TOSHIBA

Tecra® M1 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 "Troubleshooting Guide" on page 188 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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Model: Satellite

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.**

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FCC Notice

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 or expansion unit's serial port, 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.

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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. A compliant telephone cord and modular plug is provided with this product. 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##TXXXXX. 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 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.

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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), as defined and approved by the Institute of Electrical and Electronics Engineers.

❖ The Wireless Fidelity (Wi-Fi) certification as defined by the WECA Wireless Ethernet Compatibility 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 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.

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.

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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.

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.

Europe – EU Declaration of Conformity

❖ 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.

België/Belgique:	For outdoor usage only channel 10 (2457 MHz) and 11 (2462 MHz) is allowed.
	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. An IBPT/BIPT license is required for public usage outside building. For registration and license please contact IBPT/BIPT.
	Gebruik buiten gebouw alleen op kanalen 10 (2457 MHz) en 11 (2462 MHz). 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 publiek gebruik buiten gebouwen is licentie van BIPT/IBPT verplicht. Voor registratie of licentie kunt u contact opnemen met BIPT.
	L'utilisation en extérieur est autorisé sur le canal 10 (2457 MHz) et 11 (2462 MHz). Dans le cas d'une utilisation privée, a l'extérieur d'un bâtiment, audessus d'un espace public, aucun enregistrement n'est nécessaire pour une distance de moins de 300m. Pour une distance supérieure à 300m un enregistrement auprés de I'IBPT est requise. Pour une utilisation publique à l'extérieur de bâtiments, une licence de l'IBPT est requise. Pour les enregistrements et licences, veuillez contacter l'IBPT.
Deutschland:	License required for outdoor installations. Check with reseller for procedure to follow.

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	Anmeldung im Outdoor-Bereich notwendig, aber nicht genehmigung-spflichtig. Bitte mit Händler die Vorgehensweise abstimmen.
France:	Restricted frequency band: only channels 10 and 11 (2457 MHz and 2462 MHz respectively) may be used in France. License required for every installation, indoor and outdoor installations. Please contact ART for procedure to follow.
	Bande de fréquence restreinte: seuls les canaux 10 à 11 (2457 MHz et 2462 MHz respectivement) doivent être utilisés en France. Toute utili-sation, qu'elle soit intérieure ou extérieure, est soumise à autorisation. Vous pouvez contacter l'Autorité de Régulation des Télécommunia-tions (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. Verifi-care con i rivenditori la procedura da seguire. L'uso per installazione in esterni non e' permessa.
Nederland:	License required for outdoor installations. Check with reseller for pro-cedure to follow.
	Licentie verplicht voor gebruik met buitenantennes. Neem contact op met verkoper voor juiste procedure.

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 Toshiba Wireless LAN Mini PCI Card will be installed with one of two types of antennas. The both of antenna types, when installed are located at the upper edge of the LCD screen.

For both antennas, 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.

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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 2.4GHz.

2 DS: This equipment uses DS-SS 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: MPC13A-20/R

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.

Interference Statement

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. 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 and correct the interference by one or more of the following measures:

❖ Reorient or relocate the receiving antenna.

❖ Increase the distance between the equipment and the receiver.

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❖ 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.

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.

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

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 (2.4GHz)

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

802.11a (5GHz)

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

Turbo Mode (5GHz)

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	

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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 Ver.1.1, 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.

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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) (3)

2.4FH1

(4)

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.)

Product is certified by the manufacturer to comply with DHHS rules 21 CFR sub-chaper J applicable at the date of manufacture.

MANUFACTURED:

Toshiba Corporation
1-1, Shibaura 1-Chome
Minato-Ku, Tokyo 105-0061, Japan

**CLASS 1 LASER PRODUCT
LASER KLASSE 1**
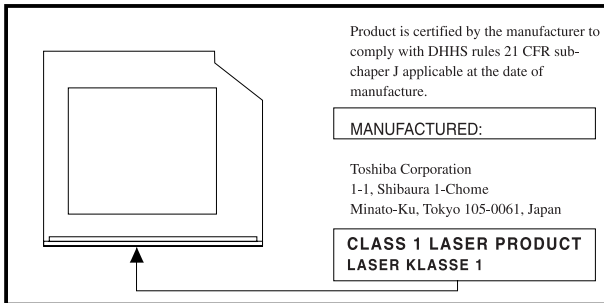
CAUTION

This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCT." To use this model properly, read the instruction manual 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.

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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, portable multimedia computing. With your Toshiba notebook computer, your work can accompany you wherever you go.

Tecra M1 Series notebook computers provide considerable computing power, enabling you to perform the most demanding computing tasks from any location.

You will find your operating system, Microsoft® Windows® XP Professional or Windows® 2000 (see Windows 2000 Supplemental Information), already installed on your computer. Your operating system offers exciting features and easy Internet access.

NOTE 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 user's guide contains basic information about your computer, including troubleshooting advice, detailed descriptions of your computer's hardware and how to use it, and vital notes about Microsoft® Windows® XP.

Depending on your needs, 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. 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:

❖ This electronic user's guide. Look for the user's guide icon on your desktop or in the DOCS folder on the C: drive.

❖ Guides for other programs that may come preinstalled on your computer or that are available for installation on your Recovery media.

❖ For accessory information, visit Toshiba's Web site at toshiba.com.

❖ The Microsoft® Windows® operating system documentation which explains the features of the operating system.

Service options

Toshiba offers a full line of service options built around its SelectServ™ limited warranty programs. 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 pcsupport.toshiba.com.

If you have a problem or need to contact Toshiba, see "If you need further assistance" on page 213.

Chapter 1

Finding Your Way Around

This chapter presents a "grand tour" of your Satellite computer with illustrations to guide you along your way.

It serves as a reference when you need to locate specific parts of the computer.

Making sure you have everything

Before you do anything else, consult the Quick Start card that shipped with your computer to make sure you received everything.

If any items are missing or damaged, contact your authorized Toshiba representative or your network administrator.

Finding where everything is located

The next few pages take you on a guided tour of your computer.

Front with the display panel closed

Microphone jack

Infrared port   Headphone jack   Display latch

Wireless antenna on/off switch   Volume control dial   System indicator panel
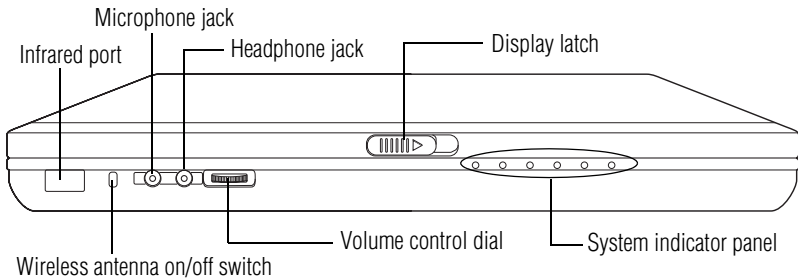
Infrared port—The fast infrared port allows cable-free communication with another device, such as a computer or printer, that has a compatible infrared port.

Wireless antenna on/off switch—The Wireless antenna on/off switch turns the optional wireless communication system on or off.

Microphone jack—The 3.5 mm microphone jack lets you connect an external monaural microphone or other audio input device. Connecting a microphone or other device to this jack automatically disables the internal microphone.

Headphone jack—The 3.5 mm headphone jack lets you connect stereo headphones or other audio output devices. Connecting headphones or other devices to this jack automatically disables the internal speakers.

Volume control dial—The volume control dial lets you adjust the loudness of the system speakers.

Display latch—Sliding the display latch opens the computer display panel. For more information, see "Front with the display panel open" on page 43.

System indicator panel—The system indicator panel is made up of several status lights that provide information about various system functions. See "System indicator panel lights" on page 47 for a description of each of the panel lights.

Back

RGB (monitor) port

S-Video port

Network port ——— i Link port

Modem port

DC IN

Serial port

Parallel port

Cooling vents
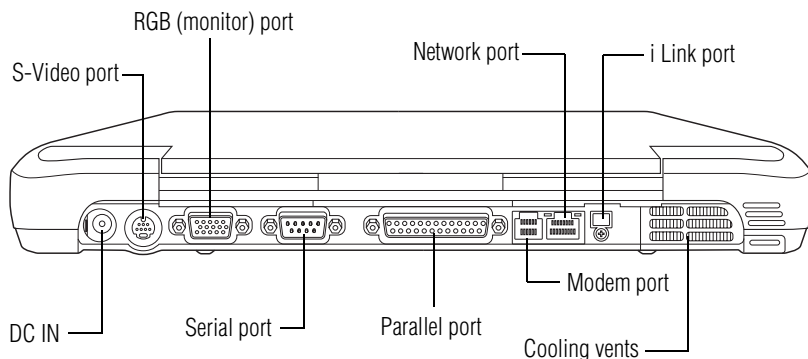
⊖⊙⊕ **DC IN** —Lets you plug in the AC adapter.

S-Video port—Lets you connect your computer to an external video device such as a standard television set.

RGB (monitor) port—Lets you connect an external monitor or projector. For more information, see "Using external display devices" on page 65.

Serial port—Lets you connect a serial mouse, serial printer, or other serial device.

Parallel port—Lets you connect a parallel printer or other parallel device. For more information, see "Connecting a local printer" on page 71.

Network port—Lets you connect the computer to an Ethernet LAN (local area network).

Modem port—Lets you connect the computer's internal modem directly to a conventional telephone line.

i.LINK® port—The i.LINK® port on the rear of the computer provides very fast data transfer rates of up to 400 mega bits per second (Mbps). You can connect up to 63 external devices to this port. For more information on i.LINK® ports, see "Using the i.LINK® port" on page 90.

Cooling vent—Provides ventilation to keep the computer's processor from overheating. The vent lets the processor continue performing at its maximum speed.

CAUTION To prevent possible overheating of the computer's processor, make sure you don't block the cooling vent.

Left side
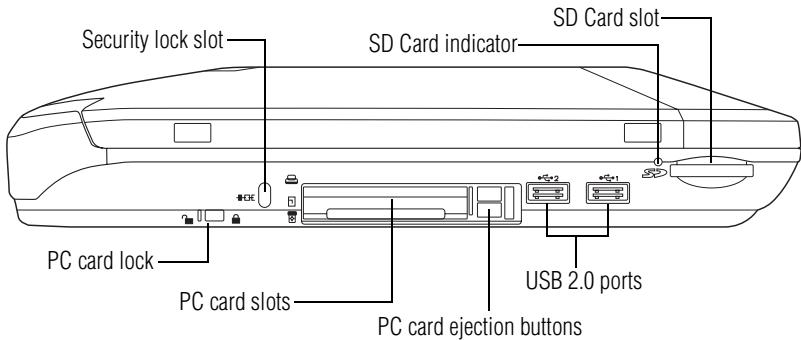
USB 2.0 ports—Use the **Universal Serial Bus 2.0 (USB) ports** to connect USB peripherals.

DEFINITION: USB 2.0 is a peripheral expansion standard that supports a data transfer rate of up to 480 Mbps for peripherals such as keyboards and pointing devices. USB peripherals have a single standard for cables and connectors. The USB standard also allows hot swapping of peripherals.

