TOSHIBA

Portégé® R100 Series User's Guide

If you need assistance:

- Toshiba Global Support Centre
  Calling within the United States (800) 457-7777
  Calling from outside the United States (949) 859-4273

For more information, see "If Something Goes Wrong" on page 173 in this guide.

WARNING Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. ***Wash hands after handling.***

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Models: Portégé R100 Series

ReWritable CD/DVD Drives

The computer system you purchased may include a ReWritable CD and/or DVD drive(s), among the most advanced data storage technologies available. As with any new technology, you must read and follow all set-up and usage instructions in the applicable user guides and/or manuals enclosed. If you fail to do so, this product may not function properly and you may lose data or suffer other damage. **TOSHIBA AMERICA INFORMATION SYSTEMS ("TOSHIBA"), ITS AFFILIATES AND SUPPLIERS DO NOT WARRANT THAT OPERATION OF THE PRODUCT WILL BE UNINTERRUPTED OR ERROR FREE. YOU AGREE THAT TOSHIBA, ITS AFFILIATES AND SUPPLIERS SHALL HAVE NO RESPONSIBILITY FOR DAMAGE TO OR LOSS OF ANY BUSINESS, PROFITS, PROGRAMS, DATA OR REMOVABLE STORAGE MEDIA ARISING OUT OF OR RESULTING FROM THE USE OF THE PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.**

Protection of Stored Data

For your important data, please make periodic back-up copies of all the data stored on the hard disk or other storage devices as a precaution against possible failures, alteration, or loss of the data. **IF YOUR DATA IS ALTERED OR LOST DUE TO ANY TROUBLE, FAILURE OR MALFUNCTION OF THE HARD DISK DRIVE OR OTHER STORAGE DEVICES AND THE DATA CANNOT BE RECOVERED, TOSHIBA SHALL NOT BE LIABLE FOR ANY DAMAGE OR LOSS OF DATA, OR ANY OTHER DAMAGE RESULTING THEREFROM. WHEN COPYING OR TRANSFERRING YOUR DATA, PLEASE BE SURE TO CONFIRM WHETHER THE DATA HAS BEEN SUCCESSFULLY COPIED OR TRANSFERRED. TOSHIBA DISCLAIMS ANY LIABILITY FOR THE FAILURE TO COPY OR TRANSFER THE DATA CORRECTLY.**

Critical Applications

The computer you have purchased is not designed for any "critical applications." "Critical applications" means life support systems, medical applications, connections to implanted medical devices, commercial transportation, nuclear facilities or systems or any other applications where product failure could lead to injury to persons or loss of life or catastrophic property damage. **ACCORDINGLY, TOSHIBA, ITS AFFILIATES AND SUPPLIERS DISCLAIM ANY AND ALL LIABILITY ARISING OUT OF THE USE OF THE COMPUTER PRODUCTS IN ANY CRITICAL APPLICATIONS. IF YOU USE THE COMPUTER PRODUCTS IN A**

CRITICAL APPLICATION, YOU, AND NOT TOSHIBA, ASSUME FULL RESPONSIBILITY FOR SUCH USE.

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, it 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 to 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.

NOTE Only Peripherals complying with the FCC Class B limits may be attached to this equipment. Operation with noncompliant 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 parallel port, monitor port, USB port, PS/2 port®, i.LINK® 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

Contact:

Toshiba America Information Systems, Inc.

9740 Irvine Blvd.

Irvine, CA 92618-1697

(949) 583-3000

Industry Canada requirement

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

Cet appareil numérique de la classe B est conformé à la norme NMB-003 du Canada.

FCC requirements

The following information is pursuant to FCC CFR 47, Part 68 and refers to internal modems.

This equipment complies with Part 68 of the FCC rules. On the bottom of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, the information must be provided to the telephone company.

The modem connects to the telephone line by means of a standard jack called the USOC RJ11C.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC part 68 rules and requirements adopted by the ACTA. It is designed to be connected to a compatible modular jack that is also compliant.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by the ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

Telephone Company Procedures

The goal of the telephone company is to provide you with the best service it can. In order to do this, it may occasionally be necessary for them to make changes in their equipment, operations or procedures. If these changes might affect your service or the operation of your equipment, the telephone company will give you notice, in writing, to allow you to make any changes necessary to maintain uninterrupted service.

If Problems Arise

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advanced notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

If trouble is experienced with this equipment, for repair or limited warranty information, please contact Toshiba Corporation, Toshiba America Information Systems, Inc. or an authorized representative of Toshiba, or the Toshiba Support Centre within the United States at (800) 457-7777 or Outside the United States at (949) 859-4273. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

Disconnection

If you should ever decide to permanently disconnect your modem from its present line, please call the telephone company and let them know of this change.

Fax Branding

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including Fax machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.)

In order to program this information into your fax transmission, refer to the fax software instructions installed on this computer.

Alarm Equipment

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

Instructions for IC CS-03 Certified Equipment

1. NOTICE: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

   Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

   Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

   Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

   Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

2. The user manual of analog equipment must contain the equipment's Ringer Equivalence Number (REN) and an explanation notice similar to the following:

   The Ringer Equivalence Number (REN) of this device can be found on the label affixed to your computer.

NOTICE: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

3 The standard connecting arrangement (telephone jack type) for this equipment is jack type(s): USOC RJ11C.

Wireless Interoperability

The TOSHIBA Wireless LAN Mini PCI Card products are designed to be interoperable with any wireless LAN product that is based on Direct Sequence Spread Spectrum (DSSS) radio technology, and is compliant to:

- The IEEE 802.11 Standard on Wireless LANs (Revision A/B/G), 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.

CAUTION 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 your Bluetooth™ or Wireless LAN device.

Please contact Toshiba PC product support on Web site http://www.toshiba-europe.com/computers/tnt/bluetooth.htm in Europe or http://www.pcsupport.global.toshiba.com in the United States for more information.

CAUTION This device is restricted to indoor use due to its operation in the 5.15 GHz to 5.85 GHz frequency range.

Wireless LAN and your Health

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

Because Wireless LAN products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless LAN 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 LAN may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- Using the Wireless LAN 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 LAN device prior to turning on the equipment.

Regulatory Information

The TOSHIBA Wireless LAN Mini PCI Card 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 device complies with the following radio frequency and safety standards.

Canada – Industry Canada (IC)

This device complies with RSS 210 of Industry Canada.

CAUTION 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 Web site www.hc-sc.gc.ca/rpb. The RF device shall not be co-located with any other transmitter that has not been tested with this device.

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.

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit étre prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

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

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Pour empecher que cet appareil cause du brouillage au service faisant l'objet d'une licence, il doit etre utilize a l'interieur et devrait etre place loin des fenetres afin de Fournier un ecram de blindage maximal. Si le matriel (ou son antenne d'emission) est installe a l'exterieur, il doit faire l'objet d'une licence.

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

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

Europe – EU Declaration of Conformity CE !

- This device complies with the essential requirements of the R&TTE Directive 1999/5/EC with essential test suites as per standards:

EN 60950 Safety of Information Technology equipment

ETS 300 328 Technical requirements for radio equipment

ETS 300 826 General EMC requirements for radio equipment.

English:	Hereby, TOSHIBA Corp. Digital Media Network Company, declares that this Radio LAN device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Finnish:	Valmistaja TOSHIBA Corp. Digital Media Network Company vakuuttaa täten että Radio LAN device tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Dutch:	Hierbij verklaart TOSHIBA Corp. Digital Media Network Company dat het toestel Radio LAN device in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
	Bij deze TOSHIBA Corp. Digital Media Network Company dat deze Radio LAN device voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.
French:	Par la présente TOSHIBA Corp. Digital Media Network Company déclare que l'appareil Radio LAN device est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
	Par la présente, TOSHIBA Corp. Digital Media Network Company déclare que ce Radio LAN device est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables.
Swedish:	Härmed intygar TOSHIBA Corp. Digital Media Network Company att denna Radio LAN device står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Danish:	Undertegnede TOSHIBA Corp. Digital Media Network Company erklærer herved, at følgende udstyr Radio LAN device overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF
German:	Hiermit erklärt TOSHIBA Corp. Digital Media Network Company, dass sich dieser/diese/dieses Radio LAN device in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMWi)
	Hiermit erklärt TOSHIBA Corp. Digital Media Network Company die Übereinstimmung des Gerätes Radio LAN device mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)
Greek:	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ TOSHIBA Corp. Digital Media Network Company ΔΗΛΩΝΕΙ ΟΤΙ Radio LAN device ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ
Italian:	Con la presente TOSHIBA Corp. Digital Media Network Company dichiara che questo Radio LAN device è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Spanish:	Por medio de la presente TOSHIBA Corp. Digital Media Network Company declara que el Radio LAN device cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Portuguese:	TOSHIBA Corp. Digital Media Network Company declara que este Radio LAN device está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

USA – Federal Communications Commission (FCC)

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

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

TOSHIBA is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this TOSHIBA Wireless LAN Mini PCI Card, or the substitution or attachment of connecting cables and equipment other than specified by TOSHIBA.

The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

Caution: Exposure to Radio Frequency Radiation

The radiated output power of the TOSHIBA Wireless LAN Mini PCI Card is far below the FCC radio frequency exposure limits. Nevertheless, the TOSHIBA Wireless LAN Mini PCI Card shall be used in such a manner that the potential for human contact during normal operation is minimized. In normal operating configuration, the LCD in the upright position, the distance between the antenna and the user should not be less than 20 cm. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Antenna(s) used in 5.15 GHz to 5.25 GHz frequency band must be integral antenna which provide no access to the end user.

Refer to the Regulatory Statements as identified in the documentation that comes with those products for additional information.

Caution: Radio Frequency Interference Requirements

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

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

NOTE The above Caution information applies to products that operate with an 802.11a device.

Taiwan

Article 14	Unless approved, for any model accredited low power radio frequency electric machinery, any company, trader or user shall not change the frequency, increase the power or change the features and functions of the original design.
Article 17	Any use of low power radio frequency electric machinery shall not affect the aviation safety and interfere with legal communications. In event that any interference is found, the use of such electric machinery shall be stopped immediately, and reusing of such products can be resumed until no interference occurs after improvement.

The legal communications mentioned in the above item refer to radio communications operated in accordance with telecommunication laws and regulations.

Low power radio frequency electric machinery shall resist against interference from legal communications or from industrial, scientific and medical radio emission electric machinery.

Using this Equipment in Japan

In Japan, the frequency bandwidth of 2,400 MHz to 2,483.5 MHz 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. Sticker

Please put the following sticker on devices incorporating this product.

In the frequency bandwidth of this equipment, industrial device, scientific device, medical device like microwave oven, licensed premises radio station and non-licensed specified low-power radio station for mobile object identification system (RF-ID) that is used in product line of factories,(Other Radio Stations) are used.

1 Please make sure before using this equipment that no Other Radio Stations are used in the neighborhood.

2 In case that RF interference occurs to Other Radio Stations from this equipment, please change promptly the frequency for use, place to use, or stop emitting Radio.

3 Please contact TOSHIBA Direct PC if you have a problem, such as interference from this equipment to Other Radio Stations

2. Indication

The indication shown below appears on this equipment.

1 2.4: This equipment uses a frequency of 2.4 GHz.

2 DS: This equipment uses DS-SS modulation.

OF: This equipment uses OFDM modulation.

3 The interference range of this equipment is less than 40m.

4 ■■■ This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz.

It is possible to avoid the band of mobile object identification systems.

3. TOSHIBA Direct PC

Monday – Friday: 10:00 – 17:00

Toll Free Tel: 0120-13-1100

Direct Dial: 03-3457-5916

Fax: 03-5444-9450

Device Authorization

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

The Name of the radio equipment: refer to the equipment label provided on the computer

JAPAN APPROVALS INSTITUTE FOR TELECOMMUNICATIONS EQUIPMENT

Approval Number: D01-1128JP

TELECOM ENGINEERING CENTER Approval Number: 03NY.A0018, 03GZDA0017

The following restrictions apply:

- Do not disassemble or modify the device.
- Do not install the embedded wireless module into other device.
- 5.17 GHz to 5.23 GHz for indoor use only

Radio approvals for wireless devices

NOTE The following information is dependent on what type of wireless device is in your computer.

Approved Countries/Regions for use for the Atheros AR5BMB-43/44 Mini PCI Wireless network adapter

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

CAUTION Do not use this equipment except in the countries/regions in the following table.

NOTE This device works on passive scan only.

A peer-to-peer mode is not available in 802.11a and Turbo Mode.

802.11b (2.4 GHz)

Australia	Austria	Belgium
Canada	Denmark	Finland
France	Germany	Greece
Ireland	Italy	Liechtenstein
Luxembourg	Netherlands	New Zealand
Norway	Portugal	Sweden
Switzerland	UK	USA

Europe - Restrictions for use of 2.4 GHz Frequencies in European Community Countries

België/ Belgique:	For private usage outside buildings across public grounds over less than 300m no special registration with IBPT/BIPT is required. Registration to IBPT/BIPT is required for private usage outside buildings across public grounds over more than 300m. For registration and license please contact IBPT/BIPT.
	Voor privé-gebruik buiten gebouw over publieke groud over afstand kleiner dan 300m geen registratie bij BIPT/IBPT nodig; voor gebruik over afstand groter dan 300m is wel registratie bij BIPT/IBPT nodig. Voor registratie of licentie kunt u contact opnemen met BIPT.
	Dans le cas d'une utilisation privée, à l'extérieur d'un bâtiment, au-dessus d'un espace public, aucun enregistrement n'est nécessaire pour une distance de moins de 300m. Pour une distance supérieure à 300m un enregistrement auprès de I'IBPT est requise. Pour les enregistrements et licences, veuillez contacter I'IBPT.
Deutschland:	License required for outdoor installations. Check with reseller for procedure to follow.
	Anmeldung im Outdoor-Bereich notwendig, aber nicht genehmigungspflichtig.Bitte mit Händler die Vorgehensweise abstimmen.
France:	Restricted frequency band: only channels 1 to 7 (2400 MHz and 2454 MHz respectively) may be used outdoors in France. Please contact A.R.T. (http://www.art-telecom.fr) for applicable procedures to follow.
	Bande de fréquence restreinte: seuls les canaux 1- 7 (2400 et 2454 MHz respectivement) doivent être utilisés endroits extérieur en France. Vous pouvez contacter I'Autorité de Régulation des Télécommuniations (http://www.art-telecom.fr) pour la procédure à suivre.
Italia:	License required for indoor use. Use with outdoor installations not allowed.
	E'necessaria la concessione ministeriale anche per l'uso interno. Verificare con i rivenditori la procedura da seguire.
Nederland:	License required for outdoor installations. Check with reseller for procedure to follow.
	Licentie verplicht voor gebruik met buitenantennes. Neem contact op met verkoper voor juiste procedure.

802.11a (5 GHz)

Australia	Austria	Belgium
Canada	Denmark	Finland
France	Germany	Greece
Ireland	Italy	Liechtenstein
Luxembourg	Netherlands	New Zealand
Norway	Portugal	Sweden
Switzerland	UK	USA

Turbo Mode (5 GHz)

Canada	USA	

Europe - Restrictions for use of 5 GHz Frequencies in European Community Countries

European Community Countries	5150-5250 MHz Channels: 36, 40, 44, 48 Indoor Only	5250-5350 MHz Channels: 52, 56, 60, 64 Indoor Only	5470-5725 MHz Channels: 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140 Indoor/Outdoor
Austria	O	x	x
Belgium, France, Switzerland/Lichtenstein	O	O	x
Denmark, Finland, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Sweden, UK	O	O	O
Iceland, Spain	O	O	O

O: allowed ×: forbidden

- To remain in conformance with European spectrum usage laws for Wireless LAN operation, the above 2.4 GHz and 5 GHz channel limitations apply. The user should use the wireless LAN utility to check the current channel of operation. If operation is occurring outside of the allowable frequencies as listed above, the user must cease operating the Wireless LAN at that location and consult he local technical support staff responsible for the wireless network.
- The 5 GHz Turbo mode feature is not allowed for operation in any European Community country.

- This device must not be operated in ad-hoc mode using channels in the 5 GHz bands in the European Community. Ad-hoc mode provides a direct communication between two client devices without a Wireless LAN Access Point.
- This device must be used with Access Points that have employed and activated a radar detection feature required for European Community operation in the 5 GHz bands. This device will operate under the control of the Access Point in order to avoid operating on a channel occupied by any radar system in the area. The presence of nearby radar operation may result in temporary interruption of operation of this device. The Access Point's radar detection feature will automatically restart operation on a channel free of radar. You may consult with the local technical support staff responsible for the wireless network to ensure the Access Point device(s) are properly configured for European Community operation.

Approved Countries/Regions for use for the Atheros AR5001X Mini PCI Wireless network adapter

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

CAUTION Do not use this equipment except in the countries/regions in the following table.

NOTE This device works on passive scan only.

A peer-to-peer mode is not available in 802.11a and Turbo Mode.

802.11b (2.4 GHz)

Australia	Austria	Belgium
Canada	Denmark	Finland
France	Germany	Greece
Ireland	Italy	Liechtenstein
Luxembourg	Netherlands	New Zealand
Norway	Portugal	Sweden
Switzerland	UK	USA

802.11a (5 GHz)

Australia	Austria	Belgium
Canada	Denmark	Finland
France	Germany	Greece
Ireland	Italy	Liechtenstein
Luxembourg	Netherlands	New Zealand
Norway	Portugal	Sweden
Switzerland	UK	USA

Turbo Mode (5 GHz)

Canada	USA	

Approved Countries/Regions for use for the Intel® PRO/ Wireless LAN 2100 3B Mini PCI Adapter

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

CAUTION Do not use this equipment except in the countries/regions in the following table.

Argentina	Australia	Austria
Belgium	Brazil	Canada
Chile	Denmark	Finland
France	Germany	Greece
Iceland	Ireland	Italy
Japan	Liechtenstein	Luxembourg
Mexico	Netherlands	New Zealand
Norway	Peru	Portugal
Singapore	Spain	Sweden
Switzerland	UK	Uruguay
USA	Venezuela	

Approved Countries/Regions for use for the Toshiba Mini PCI Wireless LAN Card

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

CAUTION Do not use this equipment except in the countries/regions in the following table.

Australia	Austria	Belgium
Canada	Denmark	Finland
France	Germany	Greece
Hong Kong	Iceland	Ireland
Italy	Japan	Liechtenstein
Luxembourg	Malaysia	Netherlands
New Zealand	Norway	Philippines
Portugal	Singapore	Spain
Sweden	Switzerland	Thailand
UK	USA	

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 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 Bluetooth wireless technology is a new innovative technology, and TOSHIBA has not confirmed compatibility of its Bluetooth™ products with all PCs and/or equipment using Bluetooth wireless technology other than TOSHIBA portable computers.

Always use Bluetooth™ cards from TOSHIBA in order to enable wireless networks over two or more (up to a total of seven) TOSHIBA portable computers using these cards. Please contact TOSHIBA PC product support on Web site http://www.toshiba-europe.com/computers/tnt/bluetooth.htm in Europe or http://www.pcsupport.global.toshiba.com in the United States for more information.

When you use Bluetooth™ cards from TOSHIBA close to 2.4 GHz Wireless LAN devices, Bluetooth transmissions might slow down or cause errors. If you detect certain interference while you use Bluetooth™ cards from TOSHIBA, always change the frequency, move your PC to the area outside of the interference range of 2.4 GHz Wireless LAN devices (40 meters/43.74 yards or more) or stop transmitting from your PC. Please contact TOSHIBA PC product support on Web site http://www.toshiba-europe.com/computers/tnt/bluetooth.htm in Europe or http://www.pcsupport.global.toshiba.com in the United States for more information.

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 contact Toshiba PC product support on Web site http://www.toshiba-europe.com/computers/tnt/bluetooth.htm in Europe or http://www.pcsupport.global.toshiba.com in the United States for more information.

Bluetooth wireless technology and your Health

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

Because products with Bluetooth wireless technology operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Bluetooth wireless technology 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 Bluetooth wireless technology may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- Using the equipment with Bluetooth wireless technology 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 device with Bluetooth wireless technology prior to turning on the equipment.

Regulatory statements

This product complies with any mandatory product specification in any country/region where the product is sold. In addition, the product complies with the following:

European Union (EU) and EFTA

This equipment complies with the R&TTE directive 1999/5/EC and has been provided with the CE mark accordingly.

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."

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit étre prét à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

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

Caution: FCC Interference Statement

This device complies with part15 of the FCC rules. Operation is subject to the following two conditions:

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

Note that any changes or modifications to this equipment not expressly approved by the manufacturer may void the authorization to operate this equipment.

Caution: Exposure to Radio Frequency Radiation

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

In order to comply with FCC radio-frequency radiation exposure guidelines for an uncontrolled environment, the Bluetooth™ Card from TOSHIBA has to be operated while maintaining a minimum body to antenna which are located on top of LCD distance of 20 cm.

Refer to the Regulatory Statements as identified in the documentation that comes with those products for additional information.

The Bluetooth™ Card from TOSHIBA is far below the FCC radio frequency exposure limits.

Nevertheless, it is advised to use the Bluetooth™ Card from TOSHIBA in such a manner that human contact during normal operation is minimized.

NOTE 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.

Taiwan

Article 14	Unless approved, for any model accredited low power radio frequency electric machinery, any company, trader or user shall not change the frequency, increase the power or change the features and functions of the original design.
Article 17	Any use of low power radio frequency electric machinery shall not affect the aviation safety and interfere with legal communications. In event that any interference is found, the use of such electric machinery shall be stopped immediately, and reusing of such products can be resumed until no interference occurs after improvement.

The legal communications mentioned in the above item refer to radio communications operated in accordance with telecommunication laws and regulations.

Low power radio frequency electric machinery shall resist against interference from legal communications or from industrial, scientific and medical radio emission electric machinery.

Using this equipment in Japan

In Japan, the frequency bandwidth of 2,400 MHz to 2,483.5 MHz 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. Sticker

Please put the following sticker on devices incorporating this product.

In the frequency bandwidth of this equipment, industrial device, scientific device, medical device like microwave oven, licensed premises radio station and non-licensed specified low-power radio station for mobile object identification system (RF-ID) that is used in product line of factories,(Other Radio Stations) are used.

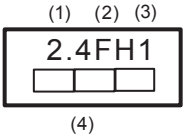
1 Please make sure before using this equipment that no Other Radio Stations are used in the neighborhood.

2 In case that RF interference occurs to Other Radio Stations from this equipment, please change promptly the frequency for use, place to use, or stop emitting Radio.

3 Please contact TOSHIBA Direct PC if you have a problem, such as interference from this equipment to Other Radio Stations

2. Indication

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 The interference range of this equipment is less than 10m.

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.

3. TOSHIBA Direct PC

Monday – Friday: 10:00 – 17:00

Toll Free Tel: 0120-13-1100

Direct Dial: 03-3457-5916

Fax: 03-5444-9450

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 Radio Law of Japan.

The Name of the radio equipment: EYXF2CS

TELECOM ENGINEERING CENTER

Approval Number: 01NYDA1305

The following restrictions apply:

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

DVD-ROM, multi-function drive safety instructions

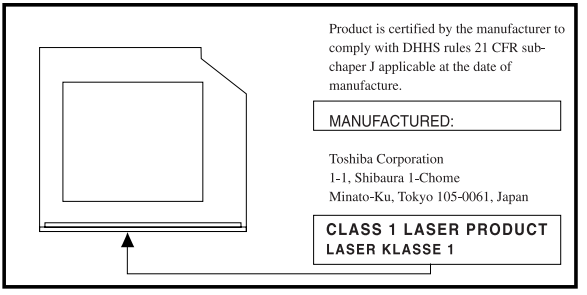
The DVD-ROM and multi-function drives employ a laser system. To ensure proper use of this product, please read this instruction manual carefully and retain for future reference. Should the unit ever require maintenance, contact an authorized service location.

Use of controls, adjustments or the performance of procedures other than those specified may result in hazardous radiation exposure.

To prevent direct exposure to the laser beam, do not try to open the enclosure.

Location of the required label

(Sample shown below. Location of the label and manufacturing information may vary.)



⚠CAUTION This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCT." To use this model properly, read the user's guide carefully and keep it for your future reference. In case of any trouble with this model, please contact your nearest "AUTHORIZED service station." To prevent direct exposure to the laser beam, do not try to open the enclosure.

CLASS 1 LASER PRODUCT
LASSER KLASSE 1

Use of controls or adjustments or performance of procedures other than those specified in the owner's manual may result in hazardous radiation exposure.

Copyright

Export Administration Regulation

This document contains technical data that may be controlled under the U.S. Export Administration Regulations, and may be subject to the approval of the U.S. Department of Commerce prior to export. Any export, directly or indirectly, in contravention of the U.S. Export Administration Regulations is prohibited.

Notice

The information contained in this manual, including but not limited to any product specifications, is subject to change without notice.

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ConfigFree is a trademark of Toshiba Corporation.

Wi-Fi is a registered trademark of the Wireless Capability Ethernet Alliance.

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TouchPad is a trademark of Synaptics, Inc.

All other brand and product names are trademarks or registered trademarks of their respective companies.

Computer disposal information

This product contains mercury. Disposal of this material may be regulated due to environmental considerations. For disposal, reuse or recycling information, please contact your local government or the Electronic Industries Alliance at www.eiae.org.

Contents

Introduction

Welcome to the world of powerful and portable multimedia computers! With your new Toshiba notebook computer, your access to information can accompany you wherever you go.

You will find that the Microsoft® Windows® XP Professional operating system is already installed on your computer. It offers exciting features and easy Internet access.

NOTE The product specifications and configuration information are designed for a product Series. Your particular model may not have all the features and specifications listed or illustrated. For more detailed information about the features and specifications on your particular model, please visit Toshiba's Web site at pcsupport.toshiba.com.

While Toshiba has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice. For the most up-to-date product information about your computer, or to stay current with the various computer software or hardware options, visit Toshiba's Web site at pcsupport.toshiba.com.

This guide

This guide introduces the computer's features. You can:

- Read the entire guide from beginning to end.
- Skim through and stop when a topic interests you.
- Use the table of contents and the index to find specific information.

If you are new to computers, or have not used a notebook computer before, read through the first couple of chapters to familiarize yourself with the components of the computer and how to turn it on. After that, seek out whatever interests you most.

Safety icons

This manual contains safety instructions that must be observed in order to avoid potential hazards that could result in personal injuries, damage to your equipment, or loss of data. These safety cautions have been classified according to the seriousness of the risk, and the icons highlight these instructions as follows:

⚠ DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in property damage.
NOTE	Provides important information.

Other icons used

Additional icons highlight other helpful or educational information:

TECHNICAL NOTE: This icon highlights technical information about the computer.

HINT: This icon denotes helpful hints and tips.

DEFINITION: This icon indicates the definition of a term used in the text.

Other documentation

Your computer comes with the following documentation in addition to this user's guide.

- An electronic version of the user's guide.
- Guides for other programs that may come preinstalled on your computer or that are available for installation on your Recovery media (if applicable to your system).
- For accessory information, visit Toshiba's Web site at accessories.toshiba.com.
- The Microsoft® Windows® operating system documentation which explains the features of the operating system.

Service options

Toshiba offers a full line of optional service programs to complement its limited warranty. To stay current on the most recent software and hardware options for your computer, and for other product information, be sure to regularly check the Toshiba Web site pcsupport.toshiba.com.

If you have a problem or need to contact Toshiba, see "If Something Goes Wrong" on page 173.

Chapter 1

Getting Started

This chapter provides tips for working comfortably, summarizes how to connect components, and explains what to do the first time you use your notebook computer.

Selecting a place to work

Your computer is portable and designed to be used in a variety of circumstances and locations.

