

User's Manual

TOSHIBA WT200

Table of Contents

	Preface	
	General Precautions	
Chapter 1	Getting Started	
	Equipment checklist	1-1
	Getting Started	1-2
Chapter 2	The Grand Tour	
	Grand Tour	2-1
	Internal Hardware Components	2-6
Chapter 3	Operating Basics	
	Using the Touch Screen	3-1
	Using the Virtual Keyboard	3-2
	Using the Tablet PC Pen	3-2
	Wireless communications	3-2
	Optional devices	3-6
	Memory media slot	3-6
	Memory media	3-7
	Media care	3-8
	Inserting a memory media	3-9
	Removing a memory media	3-9
	SIM card slot	. 3-10
	USB device	. 3-10
	HDMI	. 3-11
	Security slot	. 3-12
	Optional TOSHIBA Accessories	. 3-12
	Sound System	. 3-13
	Video mode	
	Computer Handling	
	Heat dispersal	. 3-15
Chapter 4	Utilities & Advanced Usage	
	Utilities and Applications	
	Special features	
	Using TOSHIBA Tablet Feature	
	TOSHIBA Desk Band	
	TOSHIBA Password Utility	4-9

	HW Setup 4-10)
	TOSHIBA PC Health Monitor 4-13	3
	System Recovery4-14	ł
Chapter 5	Power and Power-Up Modes	
	Power conditions 5-1	
	Monitoring of power condition5-2	2
	Battery	
	Power-up modes 5-7	
	System automatic Sleep/Hibernation5-7	7
Chapter 6	Troubleshooting	
	Problem solving process6-1	
	Hardware and system checklist6-4	ł
	TOSHIBA support6-5)
Appendix A	Specifications	
Appendix B	AC Power Cord and Connectors	
Appendix C	Legal Footnotes	
Appendix D	Information for Wireless Devices	
	Index	
	Glossary	
	,	

Copyright

© 2011 by TOSHIBA Corporation. All rights reserved. Under the copyright laws, this manual cannot be reproduced in any form without the prior written permission of TOSHIBA. No patent liability is assumed, with respect to the use of the information contained herein.

First edition December 2011

Copyright authority for music, movies, computer programs, databases and other intellectual property covered by copyright laws belongs to the author or to the copyright owner. Copyrighted material can be reproduced only for personal use or use within the home. Any other use beyond that stipulated above (including conversion to digital format, alteration, transfer of copied material and distribution on a network) without the permission of the copyright owner is a violation of copyright or author's rights and is subject to civil damages or criminal action. Please comply with copyright laws in making any reproduction from this manual.

Disclaimer

This manual has been validated and reviewed for accuracy. The instructions and descriptions it contains are accurate for your computer at the time of this manual's production. However, succeeding computers and manuals are subject to change without notice. TOSHIBA assumes no liability for damages incurred directly or indirectly from errors, omissions or discrepancies between the computer and the manual.

Trademarks

Intel, Intel SpeedStep, Intel Core and Centrino are trademarks or registered trademarks of Intel Corporation.

Windows, Microsoft and Windows logo are registered trademarks of Microsoft Corporation.

Bluetooth is a trademark owned by its proprietor and used by TOSHIBA under license.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

ConfigFree is a trademark of TOSHIBA Corporation.

TouchPad is a trademark of Synaptics, Inc.

Wi-Fi is a registered trademark of the Wi-Fi Alliance.

Secure Digital and SD are trademarks of SD Card Association.

MultiMediaCard and MMC are trademarks of MultiMediaCard Association.

QUALCOMM is a trademark of Qualcomm Incorporated, registered in the United States and other countries. ATHEROS is a trademark of Qualcomm Atheros, Inc., registered in the United States and other countries.

Realtek is a registered trademark of Realtek Semiconductor Corporation.

Other trademarks and registered trademarks not listed above may be used in this manual.

FCC information

FCC notice "Declaration of Conformity Information"

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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



Only peripherals complying with the FCC class B limits may be attached to this equipment. Operation with non-compliant peripherals or peripherals not recommended by TOSHIBA is likely to result in interference to radio and TV reception. Shielded cables must be used between the external devices and the computer's Universal Serial Bus (USB 2.0) port, HDMI port and microphone jack. Changes or modifications made to this equipment, not expressly approved by TOSHIBA or parties authorized by TOSHIBA could void the user's authority to operate the equipment.

FCC 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.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

Contact

Address:	TOSHIBA America Information Systems, Inc	
	9740 Irvine Boulevard	
	Irvine, California 92618-1697	
Telephone:	(949) 583-3000	

EU Declaration of Conformity

This product is carrying the CE-Mark in accordance with the related European Directives. Responsible for CE-Marking is TOSHIBA Europe GmbH, Hammfelddamm 8, 41460 Neuss, Germany. The complete and official EU Declaration of Conformity can be found on TOSHIBA's web site http://epps.toshiba-teg.com on the Internet.

CE compliance

CE

This product is labelled with the CE Mark in accordance with the related European Directives, notably Electromagnetic Compatibility Directive 2004/108/EC for the notebook and the electronic accessories including the supplied power adapter, the Radio Equipment and Telecommunications Terminal Equipment Directive 1999/5/EC in case of implemented telecommunication accessories and the Low Voltage Directive 2006/95/EC for the supplied power adapter. Furthermore the product complies with the Ecodesign Directive 2009/125/EC (ErP) and its related implementing measures.

This product and the original options are designed to observe the related EMC (Electromagnetic Compatibility) and safety standards. However, TOSHIBA cannot guarantee that this product still observes these EMC standards if options or cables not produced by TOSHIBA are connected or implemented. In this case the persons who have connected/implemented those options/cables have to provide assurance that the system (PC plus options/cables) still fulfils the required standards. To avoid general EMC problems, the following guidance should be noted:

- Only CE marked options should be connected/implemented
- Only best shielded cables should be connected

Working environment

This product was designed to fulfil the EMC (Electromagnetic Compatibility) requirements to be observed for so-called "Residential, commercial and light industry environments". TOSHIBA do not approve the use of this product in working environments other than the above mentioned "Residential, commercial and light industry environments".

For example, the following environments are not approved:

- Industrial Environments (e.g. environments where a mains voltage of 380 V three-phase is used)
- Medical Environments
- Automotive Environments
- Aircraft Environments

Any consequences resulting from the use of this product in working environments that are not approved are not the responsibility of TOSHIBA.

The consequences of the use of this product in non-approved working environments may be:

- Interference with other devices or machines in the near surrounding area.
- Malfunction of, or data loss from, this product caused by disturbances generated by other devices or machines in the near surrounding area.

Therefore TOSHIBA strongly recommend that the electromagnetic compatibility of this product should be suitably tested in all non-approved working environments before use. In the case of automobiles or aircraft, the manufacturer or airline respectively should be asked for permission before use of this product.

Furthermore, for general safety reasons, the use of this product in environments with explosive atmospheres is not permitted.

VCCI Class B Information

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使 用することを目的としていますが、この装置がラジオやテレビジョン 受信機に近接して使用されると、受信障害を引き起こすことがあります。 取扱説明書に従って正しい取り扱いをしてください。

VCCI-B

Video Standard Notice

THIS PRODUCT IS LICENSED UNDER THE AVC, THE VC-1 AND MPEG-4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR (I) ENCODING VIDEO IN COMPLIANCE WITH THE ABOVE STANDARDS ("VIDEO") AND/OR (II) DECODING AVC, VC-1 AND MPEG-4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NONCOMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED BY MPEG LA TO PROVIDE SUCH VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL, INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE HTTP://WWW.MPEGLA.COM.

Canadian regulatory information (Canada only)

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulation of the Canadian Department of Communications.

Note that Canadian Department of Communications (DOC) regulations provide, that changes or modifications not expressly approved by TOSHIBA Corporation could void your authority to operate this equipment.

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

Cet appareil numérique de la class B respecte toutes les exgences du Règlement sur le matériel brouileur du Canada.

Following information is only valid for EU-member States:

Disposal of products



The crossed out wheeled dust bin symbol indicates that products must be collected and disposed of separately from household waste. Integrated batteries and accumulators can be disposed of with the product. They will be separated at the recycling centres.

The black bar indicates that the product was placed on the market after August 13, 2005.

By participating in separate collection of products and batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health.

For more detailed information about the collection and recycling programmes available in your country, please visit our website (http://eu.computers.toshiba-europe.com) or contact your local city office or the shop where you purchased the product.

Disposal of batteries and/or accumulators



The crossed out wheeled dust bin symbol indicates that batteries and/or accumulators must be collected and disposed of separately from household waste.

If the battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) defined in the Battery Directive (2006/66/ EC), then the chemical symbols for lead (Pb), mercury (Hg) and/or cadmium (Cd) will appear below the crossed out wheeled dust bin symbol.

By participating in separate collection of batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health.

For more detailed information about the collection and recycling programmes available in your country, please visit our website (http://eu.computers.toshiba-europe.com) or contact your local city office or the shop where you purchased the product.



These symbols may not stick depending on the country and region where you purchased.

Disposing of the computer and the computer's batteries

Contact an authorized TOSHIBA service provider for details regarding how to dispose of the computer and the batteries.

REACH - Compliance Statement

The new European Union (EU) chemical regulation, REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), entered into force on 1 June 2007. TOSHIBA will meet all REACH requirements and is committed to provide our customers with information about the chemical substances in our products according to REACH regulation.

Please consult the following website <u>www.toshiba-europe.com/computers/</u> <u>info/reach</u> for information about the presence in our articles of substances included on the candidate list according to article 59(1) of Regulation (EC) No 1907/2006 ("REACH") in a concentration above 0.1 % weight by weight.

Following information is only for Turkey:

- Compliant with EEE Regulations: TOSHIBA meets all requirements of Turkish regulation 26891 "Restriction of the use of certain hazardous substances in electrical and electronic equipment".
- The number of possible pixel failures of your display is defined according to ISO 9241-307 standards. If the number of pixel failures is less than this standard, they will not be counted as defect or failure.
- Battery is a consumption product, since the battery time depends on the usage of your computer. If the battery can not be charged at all, then it is a defect or failure. The changes in battery time is not a defect or failure.

Preface

Congratulations on your purchase of this tablet. This powerful tablet provides excellent expansion capability, includes multimedia functionality, and is designed to provide years of reliable, high-performance computing.

This manual tells how to set up and begin using your tablet. It also provides detailed information on configuring your tablet, basic operations and care, using optional devices and troubleshooting.

Conventions

This manual uses the following formats to describe, identify, and highlight terms and operating procedures.

Abbreviations

On first appearance, and whenever necessary for clarity, abbreviations are enclosed in parentheses following their definition. For example: Read Only Memory (ROM). Acronyms are also defined in the Glossary.

Icons

Icons identify ports, dials, and other parts of your computer. The indicator panel also uses icons to identify the components it is providing information on.

Keys

The virtual keyboard keys are used in the text to describe many tablet operations. A distinctive typeface identifies the key top symbols as they appear on the virtual keyboard. For example, **ENTER** identifies the **ENTER** key.

Key operation

Some operations require you to simultaneously use two or more keys. We identify such operations by the key top symbols separated by a plus sign (+). For example, **CTRL** + **C** means you must hold down **CTRL** and at the same time press **C**.

ABC

When procedures require an action such as clicking an icon or entering text, the icon's name or the text you are to type in is represented in the typeface you see to the left.

Messages

Messages are used in this manual to bring important information to your attention. Each type of message is identified as shown below.



Indicates a potentially hazardous situation, which could result in death or serious injury, if you do not follow instructions.



Pay attention! A caution informs you that improper use of equipment or failure to follow instructions may cause data loss or damage your equipment.



Please read. A note is a hint or advice that helps you make best use of your equipment.

Terminology

This term is defined in this document as follows:

Start	The word " Start " refers to the "ə)" button in Windows 7.
SSD or Solid State Drive	This computer is equipped with a "Solid State Drive (SSD)" instead of a hard disk drive.

General Precautions

TOSHIBA tablets are designed to optimize safety, minimize strain and withstand the rigors of portability. However, certain precautions should be observed to further reduce the risk of personal injury or damage to the computer.

Be certain to read the general precautions below and to note the cautions included in the text of the manual.

Provide adequate ventilation

Always make sure your tablet and AC adaptor have adequate ventilation and are protected from overheating when the power is turned on or when an AC adaptor is connected to a power outlet (even if your tablet is in Sleep Mode). In this condition, observe the following:

- Never cover your tablet or AC adaptor with any object.
- Never place your tablet or AC adaptor near a heat source, such as an electric blanket or heater.
- Never cover or block the air vents.
- Always operate your tablet on a hard flat surface. Using your computer on a carpet or other soft material can block the vents.
- Always provide sufficient space around the tablet.
- Overheating your tablet or AC adaptor could cause system failure, tablet or AC adaptor damage or a fire, possibly resulting in serious injury.

Creating a computer-friendly environment

To keep your computer in prime operating condition, protect your work area from:

- Dust, moisture, and direct sunlight.
- Equipment that generates a strong electromagnetic field, such as stereo speakers (other than speakers that are connected to the tablet) or speakerphones.
- Rapid changes in temperature or humidity and sources of temperature change such as air conditioner vents or heaters.
- Extreme heat, cold, or humidity.
- Liquids and corrosive chemicals.

Stress injury

Carefully read the *Instruction Manual for Safety and Comfort*. It contains information on the prevention of stress injuries to your hands and wrists that can be caused by extensive tablet use. It also includes information on work space design, posture and lighting that can help reduce physical stress.

Heat injury

- Avoid prolonged physical contact with the tablet. If the tablet is used for long periods, its surface can become very warm. While the temperature will not feel hot to the touch, if you maintain physical contact with the tablet for a long time, for example if you rest the tablet on your lap, your skin might suffer a low-heat injury.
- If the tablet has been used for a long time, avoid direct contact with the metal plate supporting the various interface ports as this can become hot.
- The surface of the AC adaptor can become hot when in use but this condition does not indicate a malfunction. If you need to transport the AC adaptor, you should disconnect it and let it cool before moving it.
- Do not lay the AC adaptor on a material that is sensitive to heat as the material could become damaged.

Pressure or impact damage

Do not apply heavy pressure to the tablet or subject it to any form of strong impact as this can damage the tablet's components or otherwise cause it to malfunction.

Mobile phones

Please be aware that the use of mobile phones can interfere with the audio system. The operation of the tablet will not be impaired in any way, but it is recommended that a minimum distance of 30cm is maintained between the tablet and a mobile phone that is in use.

Instruction Manual for Safety and Comfort

All important information on the safe and proper use of this tablet is described in the enclosed Instruction Manual for Safety and Comfort. Be sure to read it before using the tablet.

Chapter 1

Getting Started

This chapter provides an equipment checklist, and basic information to start using your tablet.



- Some of the features described in this manual may not function properly if you use an operating system that was not pre-installed by TOSHIBA.
- In this manual, both words "tablet" and "computer" refer to the TOSHIBA tablet computer.

Equipment checklist

Carefully unpack your tablet, taking care to save the box and packaging materials for future use.

Hardware

Check to make sure you have all the following items:

- TOSHIBA WT200 Tablet
- AC adaptor and power cord (2-pin plug or 3-pin plug)
- Stylus pen or digitizer pen kit (provided with some models)

Documentation

- User Information Guide
- Instruction Manual for Safety and Comfort

If any of the items are missing or damaged, contact your dealer immediately.