NOTE The USB 2.0 ports on the left side of the computer supports USB Legacy mode. Therefore, you can boot the computer from a USB floppy drive or other legacy items, if necessary.

PC card eject buttons—Allow easy removal of PC Cards.

SD® indicator—The SD® slot indicator light glows when the SD® card is being accessed. The SD® slot is located on the left side of the computer.

SD® card slot—Lets you insert SD® cards for additional data storage.

PC Card lock—Keeps the PC Cards secure in their slots.

PC Card slots—Allows you to use Type I, Type II, or Type III PC Cards.

Security lock slot—Attaching an optional PORT-Noteworthy® Computer Lock Cable to the security lock slot lets you anchor your computer to a large, heavy object such as your desk. For more information, see "Using a computer lock" on page 114.

Right side
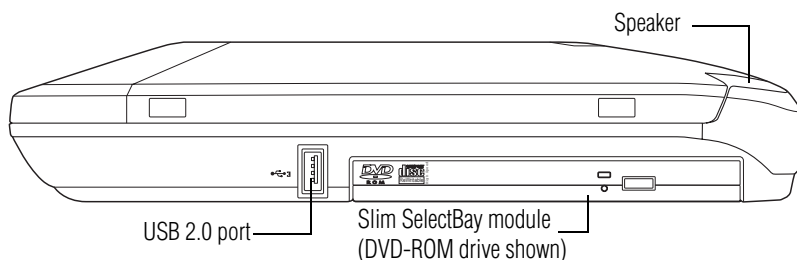
Speaker

USB 2.0 port

Slim SelectBay module
(DVD-ROM drive shown)

USB 2.0 ports—Use the **Universal Serial Bus 2.0 (USB) ports** to connect USB peripherals.

DEFINITION: USB 2.0 is a peripheral expansion standard that supports a data transfer rate of up to 480 Mbps for peripherals such as keyboards and pointing devices. USB peripherals have a single standard for cables and connectors. The USB standard also allows hot swapping of peripherals.

NOTE   The USB 2.0 port on the right side of the computer does not support USB Legacy mode. Therefore, you cannot boot the computer from a USB floppy drive or other legacy items, if necessary.

◇   **Slim SelectBay**® **module**— Lets you use one of several possible Slim SelectBay modules. The DVD-ROM drive is shown in place. For more information on using your DVD-ROM, see "Using the DVD-ROM or multi-function drive" on page 107. For further information on Slim SelectBay devices, see "Using Slim SelectBay® modules" on page 80.

Front with the display panel open

To view the front of the computer with the display panel open:

1   Locate the display latch on the front of the computer.

2   Slide the display latch to the right and lift the display panel.

3   Adjust the display panel to a comfortable viewing angle.

CAUTION   To avoid damaging the display panel, be careful when opening and closing it. Never force the panel beyond the point where it moves easily, and never use it to lift the computer.

Screen

Keyboard

Speaker

Power button

AccuPoint II
pointing device

CapsLock
indicator

TouchPad
buttons

AccuPoint II
buttons

TOSHIBA Console
button

TOSHIBA Presentation
button

Optical sensor

Speaker

Keyboard
indicator panel

TouchPad
pointing device

System
indicator panel
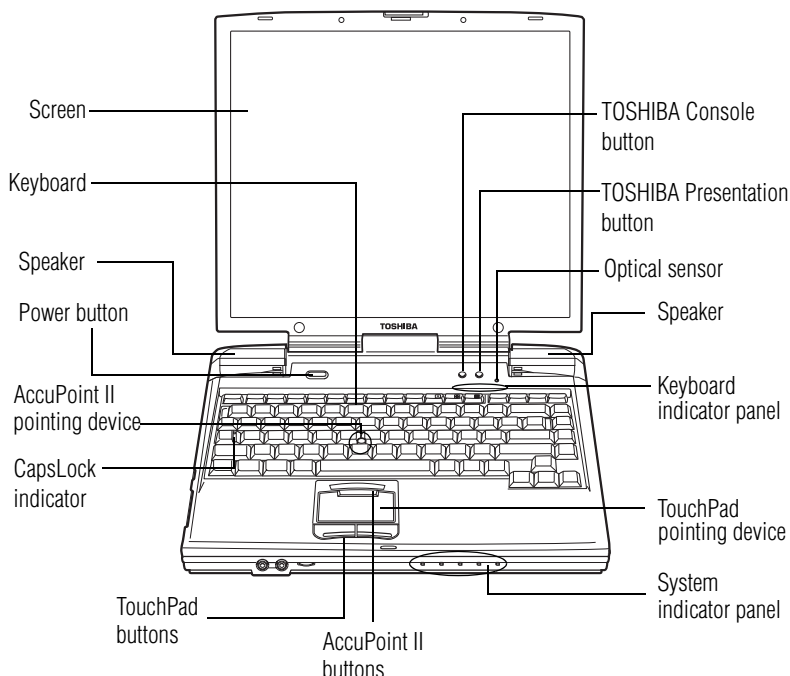
Power button —The power button is used to turn on power
to the computer. For more information, see "Turning on the
computer" on page 60.

Screen—The computer's screen is a liquid crystal display
(LCD) that provides clear, sharp images.

Keyboard—The 85-key keyboard provides all the
functionality of a full-size keyboard. For more information,
see "Using the keyboard" on page 92.

Keyboard indicator panel—These lights provide
information about various keyboard functions. See
"Keyboard indicator panel lights" on page 48 for a
description of the panel lights.

TouchPad^{TM} pointing device—Enables you to move the
cursor with the stroke of a finger.

AccuPoint® II pointing device—This device combines the function of a mouse with the convenience of never having to remove your hands from the keyboard. See "Setting up your software" on page 62.

System indicator panel—These lights provide status information about various system functions. See "System indicator panel lights" on page 47 for a description of each panel light.

t **TOSHIBA Console button**—This button activates the Toshiba Console. This gives you quick access to some common functions. For more information, see "Using the TOSHIBA Console button" on page 100.

Toshiba Presentation button— This button allows the user to switch between the LCD and LCD/CRT (or projector).

Optical sensor— This sensor automatically adjusts the brightness of your computer screen to the available light in the room.

Underside

Hard disk drive cover

Battery module

Battery module release

Slim SelectBay release

Slim SelectBay slot

Expansion port
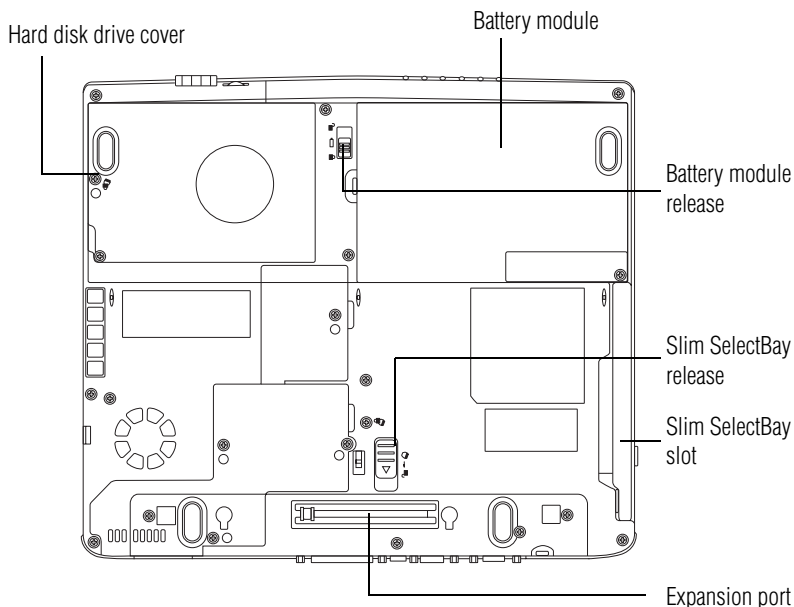
Battery module—Lets you use your computer when a standard electrical outlet is not available. For further information about using the battery, see "Mobile Computing" on page 126.

Slim SelectBay release—Keeps the Slim SelectBay module secure in its compartment.

Memory module—Lets you add more memory to your computer. For more information, see "Adding memory" on page 75.

Slim SelectBay slot—One of several interchangeable devices which offer exceptional system flexibility. For more information, see "Using Slim SelectBay® modules" on page 80.

Expansion port—Lets you connect to an expansion device, providing additional expansion capability. For more information, see "Using an expansion device" on page 74.

Indicator panel lights

Two sets of indicator lights, the system indicator panel and the keyboard indicator lights, display the current state of your system.

System indicator panel lights

This panel is located on the front of the computer.
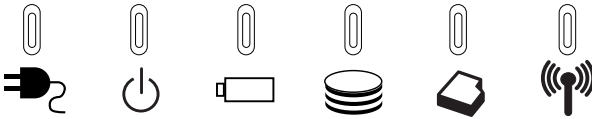
AC power light—Glows green when the computer is connected to an AC power source.

On/off light—Indicates whether the computer is on, off, or in a power down mode.

❖ Glows green when the computer is on.

❖ Flashes amber when you power down the computer using the Standby command.

❖ May flash amber if the computer is overheating.

Main battery light—Indicates the status of the main battery.

❖ Flashes amber when you are running on battery power and the battery charge is running low.

❖ Does not glow when you are running on battery power and the battery charge is not running low.

❖ Glows amber when you are connected to AC power and the battery is charging.

❖ Glows green when you are connected to AC power and the battery is fully charged.

For more information, see "Monitoring battery power" on page 129.

Hard disk drive light—Flashes to indicate that the hard disk is currently in use.

Slim SelectBay indicator light—Indicates the status of a secondary battery in the Slim SelectBay, if installed.

❖ Glows amber when the battery is charging.

❖ Glows green when the battery is fully charged.

❖ Does not glow if there is no battery in the Slim SelectBay.

Wireless indicator light—Glows amber to indicate that wireless antenna on/off switch is on.

Keyboard indicator panel lights

The keyboard indicator lights provide information about keyboard functions.

Caps lock light—Glows when you press the caps lock key. When this light is on, pressing a letter key on the keyboard produces an uppercase (capital) letter. The caps lock key does not affect the number and symbol keys.

Cursor control light—Glows when the cursor control overlay is on. When this light is on, pressing an overlay key moves the cursor as shown by the white arrow or command printed on the left front of the key instead of the letter printed on the top of the key. For more information, see "Using the overlay for cursor control" on page 96.

Numlock light—Glows when the numeric overlay is on. When this light is on, pressing an overlay key produces the white number printed on the right front of the key instead of the letter printed on the top of the key. For more information, see "Using the overlay to type numeric data" on page 96.

Chapter 2

Getting Started

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

Selecting a place to work

Your computer is designed to be used in a variety of locations and situations. This section provides guidelines for setting up your computing environment.

Creating a computer-friendly environment

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

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

❖ Dust, moisture, and direct sunlight.

❖ Liquids and corrosive chemicals.

⚠ CAUTION If you spill liquid into the computer, turn off the computer, 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 network administrator. Refer to "If you need further assistance" on page 213 for more information.