Creating a computer-friendly environment

Place the computer on a flat surface that is large enough for the computer and any other items you are using, such as a printer. Leave enough space around the computer and other equipment to provide adequate ventilation. Otherwise, they may overheat.

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 computer) 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.

CAUTION If you spill liquid into the computer, turn it off, unplug it from the AC power source, and let it dry out completely before turning it on again.

If the computer does not operate correctly after you turn it back on, contact your Toshiba service representative or your network administrator.

Keeping yourself comfortable

Strain and stress injuries are becoming more common as people spend more time using their computers. With a little care and proper use of the equipment you can work comfortably throughout the day.

⚠WARNING Using the computer keyboard incorrectly may result in discomfort and possible injury. If your hands, wrists, and/or arms bother you while typing, stop using the computer and rest. If the discomfort persists, consult a physician.

This section provides hints on avoiding strain and stress injuries. For more information, consult books on ergonomics, repetitive-strain injury, and repetitive-stress syndrome.

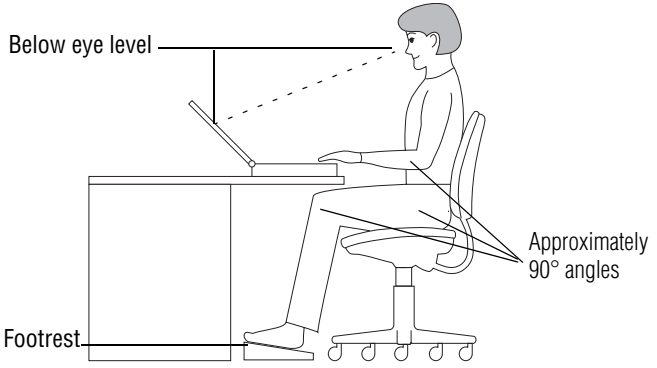
Placement of the computer

Proper placement of the computer and external devices is important to avoid stress-related injuries:

- Place the computer on a flat surface at a comfortable height and distance. You should be able to type without twisting your torso or neck, and look at the screen without slouching.
- If you are using an external monitor, the top of the screen should be no higher than eye level.
- If you use a paper holder, set it at about the same height and distance as the screen.

Seating and posture

When using your computer, maintain good posture with your body relaxed and your weight distributed evenly. Proper seating is a primary factor in reducing work strain. Some people find a backless chair more comfortable than a conventional chair. Whichever type you choose, use the following guidelines to adjust your chair for maximum computing comfort.



Correct posture and positioning of the computer

- Position your chair so that the keyboard is at or slightly below the level of your elbow. You should be able to type comfortably with your shoulders relaxed and your forearms parallel to the floor.

If you are using a conventional chair:

- Your knees should be slightly higher than your hips. If necessary, use a footrest to raise the level of your knees and ease the pressure on the back of your thighs.
- Adjust the back of your chair so that it supports the lower curve of your spine. If necessary, use a cushion to provide extra back support. Lower-back-support cushions are available at many office supply stores.
- Sit with your back straight so that your knees, hips, and elbows form approximately 90-degree angles when you work. Avoid slumping forward or leaning back too far.

Lighting

Proper lighting can improve the visibility of the display and reduce eyestrain.

- Position the display panel or external monitor so that sunlight or bright indoor lighting does not reflect off the screen. Use tinted windows or shades to reduce glare.
- Avoid placing your computer in front of a bright light that could shine directly in your eyes.
- If possible, use soft, indirect lighting in your computer work area.

⚠ CAUTION Your LCD display has a brightness approaching that of a TV device. We recommend that you adjust the brightness of your LCD to a comfortable level to prevent possible strain on your eyes.

Arms and wrists

- Avoid bending, arching or twisting your wrists. Keep them in a relaxed, neutral position while typing.
- Exercise your hands, wrists and arms to improve circulation.

Work habits

The key to avoiding discomfort or injury from strain is to vary your activities. If possible, schedule a variety of tasks into your working day. Finding ways to break up the routine can reduce stress and improve your efficiency.

- Take frequent breaks to change position, stretch your muscles and relieve your eyes. A break of two or three minutes every half hour is more effective than a long break after several hours.
- Avoid performing repetitive activities for long periods. Intersperse such activities with other tasks.
- Focusing your eyes on your computer screen for long periods can cause eyestrain. Look away from the computer frequently and focus your eyes on a distant object for at least thirty seconds.

CAUTION Your LCD display has a brightness approaching that of a TV device. We recommend that you adjust the brightness of your LCD to a comfortable level to prevent possible strain on your eyes.

Other precautions

- Avoid spilling liquids on the computer's keyboard.

  If you do spill a liquid that gets into the keyboard, turn off the computer immediately. Leave the computer turned off overnight to give it time to dry out before you use it again.

- If a drive-in-use light indicates the drive is being accessed, do not turn off the computer.

  Powering off the computer while it is reading from or writing to a disk may damage the disk, the drive or both.

- Keep the computer and diskettes away from objects that generate strong magnetic fields, such as large stereo speakers.

  Information on diskettes is stored magnetically. Getting a magnet too close to a diskette can erase important files.

- Scan all new files for viruses.

  This precaution is especially important for files you receive via diskette or email, or download from the Internet.

Important information on your computer's cooling fan

Your computer may have a CPU cooling fan that cools the CPU by drawing outside air into the computer. The cooling fan may be located on the bottom of the computer.

CAUTION To prevent possible overheating of the CPU, make sure the air intake on the cooling fan is not blocked. The fan draws in air by creating a vacuum. If the fan is blocked, it could cause the CPU to run at a lower performance level or cause the computer to shut down. Loose items such as notebook and tissue paper, plastic wrappers, or other similar materials can block the air intake, preventing air from reaching the CPU. Do not use the computer on surfaces with objects that can be drawn in by the cooling fan.

NOTE The cooling fan location will vary depending on the computer.

Setting up your computer

TECHNICAL NOTE: You must complete all set up steps up to "Setting up your software" on page 62 before adding external or internal components to your computer. These components include, but are not limited to, a mouse, keyboard, printer, memory, and PC cards.

Your computer contains a rechargeable main battery that needs to be charged before you can use it.

To use external power or to charge the battery, you must attach the AC adapter. See "Connecting the AC adapter" on page 50.

To register your computer online, or to sign up for an Internet account, you must connect the built-in modem to a telephone line. See "Connecting the modem" on page 63.

Setting up your software

NOTE The names of windows displayed, and the order in which windows appear, may vary according to your software setup choices.

The first time you turn on your computer, the Setup Wizard guides you through steps to set up your software.

1. From the welcome screen, click Next to enter the Setup Wizard.
2. Confirm acceptance of Microsoft's End User License Agreement and click Next.
3. Enter your name and the name of your company or organization and click Next.

   The computer will pause for a moment while checking for an internet connection.

   A window will display the message "An Internet connection could not be chosen."
4. Enter the information about your computer.

NOTE If you are connecting your computer to a network, consult your system administrator before you choose your computer name and network settings.

5. Set the correct date, time and time zone for your computer and click Next.

   Your computer restarts automatically.

Registering your computer with Toshiba

Product registration is strongly recommended, and allows Toshiba to send Customer periodic updates, announcements, and special offers applicable to the product. Product registration can be completed during the initial start up process of your computer. If you opt not to register at that time, you can either double-click the icon on your desktop or go to the Toshiba web site at www.register.toshiba.com. Customer failure to complete Product Registration will not diminish Customer rights under this limited Warranty.

NOTE To register online, you must be connected to the Internet via your computer's modem and a voice-grade telephone line, or a Local Area Network.

Adding External Devices

NOTE Before adding external devices, Toshiba recommends setting up your software. See "Setting up your software" on page 48.

After starting your computer for the first time, you may also want to:

- Add more memory (see "Adding Memory (optional)" on page 56)
- Connect a mouse (see "Connecting a mouse" on page 61)
- Connect a full-size keyboard (see "Connecting a keyboard" on page 131)
- Connect an external monitor (see "Using an external monitor" on page 131)

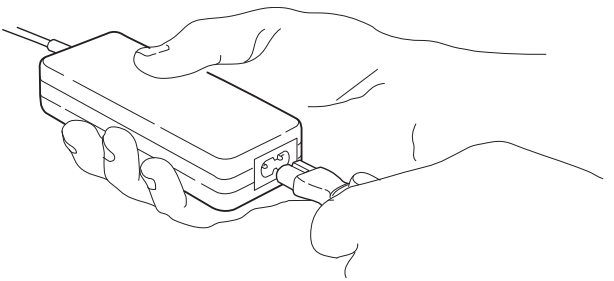
- Connect a local printer (see "Connecting a printer" on page 61)
- Install PC Cards (see "Using PC Cards" on page 133)

Connecting the AC adapter

Your computer requires power to operate. Use the power cord/cable and AC adapter to connect the computer to a live electrical outlet, or to charge the computer's battery.

To connect AC power to the computer:

1 Connect the power cord/cable to the AC adapter.



Sample power cord/cable and AC adapter

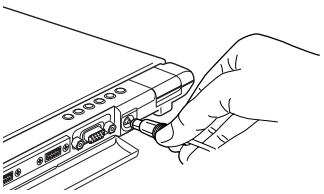
WARNING Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. ***Wash hands after handling.***

CAUTION Hold the power cord/cable by its plug when you connect/disconnect it. Do NOT pull the cable itself. Doing so may damage the power cord/cable and result in a short circuit or electric shock.

CAUTION Use only the AC adapter supplied with your computer or an equivalent adapter that is compatible. Use of any incompatible adapter could damage your computer. Toshiba assumes no liability for any damage caused by use of an incompatible adapter.

When you connect the AC adapter to the computer, always follow the steps in the exact order as described in the User's Manual. Connecting the power cord/cable to a live electrical outlet should be the last step; otherwise' the adapter 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.

2 Plug the AC adapter into the DC-IN on the rear of the computer.



Connecting the AC adapter to the computer

3 Connect the power cord/cable to a live electrical outlet.

The AC power light on the indicator panel glows green.

If the main battery is present, the main battery light glows:

- Green if the main battery is fully charged
- Amber if the main battery is charging

4 If the AC power light flashes amber during charging, either the main battery is malfunctioning, or it is not receiving input from the AC power supply.

Disconnect the AC cable and remove the main battery pack. See "Changing the main battery" on page 120 for information on replacing the main battery.

Using the main battery

Your computer came with its main battery already installed. Before using the main battery to power the computer, you must first charge it.

To charge the main battery, leave the computer plugged in for at least six hours with the computer turned off. After that, the main battery will be completely charged and ready to power the computer.

The RTC battery does not charge while the computer is turned off, even when AC power is attached.

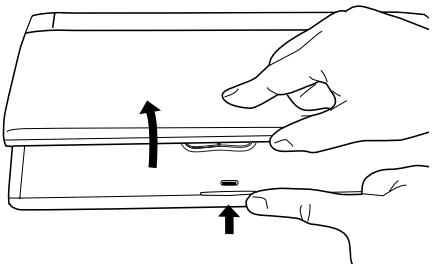
For more information about installing or removing the main battery, see "Changing the main battery" on page 120.

Using the computer for the first time

For information on connecting devices, see "Setting up your computer" on page 47.

Opening the display panel

Press the display panel latch and lift the display panel.



Opening the display panel

CAUTION To avoid damaging the display panel, do not force it beyond the point where it moves easily.

Never lift or move the computer using the display panel.

Small bright dots may appear on your TFT display when you turn on your computer. Your display contains an extremely large number of thin-film transistors (TFT) and is manufactured using high-precision technology. Any small bright dots that may appear on your display are an intrinsic characteristic of the TFT manufacturing technology.

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.

Screen will dim when the computer is operated on battery power and you may not be able to increase the brightness of the screen.

Your computer's features and specifications

Certain notebook chassis are designed to accommodate all possible configurations for an entire product Series. Your selected model may not have all the features and specifications corresponding to all of the icons or switches shown on the notebook chassis, unless you have selected all those features.

Below are examples of some of the many possible icons used on your computer:

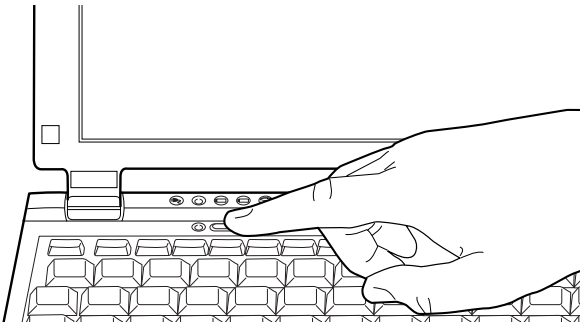
Sample system icons

This information applies to all the features and icons described in this guide.

Turning on the power

1 If the optional external diskette drive is connected, check that it is empty.

TECHNICAL NOTE: You must complete all set up steps up to "Setting up your software" on page 62 before adding external or internal components to your computer. These components include, but are not limited to, a mouse, keyboard, printer, memory, and PC cards.



Turning on the power

2 Locate the oval-shaped power button above the F4 and F5 keys at the top of the keyboard. Turn on the computer by pressing the button for at least one second.

The on/off light on the system indicator panel glows green, indicating that the computer is on.

HINT: After turning on the computer for the first time, do not turn off the power again until the operating system has completely loaded.

The AC power light glows green when the computer is connected to an external power source.

The main battery light:

- Glows amber while the main battery is being charged.
- Glows green when the main battery is fully charged.
- Is unlit when the computer is not connected to an external power source.

The hard disk drive light flashes to indicate that the hard disk drive is currently in use.

CAUTION Never turn off the computer while any of the drives are in use.

Adding Memory (optional)

HINT: To purchase additional memory modules, see the accessories information packaged with your system or visit accessories.toshiba.com.

Your computer comes with enough memory to run most of today's popular applications. You may want to increase the computer's memory if you use complex software or process large amounts of data.

Additional memory comes in various capacities (to stay current on the most recent software and hardware options for your computer, and for other product information, be sure to regularly check the Toshiba Web site at accessories.toshiba.com).

Installing a memory module

One slot is available for adding a memory module. You will need a standard Phillips no.1 screwdriver for this procedure.

CAUTION To avoid damaging the computer's screws, use a standard Phillips no. 0 screwdriver that is in good condition.

CAUTION Before you install or remove a memory module, turn off the computer using the Start menu. If you install or remove a memory module while the computer is in Standby or Hibernation mode, data will be lost.

A memory module must be installed in slot A. do not try to operate the computer with a memory module in slot B only.

If you install a memory module that is incompatible with the computer, a beep will sound when you turn on the computer. If the module is installed in slot A, thee will be a long beep followed by a short beep. If the module is in slot B, there will be a long beep followed by two short beeps. In this case, turn off the computer and remove the incompatible module.If the computer is on, begin at step 1; otherwise, skip to step 3.

1. If the computer is on, click **Start**, **Turn off computer**.

   The Turn off computer window appears.

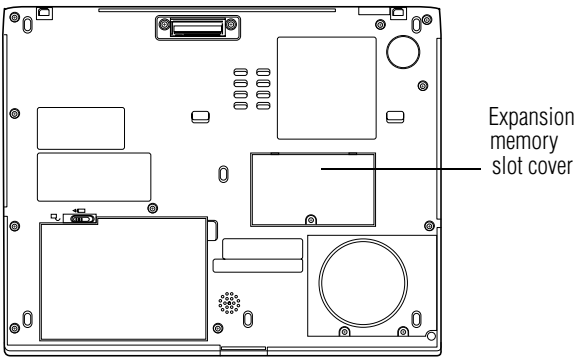
2. Click **Turn Off**.

   The operating system turns off the computer.

3. Unplug and remove any cables connected to the computer.

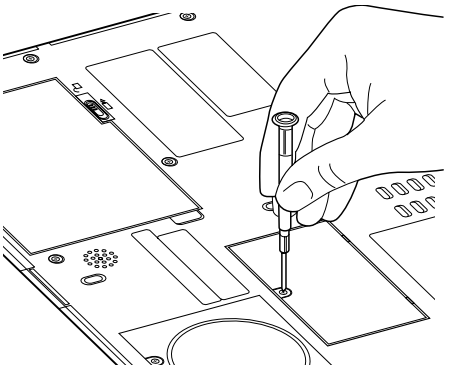
4. Remove the battery (see "Removing the battery from the computer" on page 120).

5. Close the display panel and turn the computer upside down to locate the expansion memory slot cover to the memory slot.



Base of the computer

6 Using a standard Phillips no. 0 screwdriver, unscrew the screw that secures the memory slot cover, then remove the memory slot cover.



Removing the memory slot cover screw

7 Place the screw and the cover in a safe place so that you can retrieve them later.

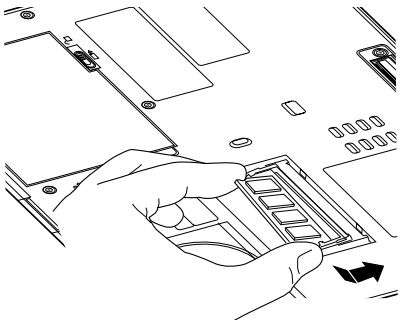
CAUTION Static electricity can damage the memory module. Before you handle the module, touch a grounded metal surface to discharge any static electricity you may have built up.

To avoid damaging the memory module, be careful not to touch its pin connector on the side you insert into the computer.

8 Remove the new memory module from its antistatic packaging.

9 Insert the memory module in the slot and gently press it down into place.

The clips on either side of the module will click to secure the module.



Inserting the memory module

10 Seat the memory slot cover and secure it with the screw.

11 When you turn the computer on, it should automatically recognize the total memory capacity. Use System Properties to verify that the added memory is recognized. If it is not recognized, check the module's connection.

Removing a memory module

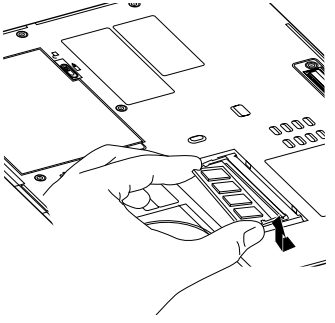
To remove the memory module:

1. Turn the computer off and remove all cables connected to the computer.

CAUTION Do not try to remove a memory module with the computer in Standby or Hibernation mode. You can damage the computer and the memory module.

2. Turn the computer upside down and remove the main battery module.
3. Using a standard Phillips no. 0 screwdriver, unscrew the screw that secures the memory slot cover, then remove the memory slot cover.
4. Place the screw and the cover in a safe place so that you can retrieve them later.
5. Pull the clips away from the memory module.

   The memory module pops partially out of the slot.
6. Carefully remove the module from the slot



Removing the memory module

CAUTION Do not touch the connectors on the memory module or on the computer. Debris on the connectors may cause memory access problems.

7 Seat the cover and secure it with the screw.

Connecting a mouse

You may want to use a USB-compatible mouse instead of the TouchPad, the computer's built-in pointing device.

To connect the mouse to your computer or the optional Slim Port Replicator, plug its cable into one of the USB ports. You can connect it while the computer is on.

The operating system automatically detects the mouse. The mouse and TouchPad can be used at the same time.

Connecting a printer

You can connect a USB-compatible printer to your computer. To determine if the printer is USB-compatible, check its documentation. If it is USB-compatible, you can connect the printer while the computer is on.

To make the connection, you need a suitable USB cable, which may come with your printer. Otherwise, you can purchase one from a computer or electronics store.

TECHNICAL NOTE: Some printers require a specific installation process. Refer to your printer installation guide for instructions.

To connect a printer to your computer or the optional Slim Port Replicator:

1. Connect the USB cable to the printer and to one of the USB ports.
2. Connect the printer's power cable to a wall outlet and turn on the printer.

See your printer documentation for additional configuration steps, or see "Setting up a printer" on page 62.

Setting up a printer

TECHNICAL NOTE: Some printers require a specific installation process. Refer to your printer installation guide for instructions.

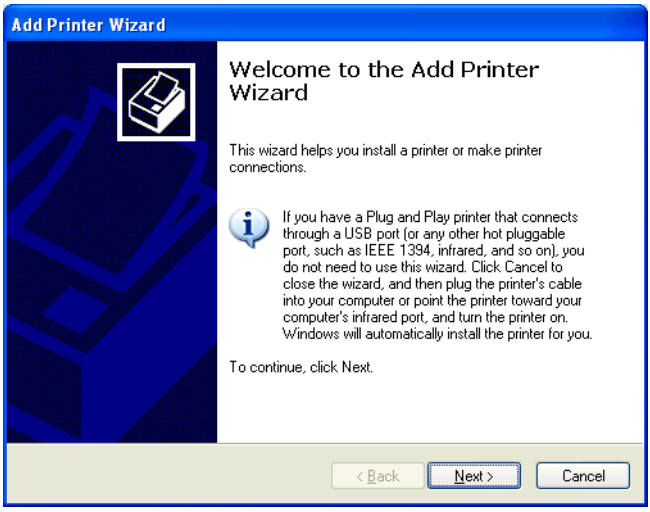
If you have a printer, follow these steps to set it up for the first time. You only need to set up the printer once.

1. Click **Start**, **Printers and Faxes**.

   The Printers and Faxes window appears.

2. Click **Add a Printer**.

   The Add Printer Wizard appears



Sample Add Printer Wizard

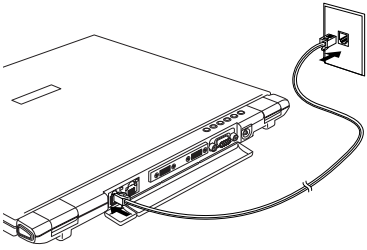
3 Follow the on-screen instructions to set up your printer.

Connecting the modem

Your computer comes with an integrated modem, which you can connect as follows:

1 Locate the modem port on the back of your computer.

2 Plug one end of a telephone cable (purchased separately) into the modem port.



Connecting the internal modem

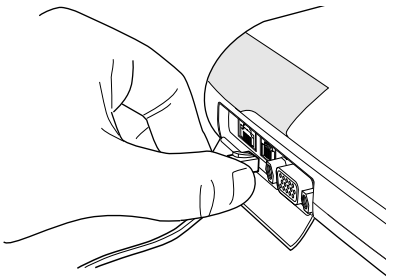
3 Connect the other end of the telephone cable to the jack of a standard voice-grade telephone line.

For more detailed information regarding your system's modem, visit the Toshiba web site at pcsupport.toshiba.com.

Connecting to a phone line

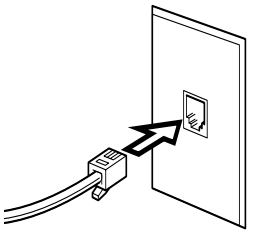
Before you can communicate using the modem, you need to connect it to a telephone line. Your computer's built-in modem provides an RJ11 jack.

1 Plug one end of the telephone cable into the modem port on the back of the computer.



Connecting the telephone cable to the modem port

2 Connect the other end to the RJ11 wall jack.



Connecting to a wall jack

CAUTION The modem is designed for use with a standard analog telephone line. Never connect the modem to a digital telephone line. A digital line will damage the modem.

Now you're ready to send a fax or use the modem to connect to an online service or the Internet.

For more information on using a modem, see "Setting up for communications" on page 145.

Connecting other external devices

For more information on attaching the optional Slim Port Replicator, an external monitor and other external USB-compatible devices, such as a keyboard and diskette drive, see the "Expansion Options" chapter on page 126.

Using the TouchPad

The TouchPad, the small, smooth square cutout located in front of the keyboard, is sensitive to touch and enables you to move the cursor with the stroke of a finger. Simply move your finger on the TouchPad in the direction you'd like to move the cursor:

- To move the cursor to the top of the page, push your finger forward on the TouchPad.

- To move the cursor to the bottom of the page, drag your finger toward yourself.
- To move the cursor to the right side of the page, slide your finger across the TouchPad from left to right.
- To move it to the left side, slide your finger from right to left.

NOTE Because the TouchPad is much smaller than the display screen, moving your cursor across the screen often means having to move your finger several times across the TouchPad in the preferred direction.

Once you've positioned your cursor, you can double-tap the TouchPad or click the buttons to open a program or file, or to get information about an icon.

Primary and secondary control buttons

When you want to click or choose an item, use the TouchPad to move the pointer/cursor to the item. Once the pointer/cursor is positioned, you can double-tap the TouchPad or click the buttons to open a program or file, or to get information about an icon.

The control buttons are adjacent to the TouchPad and are used like the buttons on a mouse. The primary control button is the left one and corresponds to the left mouse button. To double-click, press the primary button twice in rapid succession.

The function of the secondary button depends on the program you are using. It usually corresponds to the right mouse button. Check your program's documentation to find whether it uses the secondary mouse button.

Disabling or enabling the TouchPad

The TouchPad is enabled by default. To change the enable/disable TouchPad setting:

1. Click **Start**, **Control Panel**.

   The Control Panel window appears.

2. Click **Printers and Other Hardware**.
3. Click **Mouse** or press the Fn + F9 hot keys.

   The Mouse Properties window appears.

4. Click the **TouchPAD ON/OFF** tab.

   The TouchPAD ON/OFF tab view window appears.

5. Select **Disable** or **Enable**, whichever is appropriate.
6. Click **Apply**.
7. Click **OK**.

   The Mouse Properties window closes.

8. Close the Printers and Other Hardware window.
9. Close the Control Panel window.

NOTE The Fn + F9 shortcut can be used to enable or disable the TouchPad (see "Hot Keys" on page 202).

Customizing your computer's settings

There are several ways in which you can customize your computer to suit your particular requirements. Refer to your operating system documentation or Help and Support for details.

You may also wish to customize your power usage settings. For more information, see "Turning off the display

automatically" on page 118. There are additional custom settings you can choose. See "Toshiba Utilities" on page 152.

Powering off the computer

It's a good idea to power off your computer when you are not using it for a while.

If you are using the computer for the first time, leave the computer plugged into a power source (even though the computer is off) to fully charge the main battery. With the computer off, it may take up to six hours to charge the main battery.

Guidelines for powering off the computer:

- If you have work in progress and aren't connected to a network, use the Hibernate command to save your system settings to the hard disk so that, when you turn on the computer again, you automatically return to where you left off.
- To leave the computer off for a longer period, power down the computer. The Windows® XP Professional operating system uses the Shut down command to power down the computer if you are connected to a Windows® network server (domain server) or the Turn Off command if you are not.
- When the hard disk drive light on the system indicator panel is on, do not turn off the power. Doing so may damage your hard disk.

For more information, see "Powering off the computer" on page 68.

Closing the display panel

When you are finished using the computer, power off and close the display panel to keep dust and dirt out of the computer.

If you close the display panel while the computer is still on, one of these actions will occur:

- If you have the audible warning set, the computer will beep to notify you that it is still on. (See "Toshiba Hardware Setup" on page 164.)
- If you have an action feature set, the computer will perform that action (Nothing, Standby, Hibernate). For more information, see "Power Management" on page 161.

Different ways to turn the computer on and off

Pressing the power button is not the only way to turn on and off the computer.

Alternatives include:

- Using Hot Key combinations
- Opening and closing the display panel

For more information, see "Using Hibernation" on page 98 and "Using Standby" on page 102.

Caring for your computer

This section gives tips on cleaning and moving your computer. For information about taking care of your computer's main battery, see "Safety precautions" on page 122.

Cleaning the computer

CAUTION Keep liquid, including cleaning fluid, out of the computer's keyboard, speaker grille and other openings. Never spray cleaner directly onto the computer. Never use harsh or caustic chemical products to clean the computer.

To keep your computer clean, gently wipe the display panel and exterior case with a lightly dampened cloth. Ask your network administrator for suggestions for appropriate cleaning products.

Moving the computer

Before moving your computer, even across the room, make sure all disk activity has ended (the drive-in-use light stops glowing) and all external peripheral cables are disconnected.

