a powerful utility that does away with the need for recovery disks provided by the manufacturer. The Acer eRecovery Management utility occupies space in a hidden partition on your system's hard drive. By default, user-created backups are stored on the D:\ drive.

Acer eRecovery Management provides you with:

- Password protection.
- Recovery of applications and drivers.
- Image/data backup:
 - Back up to HDD (set recovery point).
 - Back up to CD/DVD.
- Image/data recovery tools:
 - Recover from a hidden partition (factory defaults).
 - Recover from the HDD (most recent user-defined recovery point).
 - Recover from CD/DVD.



For more information, please refer to "Acer eRecovery Management" on page 93 in the AcerSystem User's Guide.



Note: If your computer did not come with a Recovery CD or System CD, please use Acer eRecovery Management's "System backup to optical disk" feature to burn a backup image to CD or DVD. To ensure the best results when recovering your system using a CD or Acer eRecovery Management, detach all peripherals (except the external Acer ODD, if your computer has one), including your Acer ezDock II/II+.

Acer eSettings Management **

Acer eSettings Management allows you to inspect hardware specifications, change BIOS passwords or other Windows settings, and to monitor the system health status.

Acer eSettings Management also:

- Provides a simple graphical user interface for navigation.
- Displays general system status and advanced monitoring for power users on Acer computer.
- Adding unique asset tag to organize your equipment and provide a security feature in business.





Acer ePerformance Management is a system optimization tool that boosts the performance of your Acer computer. It provides an express optimization method to release unused memory and disk space quickly. The user can also enable advanced options for full control over the following options:

- Memory optimization releases unused memory and check usage.
- Disk optimization removes unneeded items and files.
- Speed optimization improves the usability and performance of your Windows XP system.



Your Acer notebook tour

After setting up your computer as illustrated in the **Just for Starters...** poster, let us show you around your new Acer notebook.

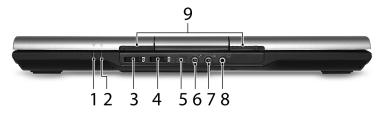
Front view



#	Item	Description
1	Acer Oribcam	 1.3 megapixel web camera for video communication (for selected models).
2	Display screen	Also called Liquid-Crystal Display (LCD), displays computer output.
3	Acer FineTouch Keyboard	For entering data into your computer.

#	Item	Description
4	Acer FineTrack	Touch-sensitive pointing device which functions like a computer mouse when used together with the click buttons. See "FineTrack basics" on page 29 for more details.
5	Microphone	Internal microphone for sound recording.
6	Fingerprint reader	Security identification (for selected models).
7	Touchpad	Touch-sensitive pointing device which functions like a computer mouse.
8	Status indicators	Light-Emitting Diodes (LEDs) that light up to show the status of the computer's functions and components. See "Indicators" on page 27 for more details.
9	3DSonic speakers	Left and right speakers deliver stereo audio output.
10/ 11	Click buttons (left, center and right)	The left and right buttons function like the left and right mouse buttons; the center button serves as a 4-way scroll button.
12	Palmrest	Comfortable support area for your hands when you use the computer.
13	FinTrack buttons (left and right)	Function like the left and right mouse buttons when used together with the center-keyboard FineTrack. See "FineTrack basics" on page 29 for more details.
14	Power button	Turns the computer on and off.
15	Status indicators	Light-Emitting Diodes (LEDs) that light up to show the status of the computer's functions and components. See "Indicators" on page 27 for more details.
16	Easy-launch buttons	Buttons for launching frequently used programs. See "Easy-launch buttons" on page 28 for more details.

Closed front view



#	lcon	Item	Description
1	Ş	Power indicator	Indicates the computer's power status.

#	lcon	Item	Description
2	Ē	Battery indicator	Indicates the computer's battery status.
3	*	Bluetooth communication switch/indicator	Enables/disables the Bluetooth function. Indicates the status of Bluetooth communication.
4	' C	Wireless communication switch/indicator	Enables/disables the wireless function. Indicates the status of wireless LAN communication.
5		Infrared port	Interfaces with infrared devices (e.g., infrared printer and IR-aware computer). (for selected models)
6	▶ øŋ	Microphone-in jack	Accepts input from external microphones.
7	(+))	Line-in jack	Accepts audio line-in devices (e.g., audio CD player, stereo walkman).
8	೧	Headphones/speaker/ line-out jack	Connects to audio line-out devices (e.g., speakers, headphones).
9		Latch	Locks and releases the lid.

Left view



#	Icon	Item	Description
1		Ventilation slots	Enable the computer to stay cool, even after prolonged use.
2	1394	4-pin IEEE 1394 port	Connects to IEEE 1394 devices (for selected models).
3	•~•	Two USB 2.0 ports	Connect to USB 2.0 devices (e.g., USB mouse, USB camera) (3 total).
4	ExpressCard/34	ExpressCard/34 slot	Accepts one ExpressCard module (for selected models).

#	Icon	Item	Description
5	PRO PRO NO NO NO NO NO NO NO NO NO	5-in-1 card reader	Accepts Memory Stick (MS), Memory Stick PRO (MS PRO), MultiMediaCard (MMC), Secure Digital (SD), xD-Picture Card (xD) (for selected models).
6		PC Card slot	Accepts one Type II PC Card.
7		PC Card slot eject button	Ejects the PC Card from the slot.
8		SmartCard	Accepts the TravelMate SmartCard (for selected models).

Right view



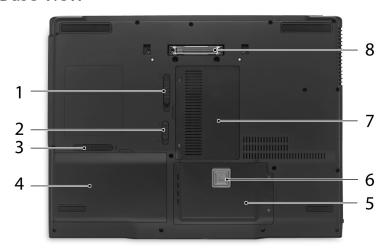
#	Item	Description
1	Acer MediaBay optical drive	Internal optical drive; accepts CDs or DVDs.
2	Optical disk access indicator	Lights up when the optical drive is active.
3	Optical drive eject button	Ejects the optical disk from the drive.
4	Emergency eject hole	Ejects the optical drive tray when the computer is turned off.
5	USB 2.0 port	Connect to USB 2.0 devices (e.g., USB mouse, USB camera) (3 total).

Rear view



#	lcon	Item	Description
1	S →	S-video/TV-out (NTSC/PAL) port	Connects to a television or display device with S-video input (for selected models).
2		Modem (RJ-11) port	Connects to a phone line.
3	용	Ethernet (RJ-45) port	Connects to an Ethernet 10/100/1000 based network.
4	[0]0]	serial port	Connects to serial devices.
5	DVI-D	Digital Video Interface -Digital port	Supports digital video connections (for selected models).
6		External display (VGA) port	Connects to a display device (e.g., external monitor, LCD projector).
7		DC-in jack	Connects to an AC adapter.
8	ĸ	Kensington lock slot	Connects to a Kensington-compatible computer security lock.

Base view



#	Item	Description
1	Acer MediaBay release latch	Lock or unlock Acer MediaBay device.
2	Battery lock	Locks the battery in position.
3	Battery latch	Release the battery pack.
4	Battery bay	Houses the computer's battery pack.
5	Hard disk bay	Houses the computer's hard disk (secured with screws).
6	Acer DASP	Disk Anti-Shock Protection
7	Memory compartment	Houses the computer's main memory.
8	ezDock II/II+ connector	Connects to Acer ezDock II/II+.

Specifications

Operating	 Windows® Vista™ Capable 		
system	 Windows® Vista™ Premium Ready (for selected models) 		
	 Genuine Windows® XP Professional x64 Edition 		
	 Genuine Windows® XP Professional (Service Pack 2) 		
	 Genuine Windows® XP Home Edition (Service Pack 2) 		
Platform	Intel® Centrino® Duo mobile technology, featuring:		
	 Intel® Core™ 2 Duo processor T7200/T7400/T7600 (4 MB L2 cache, 2/2.16/2.33 GHz, 667 MHz FSB), or T5500/T5600 (2 MB L2 cache, 1.66/1.83 GHz, 667 MHz FSB), supporting Intel® Extended Memory 64 Technology (Intel® EM64T) 		
	 Mobile Intel® 945GM/PM Express chipset (for selected models) 		
	 Intel® PRO/Wireless 3945ABG network connection (dual- band tri-mode 802.11a/b/g) or Intel® PRO/Wireless 3945BG network connection (dual-mode 802.11b/g) Wi- Fi CERTIFIED™ solution, supporting Acer SignalUp™ wireless technology 		
System memory	Up to 2 GB of DDR2 533/667 MHz memory, upgradeable to 4 GB using two soDIMM modules (dual-channel support)		
Display and graphics	15.4" WSXGA+ high-brightness TFT LCD, 1680 x 1050 pixel resolution, 16 ms response time, supporting simultaneous		
grapriics	multi-window viewing via Acer GridVista™		
	 15.4" WXGA high-brightness TFT LCD, 1280 x 800 pixel resolution, 16 ms response time, supporting simultaneous multi-window viewing via Acer GridVista™ 		
	15" SXGA+ high-brightness TFT LCD, 1400 x 1050 pixel resolution		
	 15" XGA high-brightness TFT LCD, 1024 x 768 pixel resolution 		
	 ATI Mobility™ Radeon® X1300 with up to 512 MB HyperMemory™ (128 MB of dedicated GDDR2 VRAM, up to 384 MB of shared system memory), supporting ATI PowerPlay™ 5.0, Microsoft® DirectX® 9.0 and DualView™ (for selected models) or 		
	 Mobile Intel® 945GM Express chipset with integrated 3D graphics, featuring Intel® Graphics Media Accelerator (GMA) 950, up to 224 MB of shared memory supporting Microsoft® DirectX® 9.0 and dual independent display (for selected models) 		
	 Up to 2048 x 1536 resolution via non-interlaced CRT display 		
	• 16.7 million colors		
	 MPEG-2/DVD hardware-assisted capability 		
	 S-video/TV-out (NTSC/PAL) support (for selected models) 		
	 DVI-D (true digital video interface) support (for selected models) 		
	·		