❖ Equipment that generates a strong electromagnetic field, such as large 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. Operate the computer within a temperature range of 41 degrees to 95 degrees Fahrenheit (5 degrees to 35 degrees Celsius) and 20 percent to 80 percent non-condensing humidity.

Keeping yourself comfortable

Strain and stress injuries are becoming more common as people spend more time using their computers. However,

with a little care and proper use of the equipment, you can
work comfortably throughout the day.

⚠ WARNING Using the computer keyboard incorrectly can result in
discomfort and possible injury. If your hands, wrists, and/or
arms hurt 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-motion injury, and repetitive-stress syndrome.

Placement of the computer

Proper placement of the computer and external devices is
important to avoid stress-related injuries. Consider the
following when placing your computer.

❖ 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 use an external monitor, the top of the screen
   should be no higher than eye level.

❖ If you use a paper holder, set it at 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.
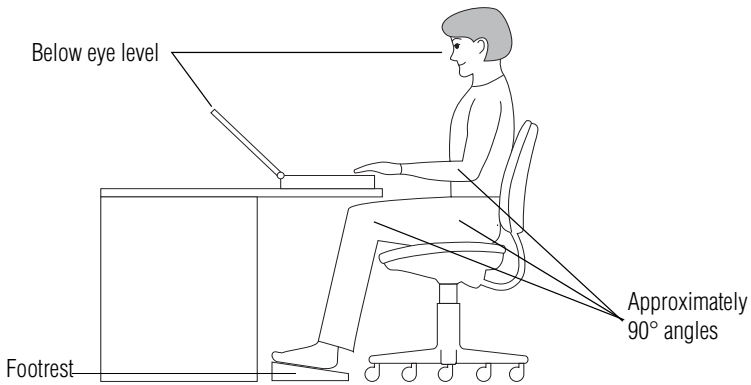
Correct posture and positioning of the computer

❖   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. Do not slump forward or lean back too far.

Lighting

Proper lighting can improve the readability 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 shines directly into your eyes.

❖ If possible, use soft, indirect lighting in your computer work area.

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, short 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 30 seconds.

Other precautions

Your computer is designed to optimize safety, minimize strain, and withstand the rigors of portability. However, you should observe certain precautions to further reduce the risk of personal injury or damage to the computer.

CAUTION Do not apply heavy pressure to the computer or subject it to sharp impacts. Excessive pressure or impact can damage computer components or cause your computer to malfunction.

⚠ CAUTION Some PC Cards can become hot with prolonged use. If two cards are installed, both can become hot even if only one is used extensively. Overheating of a PC Card can result in errors or instability in the PC Card operation.

CAUTION Be careful when you remove a PC Card that has been used for lengthy periods of time.

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 comes with a rechargeable battery pack that must 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 56.

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

Before adding any of these devices to the computer, be sure to complete "Setting up your software" on page 62.

After setting up your computer, you may want to:

❖ Add more memory. See "Adding memory" on page 75.

❖ Connect a mouse. See "Connecting a mouse" on page 70.

❖ Connect a full-size keyboard. See "Using a keyboard" on page 70.

❖ Connect an external monitor. See "Using external display devices" on page 65.

❖ Connect a local printer. See "Connecting a local printer" on page 71.

❖ Install PC Cards. See "Inserting and removing PC Cards" on page 84.

For more information on installing specific devices, see "Connecting Other External Devices" on page 65.

Connecting the AC adapter

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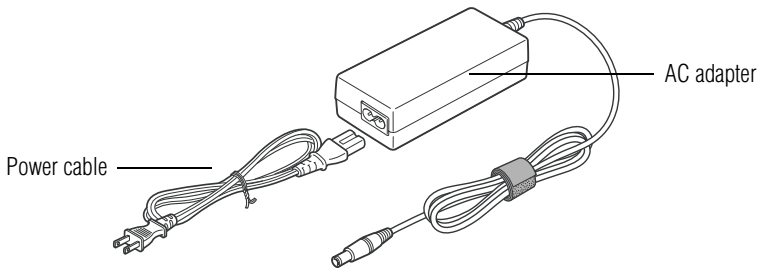
Sample power cable and AC adapter

⚠ 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 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 Guide. Connecting the power 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.

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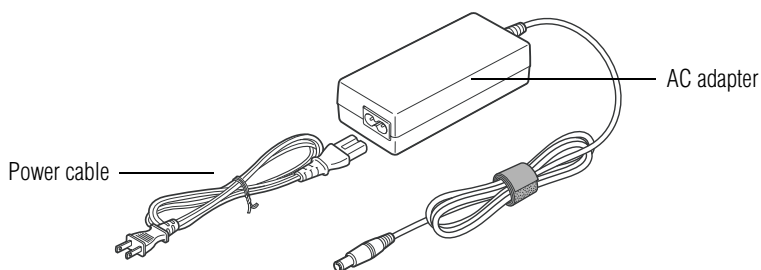
Sample power cable and AC adapter

To connect AC power to the computer:

1   Connect the power cable to the AC adapter.
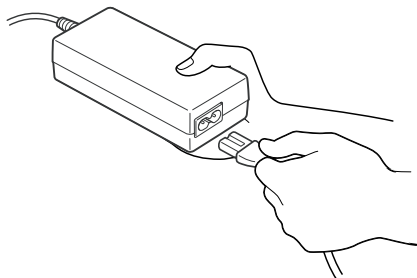
Connecting the power cable to the AC adapter

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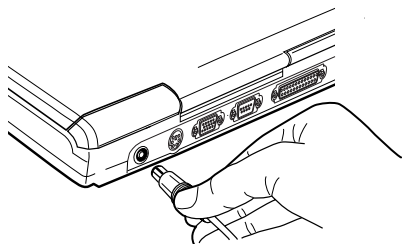
Connecting the AC adapter to the computer

3 Connect the power cable to a live electrical outlet.

If the electrical outlet is live, the system indicator panel's AC power light (⬛⊃) glows green.

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

❖   Amber while the battery is charging

❖   Green when the battery is fully charged

If the battery light flashes amber during charging, either the battery pack is malfunctioning, or it is not receiving input from the AC power supply. Disconnect the AC cable and remove the battery pack. See for troubleshooting information.

⚠ DANGER Damaged power cables can cause fire or electric shock. Never modify, forcibly bend, place heavy objects on top of, or apply heat to the power cable.

If the power cable becomes damaged or the plug overheats, discontinue use. There is a risk of electric shock.

Never remove the power plug from the outlet with wet hands. Doing so may cause an electric shock.

Charging the battery

Before you can use the battery to power the computer, you must charge it. Connect the computer to a live electrical outlet using the AC adapter and power cable. When the AC adapter is connected to a live electrical outlet, the system indicator panel's AC power light (⬛⊃) glows green and the battery light (▭) glows amber. When the battery light turns green, the battery is completely charged and ready to power the computer.

Charging time for the battery varies depending upon the demand placed on the AC adapter. If the computer is off, the

battery should fully charge in about three hours. If the computer is on, the battery will charge in four to ten hours, provided the computer is *not* consuming full power. If you are also charging a secondary battery housed in the Slim SelectBay, charging time will be longer.

| NOTE | Once the battery is charged for the first time, avoid leaving the computer plugged in and turned off for more than a few hours at a time. |

For more information on battery use, see "Running the computer on battery power" on page 127.

Turning on the computer

The computer is now ready for you to turn it on and begin using it.

Opening the display panel

1 Slide the display latch to the right.

2 Lift the display panel.

| **CAUTION** | To avoid damaging the display panel, do not force it beyond the point where it moves easily, and never lift the computer by 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.

Turning on the power

To turn on the computer:

1 Make sure any external devices (such as the AC adapter, if you plan to use AC power rather than battery power) are properly connected and ready.

2 Check to ensure that any floppy drives are empty.

3 Press and hold the power button in until the on/off light on the system indicator panel glows green—about one second.

Turning on the power

For the meaning of each light on the system indicator panel, see "System indicator panel lights" on page 47.

4 The preinstalled operating system will load automatically.

CAUTION When you turn on the computer for the first time, don't turn off the power again until the operating system has loaded completely.

Setting up your software

NOTE	The name 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 **Nex**t.

3   Enter the computer name and description and click **Nex**t or **Skip**.

    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   Click **Skip** to exit the process or **Next** to continue.

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

A window will display asking if you wish to register with Toshiba and Microsoft.

5 Click **Yes** to register, or **No** to exit the process.

NOTE   If you click No, you may register with Toshiba by clicking the
Register with Toshiba icon on the desktop.

6 Enter your personal information in the registration
window.

7 Click **Finish** to complete the process.

Your computer restarts automatically.

Registering your computer with Toshiba

To register your computer with Toshiba, click on the desktop
icon and follow the on-screen instructions.

Setting up other devices

You may want to take this time to set up your printer. For
more information, see "Connecting a local printer" on
page 71.

Turning off the computer

It's generally a good idea to turn off your computer when you
are not using it.

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 three hours to recharge the
main battery.

When you power down the computer, you have three options
to choose from: Turn Off (or Shut down), Hibernate and
Standby. Each option has its advantages.

❖ Use the Turn Off command if you are using the Windows® XP Professional operating system when not connected to a domain server.

❖ Use the Shut down command if you are using the Windows XP Professional operating system and connected to a domain server.

❖ If you have work in progress and are not connected to a network, use the Windows® Standby or Hibernate commands to save your system settings to memory so that, when you turn on the computer again, you will automatically return to where you left off.

❖ To leave the computer off for a longer period, you can use the Windows® Turn Off command when not connected to a domain server or the Shut down when connected to a domain server instead. For more information, see "Powering down the computer" on page 116.

CAUTION Never turn off the computer while any drive is in use. Doing so may damage the media in use and result in loss of data.

Closing the display panel

When you are finished, shut the computer down and close the display panel to keep dust and dirt out of the computer.

If you close the computer while it is still on, these actions will occur:

❖ If you have the LCD power-saver feature set, the LCD panel will automatically turn off until you open it again.

❖ If you have the audible warning set, the computer will beep to notify you that it is still on.

❖ If you have an action feature set, the computer will perform either: Nothing, Standby, or Hibernate (see "Using Hibernation" on page 120).

Chapter 3

Connecting Other External Devices

This chapter describes how to connect devices that can increase the capabilities of your Satellite computer.

Using external display devices

Your computer comes with a built-in LCD display, but you can also connect three different types of external display devices to one of two available video ports:

❖ A television via the S-Video port.

❖ A video display device, such as a video projection unit, via the S-Video port.

❖ An external monitor or projector via the RGB (monitor) port.

Connect a television, video projector, monitor or other display device and then configure your computer for the type of device you're connecting. To do this, refer to the documentation for your operating system and devices.

Connecting the display device

If you're connecting a television or other video display device to the computer's S-Video port, first refer to "Selecting video cables" below for guidelines on choosing a video cable, then refer to "Connecting to the S-Video port" on page 66.

If you're connecting an SVGA monitor, skip to "Connecting an external monitor or projector" on page 67.

Selecting video cables

To connect a device to the S-Video port, you'll need to purchase an S-Video cable. For the best video quality, always use a properly shielded cable.