Using a computer lock

You may want to secure your computer to a heavy object such as your desk. The easiest way to do this is to purchase an optional PORT-Noteworthy® computer lock cable.

Sample PORT-Noteworthy computer lock cable

To secure the computer:

1. Loop the cable through or around some part of a heavy object.

   Make sure there is no way for a potential thief to slip the cable off the object.

2 Pass the locking end through the loop.

3 Insert the cable's locking end into the security lock slot on your computer, then engage the locking device.

The computer is now securely locked.

Chapter 2

Learning the Basics

This chapter lists computing tips and provides important information about the system's basic features.

Computing tips

- ave your work frequently.

  Your work stays in the computer's temporary memory until you save it to the disk. If the network you are using goes down and you must restart your computer to reconnect, or your battery runs out of charge while you are working, you will lose all work since you last saved.

  See "Saving your work" on page 78 for further information.

HINT: Some programs have an automatic save feature which you can turn on. This feature saves your file to the hard disk at preset intervals. See your software documentation for details.

- Back up your files to disks (or other removable storage media) on a regular basis. Label the backup copies clearly and store them in a safe place.

  If your hard disk suddenly fails, you may lose all the data on it unless you have a separate backup copy.

- Use Error-checking and Disk Defragmenter regularly to conserve disk space and improve performance. Consult your operating system documentation for more information on these and other utilities.

- Scan all new files for viruses. This precaution is especially important for files you receive via diskette, email, or download from the Internet.

- Take frequent breaks to avoid repetitive-motion injuries and eyestrain.

- Do not turn off the computer if a drive indicator light indicates a drive is active.

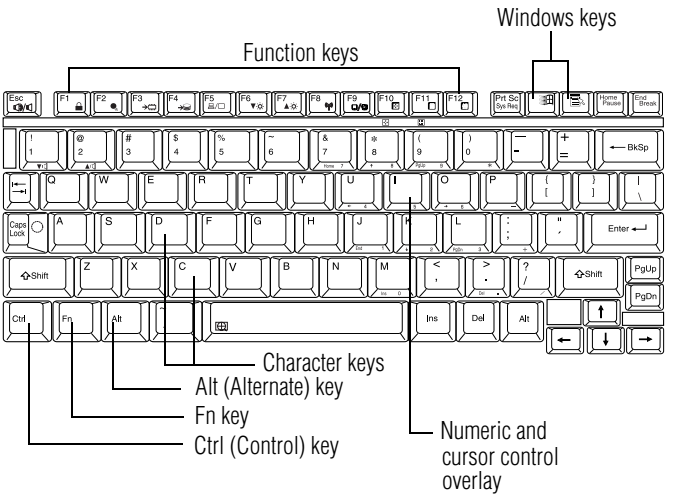
  Turning off the computer while it is reading from or writing to a disk may damage the disk, the drive, or both.

- Before turning off the computer, use the Turn off computer command or Standby command. See "Powering down the computer" on page 92 to learn more about Standby.

NOTE The operating system records information, such as your desktop setup, during its shutdown procedure. If you do not let the operating system shut down, details such as new icon positions may be lost.

Using the keyboard

Your computer's keyboard contains character keys, control keys, function keys, and special Windows® keys, providing all the functionality of a full-size keyboard.



Sample parts of the keyboard

Character keys

Typing with the character keys is very much like typing on a typewriter, except that:

- The spacebar creates a space character instead of just passing over an area of the page.
- The lowercase l (el) and the number 1 are not interchangeable.
- The uppercase O (oh) and the number 0 are not interchangeable.
- The Caps Lock key changes only the alphabet keys to uppercase—the number and symbol keys are not

affected. The light on the Caps Lock key glows when you press the Caps Lock key.

Making your keyboard emulate a full-size keyboard

Although your computer's keyboard layout is compatible with a standard full-size keyboard, it has fewer keys.

A standard full-size keyboard has two Enter, Ctrl, and Alt keys; editing keys; cursor positioning keys; and a numeric keypad. Pressing the Fn key simultaneously in combination with one of the specially marked keys allows you to emulate a full-size keyboard.

Your computer's keyboard has only one Enter and one Ctrl key. Most of the time, this does not matter. However, some programs assign separate functions to the right and left Ctrl and Alt keys, or to the regular and numeric pad Enter keys on the full-sized keyboard. Using the Fn key you can simulate these separate keys, as follows:

- Press Fn and Ctrl simultaneously to simulate the Ctrl key on the right side of the enhanced keyboard.
- Press Fn and Enter simultaneously to simulate the Enter key on the numeric pad of the enhanced keyboard.

Ctrl, Fn and Alt keys

Ctrl, Fn and Alt keys

The Ctrl, Fn and Alt keys do different things depending on the program you are using. For more information, see your program documentation.

Function keys

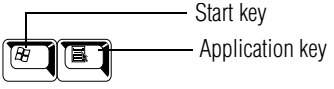
Function keys

The function keys (not to be confused with the Fn key) are the 12 keys at the top of the keyboard. They are called function keys because they run programmed functions determined by the application you are using. For more information, see your program documentation.

Hot keys

When used in combination with the Fn key, function keys marked with icons run programmed functions specific to your computer. For more information, see "Hot Keys" on page 202.

Windows® special keys

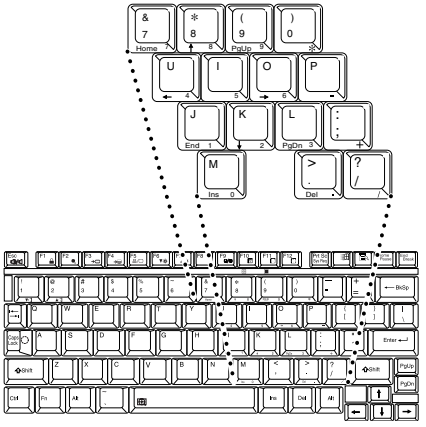


Windows® special keys

The keyboard provides two keys that have special functions:

- The **Start key** opens the Start menu.
- The **Application key** has the same function as the secondary (or right mouse) control button.

Overlay keys



Keyboard overlay keys

The keys with numbers and symbols on them form the numeric and cursor overlay. This overlay lets you enter numeric data or control the cursor as you would using the ten-key keypad on a full-size keyboard.

Using the overlay to type numeric data

The keys with the numbers on their right front are the numeric overlay keys.

To turn the numeric overlay on, press Fn and F11 simultaneously. The numeric mode light on the keyboard indicator panel glows when the numeric overlay is on.

You can still use the overlay keys to type alphabetic characters while the numeric overlay is on. To do so:

- For lowercase letters, hold down Fn while you type the letters.
- For uppercase letters, hold down both Fn and Shift while you type the letters.

To turn off the numeric overlay, hold down the Fn key and press F11 again. The numeric mode light on the keyboard indicator panel goes out.

Using the overlay for cursor control

To turn the cursor control overlay on, press Fn and F10 simultaneously. The cursor control mode light on the keyboard indicator panel glows when the cursor control overlay is on.

To type alphabetic characters while the overlay is on:

- For lowercase letters, hold down Fn while you type the letters.
- For uppercase letters, hold down both Fn and Shift while you type the letters.
- To use the numeric keypad overlay when the cursor control overlay is on, hold down Shift while you use the numeric overlay keys. To return to the cursor control overlay, release Shift.

To turn off the cursor control overlay, hold down the Fn key and press F10 again. The cursor control mode light on the keyboard indicator panel goes out.

Saving your work

Before you turn off the computer, save your work on the hard disk drive or a diskette.

CAUTION Always save your data even when you are using Stand by mode. If your battery fully discharges, your information will be lost. Your computer can be configured to warn you when the battery is running low, see "Setting battery alarms" on page 116.

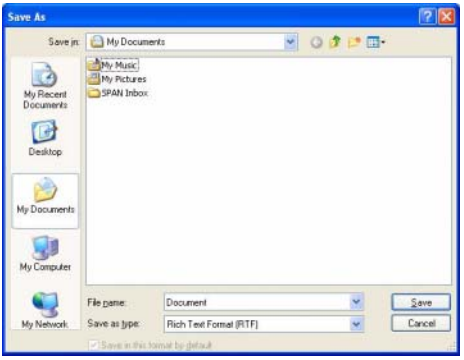
Many programs offer a feature that saves documents at regular intervals. Check your program's documentation to see if it has an automatic save feature.

Saving files

1 On the **File** menu of your Windows program, click **Save**.

If you are working with a document that already has a file name, this is all you need to do. If you created a new document, your program displays a Save As dialog box.

Use this dialog box to specify where to store the document and to give it a file name.



Sample Save As dialog box

2 Choose the drive and folder where you want your file to be stored.

3 Type a file name, then click **Save**.

HINT: To make another copy of the file you are currently working with, choose Save As from the File menu and give the new file a different name.

The Windows XP operating system supports file names of up to 255 characters; the names can include spaces. Some applications still require MS-DOS® file names.

File names

If you plan to share your files with a computer using a pre-Windows® 95 version of the Windows operating system, the file name must be no more than eight characters long. Typically the file name also has an extension, consisting of a period and up to three additional characters.

You may use all the letters and numbers on the keyboard plus these characters: _ ^ $ ~ ! # % & { } ( ) @ and ‘. MS-DOS® file names are not case-sensitive and must not contain spaces.

Using a file extension

Most programs assign an extension to the file name that identifies the file as being created in the program with a particular format. For example, Microsoft Word saves files with a .doc extension. Any file name with an extension of “.doc” is assumed to be a Microsoft Word file. Creating your own extension is usually unwise, since the program is unlikely to recognize a strange extension and may refuse to handle your file correctly.

Printing your work

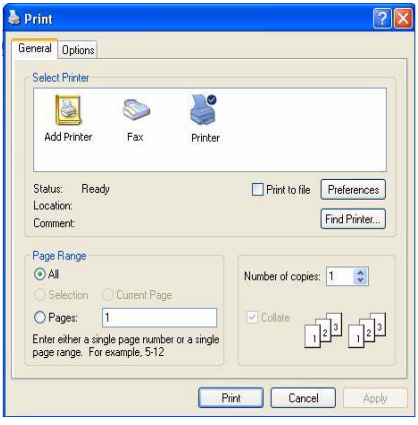
Verify that the Windows® XP operating system is set up for your printer as described in "Setting up a printer" on page 62.

TECHNICAL NOTE: You only need to set up the printer the first time you connect it. If you use more than one printer or are changing printers, you will need to set up the operating system to run with the additional printer(s).

To print a file:

1. If your printer is not on, turn it on now.
2. Open the **File** menu of your Windows program and click **Print**.

   The program displays a Print dialog box.



Sample Print dialog box

3. Specify the print parameters. For example, the range of pages and number of copies to print.
4. Click **Print**.

Using optional external diskettes and discs

To use disks, you must connect the optional external USB disk drive to the USB port on the back of the computer, or to the optional Slim Port Replicator. See "Connecting the optional external USB diskette drive" on page 129 for more information.

To use CDs or DVDs, you must connect the external CD or DVD drive to the USB port on the back of the computer.

Inserting and removing disks

1 Insert a disk into the insertion slot until it clicks in place.

   A protective flap inside the drive's insertion slot automatically retracts when you insert a disk.

   The disk-in-use light glows when the computer is accessing a disk.

2 Push the disk eject button to remove a disk from the drive.

Inserting a disc

CAUTION Before playing an audio CD, turn the volume down. Playing the compact disc at maximum volume could damage your ears. To turn the volume down, access the Volume Control program (click **Start**, **All Programs**, **Accessories**, **Entertainment**, **Volume Control**), or use the volume control dial.

1 If the computer is turned on, press the eject button on the DVD-ROM or multi-function drive.

The disc tray partially opens.

CAUTION To avoid damaging a disc or losing data, check that the disc activity light is off before opening the disc tray.

2 Grasp the disc tray and pull it fully open.

3 Hold the disc by its edges and check that it is clean and free of dust.

CAUTION Handle discs carefully. Avoid touching the surface of the disc. Grasp it by its center hole and edge. If you handle the disc incorrectly, you could lose data.

4 Carefully place the disc in the empty tray with its label facing up.

CAUTION Be careful not to touch the drive's lens (located underneath the drive's spindle) or the area around it. Doing so could cause the drive to malfunction.

5 Gently press the center of the disc onto the spindle until it locks into place.

CAUTION Make sure the disc is properly positioned on the spindle. If you position the disc incorrectly, it can jam the disc tray.

6 Close the disc tray by pressing gently on the center of the tray until it clicks indicating that it is locked.

Removing a disc with the computer on

CAUTION Never press the eject button or turn off the computer while the drive-in-use light is glowing. Doing so could damage the disk or the drive.

1. Locate and press the eject button.

   The disc tray partially opens.
2. Grasp the sides of the disc tray and pull it fully open.
3. Remove the disc from the disc tray and place it in its protective cover.

⚠ CAUTION If the disc is spinning when you open the disc tray, wait for the disc to stop before removing it.

4. Close the disc tray by pressing gently on the center of the tray until it clicks, indicating that it is locked.

Removing a disc with the computer off

1. Insert a slender object, such as a straightened paper clip, into the manual eject button access hole.

CAUTION Never use a pencil to press the manual eject button. Pencil lead can break off inside the computer and damage it.

2. Pull the tray fully open, remove the disc and place it in its protective cover.
3. Close the disc tray by pressing gently on the center of the tray until it clicks, indicating that it is locked.

Copying documents to a disk

Disks provide an easy means of transferring files from one computer to another. Copying a file to a disk also gives you a backup copy in case something happens to the original on your hard disk. This section describes how to use the My Computer window to copy a file from the hard disk to a disk.

To copy files to a disk:

1. Connect the optional external USB diskette drive to the computer.
2. Insert a disk into the drive.
3. Double-click the **My Computer** icon.

   The operating system opens the My Computer window.
4. Double-click the drive that contains the file you want to copy.

   The operating system displays the contents of the drive.
5. Double-click the folder that contains the file, then click the file you want to copy.

HINT: Use the Ctrl or Shift key to select more than one file.

6. On the menu bar, click **File**, then click **Send To**.
7. Click the icon for 3½ Floppy (A:).

   The operating system copies the file(s).

HINT: You can also copy a file to disk by clicking the file (or files) you want to copy with the secondary button, then pointing to Send To and clicking 3 ½ Floppy (A:).

Taking care of disks

To protect the data stored on your disks:

- Store your disks in their boxes or other containers to protect them and keep them clean.
- Keep disks at room temperature and avoid exposing them to direct sunlight. Otherwise data may be lost.
- Keep your disks away from sources of magnetism, such as speakers and radios, since these can destroy data.
- Clean dirty disks with a soft cloth moistened in water. Do *not* use cleaning fluids.

Avoid:

- Sliding back the protective metal cover.
- Touching the magnetic surface of a disk. Fingerprints can prevent the drive from reading the data held on a disk.
- Twisting or bending a disk.
- Placing heavy objects on your disks.
- Eating, smoking or using erasers near your disks. Foreign particles can damage the surface.

Caring for CD and DVD discs

- Store your discs in their original containers to protect them from scratches and keep them clean.
- Never bend a disc or place heavy objects on top of it.
- Hold a disc by its outside edge. Fingerprints on the surface of a compact disc can prevent the drive from reading the data properly.
- Avoid exposing discs to direct sunlight or extreme heat or cold.
- To clean a disc, wipe it from the center outwards (not in a circle) with a clean, dry cloth. If necessary, moisten the

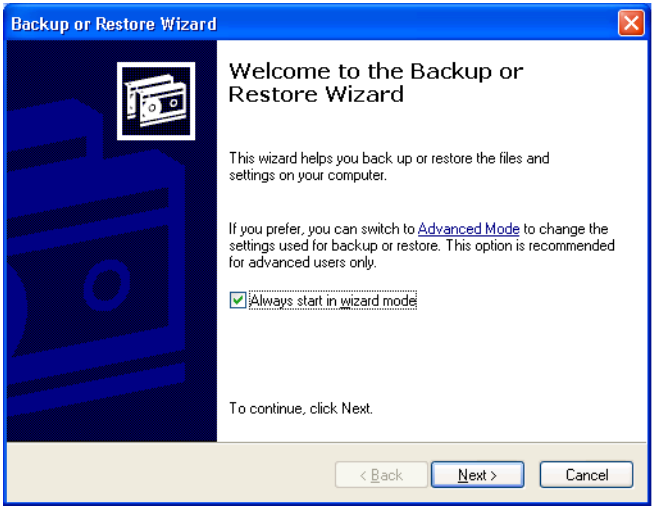
cloth with water or a neutral cleaner (not benzine or rubbing alcohol). Let the disc dry completely before inserting it in the drive.

Backing up your work

To back up several files at one time, use the Backup or Restore Wizard. You can choose the files and the type of backup you want to perform.

1. Connect the backup device to your computer as shown in the manufacturer's instructions.
2. Click **Start**, **All Programs**, **Accessories**, **System Tools**, **Backup**.

   The Backup or Restore Wizard window appears.



Sample Backup or Restore Wizard window

3. Follow the on-screen instructions.

Restoring your work

You can also use the Backup or Restore Wizard to restore information from your backup media to your hard disk.

TECHNICAL NOTE: When restoring files, the backup program prompts you if you try to overwrite a file that already exists on the hard disk. Make sure the backup version is the one you want before overwriting the existing file.

Backing up your files

Backing up your files means copying individual files to media, such as a CD. Or copying entire sections of your hard disk to another device such as a tape drive or to your network partition.

To back up to a CD, optional diskette drive, or other media:

1. Insert the media into the appropriate drive.
2. Click **Start**, then click **My Computer**.
3. Double-click the drive that contains the file you want to copy.
4. Double-click the folder that contains the file, then click the file you want to copy.

HINT: You can use the Ctrl or Shift keys to select more than one file. To select multiple consecutive files, hold down the Shift key and click the first and then the last file (all files within that range will be highlighted). To select non-consecutive files, hold down the Ctrl key and click the individual files you want to select.

5 Right-click, select **File**, then click **Send To**.

6 Click the icon for the destination device.

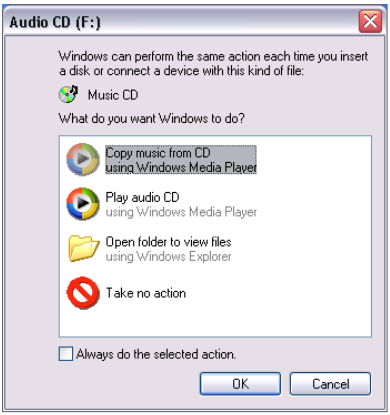
Restoring your work

To restore information from your backup media to your hard disk, use the Restore page in the backup program. Look in the online Help or your operating system documentation for information on restoring files.

Playing audio

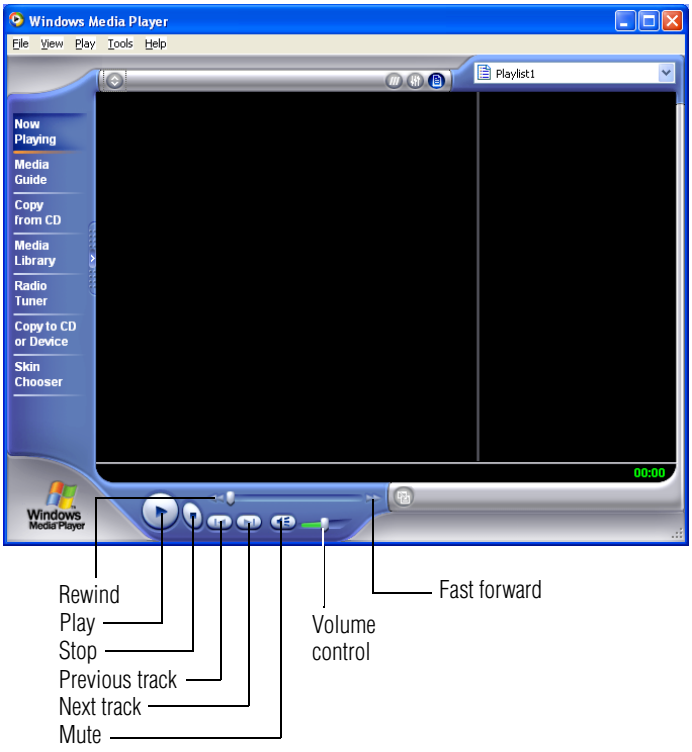
If you are using an optional external CD or DVD drive, insert an audio CD into the drive and close the disc tray.

The computer automatically detects a disc in the drive and opens the Audio CD window. To play an audio CD select the Play Audio CD using Windows Media® Player option and click OK.



Sample Audio CD window

The Windows Media Player window appears.



Sample Windows Media™ Player screen

The Windows Media™ Player control panel works much like an ordinary compact disc player:

- To play the CD or to pause, click the **Play/Pause** button on the CD Player control panel.
- To stop the CD, click the **Stop** button.

Playing DVDs

If you are using an external DVD-ROM drive or multi-function drive, you can watch DVD movies using the InterVideo WinDVD™ application. You will first need to run WinDVD setup from your computer's hard drive.

Using Windows Explorer, browse to the C:\Toshiba\WinDVD folder and double-click the **Setup.exe** file.

TECHNICAL NOTE: Your DVD-ROM or multi-function drive is set to play region 1 (North America) DVD-ROMs. If you play a DVD disc from another region, the drive will automatically change to play in the format of the other region. The drive will allow you to change regions four times. On the fourth change, the region will be "locked in." That is, the drive will only play DVDs from that last region. Note that changing from region 1 to region 2 and back to region 1 is counted as two changes.

NOTE For optimum DVD performance, it is recommended that you play DVDs while running the computer on AC power.

Caring for CDs and DVDs

- Store your discs in their original containers to protect them from scratches and keep them clean.
- Do not bend a disc or place heavy objects on top of it.
- Do not apply a label to, or otherwise mar the surface of a disc.
- Hold a disc by its outside edge. Fingerprints on the surface can prevent the DVD-ROM drive or multi-function drive from reading the data properly.

- Do not expose discs to direct sunlight or extreme heat or cold.
- To clean a disc that is dirty, wipe it with a clean, dry cloth. The most efficient method to clean it is to start from the center of the disc and wipe toward the outward edge (not in a circle). If necessary, moisten the cloth with water or a neutral cleaner (not benzine or rubbing alcohol). Let the disc dry completely before inserting it in the drive.

TECHNICAL NOTE: If you record MP3 files, you will only be able to play them on a device capable of playing MP3 files.

Powering down the computer

When you power down the computer, you have a number of options to choose from:

- Turn Off or Shut down, which power off the computer.
- Hibernation, which saves the current operating state to the hard disk and powers off the computer
- Standby, which saves the current operating state to memory and enters a low power mode
- Restart, which restarts the computer

Each option has its advantages.

TECHNICAL NOTE: Before using any of these options to power down your computer, save your files and make sure the disk activity lights are off.

If you change your mind and decide to continue working after all, wait a few seconds before turning the computer on again.

Turn Off or Shut down command

The Turn Off or Shut down commands power off the computer. The Windows® XP Professional operating system uses Turn Off if you are not connected to a Windows® network server (domain server). It uses Shut down if you are connected to a Windows® network server (domain server).

Factors to consider when choosing Turn Off or Shut down:

- No power is used while the computer is turned off. This is the most efficient mode if you will be away from your computer for an extended time.
- Restarting from Turn Off or Shut down uses the most time and battery power.
- When starting up again, the system does not automatically open the programs and files you were previously using.

Restart command

Restart is the same as Turn Off or Shut down but automatically powers up the computer. Use it when you need to reload the operating system, for example to activate changes to system settings.

Hibernation command

The Hibernation command powers off the computer, but it first saves the current state of the computer to the hard disk. Since Hibernation does not require power to maintain the saved information, the system settings are retained indefinitely. Restoring information from the hard disk takes longer than restoring it from memory. When you start up again, the computer runs a self-test, loads the operating system, and then returns to the state in which you left it.

Factors to consider when choosing Hibernation:

- While in Hibernation mode, the computer uses no battery power.
- Because the state of the system is held on the hard disk, no data is lost if the battery discharges while the computer is in Hibernation mode.
- When starting up again, this choice uses less time and battery power than the Turn Off or Shut down option. But it uses a little more time and battery power to start up than the Standby option, because information is being retrieved from the hard disk instead of from memory.
- On restarting, the computer returns to the state in which you left it, and opens all the programs and files you were using.

Standby command

The Standby command puts the computer into a power-saving mode. Standby stores the current state of the computer in memory so that, when you restart the computer, you can continue working from where you left off.

Factors to consider when choosing Standby:

- While in Standby mode, the computer uses some battery power. If your computer is left in Standby mode for an extended period, your computer could lose data.
- When starting up again, this choice uses less time and battery power than either Turn Off, Shut down or Hibernation.

- On restarting, the computer returns to the state in which you left it, and opens all the programs and files you were using.

NOTE If you power down using the Standby command and the battery discharges fully, your information will be lost. Be sure to save your work often.

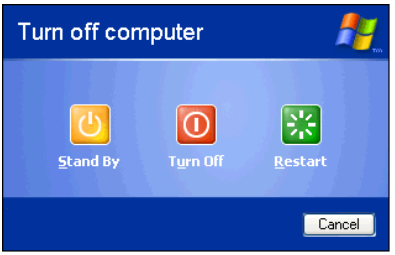
Using Turn Off or Shut down

If you are not connected to a Windows® network server (domain server), power off the computer as follows:

To turn off the computer.

1 Click **Start**, **Turn off computer**.

The Turn off computer window appears.



Sample Turn off computer window

2 Click **Turn Off**.

The computer turns itself off.

If you are connected to a Windows® network server (domain server), power off the computer as follows:

1 Click the **Start** button, then **Shut down**.

The Shut Down window appears.

2 Select **Shut down** from the drop-down list.

3 Click **OK**.

The computer shuts down completely.

Turning off more quickly

In addition to the method described above, you can turn off the computer by pressing the power button.

To use this method, you first need to turn on the feature in TOSHIBA Power Saver.

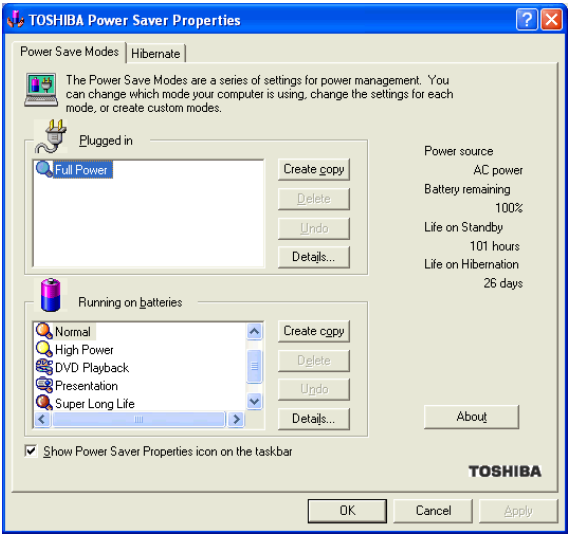
1 Click **Start**, **Control Panel.**

The Control Panel window appears.

2 Click **Performance and Maintenance**.

3 Click the **TOSHIBA Power Saver** icon.

The TOSHIBA Power Saver Properties window appears.