Storage	60/80/100/120/160 GB or higher Serial ATA primary hard disk
subsystem	drive with Acer DASP (Disk Anti-Shock Protection)
subsystem	Acer MediaBay hot-swappable 80/100/120/160 GB Serial ATA
	second hard disk drive
	 Acer MediaBay hot-swappable optical drive:
	8X DVD-Super Multi double-layer drive
	DVD/CD-RW combo drive
	 5-in-1 card reader, supporting Secure Digital (SD),
	MultiMediaCard (MMC), Memory Stick® (MS), Memory Stick PRO™ (MS PRO), xD-Picture Card™ (xD) (for selected models)
Dimensions	• 360 (W) x 271 (D) x 35.5 (H) mm
and weight	(14.2 x 10.6 x 1.4 inches)
-	 3.12 kg (6.88 lbs.) with 8-cell battery pack and Acer MediaBay
	6-cell second battery pack
	 2.85 kg (6.27 lbs.) with 8-cell battery pack and optical drive
	 2.7 kg (5.94 lbs.) with 6-cell battery pack and optical drive
Power	ACPI 2.0 CPU power management standard: supports
subsystem	Standby and Hibernation power-saving modes
•	 71 W 4800 mAh Li-ion primary battery pack (8-cell)
	 44.4 W 4000 mAh Li-ion primary battery pack (6-cell)
	 Acer QuicCharge™ technology:
	80% charge in 1 hour
	2-hour rapid charge system-off
	2.5-hour charge-in-use
	3-pin 90 W AC adapter
Input devices	Security access via TravelMate TPM-based fingerprint reader /
	TravelMate SmartCard reader (for selected models)
	 88-/89-key Acer FineTouch™ keyboard with 5° curve,
	inverted "T" cursor layout, 2.5 mm (minimum) key travel
	 12 function keys, four cursor keys, two Windows® keys,
	hotkey controls, embedded numeric keypad, international
	language support
	 Dual navigation control, featuring Acer FineTrack™ with two FineTrack™ buttons and touchpad with 4-way scroll button
	Four easy-launch buttons: Empowering Key, email, Internet,
	user-programmable
	Two communication LED switches: WLAN, Bluetooth®
Audio	Intel® High-Definition audio support
, (4410	Two built-in Acer 3DSonic (1.5W) stereo speakers
	•
	Built-in microphone Grand Blacker Day IM and MS Second as grantilla.
	 SoundBlaster Pro[™] and MS Sound compatible

Communication	Acer Video Conference featuring Voice and Video over
	Internet Protocol (VVoIP) support via Acer OrbiCam™ and
	optional Acer Bluetooth® VoIP phone (for selected models)
	Acer OrbiCam™ integrated 1.3 megapixel CMOS camera (for
	selected models), featuring:
	225° ergonomic rotation
	Acer VisageON™ technology
	 Acer PrimaLite™ technology
	WLAN: integrated Intel® PRO/Wireless 3945ABG network
	connection (dual-band tri-mode 802.11a/b/g) or 3945BG network connection (dual-mode 802.11b/g) Wi-Fi
	CERTIFIED™ solution, supporting Acer SignalUp™ wireless
	technology
	 WPAN: Bluetooth® 2.0+EDR (Enhanced Data Rate)
	 LAN: Gigabit Ethernet; ASF 2.0 support; Wake-on-LAN ready
	Modem: 56K ITU V.92 with PTT approval; Wake-on-Ring ready
I/O interface	Acer ezDock II/ II+ connector
	 ExpressCard™/34 slot (for selected models)
	PC Card slot (one Type II)
	 TravelMate fingerprint reader (for selected models)
	 TravelMate SmartCard reader (for selected models)
	• 5-in-1 card reader (SD, MMC, MS, MS PRO, xD)
	(for selected models) Three USB 2.0 ports
	DVI-D port (for selected models)
	IEEE 1394 port (for selected models)
	Fast infrared (FIR) port (for selected models)
	External display (VGA) port
	S-video/TV-out (NTSC/PAL) port (for selected models)
	Serial port
	Headphones/speaker/line-out port
	Microphone-in jack
	• Line-in jack
	• Ethernet (RJ-45) port
	 Modem (RJ-11) port
	DC-in jack for AC adapter
Security	 Acer DASP/DASP+ including Acer DASP (Disk Anti-Shock
	Protection), Acer GraviSense and Acer Anti-Theft HDD
	protection technologies (for selected models) TravelMate TPM-based fingerprint solution
	(for selected models)
	TravelMate SmartCard solution (for selected models)
	TravelMate TPM (Trusted Platform Module) solution
	supporting Acer eDataSecurity Management
	(for selected models)
	BIOS user, HDD and supervisor passwords
	Kensington lock slot

Software	 Acer Empowering Technology (Acer eNet / ePower / ePresentation / eDataSecurity / eLock / eRecovery / eSettings / ePerformance Management) Acer GridVistaTM
	Acer Launch Manager
	Acer Protector Suite QL fingerprint utility
	(for selected models)
	 PlatinumSecret[™] suite (for selected models)
	 Norton AntiVirus™ Adobe® Reader®
	CyberLink® PowerDVD®
	NTI CD-Maker TM
Options and	Acer ezDock II
accessories	Acer ezDock II+
	Acer MediaBay 80/100/120/160 GB second hard disk drive
	Acer MediaBay 6-cell 3800 mAh Li-ion second battery pack
	8-cell 4800 mAh Li-ion primary battery pack
	Acer Bluetooth® VoIP phone Acer Bluetooth® VoIP phone
	512 MB / 1 GB / 2 GB DDR2 533/667 MHz soDIMM module
	External USB floppy disk drive
	3-pin 90 W AC adapter
Environment	Temperature:
	 Operating: 5 °C to 35 °C
	 Non-operating: -20 °C to 65 °C
	Humidity (non-condensing):
	 Operating: 20% to 80%
	 Non-operating: 20% to 80%
System	Cisco Compatible Extensions (CCX)
compliance	• Wi-Fi®
	 ACPI 2.0
	Mobile PC 2002
	• DMI 2.0
	DMI 2.0TCG 1.2



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

Indicators

The computer has eight easy-to-read status indicators, including five on the front panel.



The power, battery and wireless communication status indicators are visible even when the LCD display is closed.

Icon	Function	Description
1	Num Lock	Lights up when Num Lock is activated.
A	Caps Lock	Lights up when Caps Lock is activated.
	HDD	Indicates when the hard disk drive is active.
*	Bluetooth	Indicates the status of Bluetooth communication.
<i>C</i>	Wireless LAN	Indicates the status of wireless LAN communication.
Ş	Power	Indicates the computer's power status.
F	Battery	Indicates the computer's batttery status.



- **1. Charging:** The light shows amber when the battery is charging.
- 2. Fully charged: The light shows green when in AC mode.

Easy-launch buttons

Located above the keyboard are four buttons. These buttons are called easy-launch buttons. They are: Empowering Key < \sim >, one user-programmable button, Internet and email.

Press < @ > to run the Acer Empowering Technology. Please see "Acer Empowering Technology" on page 1. The mail and Web browser buttons are pre-set to email and Internet programs, but can be reset by users. To set the Web browser, mail and programmable buttons, run the Acer Launch Manager. See "Launch Manager" on page 45.



Easy-launch button	Default application
e	Acer Empowering Technology (user-programmable)
Р	User-programmable
Internet	Internet browser (user-programmable)
Email	Email application (user-programmable)

FineTrack and FineTrack buttons

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



FineTrack basics

The following items show you how to use the FineTrack and FineTrack buttons:

- Using your finger, apply light, steady force on the FineTrack (1) to move the cursor.
- Press the FineTrack left (2) and right (3) buttons located below the keyboard to perform selection and execution functions. These two FineTrack buttons are similar to the left and right buttons on a mouse.

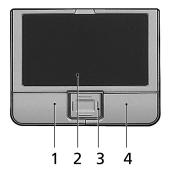
Touchpad

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



Touchpad basics

The following items show you how to use the touchpad:



- Move your finger across the touchpad (2) to move the cursor.
- Press the left (1) and right (4) buttons located beneath the touchpad to
 perform selection and execution functions. These two buttons are similar
 to the left and right buttons on a mouse. Tapping on the touchpad is the
 same as clicking the left button.
- Use the 4-way scroll (3) button to scroll up or down and move left or right a page. This button mimics your cursor pressing on the right scroll bar of Windows applications.

Function	Left button (1)	Right button (4)	Main touchpad (2)	Center button (3)
Execute	Quickly click twice.		Tap twice (at the same speed as double-clicking a mouse button).	
Select	Click once.		Tap once.	
Drag	Click and hold, then use finger on the touchpad to drag the cursor.		Tap twice (at the same speed as double-clicking a mouse button); rest your finger on the touchpad on the second tap and drag the cursor.	
Access		Click		
context menu		once.		
Scroll				Click and hold to move up/ down/left/ right.



Note: When using the touchpad, keep it — and your fingers — dry and clean. The touchpad is sensitive to finger movement; hence, the lighter the touch, the better the response. Tapping harder will not increase the touchpad's responsiveness



Note: By default, vertical and horizontal scrolling is enabled on your touchpad. It can be disabled under Mouse settings in

Windows Control Panel.

Using Acer FineTouch keyboard

The keyboard has full-sized keys and an embedded numeric keypad, separate cursor, lock, Windows, function and special keys.

Lock keys and embedded numeric keypad

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



Lock key	Description
Caps Lock	When Caps Lock is on, all alphabetic characters typed are in uppercase.
Num Lock <fn> + <f11></f11></fn>	When Num Lock is on, the embedded keypad is in numeric mode. The keys function as a calculator (complete with the arithmetic operators +, -, *, and /). Use this mode when you need to do a lot of numeric data entry. A better solution would be to connect an external keypad.
Scroll Lock <fn> + <f12></f12></fn>	When Scroll Lock is on, the screen moves one line up or down when you press the up or down arrow keys respectively. Scroll Lock does not work with some applications.

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

Desired access	Num Lock on	Num Lock off
Number keys on embedded keypad	Type numbers in a normal manner.	
Cursor-control keys on embedded keypad	Hold <shift></shift> while using cursor-control keys.	Hold <fn></fn> while using cursor-control keys.
Main keyboard keys	Hold <fn></fn> while typing letters on embedded keypad.	Type the letters in a normal manner.

Windows keys

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

Key		Description
**	Windows 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.</tab>
		<>> + <e>: Opens the My Computer window.</e>
		<>> + <f1>: Opens Help and Support Center.</f1>
		<>> + <f>: Opens the Search Results window.</f>
		<>> + <r>: Opens the Run dialog box.</r>
		< >> + < M>: Minimizes all windows.
		<shift> + <♣> + <m>: Undoes the minimize all windows action.</m></shift>
	Application key	This key has the same effect as clicking the right mouse button; it opens the application's context menu.

Hotkeys

The computer employs hotkeys or key combinations to access most of the computer's controls like screen brightness, volume output and the BIOS utility.

To activate hotkeys, press and hold the **<Fn>** key before pressing the other key in the hotkey combination.