HINT: Toshiba recommends using a cable no longer than 20 feet (approximately 6 meters).

Using a poor quality cable may result in a dull or fuzzy picture, poor color, ghosting, video noise, or loss of video.

Connecting to the S-Video port

NOTE   Video cables are not included with your computer. To connect a device to the S-Video port, you'll need to purchase an S-Video cable.

1 Connect one end of the S-Video cable to the external video device.

Refer to the documentation provided with the device for the location of its S-Video-in port.

2 Connect the other end of the S-Video cable to the S-Video port on the back side of the computer.

3 Turn on the external video device.

4 Set the display mode by pressing Fn + F5 or by setting the Display Properties settings. For more information, see "Directing the display output when you turn on the computer" on page 67.

Connecting an external monitor or projector

You can easily attach an external monitor or projector to your computer if you need a larger screen. To do this:

1 Connect the monitor's video cable to the RGB port on the back of the computer.

2 Connect the device's power cable to a live electrical outlet.

3 Turn on the external device.

4 Set the display mode by pressing Fn + F5 or by setting the Display Properties settings. For more information, see "Directing the display output when you turn on the computer" on page 67.

Directing the display output when you turn on the computer

Once you've connected an external display device, you can choose to use the internal display only, the external device only, or both simultaneously. The quickest way to change the display output settings is to use the display hot key (Fn + F5):

1 Press Fn and F5 simultaneously.

2 While holding down Fn, press F5 repeatedly until the setting you want takes effect.

This hot key cycles through the settings in the following order:

❖ Built-in display only

❖ Built-in display and external device simultaneously

❖ External device only

❖ Built-in display and TV (or other external video device)
    simultaneously

NOTE   This setting is available only if you have the controller option
set to dual. The default setting is single.o set the controller
option to dual:

- Click Start, then Control Panel.

- Double-click the Display icon.

- Click the Settings tab and click the Advanced button.

- Click the Display Device tab.

- Click Enable Different Refresh Rate.

- Click Apply then click Ok.

- Click Yes.

- Click Ok.

- Click Ok.

Restarting the system returns the controller option to single.

❖ TTV (or other external video device) only

3 Release the Fn key.

TECHNICAL NOTE: You can also change these settings using
the Display Properties Box.

For more information on switching the display output, see

Adjusting the quality of the external display

To obtain the best picture quality from your television (or other video display device), you may need to adjust the video settings. See the video device documentation for additional configuration steps.

TECHNICAL NOTE: In order to use one of the simultaneous modes, you must set the resolution of the internal display panel to match the resolution of the external display device.The external display device must support a resolution of 640 X 480 or higher.

Video limitations

Keep in mind that the quality of the display will be limited to the capabilities of the external video device.

❖ If the external video device, such as an SVGA monitor, is capable of displaying at a maximum resolution of 640 x 480 and your system is set for a higher resolution, only part of the desktop will appear on the screen. You can view the "lost" area by scrolling to it.

❖ Since most televisions and video projectors overscan by 15 to 20 percent, some of the desktop will be outside the viewing area. You can view the edge of the desktop by scrolling to it.

❖ If you use the display hot key (Fn + F5) to change the display output with the LCD Display Stretch option enabled and the display area (resolution) set to 640 x 480 or 800 x 600, the image on the internal display panel may appear stretched.

Using a keyboard

If you prefer to use a standard keyboard, you can attach one to a USB or serial port.

Connecting a keyboard

To connect a USB or serial keyboard to, gently push the keyboard cable into the USB or serial port.

Making your external keyboard emulate the Fn key

An external keyboard does not have the Fn key provided by the computer's built-in keyboard. You can use the Fn Key Emulation option in Toshiba Hardware Setup to assign an external keyboard key combination that will emulate the internal keyboard's Fn key.

In Toshiba Hardware Setup, you can emulate the Fn keys by setting key combinations in the keyboard option of the utility. See "Toshiba HW Setup" on page 164 for more information.

NOTE   The Fn emulation key is not supported when using a USB keyboard.

Using a mouse

If you prefer to use a mouse, you can attach one to a serial port or USB port. A serial mouse disables the Dual Pointing device.

Connecting a mouse

To connect the USB or serial mouse, gently push the mouse cable into the USB or serial port.

Connecting a local printer

NOTE   Read the documentation that came with your printer. Follow
              the manufacturer's instructions when connecting a local
              printer.

              You must supply the proper printer cable. If one did not come
              with your printer, you may purchase one from an electronics or
              computer store.

              If your printer is ECP- or IEEE-compliant, make sure your
              printer cable is an IEEE 1284 cable.

CAUTION   Your printer documentation may require you to install the
              printer software before physically connecting the printer to
              your computer. If you do not install the software as instructed
              by the printer manufacturer, the printer may not function
   correctly.

CAUTION   Never connect the printer cable while the computer's power is
              on. Doing so may damage the printer, the computer, or both.

These instructions assume you have a parallel printer.

To connect the printer:

1   If the computer is on, turn it off.

2   Connect the printer cable to the printer and to the
         computer's parallel port. Use the printer cable illustration
         as a connection guide.

To the computer   To the printer
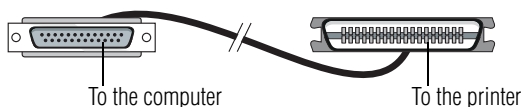
Identifying the ends of a parallel printer cable

3 Plug the printer's power cable into a live electrical outlet.

**4** See your printer documentation for additional configuration steps.

For more information on getting your printer to print, see "Printing your work" on page 106.

Connecting an external diskette drive

Some operations, such as creating a password service diskette, require a diskette drive designed for use with 3.5-inch diskettes.
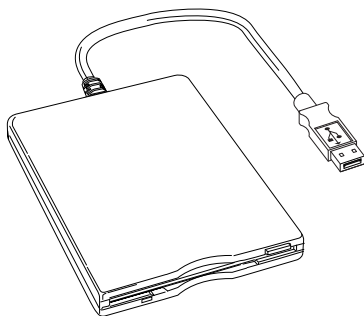
An optional external USB diskette drive

To connect an optional external USB diskette drive, connect the cable to one of the USB ports.
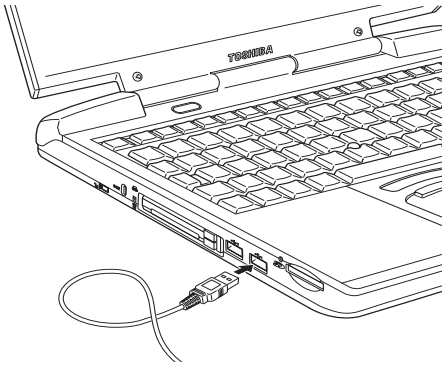
Connecting an optional external USB diskette drive

Connecting external speakers or headphones

To attach an external stereo output device:

1 Locate the headphone jack on the front of the computer.

2 Using any necessary adapters, plug the cable from the external audio device into the headphone jack. The headphone jack requires a 3.5 mm 16-ohm stereo jack.

When the headphone is inserted, the internal speakers are automatically disabled.

For more information on using headphones or external speakers, see "Using external speakers or headphones" on page 145.

Connecting an external microphone

Your computer comes equipped with an internal microphone, but to record higher quality sounds, you can attach an external microphone:

1 Locate the microphone jack on the front of the computer.

2 Plug the microphone cord into the microphone jack.

3 Turn on the microphone.

   The internal microphone is automatically disabled.

Once the external microphone is connected, the recording process is the same as with the built-in microphone. For more information, see "Recording sounds" on page 146.

Using an expansion device

The expansion port allows you to connect your computer to an expansion device, which is an excellent investment if you're using your computer both in and out of the office.

When you return to your desk, you probably want to connect to your network, print reports from your computer, or use a mouse instead of the AccuPoint II. Connecting cables for each of these devices every time you return to the office is time-consuming and inconvenient.

With an expansion device, you can leave external devices connected while you are using your computer away from your desk. When you return, you can quickly connect your computer and have immediate access to all the devices.

For more information, see the accessories information package that comes with the device or visit toshiba.com.

Adding memory

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

Your Satellite notebook computer is equipped with two memory slots which can provide for various memory configurations. When additional memory is added, or original memory replaced, it is recommended that you use only compatible memory. In the event original memory is replaced with invalid memory, the system will beep and will not boot beyond the BIOS memory check. A message may display. If this occurs, contact Toshiba's support center at (800) 457-7777.

Installing a memory module

Additional memory modules can be installed in the memory expansion slots under your computer's keyboard. You will need a standard Phillips no.1 screwdriver and a small flat head screwdriver for this procedure.

CAUTION To avoid damaging the computer's screws, use a standard Phillips no. 1 screwdriver that is in good condition.

The computer has two memory expansion slots—Slot A and Slot B. You can install one or two memory modules.

1 Shut down your computer completely using the Shut down or Turn Off command.

See "Turning off the computer" on page 63.

> **2** Unplug the computer and remove any cables you may have connected.

CAUTION Installing a memory module with the computer's power on may damage the computer, the module, or both.

> **3** Open the display panel and remove the panel that contains the Power and TOSHIBA Console buttons.

CAUTION When removing the computer's power and TOSHIBA Console button panel to install additional memory, be careful not to damage the display or circuit board.
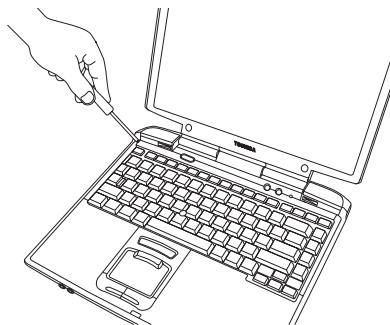
Using a flat head screw driver to pry the panel off

You can pry the panel out of its position by using a flat head screwdriver. Starting at the left or right side, carefully wedge the flat head screwdriver between the panel and the surrounding housing. Grasp the end of the panel, lift up and wiggle it back and forth until the panel comes free.
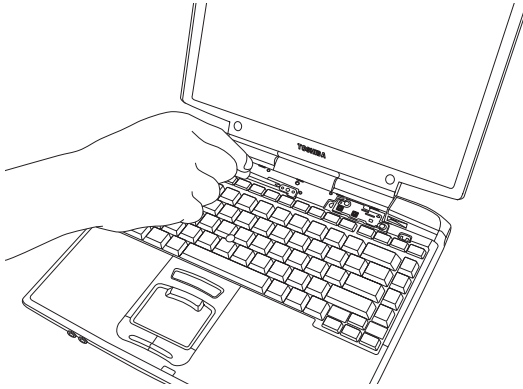
Removing the center keyboard screw

4 Locate and remove the screws that hold the keyboard in place.

5 Lift the keyboard and place it face down on the palm rest of the computer.
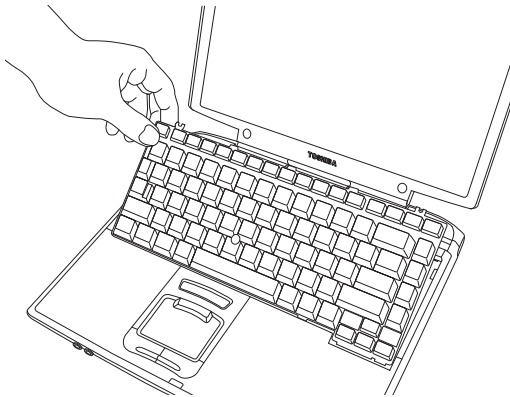

Lifting off the keyboard

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.