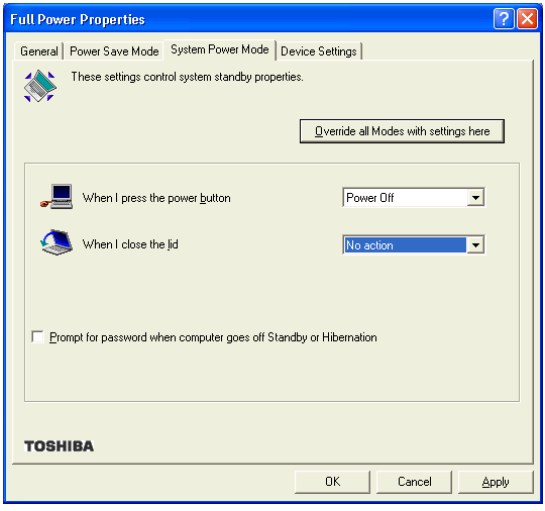


Sample TOSHIBA Power Saver Properties window

4 Click **Details** in the Plugged in section.

The Full Power Properties window appears.

5 Click the **System Power Mode** tab.



Sample Full Power Properties window

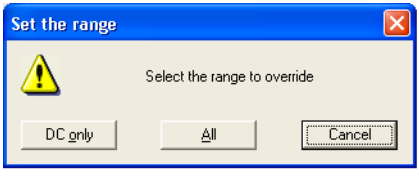
6 Select **Power Off** for the option you want.

- **When I press the power button**

  Set this option to Power Off if you want the computer to turn off when you press the power button.

7 Click **Override all Modes with settings here**.

The Set the range window appears.



Sample Set the range window with DC only option

8 Do one of the following:

- Click **DC only** if you want the settings to apply only when you are using battery power.
- Click **All** for the settings to apply whether you are using battery power or outlet power.

9 Click **OK** to close the Full Power Properties window.

10 Click **OK** to close the TOSHIBA Power Saver Properties window, then close the Control Panel.

Starting again after Turn Off or Shut down

To start the computer up again, press and release the power button; the on/off light changes to green.

Using Hibernation

Enabling the Hibernation command

Hibernation is a default setting. If it should become disabled, you can enable it as follows:

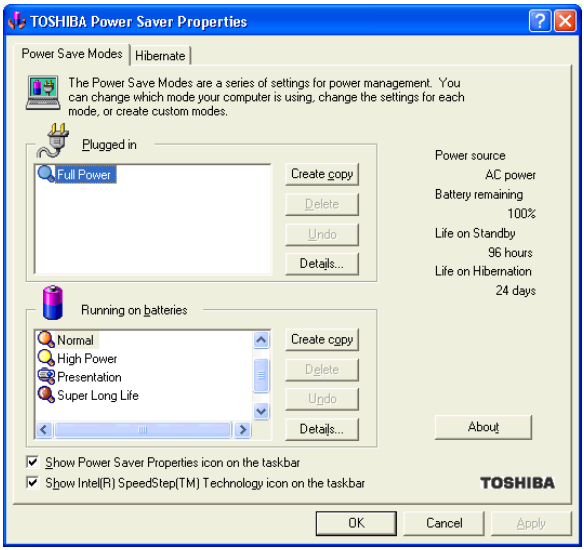
1 Click **Start**, **Control Panel**.

The Control Panel window appears.

2 Click **Performance and Maintenance**.

3 Click the **TOSHIBA Power Saver** icon.

The TOSHIBA Power Saver Properties window appears.



Sample TOSHIBA Power Saver Properties window

4 In the Running on batteries area, click the **Details** button.

5 Click the **System Power Mode** tab.

6 Select **Hibernation** for the options you want.

- **When I press the power button**

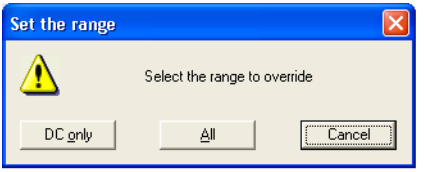
  Set this option to Hibernation so that the computer will go into Hibernation mode when you press the power button.

- **When I close the lid**

  Set this option to Hibernation so that the computer will go into Hibernation mode when you close the display panel.

7 Click **Override all Modes with settings here**.

The Set the range window appears.



Sample Set the range window with DC only option

8 Do one of the following:

- Click **DC only** if you want the settings to apply only when you are using battery power.
- Click **All** for the settings to apply whether you are using battery power or outlet power.

9 Click **OK** to close the Full Power Properties window.

10 Click the **Hibernate** tab, then click the **Enable hibernate support** check box.

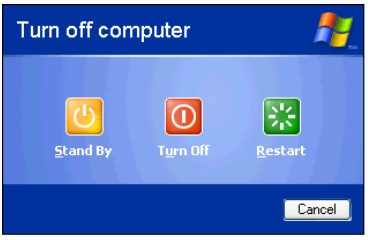
11 Click **OK** to close the TOSHIBA Power Saver Properties window, then close the Control Panel.

Going into Hibernation mode

If you are not connected to a Windows® network server (domain server), power off the computer using the Hibernation command as follows:

1 Click **Start**, **Turn off computer**.

The Turn off computer window appears.



Sample Turn off computer window with shift key held down to show Hibernate option

2 Hold down the shift key and click **Hibernate** ("Hibernate" only appears when the shift key is pressed).

The computer saves the state of the system, including all open programs and files, to the hard disk, and then powers down completely.

If you are connected to a Windows® network server (domain server), follow these steps to power down the computer using Hibernation:

1 Click **Start**, then **Shut Down**.

The Shut Down window appears.

2 Select **Hibernate** from the drop-down list of options.

3 Click **OK**.

The computer saves the state of the system, including all open programs and files, to the hard disk, and then powers down completely.

Going into Hibernation mode more quickly

You can also put the computer into Hibernation mode in three ways:

- By pressing the hotkey combination Fn+F4.
- By pressing the power button
- By closing the display panel.

Starting again from Hibernation

To start up the computer from Hibernation mode, press the power button until the on/off icon glows green. The computer returns to the screen you were using.

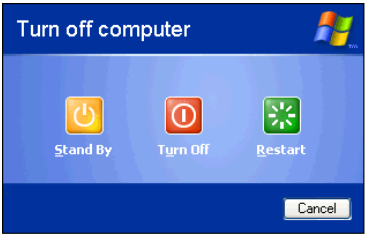
If you went into Hibernation mode by closing the display panel, you can start the computer again by opening the display panel.

Using Standby

If you are not connected to a Windows® network server (domain server), power down the computer using the Standby command as follows:

1. Click **Start**, **Turn off computer**.

   The Turn off computer window appears.



Sample Turn off computer window with Stand By option

2 Click **Stand By**.

The computer saves the state of all open programs and files to memory, turns off the display, and goes into a low-power mode. The on/off light (⏻) blinks amber indicating the machine is in Standby mode.

If you are connected to a Windows® network server (domain server), power down the computer using the Standby command as follows:

1 Click the **Start** button, then select **Shut down**.

The Shut Down window appears.

2 Select **Stand by** from the drop-down list of options.

3 Click **OK**.

The computer saves the state of all open programs and files to memory, turns off the display, and goes into a low-power mode. The on/off light blinks green to indicate the machine is in Stand by mode.

NOTE If you power down using the Standby command and the battery discharges fully, your information will be lost. Be sure to save your work often.

Going into Standby mode more quickly

You can also put the computer into Standby mode in three ways:

- By pressing the hot key combination Fn+F3.
- By pressing the power button
- By closing the display panel.

To put the computer into Standby mode when you press the power button or close the display panel, you must preset the mode:

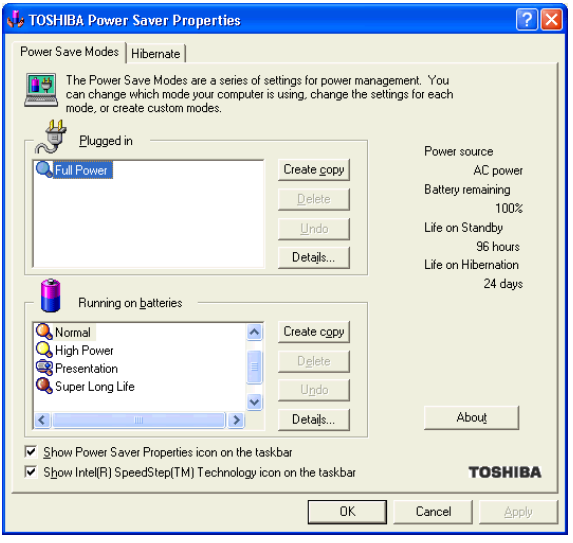
1 Click **Start**, **Control Panel.**

The Control Panel window appears

2 Click **Performance and Maintenance**.

3 Click the **TOSHIBA Power Saver** icon.

The TOSHIBA Power Saver Properties window appears.

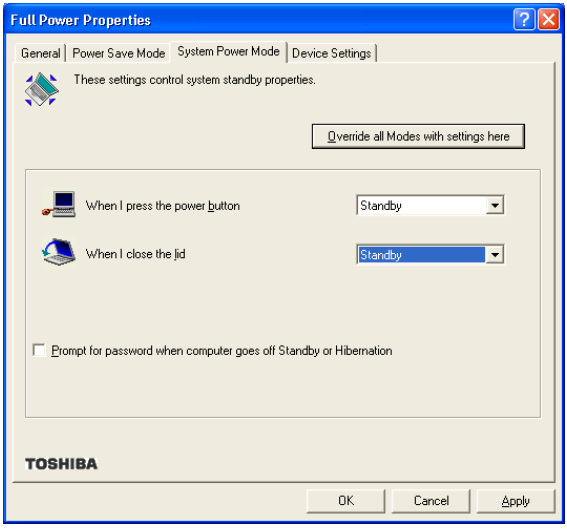


Sample TOSHIBA Power Saver Properties window

4 Click **Details** in the Plugged in section.

The Full Power Properties window appears

5 Click the **System Power Mode** tab.



Sample Full Power Properties window

6 Select **Standby** for the options you want.

- **When I press the power button**

  Set this option to Standby so that the computer will go into Standby mode when you press the power button.

- **When I close the lid**

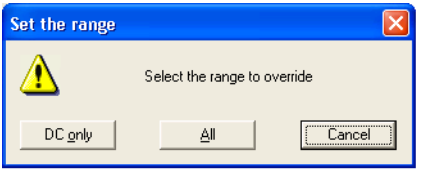
  Set this option to Standby so that the computer will go into Standby mode when you close the display panel.

- **When the system standby time has passed**

  Set this option to Standby if you want the computer to automatically go into Standby mode when you haven't used it for a specified amount of time. You can set the System standby time on the Power Save Mode tab.

7 Click **Override all Modes with settings here**.

The Set the range window appears.



Sample Set the range window with DC only option

8 Do one of the following:

- Click **DC only** for the settings to apply only when you are using battery power.
- Click **All** for the settings to apply whether you are using battery power or outlet power.

9 Click **OK** to close the Full Power Properties window.

10 Click **OK** to close the TOSHIBA Power Saver Properties window, then close the Control Panel.

Starting again from Standby

To start up the computer from Standby mode, press the power button until the on/off light changes to green. The computer returns to the screen you were using.

If you put the computer in Standby mode by closing the display panel, you can start the computer again by opening the display panel.

Chapter 3

Mobile Computing

This chapter covers all aspects of using your computer while traveling.

Toshiba's energy-saver design

Your computer enters a low-power standby mode when it is not being used, thereby conserving energy and saving money in the process. It has a number of other features that enhance its energy efficiency.

Many of these energy-saving features have been set by Toshiba. We recommend you leave these features active, allowing your computer to operate at its maximum energy efficiency, so that you can use it for longer periods while traveling.

Running the computer on battery power

The computer contains a removable Lithium-Ion (Li-Ion) high-capacity battery that provides power when you are away from an AC outlet. You can recharge it many times.

Battery Notice

Battery life may vary, depending on applications, power management settings, and features utilized. Recharge time varies depending on usage. The battery may not charge while the computer is consuming full power.

After a period of time, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is normal for all batteries. To purchase a new battery pack, see your accessories information that shipped with your computer, or to stay current on the most recent software and hardware options for your computer, and for other product information, regularly check the Toshiba Web site at accessories.toshiba.com.

To ensure that the battery maintains its maximum capacity, operate the computer on battery power at least once a month until the battery is fully discharged. Please see "Maximizing battery life" on page 123 for procedures. If the computer is continuously operated on AC power, either through an AC adapter or a docking station (if applicable to your system), for an extended period (more than a month), the battery may fail to retain a charge. This may shorten the life of the battery, and the battery light may not indicate a low-battery condition.

NOTE

For optimum DVD performance, Toshiba recommends that you play DVDs while running on AC power rather than on battery power.

Battery life is less than when using similar applications in the Windows operating system.

NOTE 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.

Screen will dim when the computer is operated on battery power and you may not be able to increase the brightness of the screen.

Power management

Your computer ships with the power management options preset to a configuration that will provide the most stable operating environment and optimum system performance for both AC power and battery modes.

CAUTION Changes to these settings may result in system performance or stability issues. users who are not completely familiar with the power management component of the system should use the preset configuration. For assistance with setup changes, contact Toshiba's Global Support Centre.

Using additional batteries

If you spend a lot of time traveling and need to work for many hours without an AC power source, you may want to carry additional charged batteries with you. You can then replace a discharged battery and continue working.

Charging batteries

The main battery and optional high capacity battery need to be charged before you can use them to power the computer. You can charge the main battery or the high capacity battery using either your computer or an optional battery charger. To charge the high capacity battery, the main battery must be fully charged.

Charging the main battery

To charge the main battery while it is in your computer, use the AC adapter to connect the computer to a live wall outlet. With the computer off, recharging the main battery takes up to six hours. The main battery takes much longer to charge when the computer is on and should be done using the AC adapter.

The main battery light:

- Glows amber while the main battery is being charged.
- Glows green when the main battery is fully charged.

The main battery may not start charging immediately if:

- The main battery is extremely hot or cold. To ensure that the main battery charges to its full capacity, wait until it reaches room temperature.
- The main battery is almost completely discharged. Leave the power connected and the main battery should begin charging after a few minutes.

HINT: Once the main battery is fully charged, we recommend you operate your computer on battery power until the main battery discharges completely. Doing this extends the life of the main battery and helps ensure accurate monitoring of battery capacity.

TECHNICAL NOTE: When your computer is using all of the power provided by the AC Adaptor to run applications, features, and devices, the recharging of the battery can not occur. Your computer's Power Saver utility can be used to select a power level setting that reduces the power required for system operation and will allow the battery to recharge.

Charging the RTC battery

The RTC battery provides power for the internal real-time clock and calendar. During normal use, the main battery keeps the RTC battery adequately charged. Occasionally, the RTC battery may lose its charge completely, especially if you have had the computer turned off for a long time.

TECHNICAL NOTE: It is seldom necessary to charge the RTC battery because it charges while the computer is on. If the RTC battery is low, the real-time clock and calendar become slow or stop working.

When Hibernation mode is enabled and the RTC battery is completely discharged, a warning prompts you to reset the real-time clock.

The RTC battery does not charge while the computer is turned off, even when AC power is attached.

The RTC battery may have become completely discharged while your computer was shipped, resulting in the following error message during startup:

```
BAD RTC BATTERY
BAD CHECKSUM (CMOS)
CHECK SYSTEM
```

To recharge the RTC battery, connect the computer and leave it powered on for 24 hours.

NOTE The above error message may vary by computer model. The RTC battery does not charge while the computer is turned off even when the AC adapter is charging the computer.

If the RTC battery is low, the real-time clock and calendar may display the incorrect time and date, or stop working.

NOTE It is seldom necessary to charge the RTC battery because it charges while the computer is on. If the RTC battery is low, the real-time clock and calendar may display the incorrect time and date or stop working. When Hibernation mode is enabled and the RTC battery is completely discharged, a warning prompts you to reset the real-time clock.

The computer can be used while the RTC battery is being charged, although the charging status of the RTC battery cannot be monitored.

⚠ CAUTION The computer's RTC battery is a Lithium (Li) battery and should be replaced only by your dealer or by a Toshiba service representative. The battery can explode if not properly replaced, used, handled or disposed of. Dispose of the battery as required by local ordinances or regulations.

The main battery light (▭) glows amber while the battery is being charged, and glows blue when it is fully charged.

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

- The battery is extremely hot or cold. To ensure that the battery charges to its full capacity, wait until it reaches room temperature.
- The battery is almost completely discharged. Leave the power connected and the battery should begin charging after a few minutes.

Using a battery charger

You can purchase an optional battery charger that recharges Lithium-Ion Polymer (Li-Ion Polymer) battery packs without requiring the use of your computer.

Use the battery charger to charge the optional high capacity battery and to charge spare main battery packs.

CAUTION Never leave batteries in the battery charger for more than a week at a time. Doing so may reduce the potential charge of the battery.

Use only battery chargers designed to work with your notebook computer. You can order a Toshiba battery charger from Toshiba's Web site at accessories.toshiba.com.

Monitoring main battery power

The computer's main battery light gives you an indication of the main battery's current charge:

- No illumination means the main battery is not in use or the AC Adapter is not connected.
- Green means the main battery is fully charged.
- Amber means the main battery is charging (AC Adapter connected).

- Flashing amber means the main battery charge is low and it is time to recharge the main battery or plug in the AC Adapter.

HINT: Be careful not to confuse the main battery light (▭) with the on/off light (⏻). When the on/off light flashes amber, it indicates that the system is suspended (using the operating system Standby command).

Determining remaining battery power

NOTE Wait at least 16 seconds after turning on the computer before trying to monitor the remaining battery power. The computer needs this time to check the battery's remaining capacity and perform its calculations.

1. Click **Start**, then click **Control Panel**.
2. Click **Performance and Maintenance**.
3. Click the **Toshiba Power Saver** icon.
4. The Power Saver Properties window appears

   The current power source and battery power remaining section displays the current charge state of the battery. The value is shown as a percentage of remaining battery charge.

TECHNICAL NOTE: The computer drains the battery faster at low temperatures. Check your remaining charge frequently if you are working in temperatures below 50 degrees Fahrenheit.

The computer calculates the remaining battery charge based on your current rate of power use and other factors such as the age of the battery.

What to do when the main battery runs low

When the main battery runs low you can:

- Plug the computer into an external power source and recharge the main battery.
- Put the computer in Hibernation mode and replace the main battery with a charged spare.
- Connect the computer to the optional high capacity battery.
- Save your work and turn off the computer.

If you do not manage to do any of these things before the main battery completely runs out of power, the computer automatically enters Hibernation mode and turns itself off. Hibernation mode keeps track of where you were so, when you turn on the power again, you can continue where you left off.

The computer stores information on what you were doing until the main battery runs out of power. If you have Hibernation mode enabled (the default), the computer copies the details of your open programs and files to the hard disk before shutting down.

Setting battery alarms

You can set two alarms. Each alarm can be set to alert you when a specified percentage of remaining battery power has been reached. You can set how the warning occurs: sound an alarm, display a message, both, or none. You can also set the computer to enter Standby mode or Hibernation mode or to completely power down when the alarm goes off.

To set an alarm or alarms:

1. Click **Start**, **Control Panel**.
2. Click **Performance and Maintenance**.
3. Click **Toshiba Power Saver**.

   The Toshiba Power Saver Properties window appears.
4. In the "Running on batteries" section, click **Details**.

   The mode Properties window appears.
5. Click the Alarm tab and set the alarm(s), as desired.

Conserving battery power

How long a fully charged battery pack lasts when you are using the computer depends on a number of factors, such as:

- How the computer is configured.
- How much you use the display panel instead of an external monitor.
- How much you use the hard disk and other drives.
- Whether you use any optional devices to which the battery supplies power.
- Where you are working—since operating time decreases at low temperatures.

Toshiba's power-saving options greatly increase the length of time you can use the computer before having to recharge the main battery.

Toshiba has combined these options into several preset power usage modes.

Setting a power usage mode

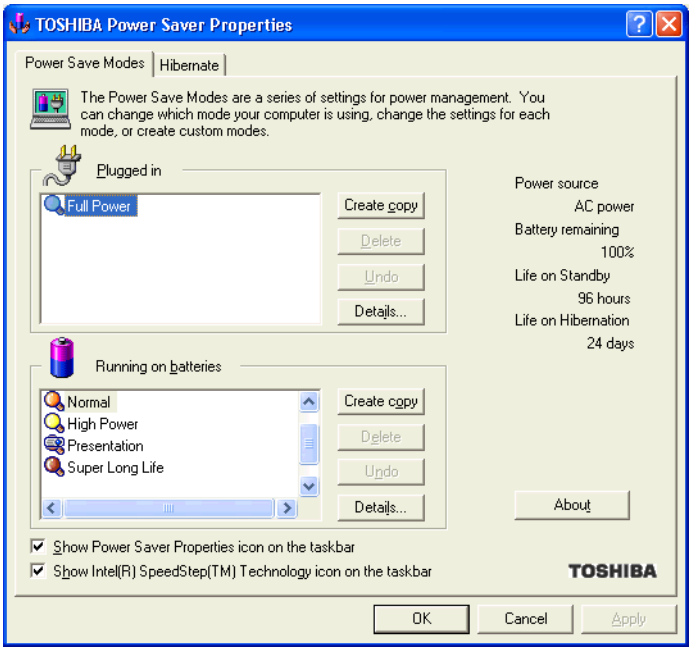
1. Click **Start, Control Panel**.

   The Control Panel window appears.

2. Click **Performance and Maintenance**.

3. Click the **TOSHIBA Power Saver** icon.

   The TOSHIBA Power Saver Properties window appears.



Sample TOSHIBA Power Saver Properties window

By changing the options that appear in the Power Saver Properties dialog box and clicking **OK**, you can reconfigure that function. You may choose a power-saving management strategy to best suit your computing needs. If you are running on batteries and the programs that you are using do not require a lot of system resources, you may experience longer work sessions by enabling the Normal setting. Any options that you change become the active settings when you exit the program. (You do not have to restart your system before they become active settings.)

Using a hot key to select the power usage mode

1. Press Fn and F2 simultaneously to display the power usage pop-up window.
2. While continuing to press Fn, press F2 until you select the desired power usage mode.
3. Release the Fn key.

   The computer is now in the selected mode.

Turning off the display automatically

To save power, it's a good idea to set the display to turn off automatically when you're not using the computer. You can do this in several ways:

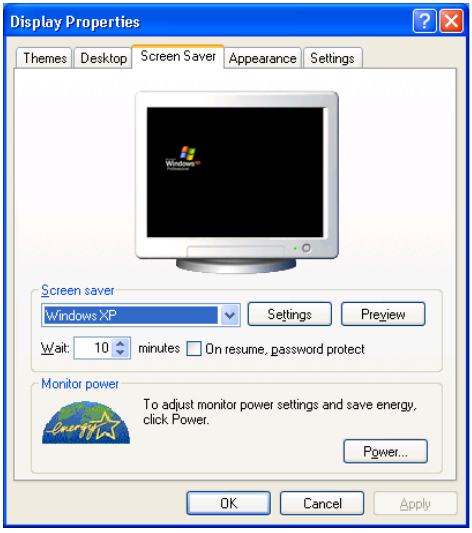
- Use the Display Properties to enable the blank screen saver.
- Use the Power Saver Properties to turn off the LCD panel after a certain amount of time has passed.

Enabling the screen saver

1. Click **Start**, **Control Panel**.
2. Click **Appearance and Themes**.
3. Click **Display**.

   The Display Properties window appears.

4 Click the **Screen Saver** tab.



Sample Display Properties window with Screen Saver tab displayed

5 In the section labeled **Screen Saver**, choose the desired screen saver.

6 In the Wait window, click the up and down buttons to set the number of minutes of inactivity before the display turns off automatically.

7 Click **Apply**, then **OK**.

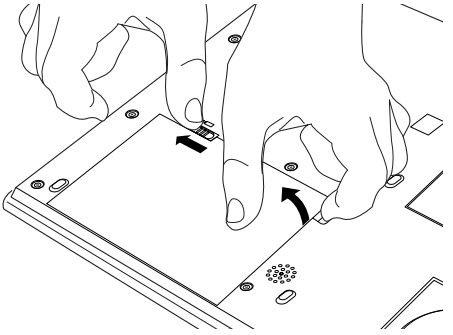
Changing the main battery

When your main battery has run out of power, you have two options: plug in the AC Adapter or install a fresh main battery.

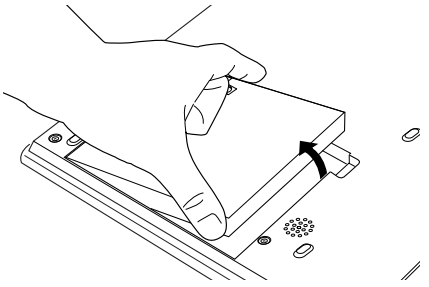
TECHNICAL NOTE: To avoid losing any data, save your files and then either completely shut down your computer, or put it into Hibernation mode before changing the main battery.

Removing the battery from the computer

1. Save your work.
2. Power off the computer or place it in Hibernation mode according to the instructions in "Using Hibernation" on page 98.
3. Remove all cables connected to the computer.
4. Close the display panel and turn the computer upside down with the front of the computer facing you.



Sliding the battery release latch and freeing the battery



Pulling the battery out

5 Carefully slide the battery release latch to the left and use the finger slot near the corner of the battery module to gently pull the battery module free.

WARNING If the battery is leaking or its case is cracked, put on protective gloves to handle it, and discard it immediately following the advice in "Disposing of used batteries" on page 124.

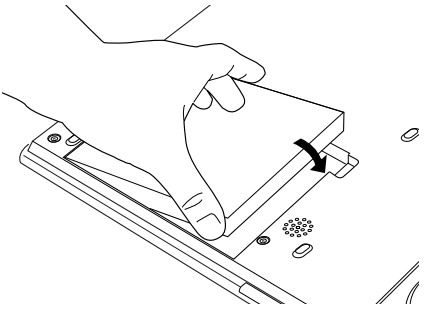
Inserting a charged battery

1 Wipe the battery terminals of the charged battery with a clean cloth to ensure good connection.

2 Holding the battery at an angle, insert the end facing you into the front of the battery slot.

Make sure that end fits evenly with the surrounding casing.

3 If you have inserted that end correctly, you will be able to gently press the rear end into place until the battery latch snaps shut. If that end resists, do not force it. Simply start over.



Inserting the battery

CAUTION Failure to lock the battery cover can result in the battery falling out of the computer case.

4 Turn the computer right side up.

5 Reconnect any cables you removed.

6 Turn on the computer.

Taking care of your battery

The following sections offer tips on how to take care of your battery and prolong its life.

Safety precautions

- If the battery pack produces an odor, overheats or changes color or shape while it is being used or charged, turn off the computer's power immediately and disconnect the power cord from the power socket. Carefully remove the battery pack from the computer.
- Do not try to disassemble a battery pack.
- Do not overcharge or reverse charge a battery. Overcharging will shorten its life, and reverse charging could damage it.

- Avoid touching the metal terminals of the battery with another metal object. Short-circuiting the battery can cause it to overheat and may cause damage to the battery or the computer.
- Do not incinerate a spent battery, as this could cause it to explode and release toxic materials.
- If a battery is leaking or damaged, replace it immediately. Use protective gloves when handling a damaged battery.
- To replace the main battery, use an identical battery that you can purchase through to Toshiba Web site at accessories.toshiba.com.
- A reverse polarity condition should be avoided with all batteries. The main battery is designed so that it cannot be installed in reverse polarity.
- Charge the battery only in the computer or in a battery charger designated as an approved option.
- When you install the battery pack, you should hear a click when it is seated properly.
- Do not expose the battery pack to fire. The battery pack could explode.

Maximizing battery life

To maximize the life of your battery pack:

- 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 below:

  1. Turn off the computer's power.
  2. Disconnect the AC adapter and turn on the computer's power. If it does not turn on, go to step 4.
  3. Operate the computer on battery power for five minutes. If the battery pack has at least five minutes of operating time, continue operating until the battery

pack is fully discharged. If the battery light LED flashes or there is some other warning to indicate a low battery, go to step 4.