Hotkey	lcon	Function	Description
<fn> + <f1></f1></fn>	?	Hotkey help	Displays help on hotkeys.
<fn> + <f2></f2></fn>	©	Acer eSettings	Launches Acer eSettings in Acer Empowering Technology. See "Acer Empowering Technology" on page 1.
<fn> + <f3></f3></fn>	♦	Acer ePower Management	Launches Acer ePower Management in Acer Empowering Technology. See "Acer Empowering Technology" on page 1.
<fn> + <f4></f4></fn>	Z ^z	Sleep	Puts the computer in Sleep mode.
<fn> + <f5></f5></fn>		Display toggle	Switches display output between the display screen, external monitor (if connected) and both.
<fn> + <f6></f6></fn>	*	Screen blank	Turns the display screen backlight off to save power. Press any key to return.
<fn> + <f7></f7></fn>		Touchpad toggle	Turns the internal touchpad on and off.
<fn> + <f8></f8></fn>	□(/=()	Speaker toggle	Turns the speakers on and off.
<fn> + <↑></fn>	()	Volume up	Increases the sound volume.
<fn> + <↓></fn>	()	Volume down	Decreases the sound volume.
<fn> + <→></fn>	Ö	Brightness up	Increases the screen brightness.
<fn> + <←></fn>	.	Brightness down	Decreases the screen brightness.

Special keys

You can locate the Euro symbol and the US dollar sign at the upper-center and/or bottom-right of your keyboard.



The Euro symbol

- 1 Open a text editor or word processor.
- 2 Either press < € > at the bottom-right of the keyboard, or hold <**Alt Gr>** and then press the <**5**> key at the upper-center of the keyboard.



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

The US dollar sign

- 1 Open a text editor or word processor.
- 2 Either press < \$ > at the bottom-right of the keyboard, or hold <Shift> and then press the <4> key at the upper-center of the keyboard.



Note: This function varies according to the language settings.

Ejecting the optical (CD or DVD) drive tray

Press the drive eject button to eject the optical drive tray when the computer is on.



Insert a clip to the emergency eject hole to eject the optical drive tray when the computer is off.

Audio

The computer comes with 32-bit Intel High-Definition audio, and built-in stereo speakers.



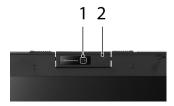
Adjusting the volume

Adjusting the volume on the computer is as easy as pressing some buttons. See **"Hotkeys" on page 33** for more information on adjusting the speaker volume.

Acer OrbiCam

The Acer OrbiCam is a 1.3 megapixel or 310,000 pixel CMOS camera appropriately mounted on top of the LCD panel. The camera's 225-degree ergonomic rotation allows you to capture high-resolution photos or videos up front or at the back of the LCD panel. The Acer OrbiCam fully supports the Acer Video Conference technology so you transmit the best video conference quality over an Instant Messenger service.

Getting to know your Acer OrbiCam



#	Item
1	Lens
2	Power indicator (note: the third is deleted)

Rotating the Acer OrbiCam

The Acer OrbiCam rotates 225 degrees counterclockwise to achieve the desired angle. Refer to the illustrations below.





Note: DO NOT rotate the camera clockwise to prevent damage to the device.

For your convenience, the camera snaps to 45 degrees to match the position of your face in front or at the back of the LCD panel.

Launching the Acer OrbiCam

To launch the Acer OrbiCam, double-click on the Acer OrbiCam logo in the desktop.

OR

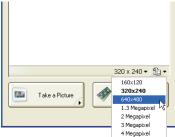
Click **Start > All Programs > Acer > Acer OrbiCam**. The Acer OrbiCam capture window appears.



Changing the Acer OrbiCam settings

Resolution

To change the capture resolution, click the displayed resolution at the bottom right corner of the capture window, then select the desired resolution.

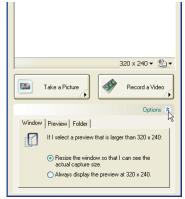




Note: Setting the camera resolution to 640 x 480 or larger does not change the capture window size.

Options

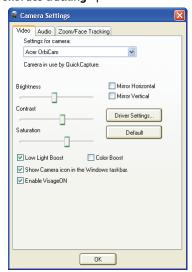
Click **Options** to display the **Window**, **Preview**, and **Folder** tabs. Use the options to change the capture window size, preview settings, and the folder for captured photos or videos.



Camera Settings

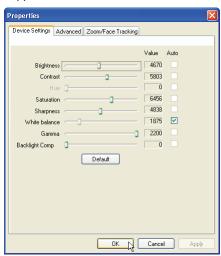
Basic settings

Click the Camera Settings icon on the bottom right corner of the capture display, then select **Camera Settings** from the pop-up menu. You can adjust the **Video, Audio**, and **Zoom/Face tracking** options from this window.



Capture settings

From the Camera Settings window, click the **Driver Settings** button. The **Properties** window appears.



Device Settings allows you to change the camera brightness, contrast, hue, saturation, sharpness, etc.

Advanced settings allows you to activate gain control, implement image mirror, select image enhancements and anti-flicker settings, and turn on/off the camera indicator.

Zoom/Face Tracking settings allows you to adjust the zoom level and turn the face-tracking feature on or off.

Capturing photos/videos

To capture a photo or a video clip, rotate the Acer OrbiCam to get the desired angle, then click the **Take a Picture** or **Record a Video** button. The **Windows Picture and Fax Viewer** or the **Windows Media Player** automatically launches to display/play a preview of the photo/video clip.



Note: By default, all photos and videos are saved in the **My Pictures** and **My Videos** folder.

Using the Acer OrbiCam as webcam

The Acer OrbiCam is automatically selected as the capture device of any Instant Messenger (IM) application. To use the Acer OrbiCam as a webcam, open the IM service, then select the video/webcam feature. You can now broadcast from your location to an IM partner anywhere in the world.

Enabling the Acer VisageON (for 1.3 megapixel camera models only)

The **Acer VisageON** technology comes with feature: **Face tracking**. The face tracking feature tracks your head movement and automatically centers your face in the capture window. (delete something)



Note: The face tracking feature is not capable of centering your face beyond the capture window frame. Minimal head movements are tracked more efficiently.

To enable the Acer VisageON:

1 Right-click on this icon, then select **VisageON** from the pop-up menu.



The VisageON window appears.

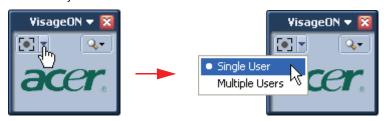


2 Select and apply a video effect from the left section of the VisageON window. Change the face tracking settings and options from the right section.

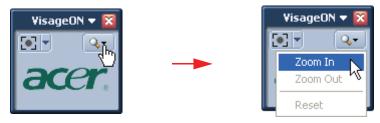
Using the face tracking feature

To use the face tracking feature:

1 Click the left icon down arrow button, then select Single User or Multiple Users from the pop-up menu. For multiple users, the face tracking feature automatically centers all the users' face in the capture window, otherwise the utility centers the face of the user closest to the camera.



2 Click the right icon to zoom in/out or reset the current view.



3 Click **VisageON** to display a pop-menu that allows configuration of the camera, face tracking and reset camera position.



Using the system utilities



Acer GridVista (dual-display compatible)



To enable the dual monitor feature of your notebook, first ensure that the second monitor is connected, then, select **Start**, **Control Panel**, **Display** and click on **Settings**. Select the secondary monitor **(2)** icon in the display box and then click the check box **Extend my Windows desktop onto this monitor**. Finally, click **Apply** to confirm the new settings and click **OK** to complete the process.



Acer GridVista is a handy utility that offers four pre-defined display settings so you can view multiple windows on the same screen. To access this function, please go to **Start**, **All Programs** and click on **Acer GridVista**. You may choose any one of the four display settings indicated below:





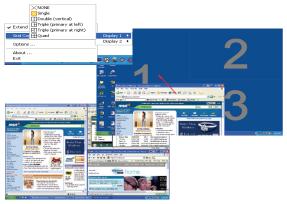




Double (vertical), Triple (primary at left), Triple (primary at right), or Quad Acer Gridvista is dual-display compatible, allowing two displays to be partitioned independently.

Acer GridVista is simple to set up:

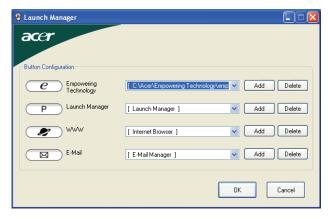
- 1 Run Acer GridVista and select your preferred screen configuration for each display from the taskbar.
- 2 Drag and drop each window into the appropriate grid.
- 3 Enjoy the convenience of a well-organized desktop.





Note: Please ensure that the resolution setting of your second monitor is set to the manufacturer's recommended value.

Launch Manager



Launch Manager allows you to set the four easy-launch buttons located above the keyboard. "Easy-launch buttons" on page 28 for the location of the easy-launch buttons.

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

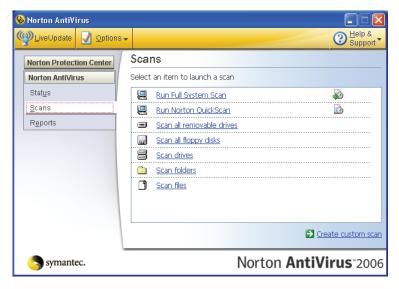
Norton AntiVirus

Norton AntiVirus is an anti-virus software that finds and repairs infected files, and protects against viruses to keep your computer data safe and secure.

How do I check for viruses?

A Full System Scan scans all files on your computer. To perform a system scan:

- Start Norton AntiVirus.
 - Double click on the **Norton AntiVirus** Icon on the desktop or click on the **Start** menu in the Windows taskbar, highlight **Programs**, and select **Norton AntiVirus**.
- 2 In the Norton AntiVirus main window, click Scans.



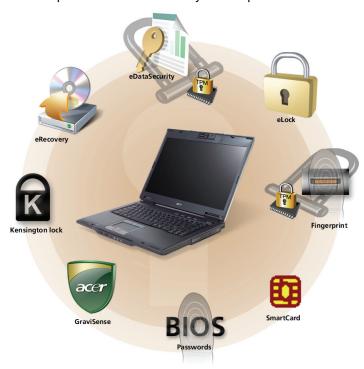
- 3 In the Scans panel, click Run Full System Scan.
- 4 When the scan is complete, a scan summary appears. Click **Finished**.

You can schedule customized virus scans that run unattended on specific dates and times or at periodic intervals. If you are using the computer when the scheduled scan begins, it runs in the background so that you do not have to stop working.

For more information refer to the Norton AntiVirus Help menu.

Securing your computer

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



Security features include anti-theft and system security:

Anti-theft

Kensington lock, a security notch

Acer GraviSense

System security

Acer TPM-based eDataSecurity Management

Acer TPM-based fingerprint utility

Acer eLock Management

Acer eRecovery Management

SmartCard

BIOS passwords



Note: For more information about Acer eLock, eRecovery and TPM-based eDataSecurity Management, please refer to "Acer Empowering Technology" on page 1.