Software

The following Windows[®] operating system and utility software are preinstalled.

- Windows 7
- TOSHIBA Recovery Media Creator
- TOSHIBA Assist
- TOSHIBA ConfigFree™
- TOSHIBA eco Utility
- TOSHIBA Bulletin Board

- TOSHIBA ReelTime
- TOSHIBA HW Setup Utility
- TOSHIBA Value Added Package
- TOSHIBA Web Camera Application
- TOSHIBA Service Station
- TOSHIBA PC Health Monitor
- User's Manual (this manual)



You may not have all the software listed above depending on the model you purchased.

Getting Started



- All users should be sure to read the section Starting up for the first time.
- Be sure to read the enclosed Instruction Manual for Safety and Comfort for information on the safe and proper use of this computer. It is intended to help you be more comfortable and productive while using a tablet computer. By following the recommendations in it you may reduce your chance of developing a painful or disabling injury to your hand, arms, shoulders or neck.

This section provides basic information to start using your computer. It covers the following topics:

- Connecting the AC adaptor
- Turning on the power
- Starting up for the first time
- Turning off the power
- Restarting the computer



- Use a virus-check program and make sure it is updated regularly.
- Never format storage media without checking its content formatting destroys all stored data.
- It is a good idea to periodically back up the internal Solid State Drive or other main storage device to external media. General storage media is not durable or stable over long periods of time and under certain conditions may result in data loss.
- Before you install a device or application, save any data in memory to the Solid State Drive or other storage media. Failure to do so may result in the loss of data.

Connecting the AC adaptor

Attach the AC adaptor when you need to charge the battery or you want to operate from AC power. It is also the fastest way to get started, because

the battery pack will need to be charged before you can operate from battery power.

The AC adaptor can automatically adjust to any voltage ranging from 100 to 240 volts and to a frequency of either 50 or 60 hertz, enabling you to use this computer in almost any country/region. The adaptor converts AC power to DC power and reduces the voltage supplied to this computer.



- Always use the TOSHIBA AC adaptor that was included with your computer, or use AC adaptors specified by TOSHIBA to avoid any risk of fire or other damage to the computer. Use of an incompatible AC adaptor could cause fire or damage to the computer possibly resulting in serious injury. TOSHIBA assumes no liability for any damage caused by use of an incompatible adaptor.
- Never plug the AC adaptor into a power source that does not correspond to both the voltage and the frequency specified on the regulatory label of the unit. Failure to do so could result in a fire or electric shock, possibly resulting in serious injury.
- Always use or purchase power cables that comply with the legal voltage and frequency specifications and requirements in the country of use. Failure to do so could result in a fire or electric shock, possibly resulting in serious injury.
- The supplied power cord conforms to safety rules and regulations in the region the product is bought and should not be used outside this region. For use in other regions, please buy power cords that conform to safety rules and regulations in the particular region.
- Do not use a 3-pin to 2-pin conversion plug.
- When you connect the AC adaptor to the computer, always follow the steps in the exact order as described in the User's Manual. Connecting the power cable to a live electrical outlet should be the last step otherwise the adaptor DC output plug could hold an electrical charge and cause an electrical shock or minor bodily injury when touched. As a general safety precaution, avoid touching any metal parts.
- Never place your computer or AC adaptor on a wooden surface, furniture, or any other surface that could be marred by exposure to heat since the computer base and AC adaptor's surface increase in temperature during normal use.
- Always place your computer or AC adaptor on a flat and hard surface that is resistant to heat damage.

Refer to the enclosed Instruction Manual for Safety and Comfort for detailed precautions and handling instructions.

1. Connect the power cord to the AC adaptor.

Figure 1-1 Connecting the power cord to the AC adaptor (2-pin plug)

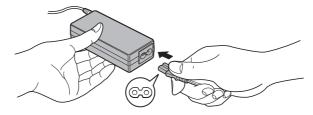
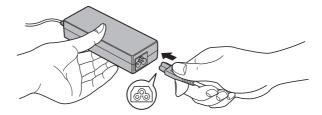


Figure 1-2 Connecting the power cord to the AC adaptor (3-pin plug)

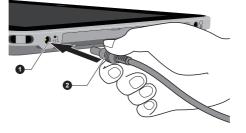




Either a 2-pin or 3-pin adaptor/cord will be included with the computer depending on the model.

Connect the AC adaptor's DC output plug to the DC IN 19V jack on your computer.

Figure 1-3 Connecting the DC output plug to the computer



1. DC IN 19V jack

2. DC output plug

3. Plug the power cord into a live wall outlet - the **Battery** and **Power** indicators on the computer should glow.

Turning on the power

This section describes how to turn on the power - the **Power** indicator will then indicate the status. Please refer to the *Monitoring of power condition* section in Chapter 5, Power and Power-Up Modes for more information.



After you turn on the power for the first time, do not turn it off until you have set up the operating system.

Volume cannot be adjusted during Windows Setup.

Slide the computer's power switch to power on.

Figure 1-4 Turning on the power



1. Power switch

Starting up for the first time

The Windows 7 Startup Screen will be the first screen displayed when you turn on the power. Follow the on-screen instructions on each screen in order to properly install the operating system.



When it is displayed, be sure to read the **Software License Terms** carefully.

Turning off the power

The power can be turned off in one of three modes, either Shut Down Mode, Hibernation Mode or Sleep Mode.

Shut Down Mode

When you turn off the power in Shut Down Mode no data will be saved and the computer will boot to the operating system's main screen the next time it is turned on.

1. If you have entered data, either save it to the Solid State Drive or to other storage media.



- Never turn off the power while an application is running. Doing so could cause loss of data.
- Never turn off the power, disconnect an external storage device or remove storage media during data read/write. Doing so can cause data loss.
- In any emergency case, you can also slide the power switch for about six seconds to force power off.
- 2. Tap Start.

- 3. Tap the **Shut down** button (Shut down).
- 4. Turn off any peripheral devices connected to your computer.



Do not turn the computer or peripheral devices back on immediately - wait a short period to avoid any potential damage.

Sleep Mode

If you have to interrupt your work, you are able to turn off the power without exiting from your software by placing the computer into Sleep Mode. In this mode data is maintained in the computer's main memory so that when you turn on the power again, you can continue working right where you left off.



When you have to turn off your computer aboard an aircraft or in places where electronic devices are regulated or controlled, always completely shut down the computer. This includes turning off any wireless communication functionalities, and cancelling settings that reactivate the computer automatically, such as a timer recording function. Failure to completely shut down the computer in this way could allow the operating system to reactivate and run pre-programmed tasks or preserve unsaved data, which could interfere with aviation or other systems, possibly causing serious injury.



Before entering Sleep Mode, be sure to save your data.



- When the AC adaptor is connected, the computer will go into Sleep Mode according to the settings in the Power Options (to access it, tap Start -> Control Panel -> System and Security -> Power Options).
- To restore the operation of the computer from Sleep Mode, slide and hold the power switch or any key on the keyboard for a short amount of time. Please note that keyboard keys can only be used if the Wakeup on Keyboard option is enabled within the HW Setup utility.
- If the computer enters Sleep Mode while a network application is active, the application might not be restored when the computer is next turned on and the system returns from Sleep Mode.
- To prevent the computer from automatically entering Sleep Mode, disable Sleep Mode within the Power Options (to access it, tap Start -> Control Panel -> System and Security -> Power Options).
- To use the Hybrid Sleep function, configure it in the Power Options.

Benefits of Sleep Mode

The Sleep Mode feature provides the following benefits:

- Restores the previous working environment more rapidly than does the Hibernation Mode feature.
- Saves power by shutting down the system when the computer receives no input or hardware access for the time period set by the System Sleep Mode feature.
- Allows the use of the panel power off feature.

Executing Sleep Mode

You can enter Sleep Mode in one of following ways:

- Tap **Start**, tap the arrow icon (<u>Shut down</u>) and then select **Sleep** from the menu.
- Slide the power switch. Please note that this feature must be enabled within the Power Options (to access it, tap Start -> Control Panel -> System and Security -> Power Options).

When you turn the power back on, you can continue where you left when you shut down the computer.



- When the computer is in Sleep Mode, the power indicator will blink white.
- If you are operating the computer on battery power, you can lengthen the overall operating time by turning it off into Hibernation Mode -Sleep Mode will consume more power while the computer is off.

Sleep Mode limitations

Sleep Mode will not function under the following conditions:

- Power is turned back on immediately after shutting down.
- Memory circuits are exposed to static electricity or electrical noise.

Hibernation Mode

The Hibernation Mode feature saves the contents of memory to the Solid State Drive when the computer is turned off so that, the next time it is turned on, the previous state is restored. Please note that the Hibernation Mode feature does not save the status of any peripheral devices connected to the computer.



- Save your data. While entering Hibernation Mode, the computer saves the contents of memory to the Solid State Drive. However, for safety sake, it is best to save your data manually.
- Data will be lost if you disconnect the AC adaptor before the save is completed.

Benefits of Hibernation Mode

The Hibernation Mode feature provides the following benefits:

- Saves data to the Solid State Drive when the computer automatically shuts down because of a low battery condition.
- You can return to your previous working environment immediately when you turn on the computer.
- Saves power by shutting down the system when the computer receives no input or hardware access for the time period set by the System Hibernate feature.
- Allows the use of the panel power off feature.

Starting Hibernation Mode

To enter Hibernation Mode, follow the steps below.

- 1. Tap Start.
- 2. Tap the arrow icon (Shut down ►) and then select **Hibernate** from the menu.

Automatic Hibernation Mode

The computer can be configured to enter Hibernation Mode automatically when you slide the power switch. In order to define these settings, you can follow the steps as described below:

- 1. Tap Start and tap the Control Panel.
- 2. Tap System and Security and tap Power Options.
- 3. Tap Choose what the power buttons do.
- 4. Enable the desired Hibernation Mode settings for When I press the power button.
- 5. Tap the Save changes button.

Data save in Hibernation Mode

When you turn off the power in Hibernation Mode, the computer will take a moment to save the current data in memory to the Solid State Drive.

After you turn off the computer, and the content of memory has been saved to the Solid State Drive, turn off the power to any peripheral devices.



Do not turn the computer or devices back on immediately. Wait a moment to let all capacitors fully discharge.

Restarting the computer

Certain conditions require that you reset the computer, for example if:

- You change certain computer settings.
- An error occurs and the computer does not respond to your keyboard commands.

If you need to restart the computer, there are three ways this can be achieved:

- Tap Start, then tap the arrow icon (Shut down >>) and then select **Restart** from the menu.
- Press the SAS button (Delta) (twice) to display the menu window and then select Restart from the Shut down options.
- Slide the power switch and hold it for five seconds. Once the computer has turned itself off, wait between ten and fifteen seconds before turning the power on again by sliding the power switch.



If the system reboots after an abnormal shutdown, to start Windows normally, press the keyboard button to highlight your selection and press the Windows button to enter.

Chapter 2

The Grand Tour

This chapter identifies the various components of the computer - it is recommended that you become familiar with each before you operate the computer.

Legal Footnote (Non-applicable Icons)

For more information regarding Non-applicable Icons, please refer to the Legal Footnotes section in Appendix C.



Please handle your computer carefully to avoid scratching or damaging the surface.

Grand Tour

The following figures show the grand tour of your computer.



Figure 2-1 Grand tour of the computer

- 1. Power switch (with lock function)
- 2. Orientation lock button
- 3. Volume down/up buttons
- 4. Web Camera (front)*
- 5. Web Camera indicator*
- 6. Microphone
- 7. Ambient light sensor
- 8. Display screen
- 9. Windows button
- 10. Camera flash*
- 11. Camera (back)*
- 12. Wireless WAN/WIMAX antennas (not shown)*13. Wireless LAN and Bluetooth
- antennas (not shown)*
- 14. Cooling vents

Power switch

- 15. Headphone/Microphone combo jack
- 16. SAS button
- 17. Keyboard button
- 18. Universal Serial Bus (USB) 2.0 port
- 19. Micro HDMI port
- 20. Memory media slot
- 21. SIM card slot*
- 22. DC IN 19V jack
- 23. Security slot
- 24. Label slot (Rating label/COA label)
- 25. Power indicator
- 26. Battery indicator
- 27. Speakers
- 28. Docking interface

* Provided with some models.

Product appearance depends on the model you purchased.



Slide this switch to turn on the tablet. Slide this power switch and hold it for five seconds will force the tablet to shut down.

You can slide the power switch to the lock position (\square) to avoid sliding it by mistake.

Þ	Orientation lock but- ton	Press this button to lock/unlock automatic rotation of the screen orientation.
+	Volume down/up but- tons	Press thess buttons to increase or decrease the volume.
	Web Camera	Web Camera is a device that allows you to record video or take photographs with your computer. You can use it for video chatting or video conferences using a communication tool such as Windows Live Messenger. TOSHIBA Web Camera Application will help you to add various video effects to your video or photograph.
		Enables the transmission of video and use of video chat via the internet using specialized applications.
		Please refer to the Web Camera Application Online Help for details.
	Web Camera LED	The Web Camera LED glows when the Web Camera is operating.
•	Do not point the we	h camera directly at the sun



Do not point the web camera directly at the sun.

Do not touch or press strongly on the web camera lens. Doing so may reduce image quality. Use an eyeglass cleaner (cleaner cloth) or other soft cloth to clean the lens if it becomes dirty.

When recording in dimly lit environments, select "Night Mode" which allows for brighter images with less noise.

Microphone	The built-in microphone allows you to import and record sounds for your application.
Ambient light sensor	Ambient light sensor can detect the light quality and intensity outside and can use this information automatically adjust the display screen brightness.
Display screen	25.7cm (10.1") LCD screen, configured with the following resolutions:
	 HD, 1366 horizontal x 768 vertical pixels
	Please be aware that, when the computer is operating on the AC adaptor, the image displayed on the internal screen will be somewhat brighter than when it operates on battery power. This difference in brightness levels is intended to save power when operating on batteries.

Legal Footnote (LCD)

For more information regarding LCD, please refer to the Legal Footnotes section in Appendix C.

Windows button	Press this button to show the start menu.
----------------	---

Camera (back)	Your tablet is equipped with a back Camera used for recording video or taking photographs.
Camera flash	This LED flash can be used as a light source when the ambient light is not bright.
Wireless LAN anten- nas	Some computers in this series are equipped with the Wireless LAN antennas.

Legal Footnote (Wireless LAN)

For more information regarding Wireless LAN, please refer to the Legal Footnotes section in Appendix C.

Wireless WAN/ Wi- MAX antennas	Some computers in this series are equipped with the Wireless WAN/WiMAX antennas.
Cooling vents	The cooling vents help the processor to avoid overheating.



Do not block the cooling vents. Keep foreign metal objects, such as screws, staples and paper clips, out of the cooling vents. Foreign metal objects can create a short circuit, which can cause damage and fire, possibly resulting in serious injury.

Carefully clean the dust on the cooling vents' surface using a soft cloth.



Headphone/Micro-
phone combo jackA 3.5 mm mini headphone/microphone combo
jack enables connection of a monaural
microphone or a stereo headphone.



The integrated sound system provides support for the computer's internal speakers and microphone, as well as allowing an external microphone and headphones to be connected via the appropriate jacks.

D	SAS button	The function of this button is equivalent to pressing Ctrl + Alt + Del on a standard computer.
	Keyboard button	Press this button to open or close the virtual keyboard.



Universal Serial Bus (USB 2.0) port One Universal Serial Bus port, which complies to the USB 2.0 standard, is provided on the right side of the computer.