6 Remove the new memory module from its antistatic packaging.

7 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.
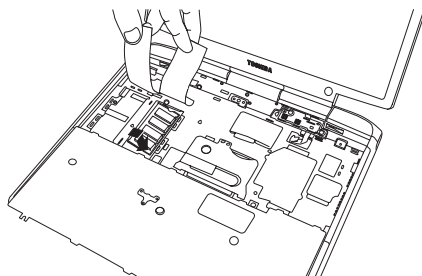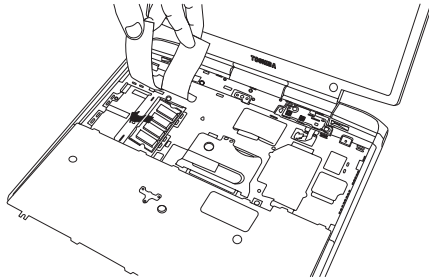

Inserting the memory module into the slot

8 Replace the keyboard and the screws.

9 Replace the panel that contains the Power and TOSHIBA Console buttons. Press hard on the keyboard panel to snap it into place.

10 Restart the computer.

When you turn on the computer, it automatically recognizes the additional memory.

Removing a memory module

If you need to remove a memory module:

1 Complete steps 1–5 in "Installing a memory module" to shut down the computer and expose the memory module(s).

2 Pull the clips away from the memory module.

3 The memory module pops partially out of the slot.

Removing the memory module

4 Carefully remove the module from the slot.

5 Replace the keyboard and the screws.

6 Replace the panel that contains the Power and TOSHIBA Console buttons.

7 Restart the computer.

Using Slim SelectBay® modules

The Slim SelectBay® gives you additional flexibility. By inserting and removing Slim SelectBay® modules, you can configure your computer for the task at hand without having to carry unnecessary components with you when you travel. For example, any one of several modules can be used in the Slim SelectBay®:

❖ DVD-ROM drive. The DVD-ROM drive can also be used as a standard CD-ROM drive.

❖ Multi-function drive

❖ Weight saver insert (a "honeycomb" piece of plastic) that reinforces the Slim SelectBay® for travel. The weight saver came in your computer's accessories box.

❖ Secondary battery

❖ Secondary hard disk drive (HDD)

HINT: Items from this list that did not come with your computer can be purchased separately. See the accessories information packaged with your system or visit www.toshibaaccessories.com.

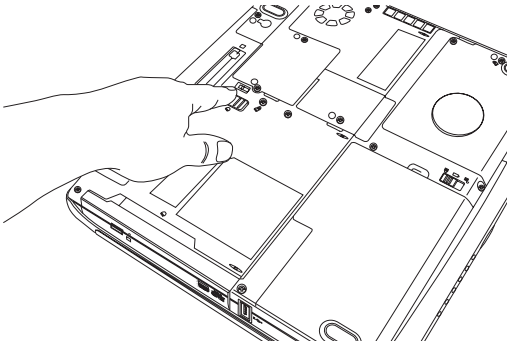## Removing a module from the Slim SelectBay®

NOTE

Use caution when lifting or turning your computer. Failure to do so may result in damage to components, such as cables, attached to your computer, or to the computer itself.

1 Turn off the computer.

You may also hot swap a module in the Slim SelectBay. Stop the module by clicking the **Safely Remove Hardware** icon

on the System tray. After the module is stopped, it is safe to remove.

2   Slide the Slim SelectBay® release toward the back of the computer.

Unlatching the Slim SelectBay®

3   Slide the module out of the computer.
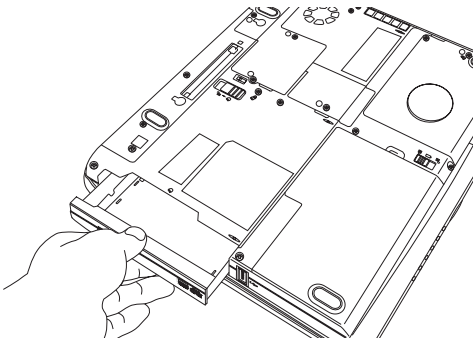
Sliding the module out

If you are removing the weight saver, retain it for transporting the computer when no other module is installed in the Slim SelectBay®.

Inserting a module into the Slim SelectBay®

To install a module into the Slim SelectBay®, simply slide the module all the way into the Slim SelectBay®.

Inserting and removing hard drives

Your Tecra® M1 can use various hard drive capacities. Depending upon the original hard drive installed in your computer, you may wish to increase storage capacity by changing the internal drive, or you can also add additional hard drive space by inserting a drive into the select bay module.

To change the internal hard drive.

1 Shut down your computer completely using the Shut down command. See "Turning off the computer" on page 63.

2 Unplug the computer and remove the battery.

3 Close the display panel and remove any cables you may have connected.

4 Turn the computer upside down.

5 Remove the screw on the hard drive bay cover.
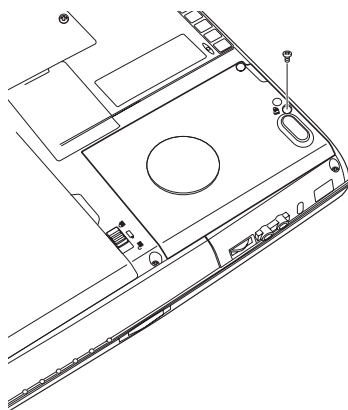
Removing the hard drive cover screws

6 Lift the hard drive bay cover to expose the hard drive.

7   Grasp the plastic tab on the exposed edge of the hard
    drive and pull it towards the left side of the computer.
    This will release the hard drive from the computer.
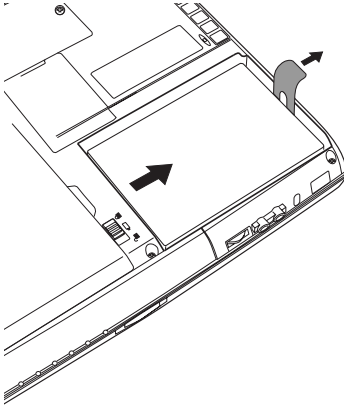
Releasing the hard drive from the computer

8   Lift the hard drive out of the computer.
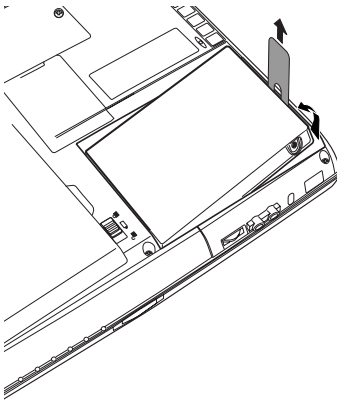
Lifting the hard drive out of the computer

9   Install the new hard drive by sliding it into the hard drive
    bay and pressing it firmly until it locks. Do not force the
    drive into the computer.
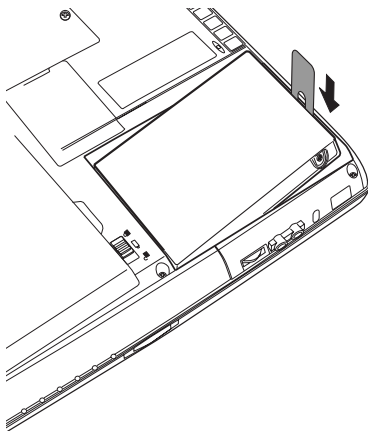
Inserting the new hard disk drive

10 Replace the hard drive bay cover and tighten the screw removed in step 5 above.

Inserting and removing PC Cards

Your Satellite computer comes with two stacked PC Card slots and supports three types of PC Cards:

❖ Type I cards—You can install up to two of these cards, one in each slot.

❖ Type II cards—You can install up to two of these cards, one in each slot.

❖ Type III cards—You can install just one of these cards.

Inserting a PC Card

Before you insert a PC Card, refer to the documentation that comes with the card to see if you need to do anything before you insert it.

There are three different ways to insert a PC Card:

❖ Turn off the computer and follow the steps below.

❖ Insert the PC card while the computer is running. Follow the steps below.

❖ Hot swap the card (choose this method if there is already a PC Card in slot you wish to use). Stop the PC Card by clicking the **Safely Remove Hardware** icon on the System tray. After the PC Card is stopped, it is safe to remove it. Follow the steps below.

1 Locate the PC Card slot on the left side of the computer.

2 If the PC Card slots are locked, unlock them by locating the PC Card lock and sliding the lock into the unlocked position.

   If you are hot swapping a PC Card, see "Removing a PC Card" on page 86, steps 3 through 5.

3 Insert the PC Card.

   If you have a Type III card, insert it into the lower part of the slot. If you have a Type I or Type II card, insert it into either the upper or lower part of the slot.

Inserting a PC Card

4 When the card is almost all the way into the slot, push firmly, but gently, to ensure a firm connection with the computer. Do not force the card into position.

5 To lock the PC Card in its slot, locate the PC Card lock and then slide the lock into the locked position.

Removing a PC Card

1 Stop the PC Card by clicking the **Safely Remove Hardware** icon on the System tray. After the PC Card is stopped, it is safe to remove it.
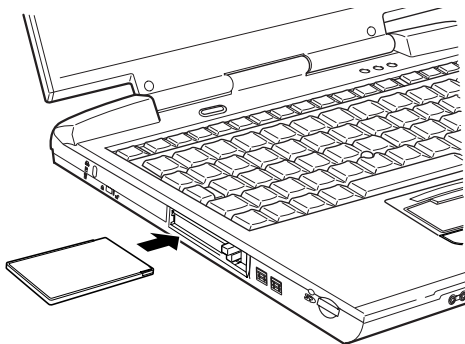
2 If the PC Card slots are locked, unlock them by locating the PC Card lock and then sliding the lock into the unlocked position.

3 Locate the PC Card ejection button that corresponds to the slot in which your PC Card is installed.

The top tab releases a card in the upper slot. The bottom tab releases a card in the lower slot.

4 Press the PC Card eject button once to extend it, and push it in to remove the PC Card.
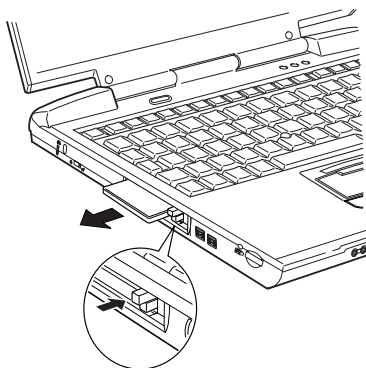
Press the PC card ejection button once to extend it

The PC Card ejects slightly from the slot.

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

Setting up a PC Card for your computer

Some PC Cards are ready to use as soon as you install them. Others, such as hard disk cards, network cards and SCSI

adapters, may need to be set up to work with your computer. To set up your PC Card, refer to the documentation that came with the card or refer to your operating system manual or online help.