Using a computer security lock

The notebook comes with a Kensington-compatible security slot for a security lock.



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

Acer GraviSense

Acer GraviSense is an innovative utility designed to further protect your data by automatically moving the read/write heads of your Acer notebook's hard disk away from the storage disk (this is known as "parking" the heads) in the event that sudden motion is detected. Acer GraviSense can also be set to activate an alarm in case your notebook is moved by an unauthorized person.

Using Acer GraviSense

You can launch Acer GraviSense in a number of ways:

- From the Start menu, go to **Start > (All) Programs > Acer GraviSense**.
- When Acer GraviSense is running, an icon will be displayed in the task tray. Move your cursor over the icon to identify Acer GraviSense. Leftclick or right-click on the icon to open a context menu.

Protecting the HDD

Activate this feature by right-clicking on the tray icon and selecting Hard Drive Protection.



Selecting this function will halt data transactions to the HDD in the event that any vibration or movement which exceeds the level tolerated by the HDD is detected.

Anti-Theft

Activate this feature by right-clicking on the tray icon and selecting Anti-Theft.



When enabled, this feature will sound an alarm if your notebook is moved. This feature is password-protected to prevent unauthorized access.

The first time you activate this function, you will be prompted to set a new password.



Your password needs to be between four and eight characters, and should consist of letters and numbers. Once you've set the password, the Anti-Theft feature will be activated.

If you enter a password that is invalid for any reason, you will be prompted to try a new password.



 When activated, Acer GraviSense will show a full-screen image and a password window.



- When activated, the Anti-Theft feature will disable the following functions:
- 1 Alt + Tab
- 2 Ctrl + Shift + Esc
- 3 Ctrl + Alt + Del
- 4 Windows keys
- 5 Task bar
- When activated, the settings below will be changed to "do nothing" (your personal settings will be recovered once the Anti-Theft function is disabled):
- a) Power button
- b) Sleep button
- c) Close the lid

If the system detects any movement when this function is active, the system will emit a beeping sound as a warning and prompt you to enter the password.



Note: Please remember the password as it cannot be changed. You need to disable the Task Manager before setting the Anti-Theft function.

Acer Trusted Platform Module (TPM)

With the development of TCG (Trusted Computing Group, http://www.trustedcomputinggroup.org/) the Acer Trusted Platform Module offers the cryptographic implementations of RSA and hash algorithms (SHA-1 and MD-5) for highest possible performance, as well as a true random number generator (TRNG).

The Acer Security Platform Solution Software is a comprehensive set of tools that takes advantage of the Trusted Platform Module embedded in your system. This solution provides services to easily create digital certificates using the Trusted Platform Module and to manage these certificates.

You can use the certificates to:

- Send and receive secure e-mail from e-mail clients like Microsoft Outlook Express, Microsoft Outlook or Netscape Messenger
- Set up browser (e.g. Netscape Navigator or Internet Explorer) and web server (e.g. Microsoft Internet Information Server) for Client Authentication
- Sign Microsoft Word macros.
- Encrypt files and folders
- Secure network connections

User roles

Security Platform Solution involves several user roles:

All Security Platform user roles are based on Windows user accounts (local or domain users). These user accounts have been authenticated by Windows logon.

Each user role has an intended purpose.

When the Security Platform is configured, members of different user roles are initialized.

Acting a specific user role requires a specific authentication (e.g. providing a specific password).

A person can act multiple user roles.

The following table lists all user roles.

User Roles:

User Role	Based on	Purpose & Tasks	Initialization	Authentication
Security Platform Owner	Windows user account (local or domain), member of the Administrators group	Perform critical administrative tasks, e.g. restoration of Security Platform.	Security Platform Initialization enables a Windows user to act as a Security Platform Owner.	Owner Password

User Roles

User Role	Based on	Purpose & Tasks	Initialization	Authentication
Security Platform Administrator (also called just "Administrator")	Windows user account (local or domain), member of the Administrators group	Perform administrative tasks, which require Windows administrative rights.	No special initialization necessary.	Apart from the authentication as Windows administrator, some administrative tasks require access to special token files protected by dedicated passwords
Security Platform User (also called just "User")	Windows user account (local or domain)	Utilize Security Platform Features, e.g. file and folder encryption or secure e-mail. Configure features and perform user- specific Security Platform tasks.	Security Platform User Initialization enables a Windows user to act as a Security Platform User.	Basic User Password

Initialization and Administration of the Acer Security Platform

The initial status of the Acer Security Platform is disabled by default on delivery to the customer. This ensures that no flow of confidential information from the Acer Security Platform back to Acer can occur in this phase, as there are no shared secrets in any form.

Before you can take advantage of your Acer Security Platform you must:

- Enable the Acer Security Platform. To enable the chip, please see "Enabling or disabling Acer TPM security" on page 75.
- Setup your Acer Security Platform by starting the Acer Security Platform Initialization Wizard
- Setup Acer Security Platform Users by starting the Acer Security Platform
 User Initialization Wizard

Refer to Acer Security Platform Solution Tools for detailed information about the wizards and administrative tools.

If the Acer Security Platform and an Acer Security Platform User have been setup, you are ready to obtain an Infineon Trusted Platform Module based certificate.

User Authentication

For security reasons, you need to authenticate to the Acer Security Platform before you can use security features. E.g. file encryption requires your Basic User Key which is protected with your Basic User Password. Typing in this password

means authenticating to the Security Platform. Only after successful authentication your Basic User Key can be used.

The Acer Security Platform Solution provides two authentication levels to protect your Basic User Key:

Password Authentication

The Basic User Key is protected with the Basic User Password. This password has to be typed in manually.

Enhanced Authentication

The Basic User Key is protected with the Basic User Passphrase. This passphrase is securely stored by an authentication device, e.g. a SmartCard, a secure USB token, a fingerprint reader or another biometric authentication device. The passphrase can be accessed only by this authentication device, e.g. by inserting a SmartCard and typing in its PIN or by putting the finger on the fingerprint reader.

Passwords and Passphrases

With Password Authentication a "normal" password serves as Basic User Password. Although it is technically possible to use long and complex passwords, most passwords are quite short, because they need to be memorized.

With Enhanced Authentication there is no need to memorize passwords, because they are managed by the authentication device. From the user's point of view, the password is replaced by a PIN or by a biometric authentication. Thus Enhanced Authentication is more user-friendly. On the other hand the security level is considerably raised with the authentication device's built-in security features. For example, a SmartCard has a retry counter blocking the card after several wrong PIN entries. This way brute-force attacks are made impossible and relatively simple PINs can be used.

To emphasize that Enhanced Authentication combines long and complex passwords with user-friendliness, another term is used instead of Password: the Passphrase. A passphrase is basically nothing different than a long complex password.

The Security Platform Solution differentiates between these two terms:

Password is used in Password Authentication mode and means Basic User Password.

Passphrase is used in Enhanced Authentication mode. It also means the Basic User Password. The Basic User Password is called Basic User Passphrase in this context.

Installation and Administration of Enhanced Authentication

Authentication devices are provided by separately installable software plug-ins. The Security Platform Solution Software detects installed authentication devices automatically.

The configuration of authentication devices is user-specific, i.e. different Security Platform Users can use different authentication devices. Usage of Enhanced Authentication can be controlled by policies.

Migrating Keys to other Systems

Once a system user is set up as an Acer Security Platform User, there may arise the requirement to provide the user-specific security environment not only on the computer where the setup happened, but also on other computers the user has access to.

Migration Basics

The Acer Security Platform offers the possibility to maintain and administrate this situation by offering a migration path for the user-specific secret. The basic idea of this technology is the strict separation of the administrative and operational role of migration.

The migration operation is performed using the Acer Security Platform Migration Wizard.

- Migration to a computer without existing user keys and certificates:
 - The migration process will install new user keys and certificates on the machine you are migrating to.
 - You will need to configure Security Platform Features for use with these new keys and certificates.
- Migration to a computer with existing user keys and certificates (different Basic User Key):
 - The migration process will invalidate your existing Security Platform keys and certificates installed on the machine you are migrating to. Your encrypted data may be lost as a result of this operation. Please decrypt your encrypted data before proceeding with migration or contact your system administrator for data recovery procedure.
- Migration to a computer with existing user keys and certificates (same Basic User Key):
 - If the destination computer already uses the same Basic User Key as the source computer, then the migration process will merge your user keys and certificates. After migration, the keys and certificates from the migration archive will be active. Old keys and certificates will be kept. This way you will not lose any encrypted data.

Acer TPM-based fingerprint reader



Note: This feature is only available on certain models.

Acer TPM-based Protector Suite QL provides fingerprint-based biometric identification and TPM solution to control access to your computer's drives. The utility is accessed via the Protector Suite icon on the taskbar. Below is a brief description of the steps for fingerprint scanning and user enrollment. For full details of Protector Suite QL's programmable functions, open the utility and follow the step-by-step guide.



Password choice

To enter Protector Suite QL, enter your password. If you are using the utility for the first time, you may choose your own password. Do not share your password with others. Make sure to remember your password.

Correct scanning procedure

- 1 Position the first joint of the finger you are scanning beyond the sensor edge.
- 2 Maintain finger contact with the sensor while sliding the finger across it in a straight line.

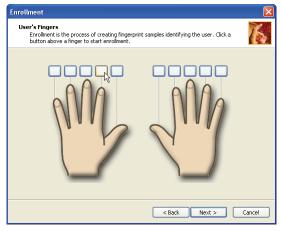
3 The application window will indicate a successful scan. If the scan quality is poor, repeat the procedure.



Note: Make sure to keep the finger flat throughout the scanning procedure.

User's Fingers and additional encryption performed by TPM chip

You can use Protector Suite QL to create fingerprint samples to identify a user. The application can record prints of up to all 10 fingers, depending on the level of security required.



 Follow the "User's Fingers" screen commands to record the fingerprints of authorized users. The utility must record three successful scans of each print before it can be accepted into the system.



 Once you have successfully enrolled a finger, swipe it to access the Protector Suite QL Control Center options.



 After entering the Control Center expand the Settings menu and select System Settings.



 Once the System Settings window opens, click the TPM tab to access controls for your system's TPM module.



- Press the Initialize TPM button and wait. You will be prompted when the
 operation completes successfully.
- Press the Finish button and you will be returned to the main Control Center window.



• Expand the Fingerprints menu and select Enroll or Edit Fingerprints.