Keep foreign metal objects, such as screws, staples and paper clips, out of the USB port. Foreign metal objects can create a short circuit, which can cause damage and fire, possibly resulting in serious injury.



Please note that it is not possible to confirm the operation of all functions of all USB devices that are available. In view of this it may be noted that some functions associated with a specific device might not operate properly.

 Historian
 Micro HDMI port
 Micro HDMI port can connect to HDMI cable with Type D connector.

 An HDMI cable sends video and audio signals. In addition to this, it can send and receive control signals.
 Memory media slot

 This slot lets you insert an SD™/SDHC™/SDXC™ memory card, miniSD™/microSD™ Card, and MultiMediaCard™. Refer to the Optional devices section in Chapter 3, Operating Basics for more information.



Keep foreign metal objects, such as screws, staples and paper clips, out of the Memory media slot. Foreign metal objects can create a short circuit, which can cause damage and fire, possibly resulting in serious injury.

SIM Card slot	This slot lets you insert a single SIM card which enables a high-speed access to the Internet, corporate Intranet and your email while you are away from office.
DC IN 19V jack	The AC adaptor connects to this jack in order to power the computer and charge its internal batteries. Please note that you should only use the model of AC adaptor supplied with the computer at the time of purchase - using the wrong AC adaptor can cause damage to the computer.
Security slot	A security cable can be attached to this slot and then connected to a desk or other large object in order to deter theft of the computer.

	Label slot	Pull the plastic tag from the label slot. You will see the ragulatory/rating label/COA label.
டு	Power indicator	The Power indicator normally glows white when the computer is turned on. However, if you turn the computer off into Sleep Mode, this indicator will flash white - approximately two seconds on, two seconds off.
	Battery indicator	The Battery indicator shows the condition of the DC-IN and battery's charge - white indicates the battery is fully charged while the power is being correctly supplied from the AC adaptor.
		Please refer to Chapter 5, <i>Power and Power-Up</i> <i>Modes</i> for more information on this feature.
	Speakers	The speakers emit sound generated by your software as well as audio alarms, such as low battery condition, generated by the system.
	Docking interface	The interface enables the connection of an optional dock such as a Tablet cradle.

Internal Hardware Components

This section describes the internal hardware components of your computer.

The actual specifications may vary depending on the model you purchased.

Battery pack	This product includes a battery pack inside. However, please do not attempt to dismount or replace it by yourself. Please contact an authorized Toshiba service provider, if necessary.
	The rechargeable lithium-ion battery pack provides power to the computer when the AC adaptor is not connected. For more detailed information on the use and operation of the battery pack please refer to Chapter 5, <i>Power</i> and <i>Power-Up Modes</i> .

Legal Footnote (Battery Life)

For more information regarding Battery Life, please refer to the Legal Footnotes section in Appendix C.

	To check which type of processor is included in your model, open the TOSHIBA PC Diagnostic Tool Utility by tapping Start -> All Programs -> TOSHIBA -> Support & Recovery -> PC Diagnostic Tool .
CPU	The processor type varies depending on model.

Legal Footnote (CPU)

For more information regarding CPU, please refer to the Legal Footnotes section in Appendix C.

Solid State Drive (SSD)	The size of the Solid State Drive varies depending on the model.
	To check which type of SSD is included in your model, open the TOSHIBA PC Diagnostic Tool Utility by tapping Start -> All Programs -> TOSHIBA -> Support & Recovery -> PC Diagnostic Tool .
	Please note that part of the Solid State Drive's overall capacity is reserved as administration space.



SSD is a large-capacity storage media which uses Solid-State Memory in place of a magnetic disk of the hard disk.



Under certain unusual conditions of prolonged non-use and/or exposure to high temperatures, the SSD may be vulnerable to data retention errors.

Legal Footnote (Solid State Drive (SSD) Capacity)

For more information regarding Solid State Drive (SSD) Capacity, please refer to the Legal Footnotes section in Appendix C.

RTC battery	The internal RTC battery backs up the Real Time
	Clock (RTC) and calendar.

Video RAM	The memory in a computer's graphics adaptor, used to store the image displayed on a bitmap display.
	The amount of Video RAM available is dependent on the computer's system memory.
	Start -> Control Panel -> Appearance and Personalization -> Display -> Adjust resolution.
	The amount of Video RAM can be verified by clicking the Advanced settings button in the Screen Resolution window.
Memory	This tablet is equipped with a 2GB memory on board. The actual amount of usable system memory will be less than the installed memory modules. This tablet does not support memory expansion.
Legal Footnote (Memor	y (Main System))
For more information re Legal Footnotes section	garding Memory (Main System), please refer to the in Appendix C.

Display controller	The display controller interprets software commands into hardware commands that turn particular parts on the screen on or off.
	The display controller also controls the video mode and uses industry standard rules to govern the screen resolution and the maximum number of colors that can be displayed at any one time. Therefore, software written for a given video mode will run on any computer that supports that mode.



Due to the display panel's increased resolution, lines may appear broken in when displaying images in full-screen text mode.

Graphics controller	The graphics controller maximizes display	
	performance.	

Legal Footnote (Graphics Processing Unit ("GPU"))

For more information regarding Graphics Processing Unit ("GPU"), please refer to the Legal Footnotes section in Appendix C.

Intel[®] Display Power Saving Technology

Intel GPU model may include the Display Power Saving Technology feature that can save the computer's power consumption by optimizing picture contrast on the internal LCD.

This feature can be used if the computer is:

- running under battery mode
- using the internal LCD display only

The Display Power Saving Technology feature is enabled at factory default. If you want to disable the feature, you can disable it.

The Display Power Saving Technology feature can be disabled in the Intel[®] GMA Driver for Mobile Control Panel.

You can access this control panel in one of the following ways:

- Tap Start -> Control Panel. Select Large icons or Small icons in View by, and then tap Intel(R) GMA Driver for Mobile.
- Right-tap on the desktop and tap Graphics Properties....

In this control panel:

- 1. Tap Power.
- 2. Select **On battery** from the drop-down menu in **Power Source**.
- 3. Clear the Display Power Saving Technology check box.
- 4. Tap **OK**.

If you want to enable this feature, under the conditions mentioned above, select the **Display Power Saving Technology** check box.

Intel[®] Rapid Start Technology

This computer supports Intel[®] Rapid Start Technology which enables the computer change to Hibernation Mode (IFFS-Intel Fast Flash Standy mode) from Sleep Mode after a specified time.

With the Intel[®] Rapid Start Technology, the Windows can rapidly restore from HibernationMode and its battery life will be improved than in Sleep Mode.

Intel[®] Rapid Start Technology is enabled at factory default. The computer will switch to Hibernation Mode after two hours of Sleep Mode.

You can use BIOS Setup to enable/disable the function and change the specified time setting from Sleep Mode to Hibernation Mode.

- 1. Turn off the computer.
- Press and hold on the Volume down button and then slide the Power switch. When the **TOSHIBA Leading Innovation** >>> logo screen appears - the BIOS setup application will load.
- 3. Select Power Management.
- 4. Enable/Disable Intel(R) Rapid Start Technology function and press ENTER using the virtual keyboard..

5. You can change the specified time from Sleep Mode to Hibernation Mode in the **Rapid Start Entry after**. If the Immediately option is selected, the computer will switch to Hibernation Mode immediately once your computer turns to the Sleep Mode.



When Intel[®] Rapid Start Technology is enabled, switching from Sleep Mode to Hibernation Mode consumes power. When you carry your computer aboard on an aircraft or in places where electronic devices are regulated or controlled, always power off your computer.

- When Intel[®] Rapid Start Technology is enabled, Wake-up on LAN, Wake-up on USB or Wake-up from Sleep Mode automatically functions are not available when the computer has been switched from Sleep Mode to Hibernation Mode.
- The Windows cannot be restored normally if the battery is exhausted when the computer is moving from Sleep Mode to Hibernation Mode.
- The partition allocation on the Solid State Drive for the Intel[®] Rapid Start Technology cannot be deleted even Intel[®] Rapid Start Technology is disabled.
- Intel[®] Rapid Start Technology can be used only for Windows 7.
- The Windows restore time from Hibernation Mode (IFFS Mode) is faster than the traditional Hibernation Mode.
- The SSD of this computer is separated into four partitions at factory default. You cannot reconfigure the partitions on your computer.

Chapter 3

Operating Basics

This chapter describes the basic operations of your computer, highlights the precautions that should be taken when using it.

Using the Touch Screen

You can use your finger to manipulate icons, buttons, menu items, the onscreen keyboard, and other items on the touch screen.

📕 Тар

Simply tap your finger on the touch screen to act on items on the screen, such as application and settings icons, to type letters and symbols using the onscreen keyboard, or to tap onscreen buttons.

Double tap

Tap quickly twice on a webpage, map or other screen to zoom.

Press & hold

Press & hold an item on the screen until a blue ring animation complete. It functions like the right-click on a standard mouse.

Select / Drag

Press & hold an item for a moment and then, without lifting your finger, move your finger on the screen until you reach the target position. You can drag items on the Windows screen to reposition them.

Press & tap

Press an item and tap using another finger. It functions like the rightclick on a standard mouse.

Swipe / Slide / Flick

To swipe/slide/flick, you quickly move your finger across the surface of the screen, without pausing when you first touch it (so you don't drag an item instead). For example, you slide the screen up or down to scroll a list.

Zoom

In some apps, you can zoom in/out by placing two fingers on the screen at once and pinching them together or spreading them apart.

Rotate

You can rotate the target by moving two fingers in opposite direction or using one finger to pivot around another.

Using the Virtual Keyboard

You can use the virtual keyboard to enter text when writing a mail, filling a table and so on. The following table describes this option.

XXXX

Virtual keyboard

The virtual keyboard is like a standard keyboard, but you enter text by tapping the keys with your fingers.

Using the Tablet PC Pen

A stylus pen or digitizer pen kit may be provided with your tablet depending on the models. You can use this pen to operate on the screen.

The digitizer pen with a button on the pen body provides the functions below:

- Erasing: Press and hold this button to turn the pen into an eraser in such application as **Paint**.
- Right-click: Press and hold this button and touch the tip of the pen to an object. Immediately lift it to display a pop-up menu or other action. It functions like the right-click on a standard mouse.

Wireless communications

The computer's wireless communication function supports some wireless communication devices.

Only some models are equipped with both Wireless LAN and Bluetooth functions.



- Do not use the Wireless LAN (Wi-Fi) or Bluetooth functionalities near a microwave oven or in areas subject to radio interference or magnetic fields. Interference from a microwave oven or other source can disrupt Wi-Fi or Bluetooth operation.
- Turn all wireless functionalities off when near a person who may have a cardiac pacemaker implant or other medical electric device. Radio waves may affect pacemaker or medical device operation, possibly resulting in serious injury. Follow the instruction of your medical device when using any wireless functionality.
- Always turn off wireless functionality if the computer is near automatic control equipment or appliances such as automatic doors or fire detectors. Radio waves can cause malfunction of such equipment, possibly resulting in serious injury.
- It may not be possible to make a network connection to a specified network name using the ad hoc network function. If this occurs, the new network(*) will have to be configured for all computers connected to the same network in order to re-enable network connections. * Please be sure to use new network name.

Wireless LAN

The Wireless LAN is compatible with other LAN systems based on Direct Sequence Spread Spectrum / Orthogonal Frequency Division Multiplexing radio technology that complies with the IEEE802.11 Wireless LAN standard.

- Frequency Channel Selection of 5GHz for IEEE 802.11a or/and IEEE802.11n
- Frequency Channel Selection of 2.4GHz for IEEE 802.11b/g or/and IEEE802.11n
- Roaming over multiple channels
- Card power management
- Wired Equivalent Privacy (WEP) data encryption based on an 128-bit encryption algorithm
- Wi-Fi Protected Access™ (WPA™)



The transmission speed over the Wireless LAN, and the distance over which the Wireless LAN can reach, may vary depending on surrounding electromagnetic environment, obstacles, access point design and configuration, client design and software/hardware configurations. The transmission rate described is the theoretical maximum speed as specified under the appropriate standard - the actual transmission speed will be lower than the theoretical maximum speed.

Setting

- 1. Please make sure that the Wireless Communication function is on.
- 2. Tap Start -> Control Panel -> Network and Internet -> Network and Sharing Center.
- 3. Tap Set up a new connection or network.
- Follow the wizard. You will need the name of the wireless network together with security settings. Consult the documentation accompanied with your router or ask your wireless network administrator for the settings.

Security

- TOSHIBA strongly recommend that you enable encryption functionality, otherwise your computer will be open to illegal access by an outsider using a wireless connection. If this occurs, the outsider may illegally access your system, eavesdrop, or cause the loss or destruction of stored data.
- TOSHIBA is not liable for the loss of data due to eavesdropping or illegal access through the wireless LAN and the damage thereof.

Card Specifications

Form Factor PCI Express Mini Card

Compatibility	 IEEE 802.11 Standard for Wireless LANs Wi-Fi (Wireless Fidelity) certified by the Wi- Fi Alliance. The "Wi-Fi CERTIFIED" logo is a certification mark of the Wi-Fi Alliance.
Network Operating System	Microsoft Windows Networking
Media Access Proto-	CSMA/CA (Collision Avoidance) with Acknowledgment (ACK)

Radio Characteristics

Radio Characteristics of Wireless LAN module may vary according to:

- Country/region where the product was purchased
- Type of product

Wireless communication is often subject to local radio regulations. Although Wireless LAN wireless networking products have been designed for operation in the license-free 2.4GHz and 5GHz band, local radio regulations may impose a number of limitations to the use of wireless communication equipment.

Radio Frequency	Band 5GHz (5150-5850 MHz) (Revision a and n)
	Band 2.4GHz (2400-2483.5 MHz) (Revision b/g and n)

The range of the wireless signal is related to the transmit rate of the wireless communication. Communications at lower transmit range may travel larger distances.

- The range of your wireless devices can be affected when the antennas are placed near metal surfaces and solid high-density materials.
- Range is also impacted due to "obstacles" in the signal path of the radio that may either absorb or reflect the radio signal.

Bluetooth wireless technology

Some computers in this series have Bluetooth wireless communication function which eliminates the need for cables between electronic devices such as computers, printers and mobile phones. When it is enabled, Bluetooth provides the wireless personal area network environment which is safe and trustworthy, that is quick and easy.

You cannot use the computer's built-in Bluetooth functions and an external Bluetooth adaptor simultaneously. For reference, Bluetooth wireless technology has the following features:

Worldwide operation

The Bluetooth radio transmitter and receiver operate in the 2.4GHz band, which is license-free and compatible with radio systems in most countries in the world.

Radio links

You can easily establish links between two or more devices, with these links being maintained even if the devices are not within a line-of-sight of each other.

Security

Two advanced security mechanisms ensure a high level of security:

- Authentication prevents access to critical data and makes it impossible to falsify the origin of a message.
- Encryption prevents eavesdropping and maintains link privacy.

Bluetooth Stack for Windows by TOSHIBA

Please note that this software is specifically designed for the following operating systems:

Windows 7

Information regarding the use of this software with these operating systems is listed below, with further details being contained with the electronic help files supplied with the software.



This Bluetooth Stack is based on the Bluetooth Version 1.1/1.2/2.0+EDR/ 2.1+EDR/3.0/3.0+HS specification, depending on the model you purchased. However, TOSHIBA cannot confirm the compatibility between any computing products and/or other electronic devices that use Bluetooth, other than TOSHIBA notebook computers.