4. Connect the AC adapter to the computer and the power cord to a power outlet. The DC-IN or AC power-light LED should glow green, and the Battery LED should glow amber to indicate that the battery pack is being charged. If the DC-IN or AC power-light indicator does not glow, power is not being supplied. Check the connections for the AC adapter and power cord.
5. Charge the battery pack until the Battery LED glows green.

- If you have extra battery packs, rotate their use.
- If you will not be using the system for an extended period, more than one month, remove the battery pack.
- Disconnect the AC adapter when the battery is fully charged. Overcharging makes the battery hot and shortens life.
- If you are not going to use the computer for more than eight hours, disconnect the AC adapter.
- Store spare battery packs in a cool dry place out of direct sunlight.

Disposing of used batteries

The life of a battery pack should last for years. When the battery pack needs replacing, the main battery light flashes amber shortly after you have fully recharged the battery.

You must discard a battery if it becomes damaged.

WARNING The computer's main battery is a Lithium-Ion (Li-Ion) battery, which can explode if not properly replaced, used, handled, or disposed of. Putting spent batteries in the trash is not only irresponsible, it may be illegal. Dispose of the battery as required by local ordinances or regulations.

Use only batteries recommended by Toshiba.

After repeated use, the batteries will finally lose their ability to hold a charge and you will need to replace them. Under federal, state, and local laws, it may be illegal to dispose of old batteries by placing them in the trash.

Please be kind to our shared environment. Check with your local government authority for details regarding where to recycle old batteries or how to dispose of them properly. If you cannot find the information you need elsewhere, call Toshiba at: (800) 457-7777.

Traveling tips

The environmental precautions listed in "Selecting a place to work" on page 41, also apply while traveling.

- Never leave your computer on a sunny ledge or in a place where it could get wet or covered in dust.
- Always travel with the computer in a carrying case. Toshiba offers a choice of carrying cases for the computer. They all provide plenty of extra space for manuals, power cords/cables, and compact discs. Contact your authorized Toshiba representative for more information.

TECHNICAL NOTE: When traveling by air, you may be required to pass your notebook through airport security equipment. The X-ray equipment will not harm your computer.

Chapter 4

Expansion Options

Your computer is designed to work in your office as well as on the road. This chapter explains how to set up several optional external devices so that your notebook can provide all the convenience of a traditional desktop computer.

To order additional devices and accessories, see the accessories information provided with your computer, or visit toshibaaccessories.com.

Using your computer at the office

By connecting an external full-size keyboard, an external monitor, a mouse and a printer, you can work with your computer as if it were a standard office model. You can connect a monitor and USB-compatible devices, such as the keyboard, mouse and printer, directly to the computer, or to the optional Slim Port Replicator.

For information on connecting a mouse and a printer, see the “Getting Started” chapter on page 41.

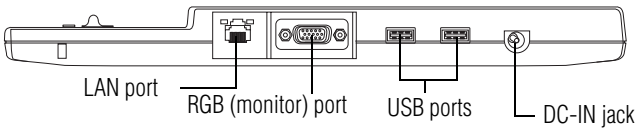
If you want to connect your computer to the office network, you can use the LAN port or your wireless LAN (Wi-Fi) capability.

Optional Slim Port Replicator

The optional Slim Port Replicator enhances your mobility because it provides ports that enable you to connect to many expansion devices. The replicator provides more USB ports than the computer, enabling you to use more USB-compatible devices at the same time.

If you use the optional Slim Port Replicator, the only other computer port you can use at the same time is the modem port. This is because attaching the replicator makes every port except the modem port inaccessible.

Back of the optional Slim Port Replicator



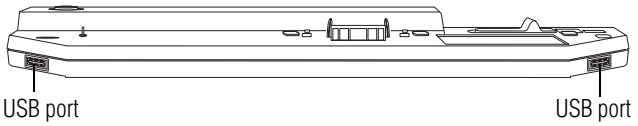
The **LAN port** lets you connect the computer to a local area network using a 10/100 Ethernet link.

The **RGB (monitor) port** lets you connect an external monitor. For more information, see "Using an external monitor" on page 131.

Use the **Universal Serial Bus (USB) ports** to connect the optional external USB diskette drive or other USB peripherals.

You can connect the AC adapter to the **DC-IN** jack on the optional Slim Port Replicator.

Front of the optional Slim Port Replicator



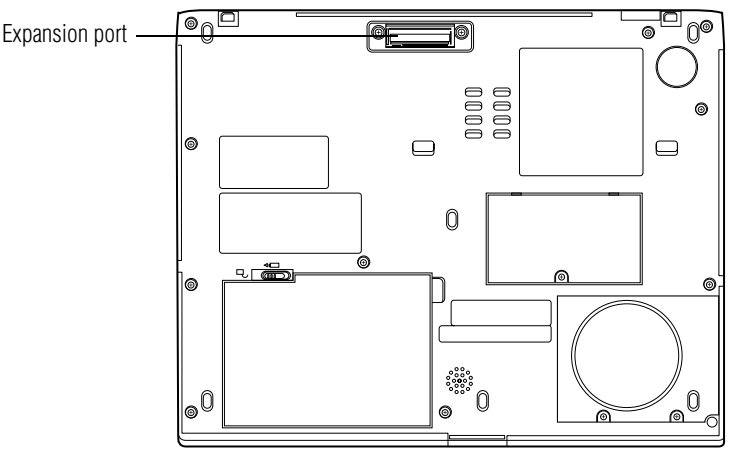
Use the **Universal Serial Bus (USB) ports** to connect the optional external USB diskette drive or other USB peripherals.

Using the optional Slim Port Replicator

The optional Slim Port Replicator connects to the expansion port on the bottom of the computer. When the port replicator is attached and the power is on, a small light illuminates.

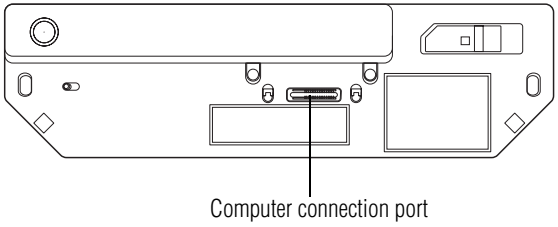
Attaching the optional Slim Port Replicator to the computer

1. Make sure the computer is turned off.
2. Remove all connections from the back of the computer.



Computer's expansion port for connecting to optional Slim Port Replicator

3 Locate the expansion port on the bottom of the computer.



Optional Slim Port Replicator and where it attaches to your computer

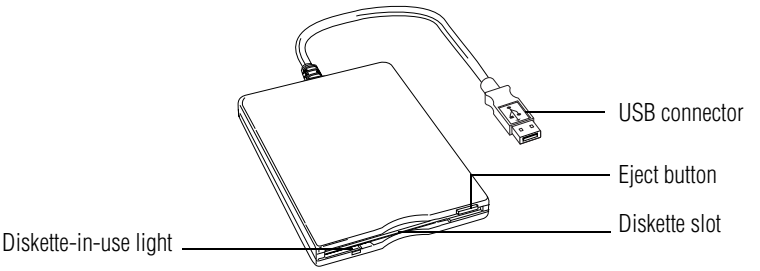
4 Holding the computer firmly, connect the expansion port on the bottom of the computer to the connection port on top of the optional Slim Port Replicator by pressing straight down.

5 Connect the replicator to a power source.

Connecting the optional external USB diskette drive

The optional external USB diskette drive allows you to use diskettes and is useful for installing software on the hard disk, exchanging information with other systems, and making backup copies of the files stored on your hard disk.

You can attach the optional external USB diskette drive to a USB port on the back of the computer or to any of the USB ports on the optional Slim Port Replicator. You can also attach it while the computer is on.

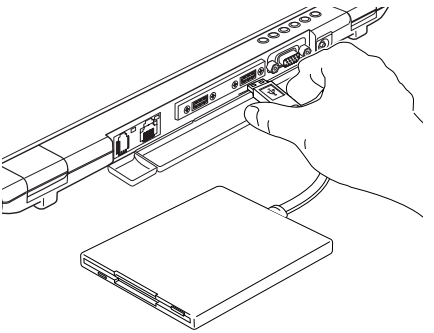


Optional external USB diskette drive and connector cable

TECHNICAL NOTE: You may attach the optional external USB diskette drive while the computer is on or off.

If you attempt to access the drive when it is not attached to the computer, you will receive an error message.

To attach the optional external USB diskette drive cable to a USB port on either the computer or the optional Slim Port Replicator, gently push the connector into the USB port.



Attaching the optional diskette drive cable to one of the computer's USB ports.

The computer automatically recognizes the optional external USB diskette drive and calls it A:.

Using an external keyboard

If you prefer to use a standard keyboard, you can attach one to a USB port on the computer or on the optional Slim Port Replicator, provided the keyboard is USB-compatible.

Connecting a keyboard

You can connect a USB keyboard while the computer is on.

To connect the keyboard to the computer or the optional Slim Port Replicator, gently push the keyboard cable into the USB port.

Using an external monitor

If you prefer to use an external monitor, you can attach one to your computer's RGB (monitor) port or to the RGB (monitor) port on the optional Slim Port Replicator.

Connecting the monitor

1. If you are connecting the monitor to your computer or to the optional Slim Port Replicator, and the replicator is connected to your computer, turn off the computer.

NOTE Make sure the computer is off before you attach the monitor. Connecting a monitor with the computer's power on may damage the monitor, the computer, or both.

2. Connect the monitor's video cable to the RGB (monitor) port on the computer or the optional Slim Port Replicator.
3. Connect the monitor's power cable to a power source.
4. Turn on the external monitor.
5. Turn on the computer.

The computer will use the external monitor and disable the built-in display panel.

If your external monitor can display high-resolution video modes (greater than 800 x 600), you can take advantage of this feature by changing the video mode in Display Properties in the Control Panel.

Using both screens simultaneously

You can view information on the computer's built-in display and an external monitor simultaneously. The size of the display image on each screen depends upon the video mode.

To send information to both the built-in display panel and the external monitor:

1. Press Fn and F5 simultaneously.
2. While holding down Fn, press F5 repeatedly until you get the desired setting.

   This hot key cycles through the settings in the following order: built-in display only, external monitor only, and simultaneous display.
3. Release the Fn key.

HINT: Simultaneous mode works only with external monitors that support 800 x 600 resolution and higher.

Connecting a mouse or a printer

For information on attaching a mouse or a printer, see "Connecting a mouse" on page 61 or "Connecting a printer" on page 61.

Using PC Cards

PC Cards are credit-card sized expansion cards that greatly increase the capabilities of your computer.

Some PC Cards combine several functions. Multi-function cards allow you to get the most out of your PC Card slot.

You may insert one Type I card or one Type II card into the computer's PC Card slot. This slot contains a spacekeeper insert to keep dust and dirt out of the computer. If you are not using a PC Card, leave the insert in place. If you are using a PC Card, remove the insert and keep it in a safe place for future use.

Most PC Cards conform to the PCMCIA (Personal Computer Memory Card International Association) standard.

TECHNICAL NOTE: For PCMCIA-compatible PC Cards, check the package to make sure they conform to the PCMCIA 2.1 standard (or later). Other cards may work with your computer, but they are likely to be much more difficult to set up and use.

Hot swapping PC Cards

One of the great things about PC Cards is that you can replace one PC Card with another while the computer is on. This is called "hot swapping."

DEFINITION: Hot swapping is the ability to change PC Cards while the computer is on.

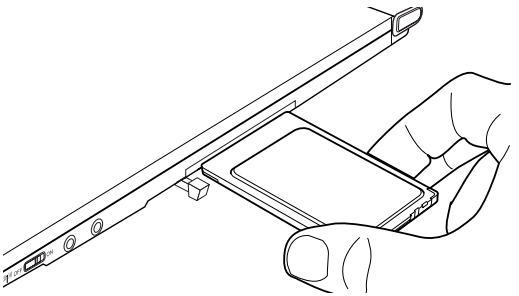
Inserting a PC Card

Before inserting a PC Card, read the documentation that came with the card to see if it has any special requirements.

HINT: The operating system provides the Card and Socket Services software for your PC Card. Even if your PC Card comes with its own version of Card and Socket Services, you should use the files included in the operating system.

To install a PC Card:

1. Locate the PC Card slot on your computer.



Inserting a PC Card into the slot

2. Insert the PC Card in the slot.
3. When the card is almost all the way into the slot, push firmly, but gently, to ensure a good connection with the computer. do not force the card into position.

Hot swapping precautions

Although you can insert a PC Card at any time, remember not to remove a card while it is in use. Otherwise, you could lose valuable information.

For example:

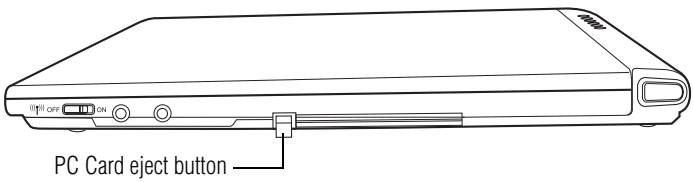
- Never remove a hard disk card or CD-ROM drive card while the system is accessing the card.
- Never remove a network card while you are connected to the network.
- Never remove a SCSI card while any of the SCSI devices connected to it are operating.

DEFINITION: SCSI is an acronym for Small Computer Systems Interface. A single SCSI PC Card enables you to connect several SCSI devices to your computer at the same time.

Before removing a PC Card, stop it by clicking the **Safely Remove Hardware** icon in the system tray.

Removing a PC Card

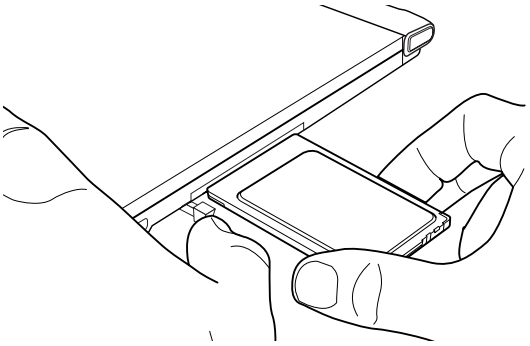
1. Click the **Safely Remove Hardware** icon in the system tray.



PC Card eject button

2. Press the PC Card eject button once to extend it, then press it again to remove the card.

   The PC Card pops out about an inch.



Removing the PC Card from the slot

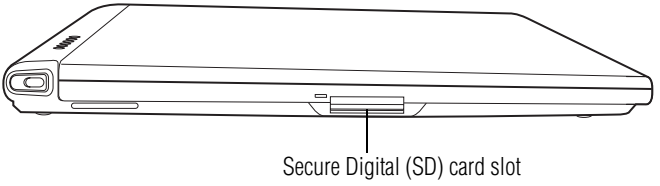
3 Grasp the edges of the PC Card and carefully slide it out of the slot.

Using a Secure Digital (SD) card

Your computer supports the use of an SD™ media card.

Inserting an SD card

1 Turn the card so that the contacts (metal areas) are face down.



2 Push the card into the slot until it locks in place.

Removing an SD card

1. Click **Start**, then **My Computer**.
2. Right-click the SD drive's icon and select **Eject** from the pop-up menu.
3. Press the card inward to release it.

   The card pops out slightly.
4. Lift the left side of the computer, grasp the card, and pull it straight out.

Another method for removing an SD memory card is as follows:

1. Click the **Safely Remove Hardware** icon in the system tray.
2. Click **Safely Remove SD Memory Card Drive - Drive (D:)**.
3. When the message displays that it is safe to remove hardware, press the card inward to release it.

   The card pops out slightly.
4. Lift the left side of the computer, grasp the card, and pull it straight out.

Chapter 5

Enhancing Productivity

In this chapter, you will explore other features of your notebook computer.

Windows® XP special features

The Windows® XP Professional operating system offers you several new features and enhancements, including:

- New system file protection
- A system restore function, allowing you to rollback the system to its previous mode
- An improved help center, support automation, and automatic Windows® operating system update
- Wizards to simplify setting up your home network
- Ability to share one Internet connection among multiple PCs
- An automatic discovery feature that allows your computer to detect new and intelligent devices

Personalizing your desktop

Your desktop is your virtual workspace. This section explains how to customize its features for the way you like to work. You can customize the following aspects of the desktop:

- Taskbar—which resources to display for quick access
- Web content interface—what information from the Internet to always display
- Desktop style—how windows are displayed and how to browse folders and files
- Toolbars—what information appears at the top of each window

Customizing the taskbar

As you work, the taskbar changes to reflect what you are doing. Its icons provide shortcuts to programs, documents, files, folders, system features, and components. Open applications also have Forward and Backward buttons to allow navigation through folders, documents, and Web sites.

For example, you can personalize the taskbar to include Quick Launch icons, and also your favorite URL addresses or local folders and programs.

DEFINITION: URL stands for Uniform Resource Locator, which is the address that defines the route to a file on the Web or any other Internet facility. Generically, it is known as the World Wide Web site address.

Having a list of favorite URLs handy saves time. Using it bypasses the need for you to launch your browser first.

To customize your taskbar settings, point to an empty space in the taskbar and click the secondary button. Then click **Properties**.

Bringing the world to your desktop

With the Windows® XP operating system you can set up your desktop with complete World Wide Web integration at a single click.

Adding components to the Web content interface

1. Point to an empty space on the desktop and click the secondary button.
2. Click on **Properties.**

   The Display Properties window appear.
3. Click the **Desktop** tab.
4. Click the **Customize Desktop** button.
5. Click the **Web** tab.

   The operating system displays a list of items to add to the desktop.
6. To view additional components, click **New.**

   The New Desktop Item dialog box appears.
7. To browse the Gallery for more components to add, click **Visit Gallery**.

   In order to browse, an active Internet connection must be established.
8. To select some other Web site, type the address of the Web site you want or click **Browse** to locate it.

You can configure the Web content interface in several other ways. For further information, see your operating system documentation or access Windows® Help by clicking **Start**, **Help and Support**.

Changing desktop and browsing style

The operating system enables you to customize the way you view your desktop and browse the files and folders on your local computer or network file server.

You can specify that:

- Items that normally require a double-click will open with a single click.
- Folders will open in their own window instead of in the same window.
- Folders are accompanied by a list of common tasks instead of being displayed alone.

The options you choose determine how you browse in the operating system, regardless of whether you start from the desktop, My Computer, Windows Explorer, or Internet Explorer.

For more information about changing your desktop style, enter desktop in the Help and Support Index.

Choosing a style

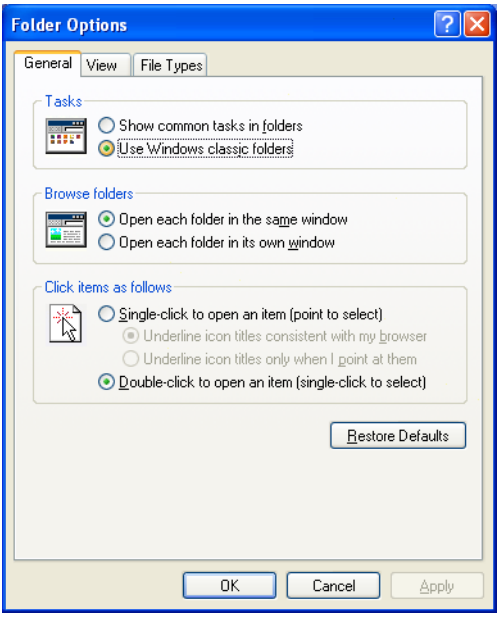
To select desktop and browsing style options:

1. Double-click **My Computer**.

   The My Computer window appears.

2. Select the **Tools** menu, then click **Folder Options**.

   The Folder Options dialog box appears.



Sample Folder Options dialog box

3 Click the preferred options.

4 Click **Apply**, then **OK**.

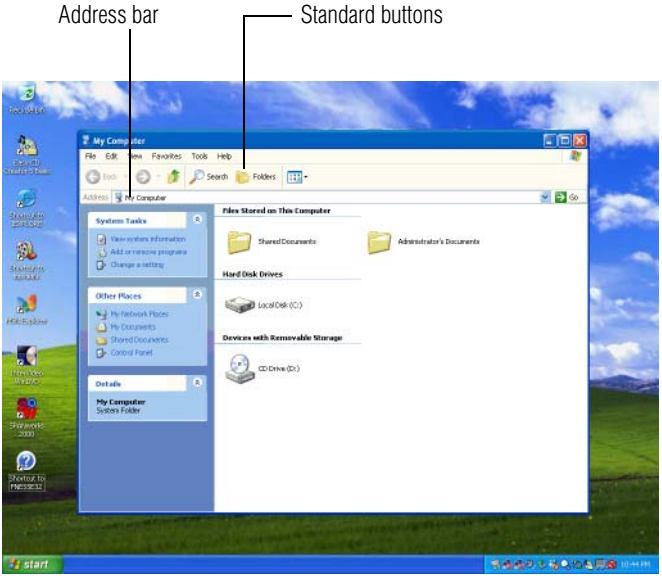
Personalizing individual windows

Just as you can display a Web page on your desktop, you can also display a Web page in an individual window. If you subscribe to the Web page, it can be automatically updated on a regular basis. For example, using this Web integration feature you can monitor weather, game scores, stock prices, or headlines—all in the window of your choice.

Customizing window toolbars

You can display one or more customizable toolbars at the top of a window. As you browse, the operating system detects the kind of information presented in the window and automatically displays the appropriate toolbar buttons and menus.

You can also add these toolbars to the taskbar.



Sample toolbar locations

The elements you can add to the top of the window are:

Toolbar element	*Description*
Standard buttons	Displays buttons for commonly used commands, such as copying, pasting, deleting items, changing views, and browsing backward and forward.

Toolbar element	*Description*
Address Bar	Opens Web pages, programs, folders, or documents. By default, the address bar shows your current location, and whether it is a folder or a Web page. You can browse to another location by typing an address — a URL, a path, or even a program name. If you start typing a previously typed address, the AutoComplete feature finishes the address for you.
Links	Displays buttons to Web sites.

Displaying a toolbar in a window

1. Double-click **My Computer.**

   The My Computer window appears.

2. On the **View** menu, point to **Toolbars**, then click the name of the toolbar you want to display.

   The toolbar appears below the menu bar of the current window.

Displaying information about each folder

In addition to displaying the contents of each window, you might find it helpful to have the operating system display the name of the folder and brief information about how to use the folder. This means displaying an individual window as a Web page.

1. Double-click **My Computer**.

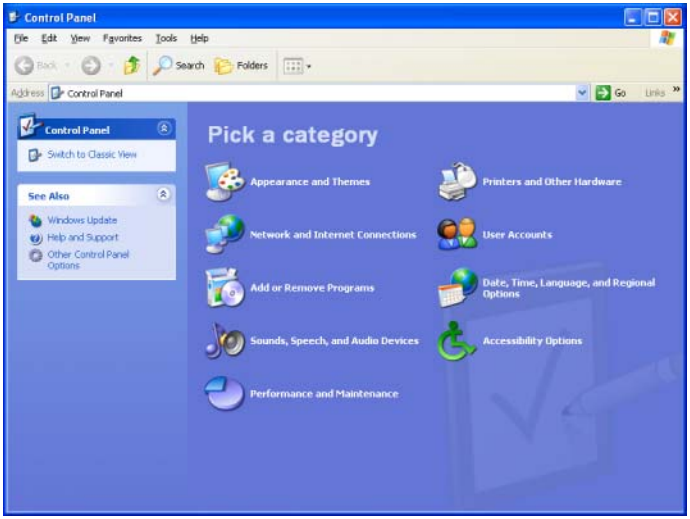
   The My Computer window appears.

2. Open the folder you want to view as a Web page.

3. In the **Tools** menu, select **Folder Options.**

4 In the Tasks section, click the button for **Show common tasks in folders**.

5 Click **Apply**, then **OK**.



Sample Control Panel window as a Web page

The addition of the name of the folder and instructions for how to use the folder on the left give the window the appearance of a Web page.

Setting up for communications

In order to connect to the Internet, use an online service, or communicate across the telephone lines with another computer, you need:

- A modem (one comes with your computer)
- A telephone line
- A browser or communications program
- An Internet Service Provider (ISP) or online service if you plan to use the Internet

Determining the COM port

Your modem is connected to one of the computer's COM (communications) ports. The default setting for the modem is COM3.

The following procedure is intended to support you if you need to either upgrade your modem or reset the port to the default settings.

If you're having trouble connecting through the modem, you may need to determine the current COM port name and possibly change it.

To find out which port your modem is connected to in the operating system:

1. Click **Start**, click **Control Panel**, then **Printers and Other Hardware**.

   The Control Panel opens.

2. Click **Phone and Modem options**.

   The Phone and Modem options window appears.

3. Click the **Modems** tab.

   A location box appears.

4. Make a note of the COM port number shown in the **Attached to** field.

5. To verify that the modem is set up properly, double-click the COM port to which your modem is connected.

   The Toshiba Software Modem Properties box appears. In the device status area, the computer should indicate whether the modem is working properly.

6. If the modem isn't working properly, click **Troubleshooting** and follow the instructions.

7. Click **OK** to close the Properties box, then the Phone and Modem options box.

8. Close the Control Panel.

Using the Ethernet LAN Port

If your operating system is Windows® XP Professional, you can connect your computer to a Local Area Network (LAN) at work or from a remote location.

When your computer starts, the Windows® operating system attempts to contact a Dynamic Host Configuration Protocol (DHCP) server. If the computer is not connected to a network, it may pause a few minutes as it waits for a reply. To avoid this delay, you can configure the Windows® operating system to disable the LAN port.

To disable the LAN port:

1. Click **Start** and then click **Control Panel**.
2. Click **Performance and Maintenance**.
3. Click the **System** icon and select the **Hardware** tab, then select the **Device Manager** button
4. Select **Network Adapters**, then select the specific Network Adapter.
5. Secondary click the **Adapter** and click **Disable**.
6. Click **Yes** to confirm disabling the network card.

   Your LAN port is now disabled.

Accessing a LAN

To access a LAN:

- At the office, you can connect the network Ethernet cable to the RJ45 jack on your computer.
- Your computer may be equipped for wireless communications. If so, see the next section on "Exchanging data with another computer."
- From home or while on the road you'll need a dial-up connection. Ask your network administrator for the telephone number to access the network.

Transferring application files

There may be instances when you will need to transfer application files from the Recovery CD that comes with your computer. A CD-ROM drive is not a standard feature of the Portégé R100 Series computers, but you can transfer these files to your computer in the following ways:

- Use an external CD-ROM drive.

  You can order a PORT-Noteworthy PC Card CD-ROM drive from Toshiba and install it in the PC Card slot on the right side of the computer. Alternatively, if you have a PC Card SCSI adapter, you can use a SCSI CD-ROM drive.

- Connect to a network.

  You can access your Recovery CD by connecting your notebook to the office network. You then can upload the files on the CD from another computer with a CD-ROM drive onto a network server and download the files onto your notebook.

Setting up a direct cable connection

NOTE To establish a direct cable connection you will need to purchase a Data Transfer/Direct Connect cable, which is sold separately.

To establish a direct cable connection with another computer:

1. Click **Start**, **All Programs**.
2. Point to **Accessories**, **Communications**, and click **New Connection Wizard**.
3. Click **Next**.
4. Select **Set up an advanced connection**.
5. Click **Next**.

6 Select **Connect directly to another computer**.

7 Choose the appropriate role for your computer:

- Guest
- Host

8 Follow the on-screen instructions.

Using audio features

Your computer is equipped with a built-in monaural speaker.

The computer plays sounds through the internal speaker. It uses the sound settings in your operating system. To adjust the volume, click the speaker icon in the system tray.

Using external speakers or headphones

Instead of using the internal speaker, you can connect headphones or a pair of external stereo speakers.