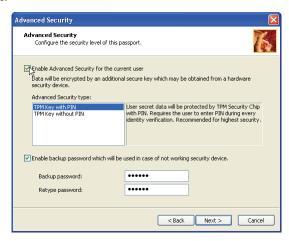


- Follow the procedure as before until you reach the Advanced Security window.
- Ensure that the Enable Advanced Security for the current user box is checked and then continue until enrollment is completed.



- Encryption will now be enabled for this user.
- Set the Advanced Security type.

 Set the backup password. This backup password can be used in case of hardware failure to bypass the fingerprint authentication. We recommend using a strong complex password. If you do not define the backup password, you can lose your data in case of authentication hardware failure.



Using boot security

- Boot Security protects your computer by subjecting boot-ups to fingerprint identification. To use this function, select "Enable Boot Security" in the User Enrollment application window.
- 2 Boot Security can also be enabled at a later date via the Settings menu.

Fingerprint system boot authentication

The fingerprint authentication system can be used to replace the keyboard-based User Password authentication system when booting up.

If you do not want to use the fingerprint authentication system for password authentication when booting up, but prefer to use the keyboard-based system instead, press the ESC key when the fingerprint system boot authentication screen is displayed. This will switch the password input screen to the keyboard-based one.

How to Enable Fingerprint System Boot Authentication

Settings

It is necessary to first enroll your fingerprint with the Protector Suite QL application prior to enabling and configuring the Fingerprint Power-on Security System.

Check that your fingerprint is enrolled before configuring the settings. See Manual for Fingerprint Registration/Enrollment instructions.

Swipe your finger across the fingerprint reader.



Note: It is necessary to register the Supervisor/User Password before using the Fingerprint Power-on Security and its extended function, the Fingerprint Single Sign-On Feature. Please use BIOS set-up manual Setup to register the supervisor/user Password.

Biomenu

Biomenu is a powerful tool to access Protector Suite's features and settings. Swipe your finger open Biomenu. To display Biomenu in a situation when finger verification invokes another action (e.g. a registered page is replayed), hold **Shift** when using the sensor.

Protector Suite supports fingerprint navigation. You can use your fingerprint sensor instead of a mouse to move (navigate) through the Protector Suite's Riomenu.



Lock computer

The first menu item contains the Lock computer command which locks your computer. Swipe your finger over the sensor to unlock the computer again.



Registered Sites

Displays a list of your web pages registered by Password Bank. To display and fill in a registered page in your default web browser, click the web page name in the list.



Register

Registers a new window (dialog or web page). You are logged on to the computer and want to register a new web page or a dialog.

To create a new registration:

- Display a web page or a dialog you want to register.
- Fill in the data that you want to be replayed when you visit the web page/ dialog and swipe your finger in the future.
- Use the sensor to display the Biomenu.
- Select Register.



Password Bank recognizes pages containing a password field and displays a hint that the page can be registered. These hints can be turned off in the Settings dialog.

A wizard will assist you through your first registration.

Supported browsers:

- Internet Explorer 5.0 and higher
- Mozilla 1.3 1.7
- Netscape 7.0 8.0.4
- Firefox 1.0 1.5



Note: The Password Bank stores registrations of your web pages and dialogs so that you can access frequent webpages (webmail, bank accounts, ecommerce, etc.) securely, without the hassle of re-entering passwords and form data. You enter the required information only once, during web page or dialog registration. When the window is displayed again, you can enter all the data by using the sensor. Registered web pages can be accessed also directly from the Biomenu.

Control Center

The Control Center contains various functions for fingerprint management and setting up your fingerprint software. Accessible options depend on the software status, hardware used, and installed applications.



How to restore your data from systemboard crash?

When the system is crashed by accident, please use the back-up TPM key and supervisor password to restore the data protected by Fingerprint and eDataSecurity.

Restore your data from emergency condition:

Condition	How to access the data protected using TPM-based Fingerprint and eDatatSecurity ?
Motherboard crash	restore data with the back-up TPM key when a new motherboard is back
System crash	restore the Suprevisor password and TPM key to the new system to unlock the data protected by TPM- based Fingerprint and eDataSecurity.

Using the SmartCard

This software includes the following components: PlatinumPAS™, PlatinumSecure™ and PlatinumKey™. Together, they provide you with multiple levels of security.

- PlatinumPAS implements the first security measure at the BIOS level and runs during the BIOS routine check when a computer is powered up or rebooting. If no SmartCard or Emergency Card is detected, the computer will stop booting up to prevent any illegal access to the system.
- PlatinumSecure enhances the secure logon procedure for your Windows at the operating system level. It provides user authentication through its encryption/decryption function using the SmartCard. If your SmartCard is unavailable, you can use the Emergency Card as a temporary replacement card.
- PlatinumKey auto-authenticate and auto cache with one-click logons to all
 password-required websites (patent pending), eliminates the overhead
 costs associated with memorizing and typing user IDs and passwords when
 surfing the Internet with Microsoft® or Netscape web browsers.

A slot for your SmartCard is located on the left panel of the computer. This new security feature helps you boot up your computer with all your settings built right into your SmartCard. You don't have to remember your password to access your computer.



To remove the SmartCard first press the SmartCard (a) and remove the SmartCard (b) as shown in the illustration below.



For more details consult your SmartCard documentation.

Registering your SmartCard



Important! Your Acer notebook is equipped with a SmartCard security feature that protects the computer from unauthorized access. If you enable this feature, please make sure that your warranty card is completed and sent back to Acer. This information will be used by Acer service centers to confirm ownership in case your SmartCard "key" is lost or damaged. Registering your notebook with Acer's service center is extremely important when replacing your lost SmartCard "key".

If you have already bypassed the SmartCard registration, please reinstall the application as follows:

- 1 Insert your **System CD** and reinstall from it.
- 2 Follow the onscreen instructions.

To enable the SmartCard security feature, please refer to your SmartCard user manual.

Running PlatinumSecure

PlatinumSecure enhances the secure logon procedure for Windows® 2000 or XP at the operating system level. It provides user authentication with an encryption/decryption function using the SmartCard. If your SmartCard is unavailable, the Emergency Card can serve as a temporary replacement for the SmartCard. After installation, the PlatinumSecure icon appears on the Windows desktop.

Double-click on it or click the right mouse button, then select **Open** from the pop-up menu (or launch it from the PlatinumSecret program group). From the menu that appears, you can directly access three operations: PlatinumSecure Options, SmartCard Manager and Change Password.



PlatinumSecure Options

Click on the **PlatinumSecure Options** button to open the SmartCard Options window. It provides great flexibility to meet the various privacy protection needs of many different users.



Disable SmartCard Authentication

When **Disable PlatinumPAS** is selected, the PlatinumPAS Preboot Authentication System will be disabled.

When **Disable PlatinumSecure** is selected, the PlatinumSecure Windows Logon Authentication with the SmartCard will be disabled, which means that the protection of your notebook as well as other options under **System Lock Option** and **Password Option** will be disabled, too. The SmartCard password is required for this selection.

• System Lock Option

When Lock system when the SmartCard is not in use (default) is selected, if the SmartCard is removed, the PlatinumSecure screensaver comes up and access to the system is locked. When Never lock the system after bootup is selected, there is no protection for the notebook after boot up, and Password Option is disabled.

Password Option

When Always enter password when the SmartCard is in use (default) is selected, the password is required whenever you need to regain access to the system while the SmartCard is inserted. When Auto authenticate when SmartCard is in use is selected, no password is required. All you need to do is insert the SmartCard.

SmartCard Manager

The Multiple user support is implemented and managed in SmartCard Manager. Please note that five users can be registered on one notebook. If you registered as the Primary User, **ONLY** you can add/remove other users. If you registered as a regular user, other registered users could add/remove you. All registered users will be able to use the View SmartCard users option.

Change Password

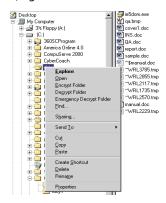
Click the **Change Password** button, fill in the three fields in the Change Password dialog box, and then close the dialog box by clicking the **OK** button to change the SmartCard password.

Encrypt/Decrypt

PlatinumSecure can also be used to encrypt/decrypt files except for system files or files that are already encrypted with other applications. Double-click on a file to automatically encrypt/decrypt it. However, if the file is associated with an application, it will be opened with that application instead of being encrypted. Note that the encryption is not recursive, i.e., when you encrypt a folder, only the files immediately under that folder are encrypted. Other files under subfolders are not.

To find the Encrypt/Decrypt commands:

- Right-click on the Start menu,
- Right-click on a folder or icon on your Windows desktop, or
- In Windows Explorer, right-click on a selected folder, file, or group of files.



Running PlatinumKey

PlatinumKey provides one-click logon to all password-required websites. With its unique SmartCard caching technology, you can greatly extend the limited card memory size to unlimited use by storing your private data in an encrypted file either on the SmartCard, or on the 360 Degree Web secure website server.

Information in PlatinumKey like the one in My Info and Credit Cards, can be transferred to other applications using the "drag-and-drop" method: simply point the cursor to the field containing the information, press and hold the left mouse button, then drag the cursor to the application and drop the information there.

PlatinumKey also makes it convenient to change your password. There is always a PWD button available, which is equivalent to the Change Password button in PlatinumSecure.

Follow these steps to use PlatinumKey:

- 1 Open your browser to connect to the Internet.
- 2 Double-click on the PlatinumKey icon on your Windows desktop.
- 3 Enter your SmartCard password and click **OK**.
- 4 If PlatinumKey is being used for the very first time, it will ask "Would you like to link to 360 Degree Web secure website server

to backup the information on your SmartCard?" The default answer is Yes, and it will enable you to store your information (excluding the Credit Cards) on the 360 Degree Web secure website server for backup purposes in case the card is lost/stolen. If you choose No, you will only be able to save My Info, Credit Cards and 5 Websites on your SmartCard.

- 5 Log in to a website where you are already registered.
- 6 PlatinumKey automatically stores your login data and asks for your confirmation to automatically log you in the next time you access the site. Click **Yes** and continue browsing.
- 7 To close PlatinumKey when you are finished browsing, right-click on the PlatinumKey icon on your Windows taskbar and select Close PlatinumKey.

PlatinumKey provides a list of all the logon pages that you have stored. To go directly to any site on the list either double-click it or select it and click the Go button. Also, you can click the View button to view the selected website information including Web Name, User Name, Password, and Web URL. Similarly, type the first letter(s) of a site on the list, and the site will be searched and selected.

You can Edit and Delete the sites as well as other information, and Save or Cancel the changes you made, by selecting the button corresponding to each command.