Release Notes related to the Bluetooth Stack for Windows by **TOSHIBA**

- 1. Fax application software: Please be aware that there is some fax application software that you cannot use on this Bluetooth Stack.
- 2. Multi-user considerations: The use of Bluetooth is not supported in a multi-user environment. This means that, when you use Bluetooth, other users that are logged into the same computer will not be able to use this type of functionality.

Product Support:

The latest information regarding operating system support, language support or available upgrades can be found on our web site http:// www.toshiba-europe.com/computers/tnt/bluetooth.htm in Europe or www.pcsupport.toshiba.com in the United States.

Optional devices

Optional devices can expand the computer's capabilities and its versatility. This section describes the connection or installation of the following devices:

Cards/memory

- Memory media slot
 - Secure Digital[™] (SD) Card (SD memory card, SDHC memory card , SDXC memory card, miniSD Card, microSD Card)
 - MultiMediaCard

Peripheral devices

HDMI device

Other

- Security lock
- Optional TOSHIBA accessories

Memory media slot

The computer is equipped with a Memory media slot that can accommodate some kinds of memory media with various memory capacities so that you can easily transfer data from devices, such as digital cameras and Personal Digital Assistants.



Keep foreign objects out of the Memory media slot. Never allow metal objects, such as screws, staples and paper clips, to enter the Memory media slot. Foreign metal objects can create a short circuit, which can cause computer damage and fire, possibly resulting in serious injury.



- This Memory media slot supports the following memory media.
 - Secure Digital (SD) Card (SD memory card, SDHC memory card, SDXC memory card, miniSD Card, microSD Card)
 - MultiMediaCard (MMC™)
- Please note that an adaptor is required to use miniSD/microSD Card.
- Please note that not all memory media have been tested and verified to work correctly. Therefore, it is not possible to guarantee that all memory media will operate properly.
- The slot does not support Magic Gate functions.

Figure 3-1 Examples of memory media







Secure Digital (SD) Card microSD card adaptor and microSD card

MultiMediaCard (MMC)

Memory media

This section provides the important safety precautions in order to handle your memory media.

Points to note about the memory media card

SD/SDHC/SDXC memory cards comply with SDMI (Secure Digital Music Initiative), which is a technology adopted to prevent unlawful copy or playback of digital music. For this reason, you cannot copy or playback protected material on another computer or other device, and you may not reproduce any copyrighted material except for your personal enjoyment.

Below is a simple explanation for distinguishing SD memory cards from SDHC and SDXC memory cards.

- SD, SDHC and SDXC memory cards appear the same externally. However, the logo on memory cards is different, so pay careful attention to the logo when purchasing.
- The SD memory card logo is (*s*»).
- The SDHC memory card logo is (💒).
- The SDXC memory card logo is (🐙).

The maximum capacity of SD memory cards is 2GB. The maximum capacity of SDHC memory cards is 32GB. The maximum capacity of SDXC memory cards is 64GB.

Card Type	Capacities
SD	8MB, 16MB, 32MB, 64MB, 128MB, 256MB, 512MB, 1GB, 2GB
SDHC	4GB, 8GB, 16GB, 32GB
SDXC	64GB

Memory media format

New media cards are formatted according to specific standards. If you wish to reformat a media card, be sure to do so with a device that uses media cards.

Formatting an memory media card

Memory media cards are sold already formatted in conformity to specific standards. If you reformat a memory card, be sure to reformat it with a device such as digital camera or digital audio player that uses the memory cards, not with the format command provided within Windows.



Should you need to format all areas of the memory card, including the protected area, you will need to obtain an appropriate application that applies the copy protection system.

Media care

Observe the following precautions when handling the card.

Card care

- Do not twist or bend cards.
- Do not expose cards to liquids or store in humid areas or lay media close to containers of liquid.
- Do not touch the metal part of a card or expose it to liquids or let it get dirty.
- After using card, return it to its case.
- The card is designed so that it can be inserted only one way. Do not try to force the card into the slot.
- Do not leave a card partially inserted in the slot. Press the card until you hear it click into place.

Memory card care

- Set the write-protect switch to the lock position, if you do not want to record data.
- Memory cards have a limited lifespan, so it is important to backup important data.
- Do not write to a card if the battery power is low. Low power could affect writing accuracy.
- Do not remove a card while read/write is in progress.



For more details on using memory cards, see manuals accompanying the cards.

About the write-protect

The memory media cards have a function for protect.

 SD Card (SD memory card, SDHC memory card and SDXC memory card)



Set the write-protect switch to the lock position, if you do not want to record data.

Inserting a memory media

The following instructions apply to all types of supported media devices. To insert a memory media, follow the steps as detailed below:

- 1. Turn the memory media so that the contacts (metal areas) are face down.
- 2. Remove the slot cover and insert the memory media into the Memory media slot on the right of the computer.
- 3. Press the memory media gently to ensure a firm connection is made.



Figure 3-2 Inserting a memory media

1. Memory media slot

- Make sure memory media is oriented properly before you insert it. If you insert the media in wrong direction, you may not be able to remove it.
- When inserting memory media, do not touch the metal contacts. You could expose the storage area to static electricity, which can destroy data.
- Do not turn the computer off or switch to Sleep Mode or Hibernation Mode while files are being copied - doing so may cause data to be lost.

Removing a memory media

The following instructions apply to all types of supported media devices. To remove a memory media, follow the steps as detailed below:

- 1. Tap the **Safely Remove Hardware and Eject Media** icon on the Windows Taskbar.
- 2. Tap Eject media.
- 3. Press the memory media to partially extend it out of the computer.
- 4. Grasp the media and remove it.

^{2.} Memory media



- Do not remove the memory media while the computer is in Sleep or Hibernation Mode. The computer could become unstable or data in the memory media could be lost.
- Do not remove only the miniSD/microSD Card while leaving the adaptor in the Memory media slot.

SIM card slot

Some models are equipped with a SIM card slot that allows you to assemble a SIM card from your wireless service provider to use your provider's mobile networks for transmitting data.



This section only applies to models with 3G modules.

Inserting a SIM card

To insert a SIM card, follow the steps as detailed below:

- 1. Turn off your tablet.
- 2. Turn the SIM card so that the contacts (metal areas) are facing down.
- 3. Remove the slot cover and insert the SIM card into the SIM card slot on the tablet and push it until you hear a click.



Figure 3-3 Inserting a SIM card

Removing a SIM card

To remove a SIM card, follow the steps as detailed below:

- 1. Remove the slot cover on the right side of your tablet and push the SIM card until you hear a click to partially release it.
- 2. Grasp it and pull it out of the slot.

USB device

This tablet is equipped with a USB port that complies with USB 2.0 standard.

To connect a USB device, plug the device's connector into the USB port on your tablet.



Make sure the connector is properly aligned with the socket. Do not try to force the connection, doing so can damage the connecting pins.



As the port operation of all USB devices has not been confirmed, some USB devices may not function properly.

HDMI

The tablet is equipped with a Micro HDMI port that can send video by connecting with external devices. 1080p, 720p, 576p and 480p signal formats are supported, but actually available signal format depends on each HDMI device.

To connect external devices, follow the steps as detailed below:



As the port operation of all HDMI (High-Definition Multimedia Interface) display devices have not been confirmed, some HDMI display devices may not function properly.

- 1. Plug Type D connector of the HDMI cable into the Micro HDMI port on your tablet.
- 2. Plug the other end of the HDMI cable into the HDMI port of the HDMI device.



Figure 3-4 Connecting an HDMI cable

1. Micro HDMI port

2. Micro HDMI (Type D) connector



Please connect or disconnect an HDMI display device to or from the tablet under the following conditions:

- The tablet is turned on.
- The tablet is completely turned off.

Do not do so when the tablet is in Sleep Mode.



When you connect a television or external monitor to the HDMI port, the display output device is set to HDMI. When you unplug the HDMI cable and re-plug it, please wait at least 5 seconds before you re-plug the HDMI cable again.

Security slot

A security slot enable you to anchor your tablet a desk or other heavy object in order to help prevent unauthorized removal or theft. The tablet has a security slot on its right side into which you can attach one end of the security cable, while the other end attaches to a desk or similar object. The methods used for attaching security cables differ from product to product. Please refer to the instructions for the product you are using for more information.



This slot is also used for attaching the digitizer pen provided depending on the models.

Connecting the security slot

In order to connect a security cable to the tablet, follow the steps as detailed below:

- 1. Turn the tablet to make the security slot face you.
- 2. Align the security cable with the lock slot and secure it in place.



Figure 3-5 Security slot

Optional TOSHIBA Accessories

You are able to add a number of options and accessories in order to make your tablet even more powerful and convenient to use. For reference, the following list details some of the items that are available from your reseller or TOSHIBA dealer:

Universal AC Adaptor	If you frequently use your tablet at more than one
	site, it may be convenient to purchase an
	additional AC adaptor to be kept at each site in
	order to remove the need to always carry the
	adaptor with you.

Sound System

This section describes some of the audio control functions.

Volume Mixer

The Volume Mixer utility lets you control the audio volume for playback of devices and applications under Windows.

- To launch the Volume Mixer utility, right click on the speaker icon on the Taskbar, and select **Open Volume Mixer** from the sub menu.
- To adjust the volume level of speakers or headphones, move the Speakers slider.
- To adjust the volume level of an application that you are using, move the slider for the corresponding application.

Microphone Level

Follow the steps below to change the microphone recording level.

- 1. Right click on the speaker icon on the Taskbar, and select **Recording** devices from the sub menu.
- 2. Select Microphone, and tap Properties.
- 3. On the **Levels** tab move the **Microphone** slider to increase or decrease the microphone volume level.

If you feel the microphone volume level is inadequate, move the **Microphone Boost** slider to a higher level.

Audio Enhancements

In order to apply the sound effects for your current speaker, follow the steps below.

- 1. Right click on the **Speakers** icon on the Taskbar, and select **Playback devices** from the sub menu.
- 2. Select Speakers, and tap Properties.
- 3. On the **Enhancements** tab select the sound effects you would like, and tap **Apply**.

Realtek HD Audio Manager

You can confirm and change the audio configuration using the **Realtek HD Audio Manager**. To launch the **Realtek HD Audio Manager**, tap **Start -> Control Panel**, select **Large icons** from **View by**, then tap **Realtek HD Audio Manager**.

When you first launch the Realtek HD Audio Manager, you will see two device tabs. **Speakers** is the default output device. **Microphone** is the default input device. To change the default device, tap the **Set Default Device** button under the chosen device tab.

Information

Tap the **Information** button **(i)** to view hardware information, software information, and language setting.

Power Management

The audio controller in your tablet can be turned off when the audio function is not used. To adjust the configuration of audio power management, tap the **Power Management** button \blacksquare .

- When audio power management is enabled, the circle button at the upper left of the Power Management is blue and convex.
- When audio power management is disabled, the button is black and concave.

Speaker Configuration

Tap the **Auto Test** button **>** to confirm the internal speakers or the headphone sound is coming from the right direction.

Default Format

You can change the sample rate and bit depth of sound.

Video mode

Video mode settings are configured via the Screen Resolution dialog.

To open the Screen Resolution dialog, tap Start -> Control Panel -> Appearance and Personalization -> Display -> Change display settings.



If you are running some applications (for example a 3D application or video playback and so on), you may see some disturbance, flickering or frame dropping on your screen.

If that occurs, adjust the resolution of display, lowering it until the screen is displayed properly.

Disabling Windows Aero[™] may also help correct this issue.

Computer Handling

This section explains computer handling and maintenance.

Cleaning the computer

To help ensure long, trouble-free operation, keep the computer free of dust and dirt, and use care with all liquids around it.

- Be careful not to spill liquids into the computer. If the computer does get wet, turn the power off immediately and let the computer dry completely - in these circumstance you should get the computer inspected by an authorized service provider in order to assess the scope of any damage.
- Clean the plastics of the computer using a slightly water dampened cloth.
- You can clean the display screen by spraying a small amount of glass cleaner onto a soft, clean cloth and then wiping the screen gently with the cloth.



Never spray cleaner directly onto the computer or let liquid run into any part of it. Never use harsh or caustic chemical products to clean the computer.

Moving the computer

While the computer is designed for flexible day-to-day usage you should exercise a few simple precautions when moving it in order to help ensure trouble-free operation.

- Make sure all disk/disc activity has ended before moving the computer.
- Turn off (shut down) the computer.
- Disconnect the AC adaptor and all peripherals before moving the computer.
- Before carrying your computer, shut it down, disconnect the AC adaptor and allow it to cool down - a failure to follow this instruction may result in minor heat injury.
- Be careful not to subject the computer to impact or shock a failure to follow this instruction could result in damage to computer, computer failure or loss of data.
- Never transport your computer with any cards installed this may cause damage to either the computer and/or the card resulting in product failure.
- Always use a suitable carry case when transporting the computer.
- When carrying your computer, be sure to hold it securely so that it does not fall or hit anything.
- Do not carry your computer by holding any of its protruding elements.

Heat dispersal

To protect against overheating, the processor is equipped with an internal temperature sensor which activates a cooling fan or lowers the processing speed if the computer's internal temperature rises to a certain level. You are able to select whether to control this temperature by either turning on the fan first, then if necessary lowering the processor speed, or by lowering the processor speed first, then if necessary turning on the fan. Both of these functions are controlled through the Power Options.

When the processor's temperature falls within normal range, the fan will be turned off and the processor operation returned to its standard speed.



If the processor's temperature reaches an unacceptably high level with either setting, the computer automatically shuts down to prevent any damage. In this instance all unsaved data in memory will be lost.

Chapter 4

Utilities & Advanced Usage

This chapter describes the utilities and special features of this computer, and the advanced usage of some utilities.

Utilities and Applications

This section describes the pre-installed utilities that come with the computer and details how to start them. For further information on their operation, you may refer to each utility's online manual, help files or README.TXT file (if applicable).

TOSHIBA Power Sav- erTOSHIBA Power Saver provides you with the features of more various power supply managements.TOSHIBA PC Diag-The TOSHIBA PC Diagnostic Tool will disp	
nostic Toolbasic system configuration information and the functionality of some of the computer's in hardware devices to be tested.	lallow
TOSHIBA Password The TOSHIBA Password utility allows you a password in order to restrict access to th computer.	
TOSHIBA Flash Cards The TOSHIBA Flash Cards provide functio similar to those of the Hot Keys on a stand computer.	
When this utility is launched, Flash Cards a displayed in a row at the top/bottom of the screen.	are
To access this utility, tap Start -> All Prog > TOSHIBA -> Tools & Utilities -> Flash	
HW SetupThis utility allows you to customize your hardware settings according to the way you with the computer and the peripherals you	
Bluetooth Stack for This software enables communication betw	veen
Windows by Toshiba the computer and external Bluetooth device such as printers and mobile phones.	es

TOSHIBA Assist is a graphical user interface that provides access to specific tools, utilities and applications that make the use and configuration of the computer easier. To access this utility, tap Start -> All Programs - > TOSHIBA -> Support & Recovery -> TOSHIBA Assist .
TOSHIBA ConfigFree is a suite of utilities that improve the ease and control of communication devices and network connections, help in the identification of communication problems and allow the creation of profiles if you need to switch between different locations and communication networks.
To access this utility, tap Start -> All Programs - > TOSHIBA -> Network & Connectivity -> ConfigFree.
This computer is equipped with "eco mode". This mode slightly lowers performance of some devices to reduce electric power consumption. You can realize measurable power savings by using it continuously. TOSHIBA eco Utility helps you monitor your power savings by showing approximate real time power consumption. Furthermore, it shows approximate accumulated power consumption and approximate accumulated power savings when using eco mode daily, weekly, and monthly. You can track power savings by using eco mode continuously. To access this utility, tap Start -> All Programs - > TOSHIBA -> Tools & Utilities -> eco Utility.
This utility includes wizard functions to monitor the Disk Drive operating status and execute the system backup.
To access the utility, tap Start -> All Programs - > TOSHIBA -> Support & Recovery -> HDD SSD Alert .