TECHNICAL NOTE: Use amplified speakers that require an external power source. Other types of speakers will be inadequate to produce sound from the computer.

To play back sound files through external speakers or headphones:

1 Locate the headphone jack on the computer.

2 Using any necessary adapters, plug the cable from the headphones or external speakers into the headphone jack.

To adjust the volume:

- For external speakers, use the volume controls on each speaker.
- For headphones, use the Fn +1 (volume decrease) and Fn+2 (volume increase) key combinations.

Recording sounds

An external microphone may be used with other software to record monaural audio sounds and save them as digital audio.WAV files on disk.

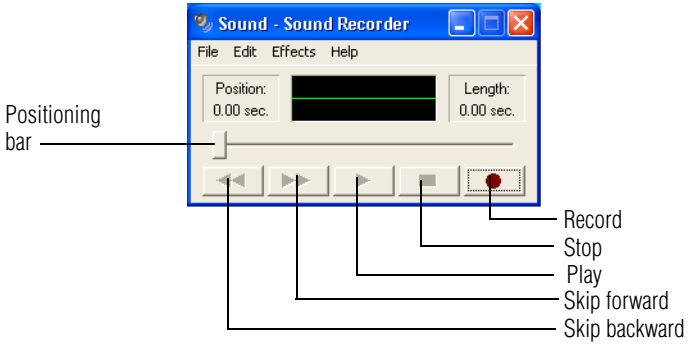
DEFINITION: A .WAV (pronounced "wave") file is one of the formats for storing sound in files.

TECHNICAL NOTE: If you record MP3 files, you will only be able to play them on a device capable of playing MP3 files.

You may also record sounds as .WAV files by connecting an external microphone or other sound source to the microphone jack.

Using a microphone

1. Connect an external microphone to the computer.
2. Click **Start**, point to **All Programs**, **Accessories**, **Entertainment**, then click **Sound Recorder**.



Sample Sound Recorder screen

3 Click the **Record** button and speak normally into the microphone.

NOTE You can only record 60 seconds at a time.

4 When you have finished recording, click the **Stop** button.

5 To hear what you just recorded, click the **Play** button.

6 To save the file, select **Save** from the **File** menu.

Adjusting recording settings

The better the quality of the recording, the more disk space the sound file requires. Experiment to find a balance that fits your needs.

1 Open Sound Recorder, if necessary (click **Start**, point to **All Programs**, **Accessories**, **Entertainment**, then click **Sound Recorder**).

2 In the Sound Recorder window, click **Edit**, then click **Audio Properties**.

3 In the Audio Properties dialog box, adjust the Recording Volume and Preferred device.

4 Click **OK**.

Your new settings take effect the next time you record.

Chapter 6

Toshiba Utilities

Your computer includes several utilities designed to help you to reconfigure your system to best meet your individual needs. Together, these allow you to ascertain certain system details, set additional options, or change default options. These utilities are described in this chapter:

- Fn-esse®
- Hotkey utility
- TOSHIBA Mobile Extension Service Configuration
- TOSHIBA Console
- TOSHIBA Button Controls

Fn-esse

The operating system shortcuts and Toshiba's Fn-esse program provide quick ways to open programs, documents, and folders from within any program without using the Start menu.

This section describes how to use the Fn-esse program to quickly access your programs and files.

With Fn-esse, you can assign an Fn key combination to:

- Open a Windows® program
- Open a file in its associated Windows® program
- Display a customized folder of Windows® programs and/or files from which to choose

Fn-esse also has several keys, known as hot keys, that perform preassigned operations. For more information, see "Hot Keys" on page 202.

You cannot assign any key that is associated with a hot key or a keyboard overlay.

Starting Fn-esse

To access Fn-esse:

- Click **Start**, **All Programs**, **Toshiba Utilities** and **Fn-esse**.

  The Fn-esse keyboard appears.

Sample Fn-esse keyboard

The keys are color-coded as follows:

- Available keys are white.
- Assigned keys and keys associated with a popup list are shown on the Fn-esse keyboard in the selected color.
- Unavailable keys do not appear.

Assigning a key to a program or document

There are two ways to assign a key to open a program or document:

- Drag-and-drop
- Use the keyboard or pointing device

The method most often used is drag-and-drop.

Using drag-and-drop

To assign a key to a program or document:

1. Start both Fn-esse and Windows® Explorer (or the program supporting drag-and-drop).
2. Resize the Explorer window so that you can see both the Fn-esse keyboard and Explorer at the same time.
3. In the Explorer window, highlight the program or document file you wish to assign to a key.
4. Click and hold the primary button as you drag the highlighted item from Explorer to the key on the Fn-esse keyboard you want to assign to it.
5. Release the primary button.

   Fn-esse displays the Add/Edit Command dialog box with the Description, Command Line, and Working Directory fields automatically completed.
6. Click **OK** to close the Add/Edit Command dialog box with your key assignment in place.

   The program or document is now associated with the key you just selected. To open the program or document, press Fn plus the appropriate key from within any Windows® program.

Using the keyboard or pointing device

To assign a key to open a program or document:

1. Start Fn-esse.
2. Perform one of the following:
   - Using the keyboard, press and hold the Fn key, then press the desired assignment key.
   - Using the pointing device, move the cursor over the desired key and press the secondary button.

   The Assignment Type dialog box appears.

HINT: If you are making a direct key assignment, complete step 3. If you are making a popup assignment, complete step 4.

3. To make a direct key assignment, select **Direct** to display the Add/Edit Command dialog box, then complete these steps:
   - Enter the Description, Command Line, and Working Directory for the new Fn-esse key assignment, or click the **Browse** button to specify this information.
   - Click **OK**.
4. To make a popup assignment, select **Popup** to display the Application Explorer dialog box, then complete these steps:
   - Select the desired folder. The left side of the Application Explorer window displays the folders in the Programs menu. The right side lists the programs and documents in the folder. These are the items that appear in the popup list.
   - To create a popup list with items from various folders, or to pick only a few items from a folder, create a new folder containing only the desired programs and documents. If you are unsure how to

do this, refer to your operating system documentation.

- Click **OK** to associate the folder with the key you just selected.
- To open a popup list showing the items in that folder, press Fn plus the appropriate key from within any Windows® program.

Viewing existing key assignments

To view the existing key assignments, choose **Assignments** from the Fn-esse keyboard. Fn-esse displays the Function Key Assignments dialog box. This box lists all the key assignments and the program or document to which each key is assigned.

To view items in a popup list, click the **Expand popup lists** check box.

Changing or removing existing key assignments

1. In the Fn-esse keyboard, click the key you wish to change with the secondary button.

   Fn-esse displays the Assignment Type dialog box.

2. To change the key assignment, click **Direct** or **Popup** and continue as if you were creating a new assignment.
3. To remove the key assignment, click **Clear**.

Hotkey utility

The hotkey utility allows you to receive a confirmation message when you use the hot key combination for Standby [Fn+F3] and Hibernation [Fn+F4].

To activate the utility:

1. Click **Start**, **All Programs**, **Toshiba Utilities**, and then click **Hotkey utility**.

The Hotkey window appears.

Sample Toshiba Hotkey utility window

2 Put a check mark next to the desired option.

3 Click **OK**.

Expansion device properties

To adjust the settings for the optional Slim Port Replicator, use the TOSHIBA Mobile Extension Service Configuration utility.

Accessing Mobile Extension Service Configuration

You can access the Mobile Extension Service Configuration utility in either of the following ways:

- Press the **TOSHIBA Console** button and then click the **TOSHIBA Mobile Extension** icon.
- Click **Start**, **Control Panel**, **Performance and Maintenance**, **TOSHIBA Mobile Extension**.

The TOSHIBA Mobile Extension Service Configuration window appears.

Sample TOSHIBA Mobile Extension Service Configuration window

TOSHIBA Console

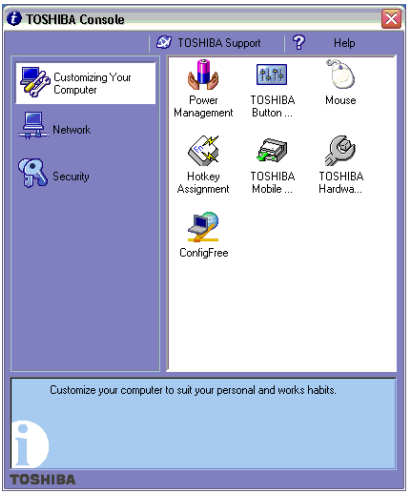
The TOSHIBA Console provides quick access to computer functions and allows you to customize a range of computer settings.

You can normally access this utility in two ways:

- Press the TOSHIBA Console button located above the Print Screen key on your keyboard.
- Use the Start menu, as follows.

1. Click **Start**, then click **All Programs**.
2. Point to **TOSHIBA Console**, then click the resulting **TOSHIBA Console** selection.

   The TOSHIBA Console window appears.



Sample TOSHIBA Console window

The TOSHIBA Console offers three categories of features:

- Customizing Your Computer
- Network
- Security

Customizing Your Computer

The features available in this category are:

- Power Management
- TOSHIBA Button Controls
- Mouse
- Hotkey assignment (for detailed information, see "Fn-esse" on page 152)
- Toshiba Mobile Extension
- Toshiba Hardware Settings
- Config Free

Network

The feature in this category is the Connectivity Doctor Utility.

Security

The features available in this category are:

- Supervisor password
- User password

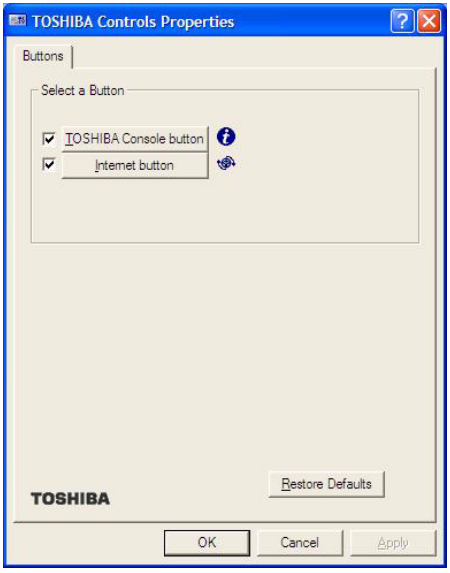
TOSHIBA Button Controls

The TOHSIBA Button Controls allow you to enable or disable the TOSHIBA Console and Internet buttons and the programs associated with them. Those buttons are located just above the function keys at the top of the keyboard.

To access these controls:

1. In the TOSHIBA Console window, click **TOSHIBA Button Controls**.

   The TOSHIBA Controls Properties window appears.



Sample TOSHIBA Controls Properties window

2 Check the boxes for the TOSHIBA Console button and/or the Internet button.

3 Click the selected button.

4 Under Select a Program, make the desired selections.

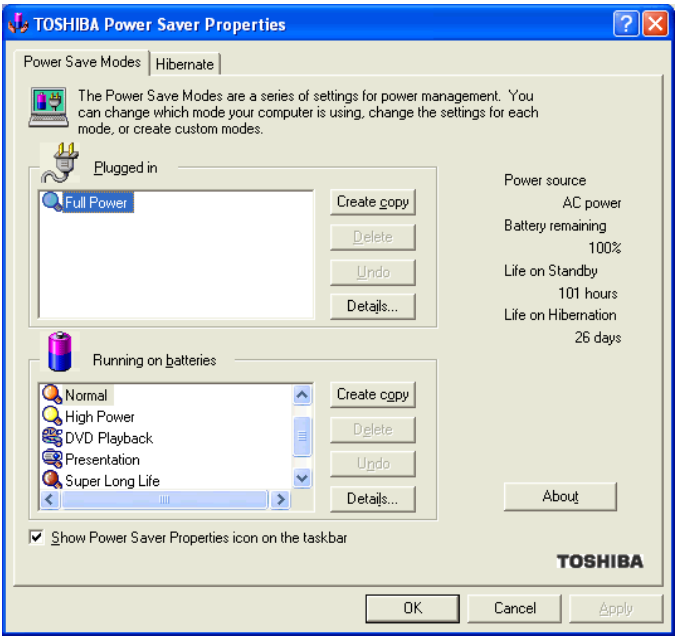
5 Click **Apply**, then click **OK**.

Power Management

The Power Management feature enables you to control your computer's power usage, regardless of the source, and use the many preset power modes, or create one yourself.

To access Power Management through the TOSHIBA Console, click the **Power Management** icon.

The TOSHIBA Power Saver Properties window appears.



Sample TOSHIBA Power Saver Properties window

The Power Save Modes tab shows the power usage modes for both AC power ("Plugged in") and battery power (Running on batteries").

You can either use one of the preset modes or create and use your own customized mode. The preset modes cannot be deleted.

By changing the options that appear in the Toshiba Power Saver Properties window and clicking **OK**, you can reconfigure that function. Any options that you change become effective when you click either **OK** or **Apply**.

Plugged in section

This section has a single preset power usage mode — Full Power. You can create other AC power modes, but Toshiba recommends use of the preset Full Power mode.

Running on batteries section

This section lists the preset modes along with the estimated battery life for each mode. The preset modes are:

- Long Life
- Normal
- High Power
- DVD Playback
- Presentation
- Super Long Life

Although you can change the properties for any of these modes, this is not recommended. If you need a customized mode, create a new mode with the properties you require.

Creating a new power mode

1. Highlight one of the preset modes.
2. Click **Create copy**.
3. A new mode appears with the title "Copy *Name*" where *Name* is the title of the mode you copied. Delete this title, type in the name for your new power mode, then press Enter.

Customizing a power mode

1. Highlight the mode on the Power Save Modes window.
2. Click **Details...**.

The Properties window for the selected mode opens with the General tab displayed.

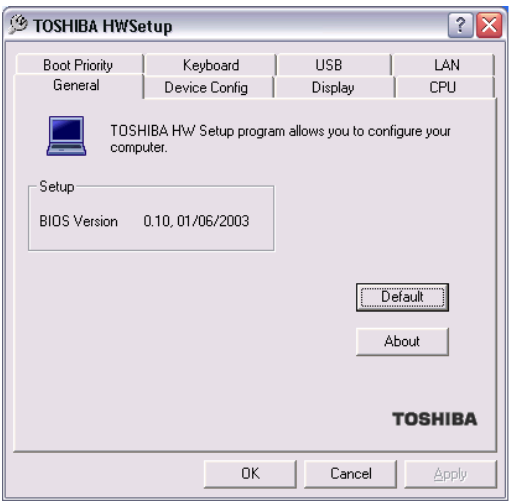
This tab enables you to choose an icon for your power usage mode, describe the mode's characteristics and, optionally, associate it with a program.

The Name field displays the name assigned to the mode in the Power Saver Properties window. You can change the name here if you wish.

Toshiba Hardware Setup

Toshiba Hardware Setup is the Toshiba configuration management tool. To access it:

In the **TOSHIBA Console**, double-click the **Toshiba Hardware** icon.



Sample TOSHIBA HWSetup window

The TOSHIBA HWSetup window appears with tabs for the following:

Choose the desired tab and accompanying options.

- Display—Allows you to change various default settings for the built-in LCD display.
- CPU—Allows you to set the "CPU Frequency Mode" to one of "Dynamically Switchable," "Always High," or "Always Low."

- Boot Priority — Allows you to change the sequence in which your computer searches the drives for the operating system.

  You can also manually choose the Boot Priority by pressing the power button, then quickly pressing the F12 key, or the right or left arrow keys.

  Select the boot device by pressing the right or left arrow keys, then pressing the Enter key.

NOTE Since the system is a quick-booting system, you must press the arrow keys immediately after pressing the power button.

- USB—Allows you to enable or disable USB Legacy Emulation.
- LAN—Lets you enable or disable the Wake-on-LAN feature, and also enable or disable the built-in LAN.
- General—Allows you to view current BIOS.
- Device Config—Shows the Device configuration options.
- Keyboard—lets you enable or disable wake-on-keyboard.

Hard disk drive passwords

Your computer comes with a System Setup utility that lets you set two types of hard disk drive passwords—user and master. These passwords protect your primary and secondary hard disks as follows:

- Setting a hard disk drive user password prevents an unauthorized user from accessing your hard disk, even if it is removed and installed on another computer. This password does not encrypt data on the hard disk.
- Setting a hard disk drive master password lets you bypass the hard disk drive user password and access your hard disk, in case you forget the hard disk drive user password. If you choose to set a hard disk drive master password, you should set it before you set a hard disk drive user password.

HINT: The hard disk drive shipped with your computer may not support the master password feature. When you attempt to set master password protection, your computer may alert you that this feature is not supported by your drive. If this happens and you want to establish a master password for your hard disk, contact your network administrator for instructions.

Setting a hard disk drive user only password in System Setup

CAUTION If you choose to set a hard disk drive user password, we strongly recommend that you set a hard disk drive master password as well.

If you set a hard disk drive user password and later forget the password or lose your password diskette, YOU WILL NEVER BE ABLE TO ACCESS YOUR HARD DISK AGAIN, unless you've set a hard disk drive master password.

To register a user only password in System Setup:

1. Click **Start**, then click **Shutdown**, and click **OK**.

   The computer shuts down.

2. Hold down the Esc key and press and hold the power button until the on/off light on the system indicator panel illuminates (green) for approximately one second. When the following message appears on the screen: "Check system, Then press [F1] key," press F1.

   The System Setup screen appears.

3. Press H to move to the **HDD PASSWORD** section on the screen.

4. Press the spacebar to select **User Only** password mode.

5. Press the down arrow key to move to the **User Password** section.

6. Press the spacebar, then type a password of 1 to 16 characters and press Enter. You may use any combination of letters and numbers in your password.

7. When System Setup prompts you to verify the password, type it again and press Enter.

If the two passwords match, System Setup displays: Registered. If the two passwords do not match, an error message appears. Repeat steps 6 and 7 to enter the password again.

8 Press End to save the change.

9 When System Setup prompts you to confirm your change, Press Y.

Deleting or changing a hard disk drive user only password in System Setup

To delete or change a user only password in System Setup:

1 Click **Start**, then click **Shutdown**, and click **OK**.

The computer shuts down.

2 Hold down the Esc key and press and hold the power button until the on/off light on the system indicator panel illuminates (green) for approximately one second. When the following message appears on the screen: "Check system, Then press [F1] key," press F1.

The System Setup screen appears.

3 Press H to move to the **HDD PASSWORD** section on the screen.

4 Press the spacebar, then type in your user password and press Enter.

5 If you want to change the password, input the new password.

6 When System Setup prompts you to verify the password, type it again and press Enter.

If the two passwords match, System Setup displays: Registered. If the two passwords do not match, an error message appears. Repeat steps 5 and 6 to enter the password again.

7 If you want to delete the user password, leave the space blank and press Enter twice. System Setup displays: Not Registered.

8 Press End to save the change.

9 When System Setup prompts you to confirm your change, Press Y.

Setting a hard disk drive master and user password in System Setup

CAUTION Make sure you choose a hard disk drive master password you can remember easily. If you set a hard disk drive user password and later forget the password or lose your password diskette, you will need to enter the hard disk drive master password in order to access your hard disk.

To register master and user passwords in System Setup:

1 Click **Start**, then click **Shutdown**, and click **OK**.

The computer shuts down.

2 Hold down the Esc key and press and hold the power button until the on/off light on the system indicator panel illuminates (green) for approximately one second. When the following message appears on the screen: "Check system, Then press [F1] key," press F1.

The System Setup screen appears.

3 Press H to move to the **HDD PASSWORD** section on the screen.

4 Press the spacebar to select **Master + User** password mode.

5 Press the down arrow key to move to the Master Password section. You must register a Master Password first.

6 Press the spacebar, then type a password of 1 to 16 characters and press Enter. You may use any combination of letters and numbers in your password.

7 When System Setup prompts you to verify the password, type it again and press Enter.

If the two passwords match, System Setup displays: Registered for both User and Master passwords. If the two passwords do not match, an error message appears. Repeat steps 6 and 7 to enter the password again.

8 Press End to save the change.

9 When System Setup prompts you to confirm your change, Press Y.

Changing the master and user passwords in System Setup

To change the master and user passwords in System Setup:

1 Click **Start**, then click **Shutdown**, and click **OK**.

The computer shuts down.

2 Hold down the Esc key and press and hold the power button until the on/off light on the system indicator panel illuminates (green) for approximately one second. When the following message appears on the screen: "Check system, Then press [F1] key," press F1.

The System Setup screen appears.

3 Press H to move to the **HDD PASSWORD** section on the screen.

4 Use the up and down arrow keys to select the password you wish to change.

5 Press the spacebar, then enter the appropriate password and press Enter.

6 If you want to change your password, input the new password.

7 When System Setup prompts you to verify the password, type it again and press Enter.

If the two passwords match, System Setup displays: Registered. Note that you can only change (not delete) the user password if a master password is registered.

8 Press End to save the change.

9 When System Setup prompts you to confirm your change, Press Y.

Deleting the hard disk drive master and user passwords in the System Setup

HINT: You must delete the hard disk drive master password before you can delete the hard disk drive user password.

To delete the master and user passwords in System Setup:

1 Click **Start**, then click **Shutdown**, and click **OK**.

The computer shuts down.

2 Hold down the Esc key and press and hold the power button until the on/off light on the system indicator panel illuminates (green) for approximately one second. When the following message appears on the screen: "Check system, Then press [F1] key," press F1.

The System Setup screen appears.

3 Press H to move to the **HDD PASSWORD** section on the screen.

4 Select the Master Password using the down arrow key.

5 Press the spacebar, the enter the master password and press Enter.

6 If you want to delete the master password, leave the space blank and press Enter twice.

System Setup displays: Not Registered. The user password will also display as Not Registered.

7 Press End to save the change.

8 When System Setup prompts you to confirm your change, Press Y.

Chapter 7

If Something Goes Wrong

Some problems you may encounter when using your computer are relatively easy to identify and solve. Others may require help from your network administrator or the manufacturer of a software program.

This chapter aims to help you solve many problems by yourself. It covers the problems you are most likely to encounter.

If all else fails, contact Toshiba. You will find information on Toshiba's support services at the end of this chapter.

Problems that are easy to fix

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 Ctrl, Alt, and Del simultaneously (once).
2. Click **Task Manager** (only when on a domain).

   The Windows Task Manager window appears.
3. Click the **Applications** tab.

   If a program has stopped responding, the words "not responding" appear beside its name in the list.
4. Select the program you want to close, then click **End Task**.

   Closing the failed program should allow you to continue working. If it does not, continue with step 5.
5. Close the remaining programs one by one by selecting the program name, then **End Task**.

To power off your computer, do one of the following:

If you are not connected to a domain server:

1. Click **Start**, **Turn off computer**.

   The Turn off computer window appears.
2. Click **Turn Off**.

   The computer turns off.

If you are connected to a domain server:

1. Click the **Start** button, then **Shut down**.

   The Shut Down window appears.
2. Select **Shut down** from the drop-down list.
3. Click **OK**.

   The computer shuts down completely.

Your program performs an illegal operation.

If you receive the message, "Your program has performed an illegal operation," you should record the details of the message and consult the software manufacturer.

To record the details:

1. Click the **Details** button and select the text the operating system displays.

   The Details button displays information that the software manufacturer needs to help you solve your problem.

2. Press Ctrl and c simultaneously to copy the text to the clipboard.
3. Open Notepad (click **Start**, point to **All Programs**, then point to **Accessories** and click **Notepad**).
4. Press Ctrl and v simultaneously to paste the details into Notepad.
5. Add a paragraph break and type some notes describing what you were doing when you received the message.
6. Save the file and refer to it when you contact the software manufacturer.

Problems when you turn on the computer

These problems may occur when you turn on the power.

The computer will not start.

Make sure you attached the AC adapter and power cord/cable properly or installed a charged battery.

Press and hold down the power button for a few seconds.

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

The computer starts but, when you press a key, nothing happens.

You are probably in Stand By mode and have a software or resource conflict. When this happens, turning the power on returns you to the problem instead of restarting the system. To clear the condition, press Ctrl, Alt, and Del simultaneously.

Clearing the condition may get the computer running, but it won't solve a resource conflict. Read the documentation that came with the conflicting device and "Resolving a hardware conflict" on page 179.

The computer is not accessing the hard disk or the optional external diskette drive.

Your computer normally loads the operating system from the hard disk. If you have a hard disk problem, you will not be able to start the computer. Insert a system diskette into the optional external diskette drive and press the left or right arrow key to choose it as your boot-up device, or press the F12 key as you power on the computer and select the floppy disk icon.

The computer displays the WARNING RESUME FAILURE message.

The computer was placed in Stand By mode and the battery has discharged. Data stored in the computer's memory has been lost.

To charge the battery, leave the computer plugged into a live wall outlet for at least 48 hours. For more information, see "Power and the batteries" on page 185.

The computer displays the Non-System disk or disk error message.

Make sure there is no diskette in the optional external diskette drive. If there is one, remove it and press any key to continue. If pressing any key does not work, press Ctrl, Alt, and Del to restart the computer.

The Windows® operating system is not working

Once you are familiar with the desktop and used to the way the operating system responds to your work routine, you can easily detect if the operating system is not working correctly. For example:

- The operating system fails to start after the Starting Windows XP message appears.
- The operating system takes a long time to start.
- The operating system responds differently from the normal routine.
- The screen does not look right.

Unless a hardware device has failed, problems usually occur when you change the system in some way such as installing a new program or adding a device.

If you experience any of these problems, use the options in the Startup menu to fix the problem.

Using Startup options to fix problems

If the operating system fails to start properly, you may have to change your system's configuration or verify the startup procedure to fix the problem. To do this, use the options in the Startup menu. This section describes each option and when to use the procedure.

To open the Startup menu:

1. Restart your computer.
2. Press F8 when your computer starts.

   The Windows® Advanced Options menu displays these options:

   - Safe Mode

- Safe Mode (with Networking)
- Safe Mode (with Command Prompt)
- Enable Boot Logging
- Enable VGA Mode
- Last known good configuration (your most recent settings that worked)
- Directory Services Restore Mode (Windows® domain controllers only)
- Debugging Mode
- Boot normally
- Return to OS Choices (menu)

See your Windows® documentation for further explanation.

TECHNICAL NOTE: If your computer is connected to a network, the Startup menu may display different versions of Safe mode.

Internet problems

My Internet connection is very slow.

Many factors contribute to the speed with which you can surf the Internet. They include: modem speed, time of day (when everyone else is surfing, your access can be slow) and popularity of the site. If accessing a particular site is very slow, try later.

My browser can not find the URL address I typed in.

Make sure you separated the domain names of the address with the forward slash (/). Check the spelling of each name and the syntax of the address carefully. A single incorrect letter or missed character, comma instead of period (“dot”) or

other mistake makes it impossible for your browser to locate the site.

My browser can not find a site I bookmarked.

The World Wide Web is constantly changing. A site you bookmarked yesterday may not be available today or its server may be down for temporary repair. Try again later.

The Windows® XP operating system can help you

If the operating system has started properly, but you still have a problem using your computer, the online Help can assist you in troubleshooting the problem.

To access Windows® XP Help and Support:

1. Click **Start**, then click **Help and Support**.

   The Help and Support window appears.

2. Then do one or both of the following:

   - In the search field, type in the topic on which you need help and follow the on-screen instructions.
   - Click a problem you would like help with from the listings and follow the on-screen instructions.

You can connect to Support Online by clicking **Support** from the menu.

Resolving a hardware conflict

If you receive an error message telling you there is a device driver conflict or a general hardware problem, try using Windows® Help and Support to troubleshoot the problem first.

For help on hardware conflicts:

1. Click Start, then click **Help and Support**.
2. Click the **Hardware** link in the window's left pane.

   A list of category links appear.