Inserting an SD® card

NOTE   MMC cards (multimedia cards) do not work in this slot.

To insert an SD® card, turn the card so that the connector (metal area) faces down then push the card in the slot until it locks in place.

If Windows® does not recognize an inserted SD® card, remove and insert it again.

To remove an SD® card, press the card inward to release it and the card will pop out slightly.

The green LED on the left side of the computer will glow when the card is being accessed.

CAUTION   Do not touch the SD® connector. You could expose the storage area to static electricity which can destroy data.

Do not remove an SD® card while data is being written or read. Even when the message "copying..." in the windows disappears, the computer may be writing to the computer and your data could be destroyed. Wait for the SD® indicator light to go out.

Connecting your modem to a telephone line

Your computer comes with a built-in modem that can be connected to a standard voice-grade telephone line.

The modem allows you to:

❖ Access the Internet.

❖ Communicate with your office's local area network (LAN), or a larger corporate wide area network (WAN).

   For specific information about connecting to a LAN or WAN, consult your network administrator.

❖ Send a fax directly from your computer.

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 port provides an RJ-11 jack, allowing you to connect the modem to a standard voice-grade telephone line.

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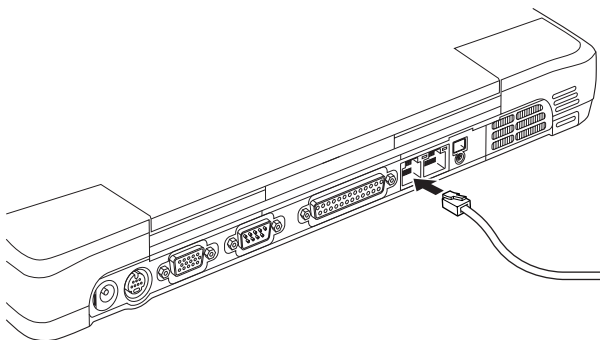
Connecting the telephone cable to the modem port

2 Connect the other end to the RJ-11 wall jack.
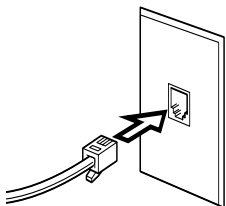
Connecting to a wall jack

CAUTION The modem is designed for use with a standard analog telephone line. Don't 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 149.

Using the i.LINK® port

The i.LINK® port on the rear of the computer provides an extremely fast data transfer rate (up to 400 mega bits per second [Mbps]). You can connect up to 63 external devices to the i.LINK® port.

In addition to high speed, the i.LINK® port also supports isochronous data—the delivery of data at a guaranteed rate. This makes it ideal for devices that transfer high levels of data in real-time, such as video devices.

As with USB ports, the i.LINK® port supports both Plug-and-Play (automatic configuration) and hot swapping (the ability to connect and disconnect devices while the computer is on). The main difference between i.LINK® and USB technology is that i.LINK® supports faster data transfer rates.

Chapter 4

Learning the Basics

This chapter covers the basics of using your computer.

Computing tips

❖ Save your work frequently.

Your work stays in the computer's temporary memory until you save it to the disk. You will lose all the work since your last save if, for example, 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.

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 media) on a regular basis. Label the backup copies clearly and store them in a safe place.

It's easy to put off backing up because it takes time. However, if your hard disk suddenly fails, you will 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.

❖ 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.

❖ Don't 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 116 to learn more about Standby.

NOTE   The Windows® XP operating system records information, such as your desktop setup, during its shutdown procedure. If you don't let the Windows® XP operating system shut down normally, 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.
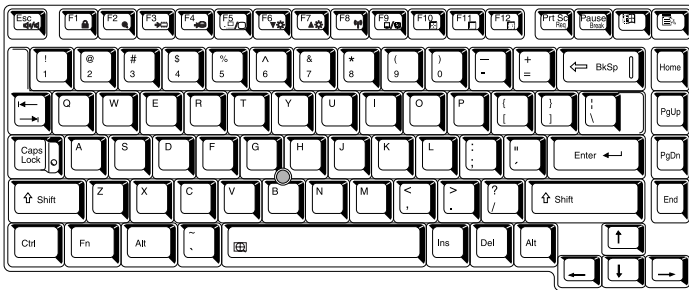
Sample keyboard

Character keys

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

❖ The space bar creates a space character instead of just passing over an area of the page.

❖ The lowercase letter l (el) and the number 1 are not interchangeable.

❖ The uppercase letter O and the number 0 are not interchangeable.

❖ The Caps Lock key changes only the alphabet keys to upper case—the number and symbol keys are not affected. The caps lock light next to 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 doesn't 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

The function keys (not to be confused with the Fn key) are the 12 keys at the top of the keyboard.

The function keys

F1 through F12 are called function keys because they execute programmed functions when pressed. Used in combination with the Fn key, function keys marked with icons execute specific functions on the computer. For more information, see "Fn-esse®" on page 159, or "Hot Keys" on page 243.

Windows special keys

Start key
Application key
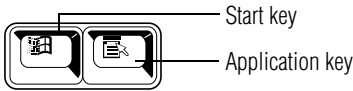
The Windows special keys

Your computer's keyboard has two keys that have special
functions in Windows:

❖ **Start key**—Opens the Start menu

❖ **Application key**—Has the same function as the
secondary mouse (or AccuPoint II) button

Overlay keys

The keys with gray numbers and symbols on the front of
them form the numeric and cursor overlay. This overlay lets
you enter numeric data or control the cursor as you would
using the 10-key keypad on a desktop computer's keyboard.
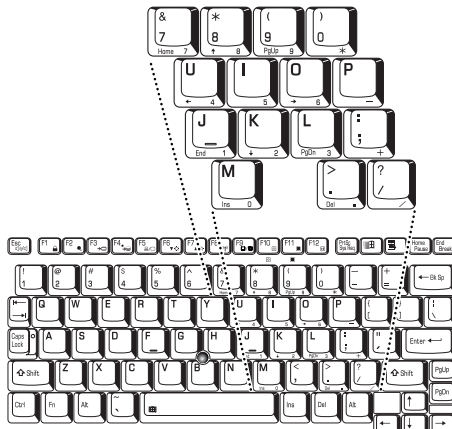
Numeric and cursor control overlay

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 use the cursor control keys when the numeric overlay is on:

❖ Press and hold down Shift while you use the cursor control overlay keys.

❖ To return to the numeric overlay, release Shift.

To disable 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

The keys with the gray arrows and symbols on their left front are the cursor control overlay keys.

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 overlay keys while 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 disable 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.

Using the AccuPoint II® pointing device
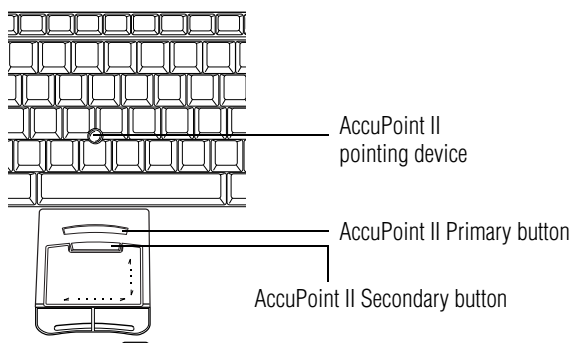
AccuPoint II buttons

Accupoint II pointing device—Enables you to move the cursor and to select items on the screen.

To move the cursor, gently push the pointing device in the direction you want the cursor to move. Pushing harder on the pointing device moves the cursor faster.

Primary button—Performs the same function as the left button on a mouse.

When a step instructs you to click or choose an item, move the cursor to the item, then press and release the primary

button. To double-click, press the primary button twice in rapid succession.

Secondary button—Performs the same function as the right button on a mouse.

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 either click it into place by double-tapping the TouchPad or clicking the control buttons.

Control buttons

When a step instructs you to click or choose an item, move the cursor to the item, then press and release the primary

(left-hand) button. To double-click, press the primary button twice in rapid succession. The primary button usually corresponds to the left mouse button.

The function of the secondary (right-hand) 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 right mouse button.

Disabling or enabling the Dual Pointing Device

The Dual Pointing Device is enabled by default. To change the enable/disable Dual Point setting:

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

   The Control Panel window appears.

2 Click **Printers and Other Hardware**.

3 Click **Mouse Properties**.

   The Mouse Properties window appears.

4 Click the **Dual Pointing Device** tab.

   The Dual Pointing Device 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.

Using the TOSHIBA Console button

The TOSHIBA Console button, located above the keyboard near the right side speaker, activates the TOSHIBA Console. This gives you quick access to some common functions.
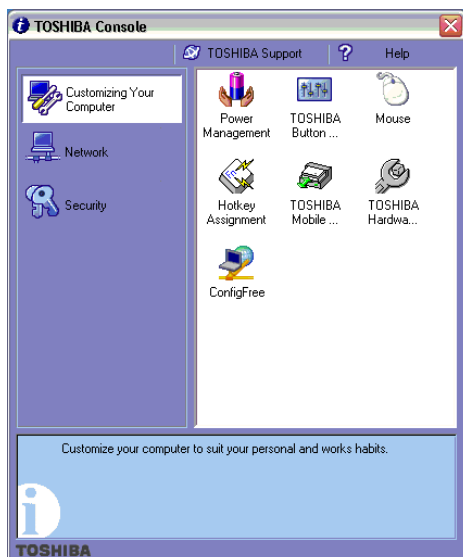
Sample Toshiba Console

To reprogram the TOSHIBA Console button:

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

2 Select **Toshiba Controls**.

This displays the **Toshiba Controls Properties** dialog box.

3 Select the box under the **Select a Button** section to bring up the **Select a Program** menu.

There are six options available when assigning a function to the TOSHIBA Console button:

❖ TOSHIBA Console

❖ Starts your Internet browser (Internet Explorer)

❖ Starts your email (Outlook Express)

❖ Outputs the display to a TV through the S-video port

❖ Disables the button

❖ Starts custom program

4 Select the radio button next to the option to which you wish to assign the TOSHIBA Console button.

To assign a custom program, click the **Select** button and enter the appropriate information for the program, or select **Browse** to find the program.

5 Click **OK** twice.

Starting a program

The easiest way to start a program is to double-click the name of a file that is associated with the program you want to use. To find the file, use My Computer or Windows® Explorer.

If you prefer to open the program first, you have the following options. You can:

❖ Use the Start menu

❖ Use Windows® Explorer or My Computer to locate the program file

❖ Use the Run dialog box

The next three sections explain how to start a program from the Start menu, Explorer and the Run dialog box.

Starting a program from the Start menu

When you install a program, the operating system usually puts an icon in the All Programs menu. To start a program that has an icon in the All Programs menu, follow these steps, which use the Windows® Wordpad program as an example:

1   Click **Start**, then point to **All Programs**.

The Windows® XP operating system displays the All Programs menu, which lists programs and program groups. If your program is listed, go to Step 3, otherwise, continue with Step 2.

2   Point to the program group, in this example, **Accessories**.

The Accessories menu is displayed.

3   Click the program, in this example, **Wordpad**.

Wordpad opens.

To close the program, click the **Close** button in the upper-right corner of the program's window.