TOSHIBA Service Sta- tion	This application allows your computer to automatically search for TOSHIBA software updates or other alerts from TOSHIBA that are specific to your computer system and its programs. When enabled, this application periodically transmits to our servers a limited amount of system information, which will be treated in strict accordance with the rules and regulations as well as applicable data protection law.
	To access this utility, tap Start -> All Programs - > TOSHIBA -> Support & Recovery -> Service Station.
TOSHIBA Bulletin Board	Bulletin Board is a convenient place to pin things to visually organize in a fun and creative way.
	Simply drag and drop your favorite pictures, files or notes to pin them on the Board. You can use it to create thumbnail shortcuts, reminders, to-do list and so on according to your personal style.
	To access this utility, tap Start -> All Programs - > TOSHIBA -> Tools & Utilities -> Bulletin Board.
TOSHIBA ReelTime	This application is a graphical history/indexing tool that enables you to view recently accessed files in a fun and easy-to-use format. View and scroll through your history of opened or imported files via thumbnails in an intuitive user interface.
	To access this utility, tap Start -> All Programs - > TOSHIBA -> Tools & Utilities -> ReelTime.
TOSHIBA Wireless LAN Indicator	TOSHIBA Wireless LAN Indicator utility displays the system's Wireless LAN connection status on the logon screen.
	You can quickly check the current Wireless LAN connection status before logging into Windows.
	To change the settings of this utility, tap Start -> All Programs -> TOSHIBA -> Network & Connectivity -> Wireless LAN Indicator - Settings.

TOSHIBA Media Con- troller	This application allows you to control your music, pictures and videos by streaming content to any compatible device in your home.
	To access this utility, tap Start -> All Programs - > TOSHIBA -> Media & Entertainment -> TOSHIBA Media Controller.
	For more information, please refer to the TOSHIBA Media Controller Help.
TOSHIBA Audio En- hancement	TOSHIBA Audio Enhancement provides a highly realistic sound without digital saturation. It can be turned On/Off on the speakers properties.
	To change the settings, tap Start -> Control Panel -> Hardware and Sound -> Sound . Double tap the Speakers icon and then tap the Enhancements tab.
TOSHIBA Tablet Key- board	This utility provides a virtual keyboard for you to enter characters, numbers and symbols.
TOSHIBA Tablet Touch Pad	This utility provides a virtual touchpad with two control buttons.
TOSHIBA Tablet Pia- no	This utility provides a virtual piano for playing with fingers tapping.

You may not have all the software listed above depending on the model you purchased.

Special features

The following features are either unique to TOSHIBA computers or are advanced features which make the computer more convenient to use.

Access each function using the following procedures.

^{*1} To access the Power Options, tap **Start -> Control Panel -> System** and **Security -> Power Options**.

Display automatic power off ^{*1}	This feature automatically cuts off power to the computer's display panel when there is no keyboard input for a specified time, with power being restored the next time a key is pressed. This can be specified in the Power Options.
SSD automatic power off ^{*1}	This feature automatically cuts off power to the Solid State Drive when it is not accessed for a specified time, with power being restored when the Solid State Drive is next accessed. This can be specified in the Power Options.

System automatic Sleep/Hibernation Mode ^{*1}	This feature automatically shuts down the system into either Sleep Mode or Hibernation Mode when there is no input or hardware access for a specified time. This can be specified in the Power Options.
Power on password	Two levels of password security, supervisor and user, are available to prevent unauthorized access to your computer.
Intelligent power sup- ply ^{*1}	A microprocessor in the computer's intelligent power supply detects the battery's charge, automatically calculates the remaining battery capacity and protects electronic components from abnormal conditions such as a voltage overload from the AC adaptor. This can be specified in the Power Options.
Battery save mode *1	This feature lets you configure the computer in order to save battery power. This can be specified in the Power Options.
Low battery automat- ic Hibernation Mode ^{*1}	When battery power is exhausted to the point that computer operation cannot be continued, the system automatically enters Hibernation Mode and shuts itself down. This can be specified in the Power Options.
Heat dispersal ^{*1}	To protect against overheating, the processor has an internal temperature sensor so that, if the computer's internal temperature rises to a certain level, the cooling fan is turned on or the processing speed is lowered. This can be specified in the Power Options.
Hibernation Mode	This feature lets you turn off the power to the computer without exiting from your software. The contents of main memory are automatically saved to the Solid State Drive so that when you next turn the power on again, you can continue working right where you left off. Refer to the <i>Turning off the power</i> section in Chapter 1, Getting Started, for more details.
Sleep Mode	If you have to interrupt your work, you can use this feature to allow you to turn off power to the computer without exiting from your software. Data is maintained in the computer's main memory so that when you next turn on the power, you can continue working right where you left off.

USB Wakeup function	This function restores the computer from Sleep Mode depending on the external devices connected to the USB ports. For example, if a mouse or USB keyboard is connected to a USB port, clicking the mouse button or pressing the keyboard will wakeup the
	computer.
TOSHIBA PC Health Monitor	The TOSHIBA PC Health Monitor application proactively monitors a number of system functions such as power consumption, battery health and system cooling, informing you of significant system conditions. This application recognizes the system and individual component serial numbers and will track specific activities related to their usage.

Using TOSHIBA Tablet Feature

The toshiba tablet feature includes the following functions:

- TOSHIBA Tablet Keyboard
- TOSHIBA Tablet Touch Pad
- TOSHIBA Tablet Piano

TOSHIBA Tablet Keyboard

This computer is provided with a TOSHIBA Tablet Keyboard - a virtual keyboard enables users to enter characters, numbers, and symbols.

Launching Tablet Keyboard

- 1. Tap Start -> All Programs -> TOSHIBA -> Tools & Utilities -> Tablet Keyboard.
- 2. Tap where you desire to enter text on the Windows screen, and enter text by finger-tapping the keyboard directly.
- 3. Tap the cross icon on the upper right corner of the Tablet Keyboard when finished entering the text.



- Up to two keys can be tapped simultaneously.
- Tapping **Ctrl+Alt+Del** keys is not available on the Tablet Keyboard. To perform this action, press the **SAS** button instead.
- Ctrl, Alt and Shift keys are set to toggle mode respectively. Tap it once to set the function ON (as if the key is being held on a standard computer), and tap it again to release the function.
- Some key functions may not be performed on the Tablet Keyboard, e.g. some key combinations or shortcut keys.

Switching Keyboard Layouts

This Tablet Keyboard is provided with several layouts. You can tap the keyboard icon in the application bar on the Tablet Keyboard to toggle.

TOSHIBA Tablet Touch Pad

This computer is provided with a TOSHIBA Tablet Touch Pad - a virtual touch pad with two control buttons.

Launching Tablet Touch Pad

To launch Tablet Touch Pad, tap Start -> All Programs -> TOSHIBA -> Tools & Utilities -> Tablet Touch Pad.

TOSHIBA Tablet Piano

To launch Tablet Piano, tap **Start -> All Programs -> TOSHIBA -> Tools & Utilities -> Tablet Piano**. You can play the Tablet Piano with figers tapping.

Tap the musical instrument icons at the top of the Tablet Piano to change the tone of it.

TOSHIBA Tablet Piano provides several instrument tones as below:

- Piano
- Trumpet
- Electronic piano
- Saxophone

TOSHIBA Desk Band

TOSHIBA Desk Band presents other TOSHIBA utilities on it. You can access the applications and utilities by touching the icons on the TOSHIBA Desk Band.

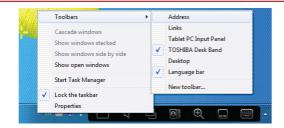
Starting the TOSHIBA Desk Band

The TOSHIBA Desk Band utility will automatically start along with Windows.

Enabling/Disabling the TOSHIBA Desk Band

You can enable or disable the TOSHIBA Desk Band in the following way:

Tap and hold the Taskbar and then choose the **Taskbar** option. Select the **TOSHIBA Desk Band** option to display the Desk Band and clear the option to hide the utility.



Applications





If the related utility is not installed, the icon will not be shown on the Desk Band bar.

Tap it to enable or disable the adaptive display.
Tap it to enable or disable the audio enhancement effect.
Tap it to launch TOSHIBA Web Camera.
If Web Camera application is already launched, tapping this icon will hide the Web Camera application.
Tap it to launch TOSHIBA Flash Cards.
Tap it to display or hide the app switcher.

If there are more than eight tasks, these tasks will be paged with eight tasks per page. You can drag the thumbnails to scroll to next page.

Zoom	Tap it to launch Zoom function.
Tablet Touch Pad	Tap it to launch TOSHIBA Tablet Touch Pad.
Tablet Keyboard	Tap it to launch TOSHIBA Tablet Keyboard.



For more details about TOSHIBA Tablet Touch Pad and TOSHIBA Tablet Keyboard, please refer toTOSHIBA Tablet Touch Pad and TOSHIBA Tablet Keyboard.

TOSHIBA Password Utility

The TOSHIBA Password Utility provides two levels of password security: User and Supervisor.



Passwords set by the TOSHIBA Password Utility function are different from the Windows password.

User Password

To start the utility, point to or tap the following items:

Start -> All Programs -> TOSHIBA -> Support & Recovery -> TOSHIBA Assist -> SECURE -> User password

Registered (button)

Tap to register a password of up to 10 characters. After a password is set, you will be prompted to enter it when you start the computer.

Not Registered (button)

Tap to delete a registered password. Before you can delete a password, you must first enter the current password correctly.

Owner String (text box)

You can use this box to associate text with the password. After you enter text, tap **Apply** or **OK**. When the computer is started, this text will be displayed together with the prompt asking you to enter a password.

Supervisor Password

If you set a Supervisor Password, some functions will be restricted when a user logs on with the User Password. To set a Supervisor Password:

Start -> All Programs -> TOSHIBA -> Support & Recovery -> TOSHIBA Assist -> SECURE -> Supervisor password

This utility lets you do the following:

- Register or delete the Supervisor Password.
- Specify restrictions for general users.

Starting the computer by password

Enter the password manually.

If you have already registered a password, there is one way to start the computer:



The password is necessary only if the computer was shut down in boot mode, not in Hibernation or Sleep mode.

To enter a password manually, follow the steps as detailed below:

1. Turn on the power as described in Chapter 1, *Getting Started*. The following message will appear in the screen:

Enter Password []

- 2. Enter the Password.
- 3. Press ENTER.



If you enter the password incorrectly three times in a row, the computer shuts off. In this case, you must turn the computer back on to retry password entry.

HW Setup

This section explains how to use the TOSHIBA HW Setup program to configure your computer, and provides information on settings for various functions.

Accessing HW Setup

To run the HW Setup program, tap Start -> All Programs -> TOSHIBA -> Tools & Utilities -> HWSetup.

HW Setup window

The HW Setup window contains a number of tabs (General, Password, Display, Boot Setting and USB) to allow specific functions of the computer to be configured.

In addition there are also three buttons : OK, Cancel and Apply.

ОК	Accepts your changes and closes the HW Setup window.
Cancel	Closes the window without accepting your changes.
Apply	Accepts all your changes without closing the HW Setup window.



Some options shown in grey are possible to confirm their status.

General

This window displays the BIOS/EC version and contains two buttons : **Default** and **About**.

Default	Return all HW Setup values to the factory settings.
About	Display the HW Setup version.

Setup

This field displays the installed **BIOS version**, date and **EC version**.

Password

This option allows you to set or reset the user password for power on.

User Password

Not Registered	Changes or remove the password. (Default)	
Registered	Selects the password. A dialogue box will appear to allow you to set the password.	

To enter a user password:

1. Select **Registered** to display the following prompt:

Enter Password:

Enter a password of up to 10 characters. The character string you enter is displayed as a string of asterisk.

2. Tap **OK**. The following message appears, allowing you to verify the password.

Verify Password:

3. If character strings match, the password is registered. Tap **OK**. If they do not match, the following message appears. You must repeat from step 1.

Entry Error!!!

To delete a user password:

1. Select Not Registered to display the following prompt:

Enter Password:

- 2. Enter the currently registered password. The character string you enter is displayed as a string of asterisks.
- 3. Tap **OK**. If the character string you enter matches the registered password, the password option is reset and the display changes to:

Not registered

If they do not match, the following message appears. You must repeat from step 1.

Incorrect Password.

Owner String

This blank field is used to display a message when the password field is displayed on startup. If a password is not registered the message will not be shown.

Display

This tab lets you customize your computer's display settings for either the internal display or an external monitor.

Power On Display

This tab allows you to select the display to be used when the computer is started. Please note that this setting is only available on standard VGA mode and is not available as part of the Windows Desktop properties.



The Power On Display is supported with some models.

Auto-Selected	Selects an external monitor if one is connected, otherwise, it selects the internal display. (Default)
System LCD Only	Selects the internal LCD, even if an external monitor is connected.

Boot Setting

This function allows you to modify the boot settings.

Boot Speed

This tab allows you to select boot-up speed.

Fast	Reduces system boot-up time. System can boot only from the built-in SSD and only internal LCD and keyboard are supported during the boot process.
Normal	System boots up at normal speed. (Default)

USB

Legacy USB Support

Use this option to enable or disable USB Legacy Emulation. If your operating system does not support USB, you can still use a USB mouse and keyboard by setting the Legacy USB Support item to enabled.

Enabled	Enables the USB Legacy Emulation. (Default)
Disabled	Disabled Disables the USB Legacy Emulation.

TOSHIBA PC Health Monitor

The TOSHIBA PC Health Monitor application proactively monitors a number of system functions such as power consumption, battery health and the system cooling, informing you of significant system conditions. This application recognizes the system and individual component serial numbers, and will track specific activities related to the computer and their usage.

The collected information includes device operation time and number of actuations or status changes (i.e.: number of power button, AC adaptor, battery, LCD, fan, SSD, sound volume, wireless communication functionalities, and USB information), date of initial system use, and also computer and device usage (i.e.: power settings, battery temperature and recharging, CPU, memory, backlight illumination time, and temperatures for various devices). The stored data uses a very small portion of the total hard disk capacity, approximately 10MB or less per year.

This information is used to identify and provide a notification of system conditions which may effect the performance of your TOSHIBA computer. It may also be used to help diagnose problems should the computer require service by TOSHIBA or TOSHIBA's authorized service providers. Additionally, TOSHIBA may also use this information for quality assurance analysis.

Subject to the use restrictions above, the SSD data logged may be transferred to entities located outside of your country or region of residence (e.g., European Union). Those countries may or may not have the same data protection laws or data protection levels as required by your home country or region.

Once enabled, you may disable the TOSHIBA PC Health Monitor at any time by uninstalling the software via **Uninstall a program** in the **Control Panel**. Doing so will automatically delete all collected information from the SSD.

The TOSHIBA PC Health Monitor software does not extend or modify TOSHIBA's obligations under its standard limited warranty in any way. TOSHIBA's standard limited warranty terms and limitations apply.