Using passwords

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

- Supervisor Password prevents unauthorized entry into the BIOS Utility.
 Once set, you must key-in this password to gain access to the BIOS Utility.
- User Password secures your computer against unauthorized use. Combine
 the use of this password with password checkpoints on boot-up and
 resume from hibernation for maximum security.
- Password on Boot secures your computer against unauthorized use.
 Combine the use of this password with password checkpoints on boot-up and resume from hibernation for maximum security.
- Hard Disk Password protects your data by preventing unauthorized access to your hard disk. Even if the hard disk is removed from the computer and moved to another computer, it cannot be accessed without the Hard Disk Password.



Important! Be sure to well record your Acer Supervisor and Hard Disk password. If you forget your password, please contact with Acer Customer Service.

Entering passwords

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

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



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

Setting passwords

You can set passwords using the BIOS Utility.

BIOS utility

The BIOS utility is a hardware configuration program built into your computer's BIOS.

Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run it.

To activate the BIOS utility, press <**F2**> during the POST; while the notebook PC logo is being displayed.

Boot sequence

To set the boot sequence in the BIOS utility, activate the BIOS utility, then select **Boot** from the categories listed at the top of the screen.

Password on boot

To set a password on boot, activate the BIOS utility, then select **Security** from the categories listed at the top of the screen. Find **Password on boot**: and use the **<F5>** and **<F6>** keys to enable this feature.

Setting up passwords when using fingerprint recognition

To change BIOS settings, the user must log in using the supervisor password, even if fingerprint PBA (pre-boot authentication) or PlatinumPAS is enabled.

Pre-boot authentication

Fingerprint PBA disabled:

- a If the user has set up a supervisor or user password, but "password on boot" is disabled, s/he will not need to enter any password when booting unless the HDD password has been set up.
- b If the user has set up a supervisor or user password, and "password on boot" is enabled, s/he will need to enter the supervisor/user password when booting. Moreover, the HDD password is needed if the user has set up an HDD password under BIOS.

Fingerprint PBA enabled:

- a Fingerprint PBA is only functional when both the supervisor and user passwords are enabled; however, users don't need to set up "password on boot" under BIOS, so they can finish both supervisor and user password setup by using Acer eSettings Management.
- b Once the user's fingerprint is matched, the system will boot the operating system without requiring a password. If users want advanced pre-boot security, HDD password and PlatinumPAS should be enabled; then users will see sequential PlatinumPAS, fingerprint PBA, and HDD password dialogs when the system boots up.

c If the user's fingerprint does not match, the supervisor/user password dialog box will appear, no matter whether or not "password on boot" is enabled. Users can press ESC to activate the password dialog box without fingerprint scanning.

Enabling or disabling Acer TPM security



Note: Before you enable or disable Acer TPM (Trusted Platform Module), the supervisor password must have been set.

Activate the BIOS utility then select **Security** from the categories listed at the top of the screen. Find **Current TPM State** at the bottom of the screen and use the **<F5>** and **<F6>** keys to set this value to **Enable & Activate** or **Deactivate & Disable**.

Your system will activate the BIOS utility automatically after rebooting, then enter Acer TPM management security setup. Please select **Execute** to confirm or **Reject** to skip your selection.



Note: During boot up additional time is required to initialize the TPM layer, as a result you may find that boot times become slightly longer with TPM enabled.

Enabling disk-to-disk recovery

To enable disk-to-disk recovery (hard disk recovery), activate the BIOS utility, then select **Main** from the categories listed at the top of the screen. Find **D2D Recovery** at the bottom of the screen and use the **<F5>** and **<F6>** keys to set this value to **Enabled**.

Frequently asked questions

The following is a list of possible situations that may arise during the use of your computer. Easy solutions are provided for each one.

I turned on the power, but the computer does not start or boot up.

Look at the power indicator:

- If it is not lit, no power is being supplied to the computer. Check the following:
 - If you are using on the battery, it may be low and unable to power the computer. Connect the AC adapter to recharge the battery pack.
 - Make sure that the AC adapter is properly plugged into the computer and to the power outlet.
- If it is lit, check the following:
 - Is a non-bootable (non-system) disk in the external USB floppy drive?
 Remove or replace it with a system disk and press <Ctrl> + <Alt> +
 Del> to restart the system.

Nothing appears on the screen.

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

If pressing a key does not turn the display back on, three things might be the cause:

- The brightness level might be too low. Press <Fn> + <→> (increase) to adjust the brightness level.
- The display device might be set to an external monitor. Press the display toggle hotkey <Fn> + <F5> to toggle the display back to the computer.
- If the Sleep indicator is lit, the computer is in Sleep mode. Press and release the power button to resume.

Image is not full-screen.

Each computer display has a different native resolution depending on the screen. If you set the resolution lower than this native resoution, the screen expands to fill the computer display. Right-click on your Windows desktop and select **Properties** to bring up the "Display Properties" dialog box. Then click on the **Settings** tab to make sure that the resolution is set to the appropriate resolution. Resolutions lower than the specified resolution are not full-screen on the computer or on an external monitor.

No audio is heard from the computer.

Check the following:

- The volume may be muted. In Windows, look at the volume control (speaker) icon on the taskbar. If it is crossed-out, click on the icon and deselect the Mute all option.
- The volume level may be too low. In Windows, look at the volume control icon on the taskbar. You can also use the volume control buttons to adjust the volume. See "Hotkeys" on page 33 for more detail.
- If headphones, earphones or external speakers are connected to the lineout port on the computer, the internal speakers automatically turn off.

I want to eject the optical drive tray without turning on the power.

There is a mechanical eject hole on the optical drive. Simply insert the tip of a pen or paperclip into the hole and push to eject the tray. (If your computer's optical drive is a slot-load model, it will not have an eject hole.)

The keyboard does not respond.

Try attaching an external keyboard to a USB port on the computer. If it works, contact your dealer or an authorized service center as the internal keyboard cable may be loose.

The infrared port does not work.

Check the following:

- Make sure that the infrared ports of the two devices are facing each other (+/- 15 degrees) a maximum of 1 meter apart.
- Make sure there is a clear path between the two infrared ports. Nothing should be blocking the ports.
- Make sure you have the appropriate software running on both devices (for file transfers) or you have the appropriate drivers (for printing to an infrared printer).
- During the POST, press <F2> to access the BIOS utility and verify that the infrared port is enabled.
- Make sure both devices are IrDA-compliant.

The printer does not work.

Check the following:

- Make sure that the printer is connected to a power outlet and that it is turned on.
- Make sure that the printer cable is connected securely to the computer's parallel port or a USB port and the corresponding port on the printer.

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

To properly use your communication software (e.g. HyperTerminal), you need to set up your location:

- 1 Click on Start, Settings, Control Panel.
- 2 Double-click on **Phone and Modem Options**.
- 3 Click on **Dialing Rules** and begin setting up your location.

Refer to the Windows manual.



Note: Please note, on first booting your notebook, that you can skip the Internet Connection setup, as it is not necessary to complete the installation of your Operating System. After the Operating System is set up, you can proceed with the Internet Connection setup.

I want to restore my computer to its original settings without recovery CDs.



Note: If your system is the multilingual version, the operating system and language you choose when you first turn on the system will be the only option for future recovery operations.

This recovery process helps you restore the C: drive with the original software content that is installed when you purchase your notebook. Follow the steps below to rebuild your C: drive. (Your C: drive will be reformatted and all data will be erased.) It is important to back up all data files before using this option.

Before performing a restore operation, please check the BIOS settings.

- 1 Check to see if Acer disk-to-disk recovery is enabled or not.
- 2 Make sure the D2D Recovery setting in Main is Enabled.
- 3 Exit the BIOS utility and save changes. The system will reboot.



Note: To activate the BIOS utility, press <F2> during POST.

To start the recovery process:

- 1 Restart the system.
- While the Acer logo is showing, press <Alt> + <F10> at the same time to enter the recovery process.
- 3 Refer to the onscreen instructions to perform system recovery.



Important! This feature occupies 4 to 5 GB in a hidden partition on your hard disk.

Requesting service

International Travelers Warranty (ITW)

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

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

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

If the country you are traveling in does not have an Acer-authorized ITW service site, you can still get in contact with our offices worldwide. Please consult http://global.acer.com.

Before you call

Please have the following information available when you call Acer for online service, and please be at your computer when you call. With your support, we can reduce the amount of time a call takes and help solve your problems efficiently. If there are error messages or beeps reported by your computer, write them down as they appear on the screen (or the number and sequence in the case of beeps).

You are required to provide the	following information:
Name:	
Address:	
Гelephone number:	
Machine and model type:	
Serial number:	
Date of purchase:	

Taking your notebook PC with you

This section gives you tips and hints to consider when moving around or traveling with your computer.

Disconnecting from the desktop

Follow these steps to disconnect your computer from external accessories:

- 1 Save any open files.
- 2 Remove any media, floppy disks or compact disks from the drive(s).
- 3 Shut down the computer.
- 4 Close the display cover.
- 5 Disconnect the cord from the AC adapter.
- 6 Disconnect the keyboard, pointing device, printer, external monitor and other external devices.
- 7 Disconnect the Kensington lock if you are using one to secure the computer.

Disconnecting from Acer ezDock II/II+

Follow these steps to disconnect your computer from Acer ezDock II/II+:

- 1 Make sure that the battery pack is charged enough for normal operation.
- 2 Make sure the security lock key of ezDock II/II+ is in place and in the unlocked position.
- 3 Press the undock button until the computer moves up.
- 4 Grasping both sides of the computer, remove the computer from the ezDock.

Moving around

When you are just moving within short distances, for example, from your office desk to a meeting room.

Preparing the computer

Before moving the computer, close and latch the display cover to place it in Sleep mode. You can now safely take the computer anywhere you go within the building. To bring the computer out of Sleep mode, open the display; then press and release the power button.

If you are taking the computer to a client's office or a different building, you may choose to shut down the computer:

Click on Start, Turn Off Computer, then click on Turn Off (Windows XP).

Or:

You can put the computer in Sleep mode by pressing **<Fn> + <F4>**. Then close and latch the display.

When you are ready to use the computer again, unlatch and open the display; then press and release the power button.



Note: If the Sleep indicator is off, the computer has entered Hibernation mode and is turned off. If the power indicator is off but the Sleep indicator is on, the computer has entered Sleep mode. In both cases, press and release the power button to turn the computer back on. Note that the computer may enter Hibernation mode after being in Sleep mode for a period of time.

What to bring to meetings

If your meeting is relatively short, you probably do not need to bring anything with you other than your computer. If your meeting will be longer, or if your battery is not fully charged, you may want to bring the AC adapter with you to plug in your computer in the meeting room.