Starting a program from Windows® Explorer

If a program is not listed in the Programs menu, you can start it from Windows® Explorer. Windows® Explorer gives you a view of your computer's contents as a hierarchy or "tree." You can easily see the content of each drive and folder on your computer. To use this method, you should know the file name and location of the program's executable file (this file ends with .exe).

This example opens Wordpad using its file name, *wordpad.exe*.

1   Click **Start**, then point to **All Programs**.

2   Click **Accessories**.

3   Click **Windows Explorer**.

4   Double-click **My Computer**.

5   In the left part of the window, under the C: icon, double-click the folder containing the program, in this case **Program Files**.

The files are hidden. Click "Show the contents of this folder" to see the files.

Windows® Explorer shows the contents of the Program Files folder on the right side of the window. The left side of the window shows all the folders contained within the Program Files folder.

6   In the left part of the window, click **Windows NT**.

7   Click **Accessories**.

Windows® Explorer shows the contents of the **Accessories** folder on the right side of the window.

8   In the right part of the window, double-click **Wordpad**.

The operating system opens Wordpad.

To close the program, click the **Close** button in the upper-right corner of the program's window.

Starting a program from the Run dialog box

This example uses the Run command to start Wordpad:

1   Click **Start**, then click **Run**.

The Run dialog box appears.
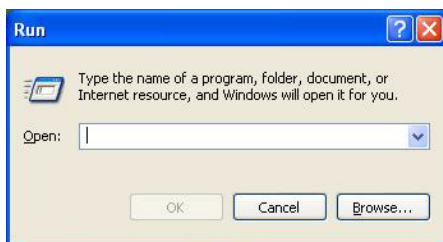
Sample Run dialog box

2   In the Run dialog box:

❖   For a program in the Windows® folder, type just the program name. Otherwise type the full file path, if you know the program's location. Then click **OK**.

❖ If you don't know the location, click **Browse...**.
In the Browse dialog box, enter the file name (for
example *wordpad.exe*) and select the drive to search.
When the operating system has found the file, click
Open.

HINT: To run the same program again, click the arrow to the
right of the text box and select the command line from the
drop-down list.

Saving your work

Before you turn off the computer, save your work on the hard
disk drive or a diskette. This is one of the most important
aspects of computing.

TECHNICAL NOTE: Save your data even when you are using
the Standby command, in case the main battery discharges
before you return to work.

Saving documents is quick and easy, so it is a good idea to get
in the habit of saving frequently.

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, that's all there is to it. 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.
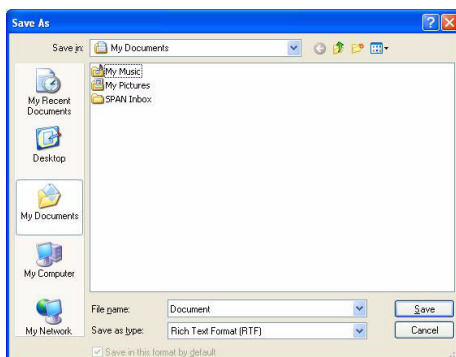
A sample Save As dialog box

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

Ensure the operating system is set up for your printer as
described in .

HINT: 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 Windows® XP 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.
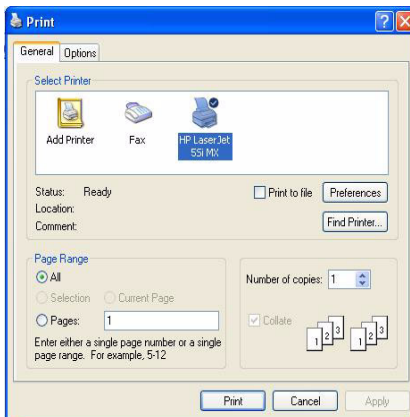
A sample Print dialog box

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

4 Click **Print**.

Using the DVD-ROM or multi-function drive

Optical storage has become the preferred medium for software, music, and video. Digital versatile discs (DVDs) provide a significant increase in data storage and support features that are not available on any other video platform. These features include wide-screen movies, multiple language tracks, digital surround sound, multiple camera angles, and interactive menus.

For these reasons, your computer may come with a DVD-ROM drive or multi-function drive.

If a DVD-ROM drive or multi-function drive is not currently installed in the Slim SelectBay, follow the instructions in "Using Slim SelectBay® modules" on page 80.

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.

Drive in-use indicator light
Eject button
Manual eject hole
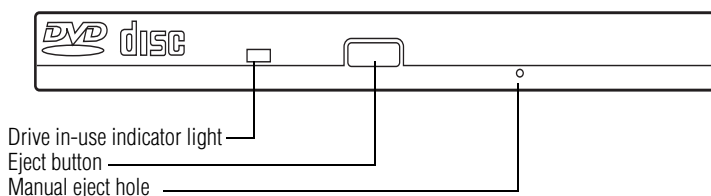
Sample DVD-ROM drive shown

Drive in-use indicator light—Indicates when the CD-ROM or multi-function drive is in use.

Eject button—Press to release the disc tray when the system is powered on.

CAUTION   Do not press the Eject button or turn off the computer while the Drive in-use indicator light is glowing. Doing so could damage the disc or the drive.

When the disc tray is open, be careful not to touch the lens or the area around it. Doing so could cause the drive to malfunction.

Manual eject hole—Use if you need to release the disc tray when the power is off. Use a straightened paper clip or other narrow object to press the manual eject button located inside the hole.

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

Inserting compact discs

To insert a compact disc into the DVD-ROM or multi-
function drive:

1   Make sure the computer is turned on.

2   Make sure the in-use indicator light is off.

3   Press the DVD-ROM or multi-function drive's eject
button.

The disc tray slides partially out of the drive (about 1 inch).

HINT: The drive won't open if the computer's power is off.
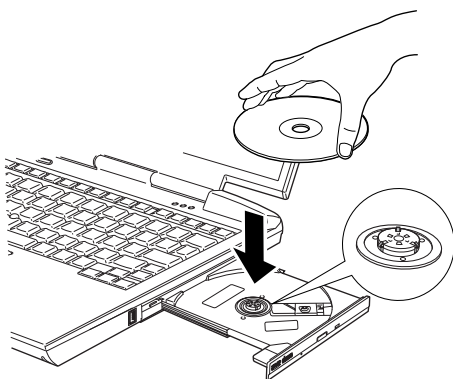
4   Grasp the tray and pull it fully open.
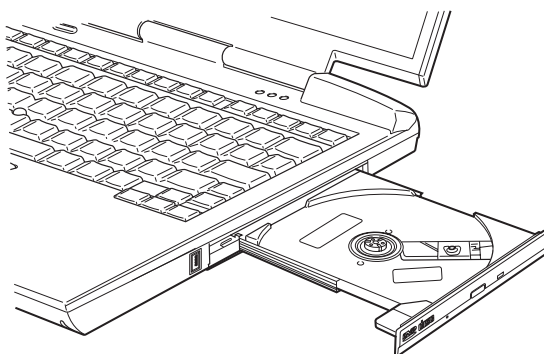
The drive tray fully extended

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

If the disc is dusty, clean it as described in "Problems with the DVD-ROM or multi-function drive" on page 203.

6 Place the disc carefully in the disc tray, label side up.

Positioning the disc in the drive

7 Gently press the disc onto the center spindle until you feel it click into place.

CAUTION Handle DVDs and CDs carefully, making contact only with the center hole and edge. Don't touch the surface of the disc. Don't stack discs. If you incorrectly handle the discs, you could lose data.

8 Make sure the disc is completely on the spindle and is lying flat on the tray.

CAUTION If you insert the disc incorrectly, it may jam the drive. If this happens, contact your network administrator for assistance.

9 Push the disc tray in by pressing gently on the center of the tray until it clicks into place.

You are ready to use the disc.

Playing a CD or DVD

For information on playing a disc, see "Using external speakers or headphones" on page 145.

Removing compact discs

To remove a compact disc (CD or DVD) with the computer turned on:

1 Press the Eject button on the drive.

CAUTION Do not press the Eject button while the in-use indicator light is glowing. Doing so could damage the disc or the drive.

Also, if the disc is still spinning when you open the disc tray, wait for it to stop spinning before you remove it.

2 Pull the tray until it is fully open, remove the disc, and place it in its protective cover.

3 Gently push the tray in to close it.

To remove a compact disc with the computer turned off:

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

2 Gently pull the tray out until it is fully open, remove the disc, and place it in its protective cover.

3 Gently push the tray in to close it.

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 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.

Using PC Cards

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 are likely to be much more difficult to set up and use.

For information on inserting or removing a PC Card, see .

Hot swapping

With PC Cards, you can replace one PC Card with another while the computer is on. This is called "hot swapping."

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:

❖ Do not remove a hard disk card while the system is accessing it.

❖ Do not remove a network card while you are connected to a network.

❖ Do not remove a SCSI card while any of the SCSI devices connected to it are operating.

Before removing a PC Card, stop it by clicking the **Safely Remove Hardware** icon on the System tray. After the PC Card is stopped, it is safe to remove.

Using SD® cards

If you do not already have a SD ® card inserted in the computer, you may do so following the procedures outlined in "Inserting an SD® card" on page 87.

Important: Do not use the **Copy Disk** function for SD® cards. In order to copy data from one SD® card to another, use the following procedure:

1 Format the target SD® card in the same format as the source SD® card.

2 Insert the source SD® card.

3 Create a temporary folder on the hard disk drive.

4 Copy the contents of the source SD® card into the temporary folder you created in step 3.

5 Remove the source SD® card.

6 Insert the target SD® card created in step 1.

7 Copy the file contents from the temporary folder to the target SD® card.

8 Eject the target SD® card.

Using your computer at the office

By connecting an external monitor, external full-size keyboard, and a mouse, you can work with your notebook as if it were a standard office computer.

An external monitor or projector connects to the RGB port.

An external USB keyboard or a USB mouse connects to the USB port.

A serial mouse connects to the serial port.

For more information on connecting these and other components, see "Connecting Other External Devices" on page 65.

Using a computer lock

For your own peace of mind, 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.
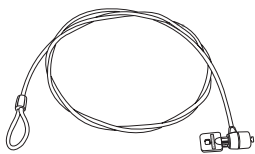
*PORT-Noteworthy® Computer Lock Cable*

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 Slide the PC Card lock (located underneath the PC Card slots) to secure your PC Cards in place.

⬛◻ **4** Insert the cable's locking end into the security lock slot on the computer, then give the key a quarter turn and remove it.

The computer is now securely locked.
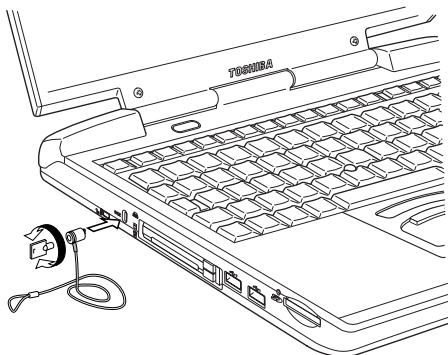
Locking the computer

Caring for your computer

This section gives tips on cleaning and moving your computer. For information about taking care of your computer's battery, see "Running the computer on battery power" on page 127.