Starting the TOSHIBA PC Health Monitor

The TOSHIBA PC Health Monitor can be started using the following methods:

- Tap Start -> All Programs -> TOSHIBA -> Support & Recovery -> PC Health Monitor.
- Tap the icon () in the notification area, then tap the "Enable PC Health Monitor..." message the first time you run the application and "Run PC Health Monitor..." every time thereafter.

No matter which method is used, the TOSHIBA PC Health Monitor explanation screen will be displayed.

Tapping **Next** will display the "PC Health Monitor Software Notice & Acceptance" screen. Please carefully read the information displayed. Selecting **ACCEPT** and tapping **OK** will enable the program. By enabling the TOSHIBA PC Health Monitor software, you agree with these terms and conditions and to the use and sharing of the collected information. Once the program is enabled, the TOSHIBA PC Health Monitor screen is displayed, and the program will begin monitoring system functions and collecting information.

If a TOSHIBA PC Health Monitor message is displayed.

A message will be displayed if any changes which may interfere with the operation of the program are detected. Follow the instructions displayed on screen in the message.

System Recovery

This section describes the creation of Recovery Media and their use.

Creating Recovery Media

This section describes how to create Recovery Media.

- Be sure to connect the AC adaptor when you create Recovery Media.
- Be sure to close all other software programs except the Recovery Media Creator.
- Do not run software such as screen savers which can put a heavy load on the CPU.
- Operate the computer at full power.
- Do not use power-saving features.
- Do not write to the media when the virus check software is running. Wait for it to finish, then disable virus detection programs including any software that checks files automatically in the background.
- Do not use utilities, including those intended to enhance Solid State Drive access speed. They may cause unstable operation and damage data.
- Do not shut down/log off or Sleep/Hibernate while writing or rewriting the media.
- Set the computer on a level surface and avoid places subjected to vibrations such as airplanes, trains, or cars.
- Do not use on an unstable surface such as a stand.
- You can use disc media when you connected the external Optical Disc Drive.

A recovery image of the software on your computer is stored on the Solid State Drive, and can be copied to either disc media or USB Flash Memory by using the following steps:

 Select either blank disc or USB Flash Memory. The application will allow you to choose from a variety of different media onto which the recovery image can be copied including disc media and USB Flash Memory.



- Please note that some of the disc media may not be compatible with the optical disc drive connected to your computer. You should therefore verify the optical disc drive supports the blank media you have chosen before proceeding.
- USB Flash Memory will be formatted and all the data in the USB Flash Memory will be lost when proceeding.
- 2. Turn on your computer and allow it to load the Windows 7 operating system from the Solid State Drive as normal.
- 3. Insert the first blank disc into the external optical disc drive, or Insert the USB Flash Memory into one available USB port.
- 4. Double tap the **Recovery Media Creator** icon on the Windows 7 desktop, or select the application from **Start** Menu.
- 5. After Recovery Media Creator starts, select the type of media and the title you wish to copy, and then tap the **Create** button.

Restoring the pre-installed software from the Recovery Solid State Drive/created Recovery Media

A portion of the total Solid State Drive space is configured as a hidden recovery partition. This partition stores files which can be used to restore pre-installed software in the event of a problem.

If you subsequently set up your Solid State Drive again, do not change, delete or add partitions in a manner other than specified in the manual, otherwise you may find that space for the required software is not available.

In addition, if you use a third-party partitioning program to reconfigure the partitions on your Solid State Drive, you may find that it becomes impossible to setup your computer.

If the pre-installed files are damaged, you are able to either use the Recovery Media you have created or the Solid State Drive recovery process to restore the computer to the state it was in when you originally received it.



When the sound mute feature has been activated, be sure to disable this to allow sounds to be heard before starting the restore process.

You can not use System Recovery Options if restoring the pre-installed software without System Recovery Options.



When you reinstall the Windows operating system, the hard disk will be reformatted and all data will be lost.

To perform this restoration, follow the steps below:

- 1. Turn off your computer.
- Press and hold on the Volume up button and then slide the Power switch. When the Power indicator glows, release the power switch and Volume up button. The Boot menu screen will appear.



To restore from the Recovery Media, load the recovery disc into the external ODD or insert the recovery USB Flash Memory into the USB port before you turn on the computer.

- 1. Tap the appropriate option twice to select it according to your actual status to proceed.
- 2. Follow the on-screen instructions.



When drivers/utilities are installed, you can setup the respective drivers/ utilities from the following place. To open the setup files, tap Start -> AII Programs -> TOSHIBA -> Support & Recovery -> Applications and Drivers.

Chapter 5

Power and Power-Up Modes

The computer's power resources include the AC adaptor, battery pack and any internal batteries. This chapter provides details on making the most effective use of these resources, and includes information on charging batteries, tips for saving battery power, and information on the different power-up modes.

Power conditions

The computer's operating capability and battery charge status are affected by different power conditions, including whether an AC adaptor is connected and what the charge level is for that battery.

		Power on	Power off (no operation)
AC adaptor connected	Battery fully charged	 Operates No charge LED: Battery white Power white 	 No charge LED: Battery white Power off
	Battery partially charged or no charge	 Operates Charge LED: Battery amber Power white 	 Quick charge LED: Battery amber Power off

		Power on	Power off (no operation)
AC adaptor not connected	Remaining battery capacity is above low battery trigger point	 Operates LED: Battery off Power white 	
	Remaining battery capacity is below low battery trigger point	 Operates LED: Battery flashes amber Power white 	
	Remaining battery capacity is exhausted	Computer shuts down	

Monitoring of power condition

As shown in the below table, the **Battery** and **Power** indicators on the system indicator panel alert you to the computer's operating capability and battery charge status.

Battery indicator

Check the **Battery** indicator to determine the status of the battery pack. The following indicator lights indicate the battery status:

Flashing amber	The battery charge is low, the AC adaptor must be connected in order to recharge the battery.
Amber	Indicates the AC adaptor is connected and the battery is charging.
White	Indicates the AC adaptor is connected and the battery is fully charged.
No light	Under any other conditions, the indicator does not light.



If the battery pack becomes too hot while it is being charged, the charge will stop and the **Battery** indicator will go out. When the battery pack's temperature falls to a normal range, charging will resume - this process will occur regardless of whether the computer's power is on or off.

Power indicator

Check the **Power** indicator to determine the power status of the computer - the following indicator conditions should be noted:

White	Indicates power is being supplied to the computer and the computer is turned on.
Blinking white	Indicates that the computer is in Sleep Mode and that there is sufficient power available (AC adaptor or battery) to maintain this condition. In Sleep Mode, this indicator will turn on for one second and off for two seconds.
No light	Under any other conditions, the indicator does not light.

Battery

This section explains battery types, use, recharging methods and handling.

Battery types

The computer has different types of batteries.

Battery pack

When the AC adaptor is not connected, the computer's main power source is this lithium ion battery pack, also referred to in this manual as the main battery.

Real Time Clock (RTC) battery

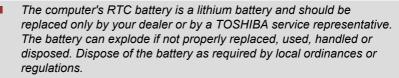
The Real Time Clock (RTC) battery provides power for the internal real time clock and calendar function and also maintains the system configuration while the computer is turned off. If the RTC battery becomes completely discharged, the system will lose this information and the real time clock and calendar will stop working.

You can change the Real Time Clock settings in the Date and Time screen of Windows. To access it, tap Start -> Control Panel -> Clock, Language and Region -> Date and Time.

Care and use of the battery pack

This section provides the important safety precautions in order to handle your battery pack properly.

Refer to the enclosed **Instruction Manual for Safety and Comfort** for detailed precautions and handling instructions.



Charge the battery pack only in an ambient temperature between 5 and 35 degrees Celsius. Otherwise, the electrolyte solution might leak, battery pack performance might deteriorate and the battery life might be shortened.

Charging the batteries

When the power in the battery pack becomes low, the **Battery** indicator will flash amber to indicate that only a few minutes of battery power remain. If you continue to use the computer while the **Battery** indicator flashes, the computer will enable Hibernation Mode so that you do not lose any data, and automatically turn itself off.

You must recharge a battery pack when it becomes discharged.

Procedures

To recharge a battery pack, connect the AC adaptor to the DC IN 19V jack and plug the other end into a working outlet - the **Battery** indicator will glow amber while the battery is being charged.

Charging Time

The following table shows the approximate time required to fully charge a discharged battery.

Charging Time (hours)		
Battery type	Power off	Power on
Battery pack (31Wh, 3cell)	about 4 hours	about 12 hours
RTC battery	Chargeable	Chargeable

Battery charging notice

The battery may not begin charging immediately under the following conditions:

The battery is extremely hot or cold (if the battery is extremely hot, it might not charge at all). To ensure the battery charges to its full capacity, you should charge it at room temperature of between 5°C to 35°C (41°F to 95°F). The battery is nearly completely discharged. In this instance you should leave the AC adaptor connected for a few minutes and the battery should begin charging.

The **Battery** indicator may show a rapid decrease in battery operating time when you try to charge a battery under the following conditions:

- The battery has not been used for a long time.
- The battery has completely discharged and been left in the computer for a long time.

In such cases you should follow the steps as detailed below:

- 1. Fully discharge the battery by leaving it in the computer with the power on until the system automatically turns itself off.
- 2. Connect the AC adaptor to the DC IN 19V jack of the computer, and to a wall outlet that is supplying power.
- 3. Charge the battery until the **Battery** indicator glows white.

Repeat these steps two or three times until the battery recovers normal capacity.

Monitoring battery capacity

Remaining battery power can be monitored using the following methods.

- Tapping the battery icon on the Taskbar
- Via the Battery Status in the Windows Mobility Center window
- You should wait at least 16 seconds after turning on the computer before trying to monitor the remaining operating time. This is because the computer needs this time to check the battery's remaining capacity and then calculate the remaining operating time, based on this together with the current power consumption.
- Please be aware that the actual remaining operating time may differ slightly from the calculated time.
- With repeated discharges and recharges, the battery's capacity will gradually decrease. In view of this it will be noted that an often used, older battery will not operate for as long as a new battery even when both are fully charged.

Maximizing battery operating time

A battery's usefulness depends on how long it can supply power on a single charge, while how long the charge lasts in a battery depends on:

- Processor speed
- Screen brightness
- System Sleep Mode
- System Hibernation Mode
- Display power off period
- Solid State Drive power off period

- How often and for how long you use the Solid State Drive and external disk(c) drives, for example, optical disc and floppy diskette drive.
- How much charge the battery contained to begin with.
- How you use optional devices, such as a USB device, to which the battery supplies power.
- Whether you enable Sleep Mode, which can conserve battery power if you are frequently turning the computer off and on.
- Where you store your programs and data.
- The environmental temperature operating time decreases at low temperatures.

Batteries exhausted time

When you turn off the power of your computer with batteries fully charged, the batteries will be exhausted within the following approximate period.

Retention Time		
Battery type	Sleep mode	Shut down mode
Battery pack (31Wh, 3cell)	about 4 days	about 220 days
RTC battery	about 500 days	about 700 days

Extending battery life

To maximize the life of your battery packs:

- At least once a month, disconnect the computer from a power source and operate it on battery power until the battery pack fully discharges. Before doing so, follow the steps as detailed below.
 - 1. Turn off the computer's power.

2. Disconnect the AC adaptor and turn on the computer's power - if it does not turn on then go to Step 4.

3. Operate the computer on battery power for five minutes. If you find that the battery pack has at least five minutes of operating time, continue operating until the battery pack is fully discharged, however, if the **Battery** indicator flashes or there is some other warning to indicate a low battery condition, go to Step 4.

4. Connect the AC adaptor to the DC IN 19V jack of the computer, and to a wall outlet that is supplying power. The **Power** indicator should glow white, and the **Battery** indicator should glow amber to indicate that the battery pack is being charged, however, in the event that **Power** indicator does not glow this indicates that power is not being supplied - check the connections for the AC adaptor and the power cord.

5. Charge the battery pack until the **Battery** indicator glows white.

Power-up modes

The computer has three different power-up modes as follows:

- Shut Down Mode: The computer will shut down without saving data in view of this you must always save your work before you turn the computer off.
- Hibernation Mode: Data in memory will be saved to the Solid State Drive.
- Sleep Mode: Data will be maintained in the computer's memory.



Please refer to the sections Turning on the power and Turning off the power in Chapter 1, Getting Started for further information.

Windows utilities

You can configure various settings associated with both Sleep Mode and Hibernation Mode within the Power Options (to access it, tap **Start -> Control Panel -> System and Security -> Power Options**).

System automatic Sleep/Hibernation

This feature automatically turns off the system in Sleep or Hibernation Mode if the computer is not used for a set duration. Refer to *Special features*, in Chapter 4 for an explanation of how to set the duration.

Chapter 6

Troubleshooting

TOSHIBA have designed this computer for durability, however, should problems occur you are able to use the procedures detailed in this chapter to help determine the cause.

All users should become familiar with this chapter as knowing what might go wrong can help prevent problems from occurring in the first place.

Problem solving process

Resolving problems will be much easier if you observe the following guidelines:

- Stop immediately when you recognize a problem exists as taking further action may result in data loss or damage, or you may destroy valuable problem related information that can help solve the problem.
- Observe what is happening write down what the system is doing and what actions you performed immediately before the problem occurred. Make a screenshot of the current display.

Please also be aware that the questions and procedures described in this chapter are meant only as a guide, they are not definitive problem solving techniques. In reality many problems can be solved simply, but a few may require help from TOSHIBA Support - if you find you need to consult others, be prepared to describe the problem in as much detail as possible.

Preliminary checklist

You should always consider the simplest solution first - the items detailed in this checklist are easy to fix and yet can cause what appears to be a serious problem:

- Make sure you turn on all peripheral devices before you turn on the tablet - this includes your printer and any other external device you are using.
- Before you attach an external device you should first turn the tablet off, then when you turn the tablet back on again it will recognize the new device.
- Make sure all optional accessories are configured properly in the tablet's setup program and that all required driver software has been loaded (please refer to the documentation included with the optional accessories for further information on its installation and configuration).

- Check all cables to ensure they are correctly and firmly attached to the tablet loose cables can cause signal errors.
- Inspect all connecting cables for loose wires and all connectors for loose pins.

Always try to make detailed notes of your observations and keep them in a permanent error log - this will help you to describe your problems to TOSHIBA Support. In addition, if a problem recurs, the log you have made will help to identify the problem faster.

Analyzing the problem

Sometimes the computer will give you clues that can help you identify why it is malfunctioning. In view of this you should keep the following questions in mind:

- Which part of the computer is not operating properly Solid State Drive, display panel - as each device will produce different symptoms.
- Check the options within the operating system to ensure that its configuration is set properly.
- What appears on the display? Does it display any messages or random characters? Make a screenshot of the current display and, if possible, look up the messages in the documentation included with the computer, software or operating system.
- Check that all connecting cables are correctly and firmly attached as loose cables can cause erroneous or intermittent signals.
- Do any indicators light, if so, which ones, what color are they and do they stay on or blink? Write down what you see.
- Do you hear any beeps, if so how many, are they long or short and are they high pitched or low pitched? In addition, is the computer making any unusual noises? Write down what you hear.

Record your observations so you can describe them in detail to TOSHIBA Support.