3 Click the **Fixing a hardware problem**.

4 Choose from specific topics and follow the steps.

If there is still a problem, the operating system should display a message that explains what the conflict is.

A plan of action

The smooth operation of the system depends on the interaction of all devices, programs, and features. If the system or one of its attached devices isn't working, resolving the problem can be time-consuming and frustrating.

The recommended procedure for getting multiple devices to work together is to add and set up one device at a time. After you add each device, test it to make sure it and all previously connected devices work.

The device most recently connected to the system is the one most likely to be causing a hardware conflict.

Resolving hardware conflicts on your own

Computer components need resources to accomplish a task. A device, such as a disk drive or a modem, needs a channel to the computer's Central Processing Unit (CPU). It also needs a direct channel to the computer's memory to store information as it works. These channels of communication are commonly referred to as system resources.

Interrupt Request Channel

The channel to the CPU is called an Interrupt Request (IRQ) because it interrupts what the processor is doing and requests some of the processor's time. If two or more devices use the same IRQ, the processor does not know which device is asking for attention. This causes a hardware conflict.

Direct Memory Access

Similarly, the data required by the device is stored in a specific place or address in memory called the Direct Memory Access (DMA). The DMA provides a dedicated channel for adapter cards to bypass the microprocessor and access memory directly. If two or more devices use the same DMA, the data required by one device overwrites the data required by the other, causing a hardware conflict.

Plug and Play

With Plug and Play and the operating system, avoiding hardware conflicts is easy. Plug and Play is a computer standard that helps the system BIOS (basic input/output system) and the operating system to automatically assign system resources to Plug and Play-compliant devices. In theory, if every device connected to the computer is Plug and Play-compliant, no two devices will compete for the same system resources. Plug in the device and turn on your computer. The operating system is automatically set up to accommodate the new device.

If you install an older (legacy) device that the operating system cannot recognize, the operating system may have difficulty assigning resources to it. As a result, a hardware conflict can occur.

Resolving conflicts

There are three things you can do to resolve hardware conflicts:

- Disable the device.

  For an older device, remove it from the computer.

- Disable another system component and use its resources for the new device, see "Fixing a problem with Device Manager" on page 182.

- Reconfigure the device so that its requirements do not conflict. Refer to the device's documentation for instructions about changing settings on the device.

Fixing a problem with Device Manager

Device Manager provides a way to check and change the configuration of a device.

CAUTION Changing the default settings using Device Manager can cause other conflicts that make one or more devices unusable. Device Manager is a configuration tool for advanced users who understand configuration parameters and the ramifications of changing them.

Disabling a device

1. Click **Start, Control Panel, Performance and Maintenance,** and then **Administrative Tools**.
2. Double-click the **Computer Management** icon.
3. In the left frame, click **Device Manager**.
4. Select the specific device from the device category.
5. In the toolbar, look to the far right for an icon of a monitor with a strike mark through a circle on the front. This is the disable feature.
6. Click the icon.

   You are given the option of disabling the device.
7. Click **yes** or **no**, whichever is appropriate.

Checking device properties

Device Manager provides a way to view the properties of a device. Properties include the name of the manufacturer, the type of device, the drivers installed, and the system resources assigned to the device.

To check a device's properties:

1. Click **Start, Control Panel, Performance and Maintenance,** and then **Administrative Tools**.
2. Double-click the **Computer Management** icon.
3. In the left frame, click **Device Manager**.
4. To view the device(s) installed, double-click the device type.
5. To view the properties, double-click the device.

   The operating system displays the Device Properties dialog box, which provides an array of tabs. They include:

   - The **General** tab, which provides basic information about the device.
   - The **Resource** tab, which lists resources assigned to the monitor, optional external diskette disk drive, and other power-using functions.
   - The **Drivers** tab, which displays the drivers being used by the device.

   A Troubleshooting button is also present.
6. Click **troubleshooting.**

   A Help and Support window for that device appears.

For more information about Device Manager, refer to Windows® XP online help.

Memory module problems

Incorrectly connected or faulty memory modules may cause errors that seem to be device-related. It is worthwhile checking for these first:

CAUTION Static electricity can damage the memory module. Before handling the module, touch a grounded metal surface.

1. Click **Start**, **Turn off computer**.
2. Click **Turn Off**.

   The operating system shuts down and turns off the computer automatically.
3. Remove the memory module, following the instructions in "Removing a memory module" on page 60.
4. Reinstall the memory module, following the instructions in "Adding Memory (optional)" on page 56, and making sure the module is seated properly.
5. Check for the error again.
6. If the error recurs, remove the memory module entirely and check for the error again.

   If removing the memory module eliminates the error, the memory module may be faulty. If the error recurs without the memory module installed, the error is not caused by the memory module.

TECHNICAL NOTE: You must have at least one memory module installed for the computer to work.

Power and the batteries

Your computer receives its power through the AC adapter and power cord/cable or from the system batteries (main battery, optional high capacity battery and real-time clock (RTC) battery). Power problems are interrelated. For example, a faulty AC adapter or power cord/cable will neither power the computer nor recharge the batteries.

Here are some typical problems and how to solve them:

The AC power light does not come on when you plug in the AC adapter and power cord/cable.

Make sure the AC adapter and power cord/cable are firmly plugged into both the wall outlet and the computer.

If the AC power light still does not come on, check that the wall outlet is working properly by plugging in a lamp or other appliance.

The AC adapter and power cord/cable work correctly, but the battery will not charge.

The battery doesn't charge while the computer is consuming full power. Try turning off the computer.

The main battery may not be inserted correctly in the computer. Turn off the computer, remove the battery, clean the contacts with a soft dry cloth (if necessary) and replace the battery. See "Removing the battery from the computer" on page 120 and "Inserting a charged battery" on page 121 for detailed instructions.

The battery may be too hot or too cold to charge properly. If you think this is the probable cause, let the battery reach room temperature and try again.

If the battery has completely discharged, it will not begin charging immediately. Leave the AC adapter and power cord/cable connected, wait 20 minutes and see if the battery is charging.

If the battery light is glowing after 20 minutes, let the computer continue charging the battery for at least another 20 minutes before you turn on the computer.

If the battery light does not glow after 20 minutes, the battery may have reached the end of its useful life. Try replacing it.

The battery appears not to power the computer for as long as it usually does.

If you frequently recharge a partially charged battery, it may not charge fully. Let the battery discharge completely, then try charging it again.

Check the power options using the Power Management utility. Have you added a device, such as a PC Card or memory module, that takes its power from the battery? Is your software using the hard disk more? Is the display power set to turn off automatically? Was the battery fully charged to begin with? All these conditions affect how long the charge lasts.

For more information on maximizing battery power, see "Maximizing battery life" on page 123.

Keyboard problems

If, when you type, strange things happen or nothing happens, the problem may be related to the keyboard itself.

The keyboard produces unexpected characters.

A keypad overlay may be on. If the numeric keypad or cursor control light is on, press Fn and F10 simultaneously to turn off the cursor control light or press Fn and F11 simultaneously to turn off the numeric keypad light.

If the problem occurs when both the keypad overlays are off, make sure the software you are using is not remapping the keyboard. Refer to the software's documentation and check that the program does not assign different meanings to any of the keys.

You have connected an external keyboard and the operating system displays one or more keyboard error messages.

If you have a second keyboard, try it. If it works, the first keyboard may be defective or incompatible with your computer.

Display problems

Here are some typical display problems and their solutions:

The screen is blank.

Display Auto Off may have gone into effect. Press any key to activate the screen.

You may have activated the instant password feature by pressing Fn and F1 simultaneously. If you have registered a password, press any key, type the password and press Enter. If no password is registered, press any key. The screen reactivates and allows you to continue working.

If you are using the built-in screen, make sure the display priority is not set for an external monitor. To do this, press Fn and F5 simultaneously (once). If this does not correct the problem, press Fn and F5 simultaneously again to return the display priority to its previous setting.

If you are using an external monitor:

- Check that the monitor is turned on.
- Check that the monitor's power cable is firmly plugged into a working power outlet.
- Check that the cable connecting the external monitor to the computer is firmly attached.
- Try adjusting the contrast and brightness controls on the external monitor.
- Press Fn and F5 simultaneously to make sure the display priority is not set for the built-in screen.

The screen does not look right.

You can change the display settings by clicking a blank area of the desktop with the secondary control button, then clicking Properties. This opens the Display Properties dialog box. The Appearance tab of this dialog box allows you to choose the colors for the screen. The Settings tab allows you to choose the screen resolution.

The built-in screen flickers.

Some flickering is a normal result of the way the screen produces colors. To reduce the amount of flickering, try using fewer colors.

To change the number of colors displayed:

1. Point at the desktop and click with the secondary button.
2. Click **Properties**, and then the **Settings** tab.
3. Change the Colors option and click **OK**.

For more information, see Windows® Help.

A message tells you that there is a problem with your display settings and that the adapter type is incorrect or the current settings do not work with your hardware.

Reduce the size of the color palette to one that is supported by the computer's internal display.

To change the display properties:

1. Point at the desktop and click with the secondary button.
2. Click **Properties**.

   The Display Properties window appears.
3. Click the **Settings** tab.
4. Adjust the screen resolution and/or color quality.
5. Click **OK**.

The display mode is set to Simultaneous and the external display device does not work.

Make sure the external monitor is capable of displaying at resolutions of 800 x 600 or higher. Devices that do not support this resolution will only work in External monitor only mode.

Small bright dots appear on your TFT display when you turn on your computer.

Your display contains an extremely large number of thin-film transistors (TFT) and is manufactured using high-precision technology. The small bright dots that appear on your display are an intrinsic characteristic of the TFT manufacturing technology.

NOTE 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.

Screen will dim when the computer is operated on battery power and you may not be able to increase the brightness of the screen.

Disk drive problems

Problems with the hard disk or with a diskette drive usually show up as an inability to access the disk or as sector errors. Sometimes a disk problem may cause one or more files to appear to have garbage in them. Typical disk problems are:

You are having trouble accessing a disk, or one or more files appear to be missing.

Make sure you are identifying the drive by its correct name (A: or C:).

Error-checking

Run Error-checking, which analyzes the directories, files and File Allocation Table (FAT) on the disk and repairs any damage it finds:

To run Error-checking:

1. Click **Start**, then click **My Computer**.
2. Right-click the drive you want to check, and then click **Properties**.

   The drive's Properties box appears.
3. Click the **Tools** tab.
4. Click the **Check now** button.

   The Check Disk All Apps box appears.
5. You can choose one or both options:
   - Automatically fix file system errors
   - Scan for and attempt recovery of bad sectors
6. Click **Start**.

   Error-checking tests and repairs the disk.

Your hard disk seems very slow.

If you have been using your computer for some time, your files may have become fragmented. Run Disk Defragmenter. To do this, click **Start**, then click **All Programs**, point to **Accessories** and **System Tools**, and click **Disk Defragmenter**.

Your data files are damaged or corrupted.

Refer to your software documentation for file recovery procedures. Many software packages automatically create backup files.

You may also be able to recover lost data using utility software. Consult your network administrator.

Some programs run correctly but others do not.

This is probably a configuration problem. If a program does not run properly, refer to its documentation and check that the hardware configuration meets its needs.

A diskette will not go into the optional external diskette drive.

You may already have a diskette in the drive. Make sure the drive is empty.

You may be inserting the diskette incorrectly. Hold the diskette with the hub side facing down, and insert it so that the metal head window cover goes into the drive first.

The metal cover or a loose label may be obstructing the path into the drive. Carefully inspect the diskette. If the metal cover is loose, replace the diskette. If the label is loose, replace the label and try inserting the diskette again.

The computer displays the Non-system disk or disk error **message**.

If you are starting the computer from a diskette, the diskette in the drive does not have the files necessary to start the computer. Replace it with a bootable diskette.

The drive cannot read a diskette.

Try another diskette. If you can access the second diskette, the first diskette (not the drive) is probably causing the problem. Run Error-checking on the faulty diskette (for instructions, see "Disk drive problems" on page 189).

Sound system problems

You do not hear any sound from the computer.

Adjust the volume control.

If you are using external headphones or speakers, check that they are securely connected to your computer.

The computer emits a loud, high-pitched noise.

This is feedback between the microphone and the speakers. It occurs in any sound system when input from a microphone is fed to the speakers and the speaker volume is too loud. Adjust the volume control.

Changing the settings for the Record Monitor feature in the Recording Control Utility (default Off), or the Mute feature in the Mixer Utility (default Enabled), may cause feedback. Revert to the default settings.

PC Card problems

PC Cards (PCMCIA-compatible) include many types of devices, such as a removable hard disk, additional memory, or a pager.

Most PC Card problems occur during installation and setup of new cards. If you're having trouble getting one or more of these devices to work together, several sections in this chapter may apply.

Resource conflicts can cause problems when using PC Cards. See "Resolving a hardware conflict" on page 179.

Card Information Structure

When you insert a PC Card into a slot, the computer attempts to determine the type of card and the resources it requires by reading its Card Information Structure (CIS). Sometimes the CIS contains enough information for you to use the card immediately.

Other cards must be set up before you can use them. Use the Add Hardware wizard to set up the card. Refer to your Microsoft® documentation for more information, or refer to the documentation that came with the PC Card.

Some card manufacturers use special software called *enablers* to support their cards. Enablers result in nonstandard configurations that can cause problems when installing the PC Card.

If your system does not have built-in drivers for your PC Card and the card did not come with an operating system driver, it may not work under the operating system. Contact the manufacturer of the PC Card for information about using the card under the operating system.

PC Card checklist

- Make sure the card is inserted properly into the slot.

  See "Inserting a PC Card" on page 134 for how to insert PC Cards.

- Make sure all cables are securely connected.
- Occasionally a defective PC Card slips through quality control. If another PCMCIA-equipped computer is available, try the card in that machine. If the card malfunctions again, it may be defective.

Resolving PC Card problems

Here are some common problems and their solutions:

The slot appears to be dead. PC Cards that used to work no longer work.

Check the PC Card status:

1. Click **Start**.
2. Click **My Computer** icon with the secondary button, then click **Properties**.

   The System Properties dialog box appears.
3. Click the **Hardware** tab.
4. Click the **Device Manager** button.
5. Double-click the appropriate category for the PC Card being used.
6. Double-click the name of the PC Card device.

The operating system displays your PC Card's Properties dialog box, which contains information about your PC Card configuration and status.

The computer stops working (hangs) when you insert a PC Card.

The problem may be caused by an I/O (input/output) conflict between the PCMCIA socket and another device in the system. Press the Power button until the computer shuts off. Check with the PC Card manufacturer for configuration instructions.

Hot swapping (removing one PC Card and inserting another without turning the computer off) fails.

Follow this procedure before you remove a PC Card:

1. Double-click the **Safely Remove Hardware** icon in the system tray.
2. Click **Safely remove hardware** icon in the system tray.

   The operating system displays a message that you may safely remove the card.
3. Remove the card from the slot.

The system does not recognize your PC Card.

Refer to the PC Card documentation.

Removing a malfunctioning card and reinstalling it can correct many problems. For more information, see "Connecting a mouse or a printer" on page 132.

A PC Card error occurs.

Reinsert the card to make sure it is properly connected.

If the card is attached to an external device, check that the connection is secure.

Refer to the card's documentation, which should contain a troubleshooting section.

Printer problems

This section lists some of the most common printer problems:

The printer will not print.

Check that the printer is connected to a working power outlet, turned on and ready (on line).

Check that the printer has plenty of paper. Some printers will not start printing when there are just two or three sheets of paper left in the tray.

Make sure the printer cable is firmly attached to the computer and the printer.

Run the printer's self-test to check for any problem with the printer itself.

Make sure you installed the proper printer drivers, as shown in "Setting up a printer" on page 62.

You may have connected the printer while the computer is on. Disable Stand By mode, turn off the computer, and turn off the printer. Turn the printer back on, make sure it is on line, then turn the computer back on.

Try printing another file. For example, you could create and attempt to print a short test file using Notepad. If a Notepad file prints correctly, the problem may be in your original file.

If you cannot resolve the problem, contact the printer's manufacturer.

The printer will not print what you see on the screen.

Many programs display information on the screen differently from the way they print it. See if your program has a print preview mode. This mode lets you see your work exactly as it will print. Contact the software manufacturer for more information.

Modem problems

This section lists common modem problems:

The modem will not receive or transmit properly.

Make sure the cable from the modem to the telephone line is firmly connected to the computer's modem port and the telephone line jack.

Check the port settings to make sure the hardware and software are referring to the same COM port. See "Determining the COM port" on page 146.

Check the communications parameters (baud rate, parity, data length and stop bits) specified in the communications program. It should be set up to transmit at 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600,and 115200 bps (bits per second) or higher. Refer to the program's documentation and the modem manual for information on how to change these settings.

The modem is on, set up properly and still will not transmit or receive data.

Make sure the line has a dial tone. Connect a telephone handset to the line to check this.

The other system may be busy or off line. Try making a test transmission to someone else.

Develop good computing habits

Make sure you are prepared.

Save your work frequently.

You can never predict when your computer will lock, forcing you to close a program and lose unsaved changes. Many software programs build in an automatic backup, but you should not rely solely on this feature. Save your work!

On a regular basis, back up the information stored on your hard disk.

Here are some ways you can do this:

- Copy files to diskette.
- Connect a tape drive to the system and use specialized software to copy everything on the hard disk to a tape.
- Connect your computer to the office network and copy files to your network partition.

Some people use a combination of these methods, backing up all files to tape weekly and copying critical files to diskette on a daily basis.

If you have installed your own programs, you should back up these programs as well as your data files. If something goes wrong that requires you to reformat your hard disk and start again, reloading all your programs and data files from a backup source will save time.

Read the user's guides.

It's very difficult to provide a fail-safe set of steps you can follow every time you experience a problem with the computer. Your ability to solve problems will improve as you learn about how the computer and its software work together.

Get familiar with all the user's guides provided with your computer, as well as the manuals that come with the programs and devices you purchase.

Your local computer store or book store sells a variety of self-help books you can use to supplement the information in the manuals.

If you need further assistance

If you have followed the recommendations in this chapter and are still having problems, you may need additional technical assistance. This section contains the steps to take to ask for help.

Before you call

Since some problems may be related to the operating system or the program you are using, it is important to investigate other sources of assistance first.

Before contacting Toshiba:

- Review the troubleshooting information in your operating system documentation.
- If the problem occurs while you are running a program, consult the program's documentation for troubleshooting suggestions. Contact the software company's technical support group for their assistance.
- Consult the dealer from whom you purchased your computer and/or program. Your dealer is your best source for current information.

Detailed system specifications are available at www.ts.toshiba.com by selecting your particular product and model number, clicking **GO**, and then clicking the **Detailed Specs** link from the menu on the left. Or just refer to the computer documentation shipped with your product.

For the number of a Toshiba dealer near you in the United States, call: (800) 457-7777.

Contacting Toshiba

If you still need help and suspect that the problem is hardware-related, Toshiba offers a variety of resources to help you.

Toshiba voice contact

Before calling Toshiba, make sure you have:

- Your computer's serial number.
- The computer and any optional devices related to the problem.
- The Recovery media that came with your system.

- Name and version of the program involved in the problem along with its installation media.
- Information about what you were doing when the problem occurred.
- Exact error messages and when they occurred.

For technical support, call the Toshiba Global Support Centre:

Within the United States at (800) 457-7777

Outside the United States at (949) 859-4273

Other Toshiba Internet Web sites

toshiba.com	Worldwide Toshiba corporate site
computers.toshiba.com	Marketing and product information in the USA
www.toshiba.ca	Canada
www.toshiba-Europe.com	Europe
www.toshiba.co.jp/index.htm	Japan
http://servicio.toshiba.com	Mexico and all of Latin America

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For more information on additional Toshiba worldwide locations, please visit: www.toshiba.co.jp/index.htm.

Appendix A

Hot Keys

Hot keys are keys that, when pressed in combination with the Fn key, turn system functions on and off. Hot keys have a legend on the key indicating the option or feature the key controls.

Volume Mute

Fn + 

This hot key enables/disables volume mute on your computer.

When volume mute is enabled, no sound will come from the speakers or headphones.

Volume Control

Fn + 

This hot key decreases the volume coming from your computer.

Fn + 

This hot key increases the volume coming from your computer.

Password security

Fn +  This hot key blanks the display.

Without a password

The Fn + F1 key combination turns off the display and activates instant security. Using the pointing device or any key will make the display's content reappear, if no password is set for the current user.

With a password

The Fn + F1 key combination turns off the display and activates instant security.

If you set a blank screen saver, pressing the Fn + F1 key combination to activate instant security will cause the screen to go blank. Using the pointing device or any key will make the display's content reappear. The Windows® operating system log-on screen will appear, prompting you for a password. After typing in the password for the current user, press Enter.

To activate the password feature:

1. Click **Start**, **Control Panel**.
2. Click **Appearances and Themes**.
3. Click one of the following:
   - **Choose a screen saver** in the "Pick a task" section.
   - **Display** in the "or pick a Control Panel icon" section.

   The Display Properties window appears.
4. If you clicked **Choose a screen saver**, the Screen Saver tab has already been selected. If it isn't selected, click the **Screen Saver** tab.
5. Click the **On resume, password protected** check box.

6 Click **OK**.

Maintaining security when the battery is not fully charged

When the battery is not fully charged (even if the computer is operating on AC power) your display may reappear automatically after a short time. To protect your desktop, you must set up a screen saver with a password before activating the password feature.

To set up a password with a screen saver, go to Windows XP help for instructions:

1 Click **Start**, **Help and Support**.

2 In the **Search** field, type password screen saver.

3 Press Enter.

4 Click the **Protect your files with a screen saver password link** located under the suggested topics.

Follow the steps listed in the Windows help to set up your password-protected screen saver.

To ensure the password protection is activated after pressing Fn + F1 (to activate instant security), wait ten seconds before walking away from the computer.

Power usage mode

Fn + 

This hot key displays the power usage pop-up window and cycles through the battery save modes.

Sample power usage modes

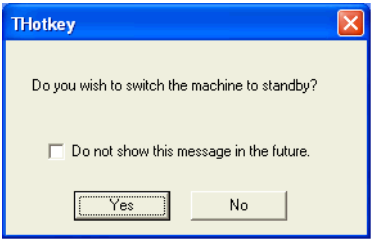
The properties of each mode are set in the Toshiba Power Management utility. For more information, see "Power Management" on page 161.

Standby mode

Fn + 

This hot key puts the computer into Standby mode.

- A message box is displayed by default to confirm that the computer is going into Standby mode. You can choose not to display this message box.



Sample Standby confirmation box

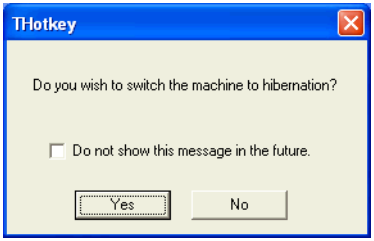
- For more information about Standby mode, please see "Using Standby" on page 102.

Hibernation mode

Fn + 

This hot key puts the computer into Hibernation mode.

- If Hibernation mode is enabled (the default) a message box is displayed by default to confirm the computer is going into Hibernation mode. You can choose not to display this message box.



Sample Hibernation confirmation box

- If Hibernation mode is disabled, this hot key will not respond. For more information on Hibernation mode, see "Using Hibernation" on page 98.

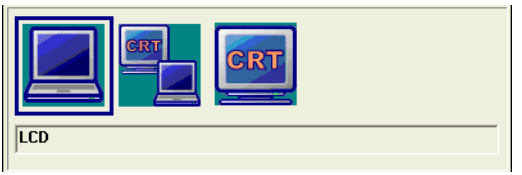
Display modes

Fn + 

This hot key cycles through the power-on display options.

The display modes are:

- Built-in display panel only
- Built-in display panel and external monitor simultaneously
- External monitor only



Sample display options window

In order to use a simultaneous mode, you must set the resolution of the internal display panel to match the resolution of the external display device.

Display brightness

Fn + 

This hot key decreases the screen brightness.

Fn + 

This hot key increases the screen brightness.

Disabling or enabling the TouchPad

Fn + 

This hot key enables/disables the TouchPad.

To use the TouchPad, see "Disabling or enabling the TouchPad" on page 67.

Sample disable and enable TouchPad windows

Keyboard hot keys

Fn + 

This hot key informs you when the Wireless antenna on-off switch is in the off position. (No message appears when the Wi-Fi antenna on-off switch is in the on position.)

Fn + 

This hot key turns the cursor control overlay on and off.

Fn + 

This hot key turns the numeric overlay on and off.

Fn + 

This hot key turns the scroll lock feature on and off.

Fn + [Spacebar] 

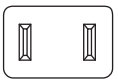
This hot key switches screen or video modes.

Appendix B

Power Cord/Cable Connectors

Your computer features a universal power supply you can use worldwide. This appendix shows the shapes of the typical AC power cord/cable connectors for various parts of the world.

USA and Canada

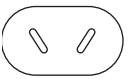


UL approved
CSA approved

United Kingdom

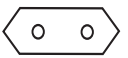
BS approved

Australia



AS approved

Europe



VDA approved
NEMKO approved

Appendix C

Using ConfigFree™ with your Toshiba Computer

ConfigFree™ is a set of utilities used for configuring networks that use both wired and wireless network devices. These utilities include the following:

- Connectivity Doctor — The Connectivity Doctor utility is used to help fix networking problems with your notebook computer. For more information, see "Connectivity Doctor" on page 214.
- Device Settings — The Device Settings utility is used to enable and disable any of the wired, wireless, and infrared (for systems with infrared) network devices. You can also change the device properties of your wired and wireless local area network (LAN), and specify settings to automatically switch between wired and wireless LAN. For more information, see "Device Settings" on page 215.
- Profile Settings — The Profiles utility is used to enable a faster and more efficient network configuration. Multiple profiles can be created for various network configurations. For more information, see "Profile Settings" on page 217.

- Quick Connect — The Quick Connect utility is used to configure a wireless LAN connection (ad hoc connection) between a personal computer and a Toshiba Wireless Projector. The Toshiba Wireless Projector utility must be installed in order to enable Quick Connect. For more information, see "Quick Connect" on page 218

Getting Started

This section contains information about the ConfigFree main screen, and how to start and configure ConfigFree.

ConfigFree Main Screen

ConfigFree main screen

- **Stay on the task tray** — Select this check box to display the ConfigFree icon in the taskbar.
- **Options** — Use to configure options in ConfigFree. For more information, see "Configuring ConfigFree" on page 213.

- **Create LOG** — Creates and displays a log file containing diagnostic information about devices connected to the network.
- **About** — Displays version information about ConfigFree.
- **Help** — Displays the online help file.

Starting ConfigFree

To start ConfigFree, do any of the following:

- (Microsoft® Windows® XP users) Click the **Start** button, and then point to **All Programs**. Point to the **TOSHIBA ConfigFree** folder, and then click **ConfigFree**.
- (Microsoft® Windows® 2000 users) Click the **Start** button, and then point to **Programs**. Point to the **TOSHIBA ConfigFree** folder, and then click **ConfigFree**.
- Double-click the **ConfigFree** icon  on the taskbar.
- Click the **ConfigFree** icon  on the taskbar, and then click the desired utility.
- Press the **Toshiba Console** button (if applicable to your system) to open the Toshiba Console, and then click the **ConfigFree** icon.

Configuring ConfigFree

The ConfigFree Option dialog box is used to specify various options, such as whether certain warning messages should display and what information should be captured when creating a profile. You can also enable and disable sounds from this dialog box.

To access the ConfigFree Option dialog box, do one of the following:

- Open ConfigFree, and then click **Options**.

- Right-click the **ConfigFree** icon on the taskbar, and then click **Options**.

For more information on configuring ConfigFree, see the online help.