If the meeting room does not have an electrical outlet, reduce the drain on the battery by putting the computer in Sleep mode. Press **<Fn> + <F4>** or close the display cover whenever you are not actively using the computer. To resume, open the display (if closed), then press and release the power button.

Taking the computer home

When you are moving from your office to your home or vice versa.

Preparing the computer

After disconnecting the computer from your desktop, follow these steps to prepare the computer for the trip home:

- Check that you have removed all media and compact disks from the drive(s). Failure to remove the media can damage the drive head.
- Pack the computer in a protective case that can prevent the computer from sliding around and cushion it if it should fall.



Caution: Avoid packing items next to the top cover of the computer. Pressure against the top cover can damage the screen.

What to take with you

Unless you have some items at home, take the following items with you:

- AC adapter and power cord
- The printed User's Guide

Special considerations

Follow these guidelines to protect your computer while traveling to and from work:

- Minimize the effects of temperature changes by keeping the computer with you.
- If you need to stop for an extended period of time and cannot carry the computer with you, leave the computer in the trunk of the car to avoid exposing the computer to excessive heat.
- Changes in temperature and humidity can cause condensation. Allow the
 computer to return to room temperature, and inspect the screen for
 condensation before turning on the computer. If the temperature change
 is greater than 10 °C (18 °F), allow the computer to come to room
 temperature slowly. If possible, leave the computer for 30 minutes in an
 environment with a temperature between outside and room temperature.

Setting up a home office

If you frequently work on your computer at home, you may want to purchase a second AC adapter for use at home. With a second AC adapter, you can avoid carrying the extra weight to and from home.

If you use your computer at home for significant periods of time, you might also want to add an external keyboard, monitor or mouse.

Traveling with the computer

When you are moving within a larger distance, for instance, from your office building to a client's office building or traveling locally.

Preparing the computer

Prepare the computer as if you were taking it home. Make sure that the battery in the computer is charged. Airport security may require you to turn on your computer when carrying it into the gate area.

What to take with you

Take the following items with you:

- AC adapter
- Spare, fully-charged battery pack(s)
- Acer MediaBay battery pack
- Additional printer driver files if you plan to use another printer

Special considerations

In addition to the guidelines for taking the computer home, follow these guidelines to protect your computer while traveling:

- Always take the computer as carry-on luggage.
- If possible, have the computer inspected by hand. Airport security X-ray
 machines are safe, but do not put the computer through a metal detector.
- Avoid exposing floppy disks to hand-held metal detectors.

Traveling internationally with the computer

When you are moving from country to country.

Preparing the computer

Prepare the computer as you would normally prepare it for traveling.

What to bring with you

Bring the following items with you:

- AC adapter
- Power cords that are appropriate for the country to which you are traveling
- Spare, fully-charged battery packs
- Acer MediaBay battery packs
- Additional printer driver files if you plan to use another printer

- Proof of purchase, in case you need to show it to customs officials
- International Travelers Warranty passport

Special considerations

Follow the same special considerations as when traveling with the computer. In addition, these tips are useful when traveling internationally:

- Turn your system the wireless LAN function off for flight security when you
 are on the airplane.
- When traveling in another country, check that the local AC voltage and the AC adapter power cord specifications are compatible. If not, purchase a power cord that is compatible with the local AC voltage. Do not use converter kits sold for appliances to power the computer.
- If you are using the modem, check if the modem and connector is compatible with the telecommunications system of the country you are traveling in.

Expanding through options

Your notebook PC offers you a complete mobile computing experience.

Connectivity options

Ports allow you to connect peripheral devices to your computer as you would with a desktop PC. For instructions on how to connect different external devices to the computer, read the following section.

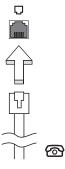
Fax/data modem

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



Warning! This modem port is not compatible with digital phone lines. Plugging this modem into a digital phone line will damage the modem.

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



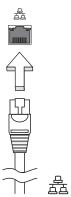


Warning! Please make sure that the cable you use is appropriate for the country in which you are working.

Built-in network feature

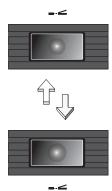
The built-in network feature allows you to connect your computer to an Ethernet-based network.

To use the network feature, connect an Ethernet cable from the Ethernet (RJ-45) port on the chassis of the computer to a network jack or hub on your network.



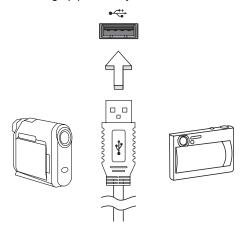
Fast Infrared (FIR)

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



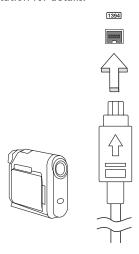
Universal Serial Bus (USB)

The USB 2.0 port is a high-speed serial bus which allows you to connect USB peripherals without taking up precious system resources.



IEEE 1394 port

The computer's IEEE 1394 port allows you to connect to an IEEE 1394-compatible device like a video camera or digital camera. See your video or digital camera's documentation for details.



PC Card slot

The Type II PC Card slot of the computer accepts PC Cards that enhance the usability and expandability of the computer. These cards should have a PC Card logo on them.

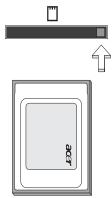
PC Cards (formerly PCMCIA) are add-on cards for portable computers, giving you expansion possibilities long afforded by desktop PCs. Popular PC Cards include flash, fax/data modem, wireless LAN and SCSI cards. CardBus improves on the 16-bit PC card technology by expanding the bandwidth to 32 bits.



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

Inserting a PC Card

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



Ejecting a PC Card

Before ejecting a PC Card:

- 1 Exit the application using the card.
- 2 Left-click on the PC Card icon on the taskbar and stop the card operation.
- 3 Press the slot eject button to pop out the eject button; then press it again to eject the card.

ExpressCard

The ExpressCard is the newest version of the PC Card. It is a smaller and faster interface that further enhances the usability and expandability of your computer.

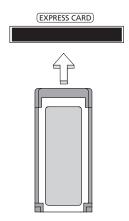
ExpressCards support a vast number of expansion options, including flash memory card adapters, TV-tuners, Bluetooth connectivity and IEEE 1394B adapters. ExpressCards support USB 2.0 and PCI Express applications.



Important! There are two types, ExpressCard/54 and ExpressCard/34 (54mm and 34mm), each with different functions. Not all ExpressCard slots will support both types. Please refer to your card's manual for details on how to install and use the card, and its functions.

Inserting an ExpressCard

Insert the card into the slot and push gently until it clicks into position.



Ejecting an ExpressCard

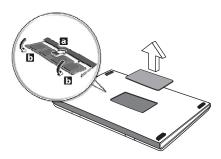
Before ejecting an ExpressCard:

- 1 Exit the application using the card.
- 2 Left-click on the remove hardware icon on the taskbar and stop the card operation.
- 3 Push the card gently into the slot and release to pop out the card. Then pull the card free from the slot.

Installing memory

Follow these steps to install memory:

- 1 Turn off the computer, unplug the AC adapter (if connected) and remove the battery pack. Then turn the computer over to access its base.
- 2 Remove the screws from the memory cover; then lift up and remove the memory cover.
- 3 **(a)** Insert the memory module diagonally into the slot, then **(b)** gently press it down until it clicks into place.



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

The computer automatically detects and reconfigures the total memory size. Please consult a qualified technician or contact your local Acer dealer.

BIOS utility

The BIOS utility is a hardware configuration program built into your computer's BIOS.

Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run it.

To activate the BIOS utility, press <**F2**> during the POST; while the notebook PC logo is being displayed.

Boot sequence

To set the boot sequence in the BIOS utility, activate the BIOS utility, then select **Boot** from the categories listed at the top of the screen.

Enable disk-to-disk recovery

To enable disk-to-disk recovery (hard disk recovery), activate the BIOS utility, then select **Main** from the categories listed at the top of the screen. Find **D2D Recovery** at the bottom of the screen and use the **<F5>** and **<F6>** keys to set this value to **Enabled**.

Password

To set a password on boot, activate the BIOS utility, then select **Security** from the categories listed at the top of the screen. Find **Password on boot:** and use the **<F5>** and **<F6>** keys to enable this feature.

Using software

Playing DVD movies

When the DVD drive module is installed in the optical drive bay, you can play DVD movies on your computer.

1 Eject the DVD tray and insert a DVD movie disk; then close the DVD tray.



Important! When you launch the DVD player for the first time, the program asks you to enter the region code. DVD disks are divided into 6 regions. Once your DVD drive is set to a region code, it will play DVD disks of that region only. You can set the region code a maximum of five times (including the first time), after which the last region code set will remain permanent. Recovering your hard disk does not reset the number of times the region code has been set. Refer to the table below for DVD movie region code information.

2 The DVD movie will automatically play after a few seconds.

Region code	Country or region
1	USA, Canada
2	Europe, Middle East, South Africa, Japan
3	Southeast Asia, Taiwan, South Korea
4	Latin America, Australia, New Zealand
5	Former USSR, parts of Africa, India
6	People's Republic of China



Note: To change the region code, insert a DVD movie of a different region into the DVD drive. Please refer to the online help for more information.

Power management

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

This computer employs a power management scheme that supports the advanced configuration and power interface (ACPI), which allows for maximum power conservation and maximum performance at the same time. Windows handles all power-saving chores for your computer.

Acer eRecovery Management

Acer eRecovery Management is a tool to quickly backup and restore the system. You can create and save a backup of the current system configuration to hard disk, CD or DVD.

Acer eRecovery Management consists of the following functions:

- 1 Create backup
- 2 Restore from backup
- 3 Create factory default image CD, or burn bundled software to an application CD
- 4 Re-install bundled software without CD
- 5 Change Acer eRecovery Management password

This chapter will guide you through each process.



Note: This feature is only available on certain models. For systems that do not have a built-in optical disk burner, plug in an external USB or IEEE 1394-compatible optical disk burner before entering Acer eRecovery Management for optical disk-related tasks.

Create backup

You can create and save backup images to hard disk, CD or DVD.

- 1 Boot to Windows XP
- 2 Press <Alt> + <F10> to open the Acer eRecovery Management utility.
- 3 Enter the password to proceed. The default password is six zeros.
- 4 In the Acer eRecovery Management window, select Recovery settings and click Next.
- 5 In the Recovery settings window, select Backup snapshot image and click Next.
- 6 Select the backup method.
 - Use **Backup to HDD** to store the backup disk image on drive D:.
 - b **Backup to optical device** to store the backup image on CD or DVD.
- 7 After choosing the backup method, click Next.

Follow the instructions on screen to complete the process.