Software	The problems may be caused by your software or disk. If you cannot load a software package, the media may be damaged or the program might be corrupted - in these instances try loading another copy of the software if possible.
	If an error message appears while you are using a software package you should refer to the documentation supplied with it as this will usually include a problem solving section or a summary of error messages.
	Next, you should check any error messages against the operating system documentation.

Hardware

If you cannot find a software problem, you should then check the setup and configuration of your hardware. First run through the items in the preliminary checklist as described previously then, if you still cannot correct the problem, try to identify the source - the next section provides checklists for individual components and peripherals.



Before using a peripheral device or application software that is not an authorized TOSHIBA part or product, make sure the device or software can be used with your computer. Use of incompatible devices may cause injury or may damage your computer.

If something goes wrong

Your program stops responding

If you are working with a program that suddenly freezes all operations, chances are the program has stopped responding. You can exit the failed program without shutting down the operating system or closing other programs.

To close a program that has stopped responding:

- 1. Press **SAS** button, then tap **Start Task Manager**. The Windows[®] Task Manager window appears.
- 2. Tap the **Applications** tab. If a program has stopped responding, the words "not responding" appear beside its name in the list.
- 3. Select the program you want to close, then tap **End Task**. Closing the failed program should allow you to continue working. If it does not, continue with the next step.
- 4. Close the remaining programs one by one by selecting the program name, then **End Task**. Closing all programs should allow you to continue working. If it does not, power off your computer and then restart it.

The computer will not start

Make sure you attached the AC adaptor and power cord/cable properly.

If you are using the AC adaptor, check that the wall outlet is working by plugging in another device, such as a lamp.

Verify that the computer is on by looking at the power indicator.

If the indicator is glowing, the computer is on. Also, try turning the computer off and then on.

If you are using an AC adaptor, verify that the computer is receiving power from the external power source by looking at the power indicator. If the indicator is glowing, the computer is connected to a live external power source.

Hardware and system checklist

This section discusses problems caused by your computer's hardware or attached peripherals. Basic problems may occur in the following areas:

- Power
- Internal display panel
- Solid State Drive
- Memory Media Card
- USB device

- Sound system
- External monitor
- Wireless LAN
- Bluetooth

Power

When the computer is not plugged into an AC power outlet, the battery pack is the primary power source. However, your computer also has a number of other power resources, including an intelligent power supply and a Real Time Clock (RTC) battery, all of which are interrelated with any one having the ability to produce apparent power problems.

Overheating power down

If the processor's temperature reaches an unacceptably high level with either setting, the computer will automatically shuts down to prevent any damage - in this instance all unsaved data in memory will be lost.

Problem	Procedure
Computer shuts down automatically.	Leave the computer off computer reaches room temperature. If the computer has reached room temperature and it still does not start, or if it starts but shuts down quickly, contact TOSHIBA Support.

AC power

If you have trouble turning on the computer with the AC adaptor connected you should check the status of the **Power/Battery** indicator. Please refer to Chapter 5, *Power and Power-Up Modes* for further information.

Problem	Procedure
AC adaptor doesn't power the computer (Power indicator does not glow white)	Check the connections to make sure that the power cord/adaptor is firmly connected to the computer and a working power outlet.
	Check the condition of the cord and terminals. If the cord is frayed or damaged it should be replaced, while if the terminals are soiled, they should be cleaned with a clean cotton cloth.
	If the AC adaptor still does not power the computer, you should contact TOSHIBA Support.

Battery

If you suspect a problem with the battery, you should check the status of the **Power** indicator as well as the **Battery** indicator.

Problem	Procedure
Battery doesn't power the computer	The battery may be discharged - connect the AC adaptor to recharge the battery.
Battery doesn't charge when the AC adaptor is attached (Battery indicator does not glow amber).	If the battery is completely discharged, it will not begin charging immediately, in these instances you should wait a few minutes before trying again. If the battery still does not charge, you should check that the power outlet the AC adaptor is connected to its supplying power - this can be tested by plugging another appliance into it. Check whether the battery is hot or cold to the touch - if so, it will not charge properly and should
	be allowed to reach room temperature before you try again.
Battery doesn't power the computer as long as expected	If you frequently recharge a partially charged battery, the battery might not charge to its full potential - in these instances you should fully discharge the battery and then attempt to charge it again.
	Check the Power saver option under Select a power plan in the Power Options .

Real Time Clock

Problem	Procedure
The BIOS setting and system date/ time are lost.	The charge in the Real Time Clock (RTC) battery has run out - you will need to set the date and time in the BIOS setup application by using the following steps:
	 Turn off the computer. Press and hold on the Volume down button and then slide the Power switch. When the TOSHIBA Leading Innovation >>> logo screen appears - the BIOS setup application will load.
	3. Set the date in the System Date field.
	4. Set the time in the System Time field.
	E Follow the on person instructions

5. Follow the on-screen instructions.

Internal display panel

Apparent computer's display panel problems may be related to the computer's setup and configuration - please refer to the HW Setup section in Chapter 4, Utilities & Advanced Usage, for further information.

Problem	Procedure
Markings appear on the computer's display panel.	These marks may have come from contact with the touch screen. You should try to remove the marks by gently wiping the display panel with a clean dry cloth or, if this fails, with a good quality LCD screen cleaner. In this latter instance you should always follow the instructions with the screen cleaner and always ensure you let the display panel dry properly before closing it.

Solid State Drive

Problem	Procedure
	Check the Boot Priority setting within the TOSHIBA HW Setup utility - please refer to the <i>Boot Setting</i> section in Chapter 4, Utilities & Advanced Usage for further information.

Problem	Procedure
Slow performance	The files on the Solid State Drive may be fragmented - in this instance you should run the disk Defragmentation utility to check the condition of your files and the Solid State Drive. Please refer to the operating system's documentation or online Help File for further information on operating and using the Defragmentation utility.
	As a last resort you should reformat the Solid State Drive and then reload the operating system and all other files and data. If you are still unable to resolve the problem, contact TOSHIBA Support.

Memory Media Card

For further information, please refer to Chapter 3, Operating Basics.

Problem	Procedure
Memory media card error occurs	Remove the memory media card from the computer and then reinsert it in order to ensure it is firmly connected.
	If the problem persists, then you should refer to the documentation supplied with your memory media card for further information.
You cannot write to a memory media card	Remove the memory media card from the computer and check to ensure that it is not write protected.
You cannot read a file	Check to ensure the required file is actually on the memory media card that is inserted into the computer.
	If you are still unable to resolve the problem, contact TOSHIBA Support.

USB device

In addition to the information in this section, please also refer to the documentation supplied with your USB device.

Problem	Procedure
USB device does not work	Remove the USB device from the computer and then reconnect it to a free port in order to ensure it is firmly attached.
	Ensure that any required USB device drivers are properly installed - to achieve this you should refer to both the device documentation and the operating system documentation.

Sound system

In addition to the information in this section, please also refer to the documentation supplied with your audio device.

Problem	Procedure
No sound is heard	Adjust the volume.
	To increase the volume press the volume up button, and to decrease it press the volume down button.
	Check the software volume settings.
	Please check to see if Mute is turned to Off.
	Check to make sure the headphone connection is secure.
	Check within the Windows Device Manager application to ensure the sound device is enabled and that the device is properly working.
Annoying sound is heard	In this instance you may be experiencing feedback from either the internal microphone or an external microphone connected to the computer - please refer to <i>Sound System</i> in Chapter 3, Operating Basics for further information.
	Volume cannot be adjusted during Windows start up or shut down.
	If you are still unable to resolve the problem, contact TOSHIBA Support.

External monitor

In addition to the information in this section, please also refer to the documentation supplied with your monitor.

Problem	Procedure
Monitor does not turn on	After confirming that the monitor's power switch is on, you should check the connections to make sure that the power cord/adaptor is firmly connected to the monitor and to a working power outlet.
No display	Try adjusting the contrast and brightness controls on the external monitor.
Display error occurs	Check that the cable connecting the external monitor to the computer is firmly attached.
	If you are still unable to resolve the problem, contact TOSHIBA Support.

Wireless LAN

If the following procedures do not restore LAN access, consult your LAN administrator. For more information on wireless communication, refer to Chapter 3, *Operating Basics*.

Problem	Procedure
Cannot access Wireless LAN	Make sure the computer's Wireless communication function is on.
	If problems persist, contact your LAN administrator.

Bluetooth

For further information on Bluetooth wireless communication, please refer to Chapter 3, *Operating Basics*.

Problem	Procedure
Cannot access Bluetooth device	Check to ensure the tablet's Bluetooth functionality is set to on in Start -> All Programs -> TOSHIBA -> Network & Connectivity -> Bluetooth.

TOSHIBA support

If you require any additional help using your computer or if you are having problems operating the computer, you may need to contact TOSHIBA for additional technical assistance.

Before you call

Some problems you experience may be related to software or the operating system so it is important that you investigate other sources of assistance first. Before contacting TOSHIBA, try the following:

- Review troubleshooting sections in the documentation supplied with your software and/or peripheral devices.
- If a problem occurs when you are running software applications, consult the software documentation for troubleshooting suggestions and consider calling the software company's technical support department for assistance.
- Consult the reseller or dealer from where you purchased your computer and/or software - they are your best resource for current information and support.

TOSHIBA technical support

If you are still unable to solve the problem and suspect that it is hardware related, visit TOSHIBA technical support website <u>http://www.toshiba.co.jp/worldwide/</u>.



Specifications

This appendix summarizes the computer's technical specifications.

Physical Dimensions

Size	270 (w) x 175.5 (d) x 14.0 (h) millimeters
	(not including parts that extend beyond the main body).

Environmental Requirements

Conditions	Ambient temperature	Relative humidity
Operating	5°C (41°F) to 35°C (95°F)	20% to 80% (noncondensing)
Non-operating	-20°C (-4°F) to 60°C (140°F)	10% to 90% (noncondensing)
Wet-bulb temperature	29°C maximum	
Conditions	Altitude (from sea level)	
Operating	-60 to 3,000 meters	
Non-operating	-60 to 10,000 meters maximum	

Power Requirements

AC adaptor	100-240V AC	
	50 or 60 Hz (cycles per second)	
Computer	19V DC	



AC Power Cord and Connectors

The power cord's AC input plug must be compatible with the various international AC power outlets and the cord must meet the standards for the country/region in which it is used. All cords must meet the following specifications:

Wire size:	Minimum 0.75 mm ²	
Current rating:	Minimum 2.5 amperes	

Certification agencies

China:	CQC		
U.S. and Canada:	UL listed and CSA certified No. 18 AWG, Type SVT or SPT-2		
Australia:	AS		
Japan:	DENANHO	DENANHO	
Europe:			
Austria:	OVE	Italy:	IMQ
Belgium:	CEBEC	The Netherlands:	KEMA
Denmark:	DEMKO	Norway:	NEMKO
Finland:	FIMKO	Sweden:	SEMKO
France:	LCIE	Switzerland:	SEV
Germany:	VDE	United Kingdom:	BSI

In Europe, two conductors power cord must be VDE type, H05VVH2-F or H03VVH2-F and for three conductors power cord must be VDE type, H05VV-F.

For the United States and Canada, two pin plug configuration must be a 2-15P (250V) or 1-15P (125V) and three pin plug configuration must be

6-15P (250V) or 5-15P (125V) as designated in the U.S. National Electrical code handbook and the Canadian Electrical Code Part II.

The following illustrations show the plug shapes for the U.S.A. and Canada, the United Kingdom, Australia, Europe and China.





CSA approved

United Kingdom



BS approved

Europe



Approved by the appropriate agency

China



CCC approved

Appendix C

Legal Footnotes

This chapter states the Legal Footnotes information applicable to TOSHIBA computers.

Non-applicable Icons

Certain computer chassis are designed to accommodate all possible configurations for an entire product series. Therefore, please be aware that your selected model may not have all the features and specifications corresponding to all of the icons or switches shown on the computer chassis.

CPU

Central Processing Unit ("CPU") Performance Legal Footnotes.

CPU performance in your computer product may vary from specifications under the following conditions:

- use of certain external peripheral products
- use of battery power instead of AC power
- use of certain multimedia, computer generated graphics or video applications
- use of standard telephone lines or low speed network connections
- use of complex modeling software, such as high end computer aided design applications
- use of several applications or functionalities simultaneously
- use of computer in areas with low air pressure (high altitude >1,000 meters or >3,280 feet above sea level)
- use of computer at temperatures outside the range of 5°C to 30°C (41°F to 86°F) or >25°C (77°F) at high altitude (all temperature references are approximate and may vary depending on the specific computer model please refer to your computer documentation or visit the TOSHIBA website at www.pcsupport.toshiba.com for details).

CPU performance may also vary from specifications due to design configuration.

Under some conditions, your computer product may automatically shutdown. This is a normal protective feature designed to reduce the risk of lost data or damage to the product when used outside recommended conditions. To avoid risk of lost data, always make back-up copies of data by periodically storing it on an external storage medium. For optimum performance, use your computer product only under recommended conditions. Read additional restrictions in your product documentation. Contact TOSHIBA technical service and support, refer to *TOSHIBA support* section in Chapter 6, Troubleshooting for more information.

Memory (Main System)

Part of the main system memory may be used by the graphics system for graphics performance and therefore reduce the amount of main system memory available for other computing activities. The amount of main system memory allocated to support graphics may vary depending on the graphics system, applications utilized, system memory size and other factors.

Battery Life

Battery life may vary considerably depending on product model, configuration, applications, power management settings and features utilized, as well as the natural performance variations produced by the design of individual components. Published battery life numbers are achieved on select models and configurations tested by TOSHIBA at the time of publication. Recharge time varies depending on usage. Battery may not charge while computer is consuming full power.

After going through many charge and discharge cycles, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is a normal phenomenon for all batteries.

Solid State Drive (SSD) Capacity

1 Gigabyte (GB) means $10^9 = 1,000,000,000$ bytes using powers of 10. The computer operating system, however, reports storage capacity using powers of 2 for the definition of 1 GB = $2^{30} = 1,073,741,824$ bytes, and therefore shows less storage capacity. Available storage capacity will also be less if the product includes one or more pre-installed operating systems, such as Microsoft Operating System and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

LCD

Over a period of time, and depending on the usage of the computer, the brightness of the LCD screen will deteriorate. This is an intrinsic characteristic of LCD technology.

Maximum brightness is only available when operating in AC power mode. Screen will dim when the computer is operated on battery power and you may not be able to increase the brightness of the screen.

Graphics Processing Unit ("GPU")

Graphics processing unit ("GPU") performance may vary depending on product model, design configuration, applications, power management

settings and features utilized. GPU performance is only optimized when operating in AC power mode and may decrease considerably when operating in battery power mode.

Total Available Graphics Memory is the total of, as applicable, Dedicated Video Memory, System Video Memory and Shared System Memory. Shared System Memory will vary depending on system memory size and other factors.

Wireless LAN

The transmission speed over the wireless LAN and the distance over which wireless LAN can reach may vary depending on surrounding electromagnetic environment, obstacles, access point design and configuration, and client design and software/hardware configurations.

The actual transmission speed will be lower than the theoretical maximum speed.

Copy Protection

Applicable copy protection standards included in certain media may prevent or limit recording or viewing of the media.

Appendix D

Information for Wireless Devices

Wireless LAN Interoperability

The Wireless LAN is compatible with other LAN systems Direct Sequence Spread Spectrum (DSSS) /Orthogonal Frequency Division Multiplexing (OFDM) radio technology, and is compliant to:

- The IEEE 802.11 Standard on Wireless LANs (Revision a/b/g/n or b/g/ n), as defined and approved by the Institute of Electrical and Electronics Engineers.
- The Wireless Fidelity (Wi-Fi[®]) certification as defined by the Wi-Fi Alliance[®].