ConfigFree Utilities

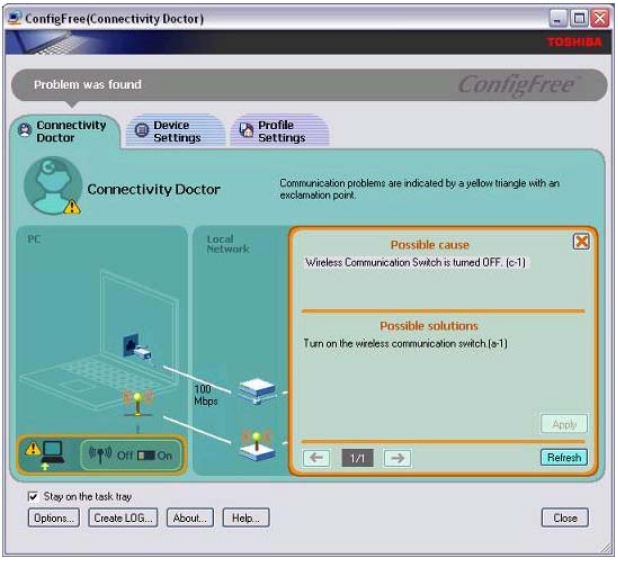
Connectivity Doctor

The Connectivity Doctor displays the connection configuration and the status of all wired and wireless LAN devices that are connected to the network. For wireless network devices, the signal strength and WEP (Wired Equivalent Privacy) key settings (if applicable) also display.

NOTE Infrared (for systems with infrared) and dial-up devices are not tested by the Connectivity Doctor.

If a problem, or potential problem, is detected, an exclamation point displays in the Connectivity Doctor screen at the relevant location. You can then view a possible cause and solution for the problem by clicking on the exclamation point.

For example, if the connection to a wireless network cannot be established because the wireless communication switch is turned off, an exclamation point displays next to the wireless communication switch. Upon clicking the exclamation point, a description of the problem and a solution displays.

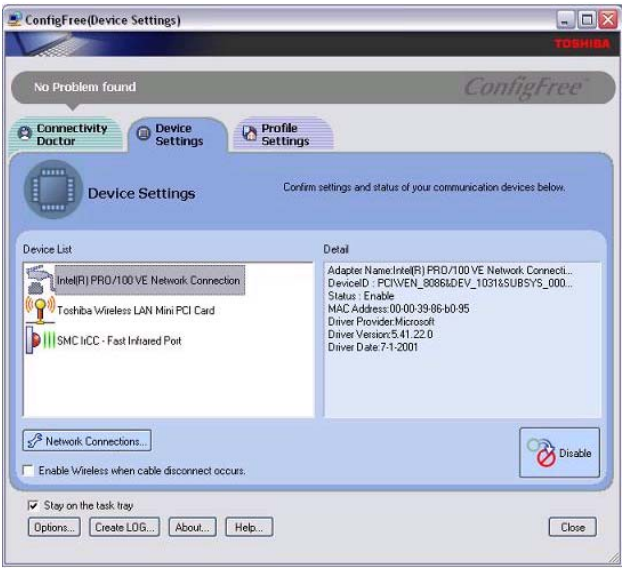


The Connectivity Doctor

The Connectivity Doctor screen automatically refreshes. However, you can also use the **Refresh** button to refresh the screen.

Device Settings

The Device Settings screen displays a list of all wired, wireless, and infrared (for systems with infrared) devices that are connected to the network. Detailed information about each device, such as the driver version number and the status, are also displayed.

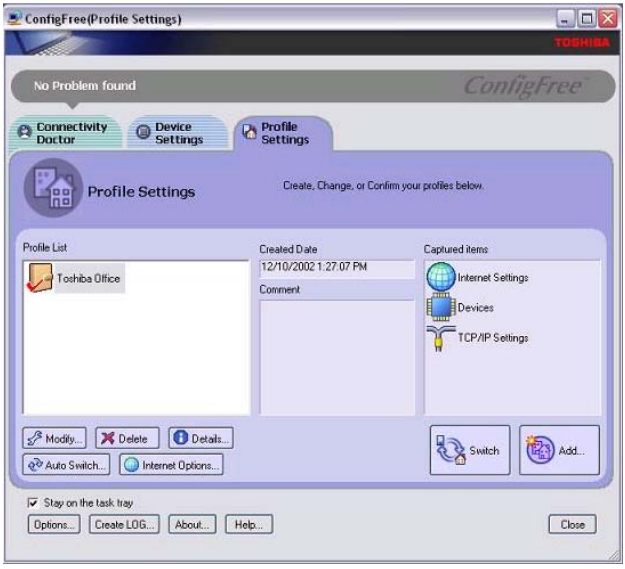


Viewing the device settings

- **Network Connections** — Displays the Network Connection window, which contains detailed information about the network connection.
- **Enable/Disable** — You can easily enable or disable any of the listed devices simply by selecting the desired device, and then clicking the **Enable/Disable** button. Each time a device is enabled or disabled, the status of the device will change.
- **Enable Wireless when cable disconnect occurs** — Select this check box to enable the Auto Switch feature. For more information, see "Using Auto Switch" on page 219.

Profile Settings

The Profile Settings utility displays a list of all the registered profiles in ConfigFree. You can also add, modify, and delete profiles; switch the profile being used; and view specific details about each profile.



Viewing registered profiles

- **Details** — The **Details** button displays the ConfigFree Details screen. This screen displays detailed information for each profile and can be used to view the various settings for each registered profile.
- **Auto Switch** — The **Auto Switch** button accesses the Auto Switch feature. For more information, see "Using Auto Switch" on page 219.
- **Internet Options** — The **Internet Options** button opens the Microsoft® Windows® Internet Options dialog box. See your Microsoft® Windows® documentation for more information.

Add, Modify, and Delete a Profile

- To add a new profile to ConfigFree, click the **Add** button in the Profile Settings screen. To overwrite an existing profile, select the profile to be overwritten, and then click **Add**.
- To modify an existing profile, select the profile you want to modify, and then click **Modify**.
- To delete an existing profile, select the profile to be deleted, and then click **Delete**. A message box displays confirming that you want to delete the profile.

Switch Profiles

To switch the profile that is being used, select the profile you want to switch to, and then click **Switch**.

Quick Connect

The Quick Connect feature switches the Wireless LAN connection to connect to the Toshiba Wireless Projector.

As a result, you will not be able to use the network to connect to a Toshiba Wireless Projector when the wireless LAN Configuration is set to Ad hoc. If you are connected to an access point, the connection will be broken and later re-established.

If the Toshiba Wireless Projector setting has been changed from the default, change the connection setting by using Quick Connect-Setup menu.

NOTE The connection will be made in Ad hoc mode, therefore, if the setting on the Toshiba Wireless Projector is in Infrastructure mode, it will not connect.

If the wireless mode for the wireless setting is set for 5 GHz (802.11a), Quick Connect will change this mode to 2.4 GHz (802.11b), and then connect to the projector.

The wireless LAN configuration will return to the default settings under the following conditions:

- If the Toshiba Wireless Projector utility is closed.
- If you select Toshiba Wireless Projector (DPJ) from the ConfigFree tray menu (this will disconnect the wireless LAN connection).
- If you select a profile from the ConfigFree tray menu or when you disable a wireless device.
- If you close ConfigFree.

Using Auto Switch

The Auto Switch feature contains options for automatically switching network devices and profiles if a network connection should fail.

- **Auto Switch (Cable Disconnect)** — This option automatically switches network devices if a wired network cable is disconnected. For more information, see "Auto Switch (Cable Disconnect)" on page 220.
- **Auto Switch (SSID)** — If your notebook computer is connected to a wireless LAN network, ConfigFree automatically switches profiles if a network failure occurs. For more information, see "Auto Switch (SSID)" on page 220.

A message displays each time the Auto Switch feature is applied. You then have the option of disabling the Auto Switch option for future use.

You can access the Auto Switch feature in any of the following ways:

- From the taskbar, right-click the Config Free icon, and then click Auto Switch.

- From the Profile Settings screen, you can click the **Auto Switch** button.

Auto Switch (Cable Disconnect)

If a wired network cable is disconnected from the network, the Auto Switch (Cable Disconnect) option will automatically switch to another network device.

- **Enable Wireless when cable disconnect occurs** — If your notebook computer is connected to multiple wired LAN devices, and the physical connection to all of these devices is disconnected, ConfigFree switches to a wireless LAN device.

However, if the cable connection to only one wired LAN device is disconnected, ConfigFree will not switch to a wireless device.

Auto Switch (SSID)

The Auto Switch (SSID) option automatically switches to a different profile if your notebook computer is connected to a wireless LAN network and a network failure occurs.

ConfigFree detects the Service Set Identifier (SSID) of the wireless network that you are connected to. If the SSID matches the Wireless Network SSID specified in Auto Switch, the ConfigFree switches to the corresponding profile.

NOTE If your notebook computer is connected to multiple wireless LAN devices, the Auto Switch (SSID) feature is disabled. To enable this feature, only one wireless LAN device can be used.

Glossary

TECHNICAL NOTE: Some features defined in this glossary may not be available on your computer.

Acronyms

The following acronyms may appear in this user's guide.

AC	alternating current
BIOS	basic input/output system
bps	bits per second
CD	compact disc
CD-ROM	compact disc read-only memory
CD-RW	compact disc rewritable memory
CMOS	complementary metal-oxide semiconductor
COM1	communications port 1 (serial port)
COM2	communications port 2 (serial port)
CPU	central processing unit
DC	direct current

DMA	direct memory access
DIMM	dual inline memory module
DOS	disk operating system
DPI	dots per inch
DSTN	dual supertwist nematic
DVD	digital versatile (or video) disc
DVD-ROM	digital versatile (or video) disc read-only memory
ECP	enhanced capabilities port
EPROM	erasable programmable read-only memory
FAT	file allocation table
FCC	Federal Communications Commission
FIR	fast infrared
GB	gigabyte
HDD	hard disk drive
HTML	Hypertext Markup Language
IEEE	Institute of Electrical and Electronics Engineers
I/O	input/output
IRQ	interrupt request
ISP	Internet service provider
KB	kilobyte
LAN	local area network
LCD	liquid crystal display
LPT1	line printer port 1 (parallel port)
LSI	large-scale integration
MB	megabyte
MIDI	Musical Instrument Digital Interface
PC	personal computer
PCI	Peripheral Component Interconnect
PCMCIA	Personal Computer Memory Card International Association

RAM	random access memory
RFI	radio frequency interference
ROM	read-only memory
RTC	real-time clock
SCSI	small computer system interface
SDRAM	synchronous dynamic random access memory
SRAM	static random access memory
SVGA	super video graphics adapter
TFT	thin film transistor
USB	universal serial bus
URL	uniform resource locator
WAN	wide area network
www	World Wide Web

Terms

The following terms may appear in this user's guide.

A

active-matrix display — A liquid crystal display (LCD) made from an array of liquid crystal cells using active-matrix technology. Also known as a "TFT display," in its simplest form there is one thin film transistor (TFT) for each cell. This type of display works well with notebook computers because of its shallow depth and high-quality color. Active-matrix displays are viewable from wider angles than most passive-matrix displays.

adapter — A device that provides a compatible connection between two units. For example, the computer's internal display adapter receives information from the software and translates it into images on the screen. An adapter can take a number of forms, from a microprocessor to a simple connector. An intelligent adapter (one that is capable of doing some processing) may also be called a controller.

alternating current (AC) — The type of power usually supplied to residential and commercial wall outlets. AC reverses its direction at regular intervals. Compare *direct current (DC)*.

application — A computer program that you use to perform tasks of a specific type. Applications include word processors, spreadsheets, and database management systems. See also *program*.

B

backup — A copy of a file, usually on a removable disk, kept in case the original file is lost or damaged.

basic input/output system (BIOS) — See *BIOS*.

baud rate — The speed at which a communication device, such as a printer or modem, transmits information. Baud rate is the number of signal changes per second (not necessarily the same as bits per second). See also *bits per second*.

BIOS (basic input/output system) — Basic instructions, stored in read-only memory (ROM), containing the information the computer needs in order to check hardware and load the operating system when you start up the computer.

bit: — Short for "binary digit." A bit is the smallest unit of information used by a computer. A group of eight bits is a byte. See also *byte*.

bits per second (bps) — A way of measuring the speed at which information is passed between two devices. The basic measure used in modem communications, bps is similar, but not identical, to the baud rate. See also *baud rate*.

boot — To start the computer. The term "boot" originates from bootstrap program (as in "pulling itself up by its bootstraps"), a program that loads and initializes the operating system. See also *reboot*.

boot disk — See *system disk*.

boot priority (startup sequence) — The order in which the computer accesses its disk drives to locate the startup files. Under the default startup sequence, the computer looks for the startup files in the diskette drive before checking the hard disk.

bus — An electrical circuit that connects the central processing unit (CPU) with other parts of the computer, such as the video adapter, disk drives, and ports. It is the pathway through which data flows from one device to another. See also *bus speed*, *frontside bus*.

bus speed — The speed at which the central processing unit (CPU) communicates with the other parts of the computer.

byte — A sequence of eight bits. A byte is the smallest addressable unit of data. See also *bit, gigabyte, kilobyte*, *megabyte*.

C

cache — A section of very fast memory in which frequently used information is duplicated for quick access. Accessing data from cache is faster than accessing it from the computer's main memory. See also *CPU cache, L1 cache, L2 cache.*

CD — An individual compact disc. See also *CD-ROM.*

CD-ROM (compact disc read-only memory) — A form of high-capacity storage that uses laser optics instead of magnetic means for reading data. See also *CD*. Compare *DVD-ROM.*

central processing unit (CPU) — The chip that functions as the "brain" of the computer. It takes information from outside sources, such as memory or keyboard input, processes the information, and sends the results to another device that uses the information.

character — Any letter, number, or symbol you can use on the computer. Some characters are non-printing characters, such as a paragraph break in a word-processing program. A character occupies one byte of computer storage.

chip — A small piece of silicon containing computer logic and circuits for processing, memory, input/output, and/or control functions. Chips are mounted on printed circuit boards.

click — To press and release a TouchPad control button or mouse button. In the Windows® operating system, this refers to the left mouse button or TouchPad control button, unless otherwise stated. See also *double-click*.

color palette — A set of specified colors that establishes the colors that can be displayed on the screen at a particular time.

compatibility — The extent to which computers, programs, or devices can work together harmoniously, using the same commands, formats, or language as each other.

configuration — (1) The collection of components that make up a single computer system. (2) How parts of the system are set up (that is, configured).

controller — A device that controls the transfer of data from a computer to a peripheral device and vice versa. For example, disk drives, monitors, keyboards, and printers all require controllers.

CPU — See *central processing unit (CPU).*

CPU cache — A section of very fast memory residing between the CPU and the computer's main memory that temporarily stores data and instructions the CPU will need to execute commands and programs. See also *cache, L1 cache, L2 cache.*

cursor — A symbol that indicates the current position on the screen. The shape of the cursor varies, depending on the program you're using and what you're doing.

D

default — The setting selected by a program when you do not specify an alternative setting.

device — A component attached to the computer. Devices may be external (outside the computer's case) or internal (inside the computer's case). Printers, disk drives, and modems are examples of devices.

device driver — A program (called a "driver") that permits a computer to communicate with a device.

dialog box — An on-screen window displayed by the operating system or a program giving a direction to, or requesting input from, the user.

direct current (DC) — The type of power usually supplied by batteries. DC flows in one direction. Compare *alternating current (AC).*

direct memory access (DMA) — A dedicated channel, bypassing the CPU, that enables direct data transfer between memory and a device.

directory — See *folder.*

disable — To turn a computer option off. See also *enable*.

disc — A round, flat piece of metal, designed to be read from and written to by optical (laser) technology, and used in the production of optical discs, such as CDs and DVDs. Compare *disk.*

disk — A round, flat piece of material that can be magnetically influenced to hold information in digital form, and used in the production of magnetic disks, such as diskettes and hard disks. Compare *disc.* See also *diskette, hard disk.*

disk drive — The device that reads and writes information and programs on a diskette or hard disk. It rotates the disk at high speed past one or more read/write heads.

diskette — A thin, flexible disk in a protective jacket that stores magnetically encoded data. Diskettes can be removed from the computer and come in two sizes: 5.25-inch and 3.5-inch. Your computer uses 3.5-inch diskettes. See also *double-density diskette, high-density diskette.*

document — Any file created with an application and, if saved to disk, given a name by which it can be retrieved. See also *file*.

double-click — To press a TouchPad control button or mouse button rapidly twice. In the Windows® operating system, this refers to the left TouchPad control button or mouse button, unless otherwise stated.

double-density diskette — A 3.5-inch diskette that can hold up to 720 KB of information (half the capacity of a high-density diskette). See also *diskette, high-density diskette.*

download — (1) In communications, to receive a file from another computer through a modem or network. (2) To send font data from the computer to a printer. See also *upload.*

drag — To hold down a TouchPad control button or mouse button while moving the cursor to drag a selected object. In the Windows® operating system, this refers to the left TouchPad control button or mouse button, unless otherwise stated.

driver — See *device driver.*

DVD — An individual digital versatile (or video) disc. See also *DVD-ROM*.

DVD-ROM (digital versatile [or video] disc read-only memory) — A very high-capacity storage medium that uses laser optics for reading data. Each DVD-ROM can hold as much data as several CD-ROMs. Compare *CD-ROM*.

E

emulation — A technique in which a device or program imitates another device or program.

enable — To turn on a computer option. See also *disable*.

executable file — A computer program that is ready to run. Application programs and batch files are examples of executable files. Names of executable files usually end with a .bat or .exe extension.

expansion device — A device that connects to a computer to expand its capabilities. Other names for an expansion device are port expander, port replicator, docking station, or network adapter.

extension — See *file extension*.

external device — See *device*.

F

file — A collection of related information, saved on disk with a unique name. A file may be a program, information used by a program, or a document. See also *document*.

file allocation table (FAT) — The section of a disk that keeps track of the location of files stored on the disk.

file name — A set of characters that uniquely identifies a file within a particular folder. It consists of two parts: the actual name and the file name extension. See also *file extension*.

file extension — The three characters following the period (pronounced "dot") at the end of a file name. The extension indicates the type of file. Examples are .exe for program files and .hlp for help files. See also *file name*.

folder — Also called directory. A container for organizing files saved to a disk. A folder is symbolized on screen by a graphical image (icon) of a file folder. A folder can contain files and other folders.

format — (verb) To prepare a blank disk for use with the computer's operating system. Formatting creates a structure on the disk so that the operating system can write information to the disk or read information from it.

frontside bus — The primary pathway (bus) between the CPU and the computer's main memory. Also called "system bus." See also *bus.*

function keys — The keys labeled F1 through F12, typically located on the keyboard. Their function is determined by the operating system and/or individual programs.

G

gigabyte (GB) — A unit of data equal to 1,073,741,824 bytes (1024 x 1024 x 1024 bytes). See also *byte.*

ground — A conductor to which all components of an electric circuit are connected. It has a potential of zero (0) volts, is connected to the earth, and is the point of reference for voltages in the circuit.

H

hard disk — A storage device composed of a rigid platter or platters that can be magnetically coded with data. Hard disks hold much more information than diskettes and are used for long-term storage of programs and data. The primary (or only) hard disk in a computer is usually fixed, but some computers have secondary hard disks that are removable. By default, the primary hard disk is referred to as drive C.

hardware — The physical components of a computer system. Compare *software.*

Hibernation — A feature of many Toshiba notebook computers that saves to the hard disk the current state of your work, including all open files and programs, when you turn the computer off. When you turn on the computer again, your work is returned to the same state it was when the computer was turned off. See also *Standby, Suspend.*

high-density diskette — A 3.5-inch diskette that holds 1.44 MB of data. See also *diskette.*

hot key — (1) A feature in which certain keys in combination with the Fn key can set system options or control system parameters, such as the battery save mode. (2) A key or combination of keys that activates a memory resident program.

hot swapping — The ability to add or remove devices from a computer while the computer is running and have the operating system automatically recognize the change.

I

icon — A small image displayed on the screen that represents a function, file, or program.

interlaced — A method of refreshing a computer screen, in which only every other line of pixels is refreshed. Interlaced monitors take two passes to create a complete screen image. Compare *non-interlaced.*

internal device — See *device.*

Internet — The decentralized, world-wide network of computers that provides electronic mail, the World Wide Web, and other services. See also *World Wide Web.*

K

keyboard shortcut — A key or combination of keys that you use to perform a task instead of using a pointing device such as the TouchPad.

kilobyte (KB) — A unit of data equal to 1024 bytes. See also *byte*.

L

L1 (level one) cache — Memory cache built into the processor to help improve processing speed. See also *cache, CPU cache, L2 cache.*

L2 (level two) cache — Memory cache installed on the motherboard to help improve processing speed. It is slower than L1 cache and faster than main memory. See also *cache, CPU cache, L1 cache.*

LAN (local area network) — A group of computers or other devices dispersed over a relatively limited area and connected by a communications link that enables any device to interact with any other on the network.

liquid crystal display (LCD) — A type of display that uses a liquid substance between two transparent electrode panels. When an electric current passes through the electrodes, the molecules in the liquid form a crystalline pattern that polarizes the light passing through it. A filter over the electrodes permits only non-polarized light to pass to the surface of the display, creating light and dark pixels.

load — To move information from a storage device (such as a hard disk) into memory for processing.

local area network — See *LAN*.

logical drive — A section of a disk that is recognized by the operating system as a separate disk drive. A system's logical drives may differ from its physical drives. For example, a single hard disk drive may be partitioned into two or more logical drives.

M

megabyte (MB) — A unit of data equal to 1,048,576 bytes (1024 x 1024 bytes). See also *bytes*.

memory — Typically refers to the computer's main memory, where programs are run and data is temporarily stored and processed. Memory can be volatile and hold data temporarily, such as RAM, or it can be nonvolatile and hold data permanently, such as ROM. A computer's main memory is RAM. See *RAM*, *ROM*.

microprocessor — See *central processing unit (CPU)*.

MIDI (Musical Instrument Digital Interface) — A standard for connecting musical instruments, synthesizers, and computers. The MIDI standard provides a way of translating music into a form computers can use, and vice versa.

modem — Short for "modulator/demodulator." A device that converts information from digital to analog and back to digital, enabling information to pass back and forth between digital computers and analog telephone lines.

motherboard — The main circuit board in the computer. It contains the processor, memory, and other primary components.

MS-DOS prompt — See *system prompt*.

multimedia — A combination of two or more media, such as sound, animation, and video in a computer program or presentation.

multi-function drive — A DVD drive that can read and write to CD and DVD media.

Musical Instrument Digital Interface — See MIDI.

N

network — A collection of computers and associated devices that are connected by communications facilities. A network allows you to share data and peripheral devices, such as printers, with other users and to exchange electronic mail.

non-interlaced — A method of refreshing a computer screen, in which each pixel of every line is refreshed as the electron beam scans across and down the screen. Compare *interlaced*.

non-system disk — A disk for storing programs and data that cannot be used to start the computer. Compare *system disk*.

O

online — Available through the computer. Online may refer to information being read from your own computer's hard disk, such as online documentation or online help, or to information coming from another company on a company network or the Internet.

operating system — A set of programs that controls how the computer works. Examples of operating systems are the Windows® XP Professional and Windows® 2000 operating systems.

P

palette — See *color palette*.

parallel — Processes that occur simultaneously. In communications, it means the transmission of more than one bit of information at a time. On some computers, a parallel port provides a parallel communications interface between the computer and an appropriate device. Compare *serial*.

password — A unique string of characters which you enter to verify your identity to the computer or the network.

PC Card — A credit-card-sized expansion card designed to increase the capabilities of notebook computers. PC Cards provide functions such as modem, fax/modem, hard disk drive, network adapter, sound card, or SCSI adapter.

peripheral — Any device, such as a printer or joystick, that is attached to the computer and controlled by the computer's CPU.

pixel — Short for "picture element." The smallest dot that can be produced on a screen or printer.

Plug and Play — Generally, refers to the computer's ability to automatically configure itself to work with peripheral devices. When capitalized, refers to a standard that, when followed by a device manufacturer, allows a PC to configure itself automatically to work with the device.

pointing device — Any device, such as the TouchPad or a mouse, that enables you to move the cursor on the screen.

port — A socket on the computer where you plug in a cable for connection to a network or a peripheral device.

processor — See *central processing unit (CPU)*.

program — A set of instructions that can be executed by a computer. The general classes of programs (also called software) are operating system, application, and utility. See also *operating system, application, utility.*

properties — The attributes of an object or device. For example, the properties of a file include the file's type, size, and creation date.

R

RAM (random access memory) — Volatile memory that can be written to as well as read. By volatile, we mean that information in RAM is lost when you turn off your computer. This type of memory is used for your computer's main memory. See also *memory.* Compare *ROM*.

random access memory — See *RAM*.

read-only memory — See *ROM*.

reboot — See *boot*, *restart*.

removable disk — A disk that can be removed from a disk drive. A diskette is one example of a removable disk.

resolution — A measure of the sharpness of the images that can be produced by a printer or displayed on a screen. For a printer, resolution is expressed in dots per inch (dpi). For a screen, it is expressed as the number of pixels available horizontally and vertically.

restart — Synonymous with reboot. To reset the computer by reloading the operating system without turning the computer off. See also *boot*.

RJ11 — A modular connector used on most U.S. telephone systems and direct-connect modems. The RJ11 connector is a 6-wire connector.

ROM (read-only memory) — Non-volatile memory that can be read but not written to. By non-volatile, we mean that information in ROM remains whether or not the computer is receiving power. This type of memory is used to store your computer's BIOS, which is essential instructions the computer reads when you start it up. See also *BIOS*, *memory*. Compare *RAM*.

S

select — To highlight or otherwise specify text, data, or graphics with the intent to perform some operation on it.

serial — Processes that occur one at a time. In communications, it means the transmission of one bit at a time sequentially over a single channel. Most computers have a serial port, which provides a serial interface between the computer and a single device, and/or a USB port which provides a high-speed connection to multiple devices. See *Universal Serial Bus (USB)*. Compare *parallel*.

shortcut — See *keyboard shortcut*.

software — See *program*. Compare *hardware*.

Standby — A feature of some Windows® operating systems that allows you to turn off the computer without exiting your open applications and to continue from where you left off when you turn the computer on again.

Suspend — A feature of some Windows® operating systems that allows you to turn off the computer without exiting your open applications and to continue from where you left off when you turn the computer on again.

system disk — A diskette that contains the operating system files needed to start the computer. Any diskette can be formatted as a system disk. A system disk is also called a "bootable disk" or a "startup disk." Compare *non-system disk*.

system prompt — The symbol (in the MS-DOS® operating system, generally a drive letter followed by a "greater than" sign) indicating where you enter commands.

T

TFT display — See *active-matrix display*.

U

universal serial bus (USB) — USB is a serial bus that supports a data transfer rate of up to 480 Mbps (480 million bits per second). USB can connect up to 127 peripheral devices through a single all-purpose USB port. USB allows hot swapping of peripherals. See also *bus, hot swapping, serial.*

upload — To send a file to another computer through a modem or network. See also *download.*

USB — See *universal serial bus (USB).*

utility — A computer program designed to perform a narrowly focused operation or solve a specific problem. Utilities are often related to computer system management.

W

Web — See *World Wide Web.*

Wi-Fi — A trademarked term by the Wireless Capability Ethernet Alliance which stands for Wireless Fidelity, and is another term for the communication protocol to permit an Ethernet connection using wireless communication components.

World Wide Web (www) — The worldwide network of Web sites linked together over the Internet. A user of the Web can jump from site to site regardless of the location of the computer hosting the site. See also *Internet.*

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