Restore from backup

You can restore backups previously created (as stated in the **Create backup** section) from hard disk, CD or DVD.

- 1 Boot to Windows XP.
- 2 Press <Alt> + <F10> to open the Acer eRecovery Management utility.
- 3 Enter the password to proceed. The default password is six zeros.
- 4 In the Acer eRecovery Management window, select Recovery actions and click Next.
- 5 Select the desired restore action and follow the onscreen instructions to complete the restore process.



Note: The "Restore C:" item is enabled only if there is a user backup stored on the hard disk (D:\). Please refer to the **Create backup** section.

Create factory default image CD

When the System CD and Recovery CD are not available, you can create them by using this feature.

- Boot to Windows XP.
- 2 Press <Alt> + <F10> to open the Acer eRecovery Management utility.
- 3 Enter the password to proceed. The default password is six zeros.
- 4 In the Acer eRecovery Management window, select **Recovery settings** and click **Next**.
- 5 In the Recovery settings window, select **Burn image to disk** and click **Next**.
- 6 In the Burn image to disk window, select 1. Factory default image or 2. Application CD and click Next.
- 7 Follow the instructions on screen to complete the process.



Note: Select **1. Factory default image** when you want to burn a bootable disk that contains your computer's entire operating system as it was delivered to you from the factory. If you wish to have a disk that will allow you to browse the contents and install selected drivers and applications, select **2. Application CD** — this disk will not be bootable.

Re-install bundled software without CD

Acer eRecovery Management stores pre-loaded software internally for easy driver and application re-installation.

- Boot to Windows XP.
- 2 Press <Alt> + <F10> to open the Acer eRecovery Management utility.
- 3 Enter the password to proceed. The default password is six zeros.
- 4 In the Acer eRecovery Management window, select Recovery actions and click Next.
- 5 In the Recovery settings window, select Reinstall applications/drivers and click Next.
- 6 Select the desired driver/application and follow the instructions on screen to re-install.

At first launch, Acer eRecovery Management prepares all the needed software and may take few seconds to bring up the software content window.

Change password

Acer eRecovery Management and Acer disk-to-disk recovery are protected by a password that can be changed by the user. Follow the steps below to change the password in Acer eRecovery Management.

- 1 Boot to Windows XP.
- 2 Press <Alt> + <F10> to open the Acer eRecovery Management utility.
- 3 Enter the password to proceed. The default password is six zeros.
- 4 In the Acer eRecovery Management window, select **Recovery settings** and click **Next**.
- 5 In the Recovery settings window, select Password: Change Acer eRecovery Management password and click Next.
- 6 Follow the instructions on screen to complete the process.

Troubleshooting

This chapter shows you how to deal with common system problems. Read it before calling a technician if a problem occurs. Solutions to more serious problems require opening up the computer. Do not attempt to open the computer yourself; contact your dealer or authorized service center for assistance.

Troubleshooting tips

This notebook PC incorporates an advanced design that delivers onscreen error message reports to help you solve problems.

If the system reports an error message or an error symptom occurs, see "Error messages" below. If the problem cannot be resolved, contact your dealer. See "Requesting service" on page 80.

Error messages

If you receive an error message, note the message and take the corrective action. The following table lists the error messages in alphabetical order together with the recommended course of action.

Error messages	Corrective action
CMOS battery bad	Contact your dealer or an authorized service center.
CMOS checksum error	Contact your dealer or an authorized service center.
Disk boot failure	Insert a system (bootable) disk into the floppy drive (A:), then press <enter></enter> to reboot.
Equipment configuration error	Press <f2></f2> (during POST) to enter the BIOS utility, then press Exit in the BIOS utility to reboot.
Hard disk 0 error	Contact your dealer or an authorized service center.
Hard disk 0 extended type error	Contact your dealer or an authorized service center.
I/O parity error	Contact your dealer or an authorized service center.
Keyboard error or no keyboard connected	Contact your dealer or an authorized service center.
Keyboard interface error	Contact your dealer or an authorized service center.
Memory size mismatch	Press <f2></f2> (during POST) to enter the BIOS utility, then press Exit in the BIOS utility to reboot.

If you still encounter problems after going through the corrective measures, please contact your dealer or an authorized service center for assistance. Some problems may be solved using the BIOS utility.

Regulations and safety notices

ENERGY STAR guidelines compliance

As an ENERGY STAR partner, Acer Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

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 notebook PC series is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. (Please visit http://global.acer.com/products/notebook/reg-nb/index.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:
 - a 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
 - b 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

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.

Macrovision copyright protection notice

"U.S Patent Nos. 4,631,603; 4,819,098; 4,907,093; 5,315,448; and 6,516,132."

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

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)

This device complies with the essential requirements of the European Council Directives listed below:

73/23/EEC Low Voltage Directive

EN 60950-1

89/336/EEC Electromagnetic Compatibility (EMC) Directive

- EN 55022
- EN 55024
- EN 6460/64100-3-2/-3

99/5/EC Radio & Telecommunications Terminal Equipment (R&TTE) Directive

- Art.3.1a) EN 60950-1
- Art.3.1b) EN 301 489 -1/-17
- Art.3.2) EN 300 328-2
- Art.3.2) EN 301 893 *applies to 5 GHz 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.

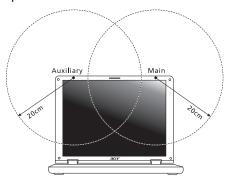
The FCC RF safety requirement

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

1 Users are requested to follow the RF safety instructions on wireless option devices that are included in the user's manual of each RF option device.



Caution: To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm (8 inches) must be maintained between the antenna for the integrated wireless LAN Mini PCI Card/ Mini Card built in to the screen section and all persons.





Note: The Acer wireless Mini PCI Card/ Mini Card adapter implements a transmission diversity function. The function does not emit radio frequencies simultaneously from both antennas. One of the antennas is selected automatically or manually (by users) to ensure good quality radiocommunication.

- 2 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.
- 3 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.
- 4 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)

- a Common information
 - Operation is subject to the following two conditions:
 - 1. This device may not cause interference, and
 - 2. This device must accept any interference, including interference that may cause undesired operation of the device.
- b 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.
- c Operation in 5 GHz band
- The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel Mobile Satellite systems.
- High power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LELAN (Licence-Exempt Local Area Network) devices.

Federal Communications Comission 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 name: Notebook PC

Model number: LB1

Machine type: TravelMate 6460/6410

SKU number: TravelMate 646xxx/641xxx

("x" = 0 - 9, a - z, or A - Z)

Name of responsible party: Acer America Corporation

Address of responsible party: 2641 Orchard Parkway

San Jose, CA 95134

USA

Contact person: Mr. Young Kim

Tel: 408-922-2909

Fax: 408-922-2606

Declaration of Conformity for CE Marking

Name of manufacturer: Beijing Acer Information Co., Ltd.

Address of Huade Building, No.18, ChuangYe Rd.

manufacturer: ShangDi Zone, HaiDian District Beijing PRCE marking

 Contact person:
 Mr. Easy Lai

 Tel:
 886-2-8691-3089

 Fax:
 886-2-8691-3000

E-mail: easy_lai@acer.com.tw

Declares that product: Notebook PC

Trade name: Acer
Model number: LB1

Machine type: TravelMate 6460/6410

SKU number: TravelMate 646xxx/641xxx
("x" = 0 - 9, a - z, or A - Z)

Is in compliance with the essential requirements and other relevant provisions of the following EC directives.

Reference no.	Title
89/336/EEC	Electromagnetic Compatibility (EMC directive)
73/23/EEC	Low Voltage Directive (LVD)
1999/5/EC	Radio & Telecommunications Terminal Equipment Directive (R&TTE)

The product specified above was tested conforming to the applicable Rules under the most accurate measurement standards possible, and all the necessary steps have been taken and are in force to assure that production units of the same product will continue to comply with these requirements.

Easy Lai, Director
Regulation Center
Environment & Safety

LCD panel ergonomic specifications

Design viewing distance	500 mm
Design inclination angle	0.0°
Design azimuth angle	90.0°
Viewing direction range class	Class IV
Screen tilt angle	85.0°
Design screen illuminance	Illuminance level:
	[250 + (250cos α)] lx where α = 85°
	Color: Source D65
Reflection class of LCD panel	Ordinary LCD: Class I
(positive and negative polarity)	 Protective or Acer CrystalBrite[™] LCD: Class III
Image polarity	Both
Reference white:	• Yn
Pre-setting of luminance and	• u'n
color temperature @ 6500K	• v'n
(tested under BM7)	
Pixel fault class	Class II

A AC adapter caring for ix audio adjusting the volume 37 troubleshooting 78	D display hotkeys 34 troubleshooting 77 DVD 92 DVD movies playing 92 E
B battery pack caring for x BIOS utility 41, 73, 91 brightness hotkeys 34	error messages 97 Euro 35 F FAQ. See frequently-asked questions frequently-asked questions 77 front view 18
C caps lock 32 on indicator 27 care AC adapter ix	H Hibernation mode hotkey 34 hotkeys 33
battery pack x computer ix CD-ROM ejecting manually 78	l IEEE 1394 port 88 infrared 87 K
troubleshooting 78 cleaning computer x computer caring for ix cleaning x disconnecting 81	keyboard 32 embedded numeric keypad 32 hotkeys 33 lock keys 32 troubleshooting 78 Windows keys 33
features 17, 44, 57 indicators 27 keyboards 32	L left view 18
moving around 81 on indicator 19, 27 security 49 setting up a home office 83 taking home 82 traveling internationally 84 traveling on local trips 84 troubleshooting 97 turning off ix	M media access on indicator 27 memory installing 91 messages error 97 modem 86
connections network 87	N network 87 Notebook Manager

num lock 32 on indicator 27 numeric keypad embedded 32	smart card 57 SmartCard 67 PlatinumKey 67 PlatinumPAS 67 PlatinumSecure 67
P	PlatinumSecure 67 PlatinumSecure options 69
password 72 types 72	speakers .
PC Card 89	hotkey 34
ejecting 89	troubleshooting 78
inserting 89	support information 80
ports 86	information 80
printer	T
troubleshooting 78 problems 77	touchpad 30 hotkey 34
CD-ROM 78	using 30-??
display 77	travel
keyboard 78	international flights 84
printer 78	local trips 84
startup 77	troubleshooting 97
troubleshooting 97	tips 97
0	U
questions	universal serial bus 88
setting location for modem use	universal serial bus 66
79	V
75	view
S	front 19
safety	left 19
CD or DVD 103	rear 21
FCC notice 99	right 20
modem notices 100	volume
scroll lock 32	adjusting 37
security	, ,
keylock 50	W
passwords 72	Windows keys 33