The Wi-Fi CERTIFIED[™] logo is a certification mark of the Wi-Fi Alliance[®].

Bluetooth wireless technology Interoperability

Bluetooth[™] Cards from TOSHIBA are designed to be interoperable with any product with Bluetooth wireless technology that is based on Frequency Hopping Spread Spectrum (FHSS) radio technology, and is compliant to:

- Bluetooth Specification Ver. 3.0+HS or Ver. 3.0 (depending on the model you purchased), as defined and approved by the Bluetooth Special Interest Group.
- Logo certification with Bluetooth wireless technology as defined by the Bluetooth Special interest Group.

CAUTION about Wireless Devices



The wireless devices have not completed verification of connection and operation with all devices which are using the Wireless LAN or Bluetooth radio technology.

Bluetooth and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use Bluetooth and Wireless LAN devices simultaneously, you may occasionally experience a less than optimal network performance or even lose your network connection.

If you should experience any such problem, immediately turn off either one of your Bluetooth or Wireless LAN.

Please visit http://www.pc.support.global.toshiba.com, if you have any questions about using Wireless LAN or Bluetooth Card from TOSHIBA.

In Europe visit http://www.toshiba-europe.com/computers/tnt/bluetooth.htm Your Bluetooth product is not compatible with devices using Bluetooth Version 1.0B specifications

Wireless Devices and your health

Wireless products, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by Wireless products however is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Because Wireless products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless products is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of Wireless products may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- Using the Wireless products equipment on board of airplanes, or
- In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization or environment (e.g. airports), you are encouraged to ask for authorization to use the Wireless device prior to turning on the equipment.

Radio Regulatory Information

The Wireless device is must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. This product complies with the following radio frequency and safety standards.

Europe

Restrictions for Use of 2400.0-2483.5MHz Frequencies in Europe

France:	band	allow current relaxed regulation Full
	2454-2483.5MHz	implementation planned 2012.

ltaly:	-	For private use, a general authorization is required if WAS/ RLAN's are used outside own premises. For public use, a general authorization is required.
Luxembourg:	Implemented	General authorization required for network and service supply.
Norway:	Implemented	This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Alesund.
Russian Federation:	-	Only for indoor applications.

Restrictions for Use of 5150-5350MHz Frequencies in Europe

Italy:	-	For private use, a general authorization is required if WAS/ RLAN's are used outside own premises.
Luxembourg:	Implemented	General authorization required for network and service supply.
Russian Federation:	Limited	e.i.r.p 100mW. Permitted to use only for indoor applications, closed industrial and warehouse areas, and on board aircraft.
		 Permitted to use for local networks of aircraft crew service communications on board aircraft in area of the airport and at all stages of flight. Permitted to use for public wireless access local networks on board aircraft during a flight at the altitude not less than 3000m.

at the altitude not less than

3000m.

Italy:	-	For private use, a general
		authorization is required if WAS/ RLAN's are used outside own premises.
Luxembourg:	Implemented	General authorization required for network and service supply
Russian Federation:	Limited	e.i.r.p 100mW. Permitted to use only for indoor applications, closed industrial and warehouse areas, and on board aircraft.
		 Permitted to use for local networks of aircraft crew service communications on board aircraft in area of the airport and at all stages of flight.
		 Permitted to use for public wireless access local networks on board aircraft during a flight

Restrictions for Use of 5470-5725MHz Frequencies in Europe

To remain in conformance with European spectrum usage laws for Wireless LAN operation, the above 2.4GHz and 5GHz channel limitations apply for outdoor usage. The user should use the wireless LAN utility to check the current channel of operation. If operation is occurring outside of the allowable frequencies for outdoor use, as listed above, the user must contact the applicable national spectrum regulator to request a license for outdoor operation.

Canada - Industry Canada (IC)

This device complies with RSS 210 of Industry Canada. 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 this device.

The term "IC" before the equipment certification number only signifies that the Industry Canada technical specifications were met.

USA-Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are

designed to provide reasonable protection against harmful interference in a residential installation.

Refer to the FCC information section for the detailed information.

Caution: Exposure to Radio Frequency Radiation

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

In the usual operating configuration, the distance between the antenna and the user should not be less than 20cm. Please refer to the computer user's manual for the details regarding antenna location.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website www.hc-sc.gc.ca

Caution: Radio Frequency Interference Requirements

This device is restricted to indoor use due to its operation in the 5.15 to 5.25GHz frequency range.

Taiwan

Article 12	Without permission granted by the NCC, any company, enterprise, or user is not allowed to change frequency, enhance transmitting power or alter original characteristic as well as performance to an approved low power radio frequency devices.
Article 14	The low power radio-frequency devices shall not influence aircraft security and interfere legal communications;
	If found, the user shall cease operating immediately until no interference is achieved.
	The said legal communications means radio communications is operated in compliance with the Telecommunications Act.
	The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices.

Using this equipment in Japan

In Japan, the frequency bandwidth of 2,400MHz to 2,483.5MHz for second generation low-power data communication systems such as this equipment overlaps that of mobile object identification systems (premises radio station and specified low-power radio station).

1. Important notice

The frequency bandwidth of this equipment may operate within the same range as industrial devices, scientific devices, medical devices, microwave ovens, licensed radio stations and non-licensed specified low-power radio stations for mobile object identification systems (RFID) used in factory production lines (Other Radio Stations).

- 1. Before using this equipment, ensure that it does not interfere with any of the equipment listed above.
- 2. If this equipment causes RF interference to other radio stations, promptly change the frequency being used, change the location of use, or turn off the source of emissions.
- Contact an authorized TOSHIBA service provider if you have problems with interference caused by this product to Other Radio Stations.

2. Indication for Wireless LAN

The indication shown below appears on this equipment.



- 1. 2.4 : This equipment uses a frequency of 2.4GHz.
- 2. DS : This equipment uses DS-SS modulation.
- 3. OF : This equipment uses OFDM modulation.
- 4. 4 : The interference range of this equipment is less than 40m.
- This equipment uses a frequency bandwidth from 2,400MHz to 2,483.5MHz. It is possible to avoid the band of mobile object identification systems.

3. Indication for Bluetooth

The indication shown below appears on this equipment.



- 1. 2.4 : This equipment uses a frequency of 2.4 GHz.
- 2. FH : This equipment uses FH-SS modulation.
- 3. 1 : The interference range of this equipment is less than 10 m.

4. This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz. It is impossible to avoid the band of mobile object identification systems.

4. About the JEITA

5GHz Wireless LAN supports W52/W53/W56 Channel.

IEEE802.11b/g/n					
IEEE802.11a/n					
25ل	W52	W53	W56		

Device Authorization

This device obtains the Technical Regulation Conformity Certification and it belongs to the device class of radio equipment of low-power data communication system radio station stipulated in the Telecommunications Business Law of Japan.

Atheros AR5B225 802.11b/g/n Wireless LAN and Bluetooth

The Name of the radio equipment: AR5B225

DSP Research, Inc.

Approval Number: D110317003

Atheros AR5B22 802.11a/b/g/n Wireless LAN and Bluetooth

The Name of the radio equipment: AR5B22

DSP Research, Inc.

Approval Number: D111398003

The following restrictions apply:

- Do not disassemble or modify the device.
- Do not install the embedded wireless module into other device.

Radio approvals for wireless devices

Approved Countries/Regions for Atheros AR5B225 802.11b/g/n Wireless LAN and Bluetooth

This equipment is approved to the radio standard by the countries/regions in the following table.



Do not use this equipment in the countries/regions which are not listed in the table below.



Available channel of Peer-to-peer connection by ad-hoc mode is Ch1-Ch11. Connection with an access point by the Infrastructure mode is Ch1-Ch13.

Argentina	Australia	Belgium	Bolivia
Brazil	Cambodia	Canada	Chile
China	Colombia	Costa Rica	Croatia
Czech Republic	Denmark	Ecuador	Egypt
Finland	France	Germany	Greece
Honduras	Hungary	Iceland	India
Indonesia	Ireland	Israel	Italy
Jamaica	Japan	Jordan	Kenya
Kuwait	Latvia	Lebanon	Liechtenstein
Lithuania	Luxembourg	Malta	Mexico
Monaco	Morocco	Nepal	Netherlands
New Zealand	Norway	Oman	Pakistan
Papua New Guinea	Paraguay	Peru	Philippines
Poland	Portugal	Qatar	Russia
Saudi Arabia	Serbia	Slovak Republic	Slovenia
South Africa	South Korea	Spain	Sweden
Switzerland	Taiwan	Thailand	Turkey
Ukraine	UAE	UK	USA
Uruguay	Venezuela	Vietnam	

As of Nov. 2011

Approved Countries/Regions for Atheros AR5B22 802.11a/b/g/n Wireless LAN and Bluetooth

This equipment is approved to the radio standard by the countries/regions in the following table.



Do not use this equipment in the countries/regions which are not listed in the table below.



Available channel of Peer-to-peer connection by ad-hoc mode is Ch1-Ch11.

Connection with an access point by the Infrastructure mode is Ch1-Ch13.

As of Nov. 2011

Argentina	Australia	Austria	Azerbaijan
Bahrain	Belgium	Bolivia	Bosnia and Herzegovin a
Brazil	Cambodia	Canada	Chile
China	Costa Rica	Croatia	Cyprus
Czech Rep	Denmark	Ecuador	Egypt
Estonia	Finland	France	Germany
Greece	Honduras	Hungary	Iceland
India	Indonesia	Ireland	Israel
Italy	Jamaica	Japan	Jordan
Kenya	Kuwait	Latvia	Lebanon
Liechtenstein	Lithuania	Luxembourg	Malaysia
Malta	Mexico	Morocco	Nepal
Netherlands	New Zealand	Norway	Oman
Pakistan	Papau New Guniea	Paraguay	Peru
Philipines	Poland	Portugal	Qatar
Romania	Russia	Saudi Arabia	Serbia
Singapore	Slovakia	Slovenia	South Africa
South Korea	Spain	Sweden	Switzerland
Taiwan	Thailand	UK	UAE
Ukraine	USA	Uruguay	Venezuela
Vietnam			

Index

A

AC adaptor additional 3-12 connecting 1-2 DC IN 19V jack 2-5

Ε

Equipment checklist 1-1

External monitor problems 6-9

В

Battery extending life 5-6 monitoring capacity 5-5 real time clock 2-7, 5-3 save mode 4-5 types 5-3

Battery indicator

Bluetooth Bluetooth Stack for Windows by Toshiba 4-1 problems 6-9

Boot Priority 4-12

С

Cleaning the computer 3-14

Cooling vents 2-4

D

Display automatic power off 4-4 screen 2-3

Display controller 2-8

Documentation list 1-1

G

Graphics controller 2-8

Н

Hard disk drive automatic power off 4-4

HDMI out port 2-5

Heat dispersal 3-15, 4-5

Hibernation Mode 1-7, 4-5

HW Setup accessing 4-10 Boot 4-12 display 4-12 general 4-10 USB 4-12 window 4-10

K

Keyboard 3-2

Μ

Media care Card care 3-8 Memory card care 3-8 memory media card inserting 3-9 removing 3-9

Memory media slot 3-6

Moving the computer 3-15

MultiMediaCard removing 3-9

Ρ

Password power on 4-5 Starting the computer by password 4-9 Supervisor 4-9 user 4-9

Pointing Device Touch Pad 3-1

Power conditions 5-1

Hibernation Mode 1-7 Shut Down mode (Boot Mode) 1-5 Sleep Mode 1-6 System Auto Off 5-7 turning off 1-5 turning on 1-4

Problems AC power 6-4 Analyzing the problem 6-2 Battery 6-5 Bluetooth 6-9 Hardware and system checklist 6-4 Internal display panel 6-6 Memory Media Card 6-7 Overheating power down 6-4 Power 6-4 Real Time Clock 6-6 Sound system 6-8 SSD 6-6, 6-7 TOSHIBA support 6-9 USB device 6-7 Wireless LAN 6-9

R

Recovery hard disk drive 4-15

Restarting the computer 1-8

S

SD/SDHC/SDXC Card formatting 3-8 note 3-7

Security lock 3-12

Sleep Mode setting 1-6 System automatic 4-5

Solid State Drive 2-7

Sound system problems 6-8

Т

TOSHIBA Assist 4-2

TOSHIBA ConfigFree 4-2

TOSHIBA HDD/SSD Alert Utility 4-2

TOSHIBA PC Diagnostic Tool 4-1

U

USB device problems 6-7

V

Video mode 3-14

Video RAM 2-8

W

Web Camera 2-3

Wireless communication 3-2

Wireless LAN problems 6-9

Glossary

The terms in this glossary cover topics related to this manual. Alternate naming is included for reference.

Abbreviations

AC: Alternating current

ANSI: American National Standards Institute

AMT: Intel Active Management Technology

ASCII: American Standard Code for Information Interchange

BIOS: basic input/output system

bps: bits per second

CD: compact disc

CD-ROM: Compact Disc Read-Only Memory

CD-RW: Compact Disc-ReWritable

CMOS: complementary metal-oxide semiconductor

CPU: central processing unit

CRT: cathode ray tube

DC: direct current

DDR: double data rate

DIMM: dual inline memory module

DVD: digital versatile disc

DVD-R: Digital Versatile Disc-Recordable

DVD-RAM: Digital Versatile Disc-Random Access Memory

DVD-R DL: Digital Versatile Disc Recordable Dual Layer

DVD-ROM: Digital Versatile Disc-Read Only Memory

DVD-RW: Digital Versatile Disc-ReWritable

DVD+R DL: Digital Versatile Disc Recordable Double Layer

FDD: floppy diskette drive

FIR: fast infrared

GB: gigabyte

HDD: Hard Disk Drive

HDMI: High-Definition Multimedia Interface

IDE: integrated drive electronics

IEEE: Institute of Electrical and Electronics Engineers

I/O: input/output

IRQ: interrupt request

KB: kilobyte

LAN: local area network

LCD: liquid crystal display

LED: light emitting diode

MB: megabyte

MMC: multi media card

OCR: optical character recognition (reader)

PC: personal computer

PCI: peripheral component interconnect

RAM: random access memory

RGB: red, green, and blue

ROM: read only memory

RTC: real time clock

S/P DIF: Sony/Philips Digital Interface Format

SD: Secure Digital

SDHC: Secure Digital High Capacity

SDRAM: synchronous dynamic random access memory

SLI: Scalable Link Interface

SSD: Solid state drive

TFT: thin-film transistor

USB: Universal Serial Bus

UXGA: ultra extended graphics array

VGA: video graphics array

WAN: wide area network

WSXGA: wide super extended graphics array

WSXGA+: wide super extended graphics array plus

WUXGA: Wide Ultra Extended Graphics Array

WXGA: wide extended graphics array

WXGA+: wide extended graphics array plus

XGA: extended graphics array

Free Manuals Download Website <u>http://myh66.com</u> <u>http://usermanuals.us</u> <u>http://www.somanuals.com</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.cc</u> <u>http://www.4manuals.com</u> <u>http://www.404manual.com</u> <u>http://www.luxmanual.com</u> <u>http://aubethermostatmanual.com</u> Golf course search by state

http://golfingnear.com Email search by domain

http://emailbydomain.com Auto manuals search

http://auto.somanuals.com TV manuals search

http://tv.somanuals.com