Cleaning the computer

CAUTION Keep liquids, including cleaning fluid, out of the computer's keyboard, speaker, 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

Toshiba dealer 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 indicator light stops glowing) and all external peripheral cables are disconnected.

CAUTION Do not pick up the computer by its display panel or by the back (where the ports are located).

Although your notebook computer is built to withstand reasonable shock and vibration, transport it in a carrying case for long trips. You can purchase a carrying case from your Toshiba dealer, through the accessories information packaged with your system, or visit www.toshibaaccessories.com.

Powering down the computer

NOTE Pushing the power button before shutting down the Windows® operating system could cause you to lose your work. Make sure the system indicator panel's disk light and the drive-in-use light are off. If you turn off the power while a disk is being accessed, you may lose data or damage the disk and/or drive.

When you power down the computer, you have three options to choose from: Turn Off Computer (or Shut down), Standby, and Hibernation.

You can set the computer to turn on automatically at a time you designate. This option is helpful for transferring files by modem at night. You can set the computer to turn on and send or receive the files while you are asleep. This option is called Auto Power On.

TECHNICAL NOTES: 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.

Using Turn Off or Shut down

The Turn Off or Shut down command shuts the computer down completely. Use the Turn Off command if you are using the Windows XP Professional operating system when not connected to a domain server.

Use the Shut down command if you are using the Windows XP Professional operating system and connected to a domain server.

When you start up again, the computer runs a self-test and loads the operating system. You must open any programs and files you want to use.

Factors when choosing Turn Off or Shut down:

❖ No power is used while the computer is shut down. 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 programs and files you were using.

For the Windows XP Professional operating system, follow these steps to shut down the computer:

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

The Shut Down Windows dialog box appears.

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

3 Click **OK**.

The computer shuts down completely.

NOTE   Holding Shift while the Turn Off computer Windows dialog box is open, changes the Stand By button to Hibernate. For more information about setting up hibernation "Using Standby" on page 122.

Shutting down more quickly

In addition, you can shut down the computer by either pressing the power button or closing the display panel.

To use either of these methods, you first need to turn it on in Toshiba's Power Management utility.

1 Click **Start**, **Control Panel**, and then **Performance and Maintenance**.

2 Double-click the **Toshiba Power Saver** icon.

3 In the Running on batteries section, click the **Details** button, then the **System Power Mode** tab.

4 Select the options you want from the drop-down lists.

❖ **When I press the power button**
Set this option to **Power Off** to have the computer shut down when you press the power button.
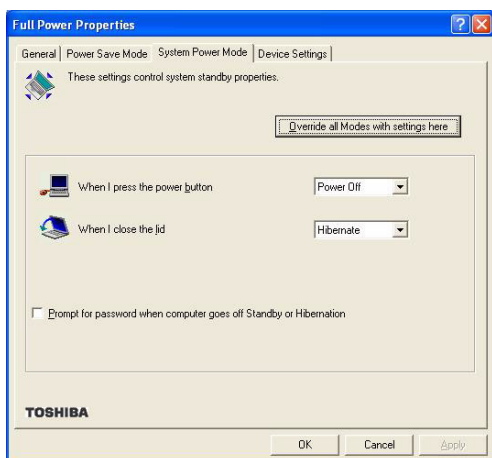
Sample system power mode settings

5 Click the **Override all Modes with settings here** button.

❖ Click **DC only** to apply the settings only when you are using battery power.

❖ Click **All** to apply the settings whenever when you are using battery power or outlet power.

6 Click **OK**.

7 Click **OK** again, then close the Control Panel.

NOTE   For more information about the Power Saver utility, see .

Starting again after Shut down

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

Using Hibernation

Hibernation mode shuts the computer down completely, but it first saves the current settings and configuration of the computer to the hard disk. Since Hibernation mode 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 mode in which you left it.

Factors to consider when choosing Hibernation:

❖ While in Hibernation mode, the computer uses no battery power.

❖ Because the mode of the system is held on the hard disk, no data is lost if the main battery discharges.

❖ When starting up again, Hibernation uses less time and battery power than does Turn Off.

❖ Resuming from Hibernation uses a little more time and power to start up than restarting from Standby, because information is being retrieved from the hard disk rather than from memory.

❖ When starting up again, the computer returns to the mode in which you left it, including all open programs and files you were using.

Configuring your computer for Hibernation

1 Click **Start**, **Control Panel**, and then **Performance and Maintenance**.

2 In the Control Panel window, double-click the **Toshiba Power Saver** icon.

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

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

5   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.

6   Click the **Override all Modes with settings here** button.

❖   Click **DC only** to apply the settings only when you are
     using battery power.

❖   Click **All** to apply the settings whenever when you are
     using battery power or outlet power.

7   Click **OK**.

8   Click the **Hibernate** tab, and then click the **Enable
     hibernate support** checkbox (this is the default setting).

9   Click **Apply**.

10   Click **OK**.

11   Click **OK** again, then close the Control Panel.

     The computer is now set to automatically go into Hibernation
     when your option settings occur.

NOTE   For more information about the Power Saver utility, see
             "Power Saver" on page 167.

Once the computer is configured, put the computer into
Hibernation mode by either pressing the power button or
closing the display panel, depending on the hibernation
options taken.

Starting again from Hibernation mode

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

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

Using Standby

The Standby command puts the computer into a power-saving mode. Standby holds the current mode of the computer in memory so that, when you power on 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.

❖ Restarting from Standby uses less time and battery power than restarting from Turn Off Computer or Hibernation.

❖ When starting up again, the computer returns to the mode in which you left it, including all open programs and files you were using.

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

To power down the computer using the Standby command, click **Start**, **Turn Off Computer**, and select **Stand By**.

Sample Turn Off Computer Windows dialog box

NOTE   If you hold down Shift, Stand By becomes Hibernate in the Turn Off Computer dialog box. To enter hibernation mode, you must hold down Shift while you select Hibernate.

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

Going into Standby mode more quickly

In addition, you can put the computer into Standby mode by either pressing the power button or closing the display panel. You can also specify an amount of time after which the computer automatically goes into Standby mode.

To use any of these methods, you first need to enable them in Toshiba's Power Saver utility.

1   Click **Start**, **Control Panel**, and then **Performance and Maintenance**.

2   In the Control Panel window, double-click the **Toshiba Power Saver** icon.

3   In the Running on batteries area, click the **Details** button, then select the **System Power Mode** tab.

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

❖ **When I press the power button**
Set this option to Standby to put the computer into Standby mode when you press the power button.

❖ **When I close the lid**
Set this option to Standby to put the computer into Standby mode when you close the display panel.

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

6 In the Set to range dialog box, click on one of these options:

❖ Click **DC only** to apply the settings only when you are using battery power.

❖ Click **All** to apply the settings whether you are using battery power or outlet power.

7 Click **OK**.

8 Click **OK** again, then close the Control Panel.

NOTE   For more information about the Power Saver utility, see "Power Saver" on page 167.

Starting again from Standby mode

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 it again by opening the display panel.

Toshiba's online resources

Toshiba maintains a number of online sites to which you can connect. These sites provide information about Toshiba products, give help with technical questions and keep you up

to date with future upgrades. For more information, see
"Contacting Toshiba" on page 214.

Chapter 5

Mobile Computing

Toshiba's energy-saver design

Your computer enters a low-power 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 is maximum energy efficiency, so that you can use it for longer periods of time while traveling.

For more information on managing your power usage, see "Power Saver" on page 167.

This chapter covers all the aspects of using your computer on battery power.

Running the computer on battery power

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

Battery Notice

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 136 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.

In addition to the main battery, you may also have a second battery installed in the Slim SelectBay. If you travel and need to work for many hours without an AC power source, you may purchase a battery module for use in the computer's Slim SelectBay, or carry additional charged battery packs with you.

The computer also has an internal real-time-clock (RTC) battery.

The RTC battery powers the RTC memory that stores your system configuration settings and the current time and date information. It maintains this information for up to a month while the computer is turned off.

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

Charging the batteries

To charge the main battery while it is in your computer, plug the computer into a live electrical outlet. The battery charges whether the computer is on or off.

The main battery light (⬜) glows amber while the battery is being charged, and glows green 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.

You computer has an internal real-time-clock (RTC) battery. The RTC battery powers the System Time Clock and BIOS memory used to store your computer's configuration settings. When fully charged, it maintains this information for up to a month when the computer is powered off.

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

BAD RTC BATTERY
BADCHECHSUM (CMOS)
CHECK THE SYSTEM

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

NOTE	The RTC battery does not charge while the computer is turned off even if the AC adapter is attached.

⚠ CAUTION	The computer's RTC battery is a Lithium-Ion (Li-Ion) 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.

To recharge the RTC battery, plug the computer in and turn it *on* for at least 24 hours.

Monitoring battery power

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

❖ Green indicates the AC adapter has fully charged the battery.

❖ Amber indicates the AC adapter is charging the battery.

❖ Off indicates that the battery is not being charged.

NOTE	Battery life and charge time may vary depending upon power management settings, applications and features used.

❖ Flashing amber indicates that the computer is using battery power, and the battery's charge is running low.

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

Displaying remaining battery power

You can monitor the battery's remaining charge. The computer calculates the remaining battery charge as it operates, based on your current rate of power use.

To show remaining power:

1 Click **Start**, then **Control Panel**, and then **Performance and Maintenance.**

2 In the Control Panel window, double-click the **Toshiba Power Saver** icon.

The Toshiba Power Saver Properties dialog box appears.
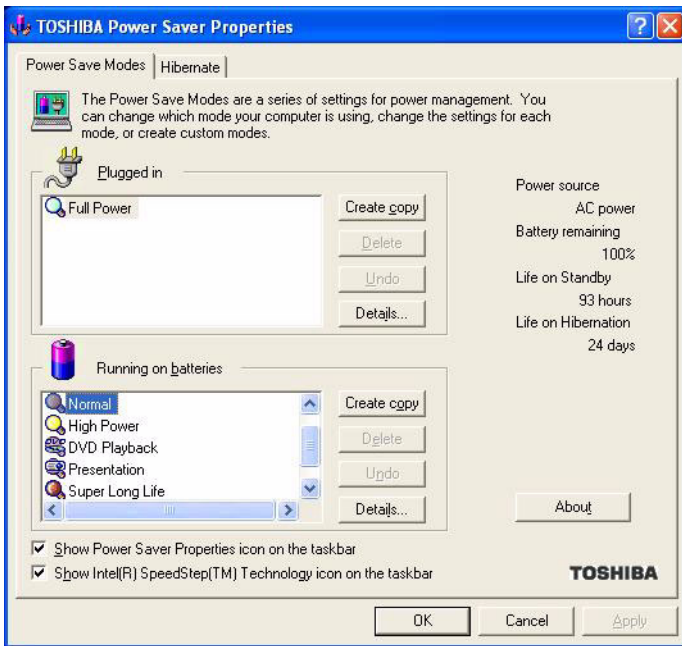
Sample Toshiba Power Saver Properties Dialog Box

The Power Save Modes tab displays the remaining amount of time for each of the different power usage modes.

With repeated discharges and recharges, the battery's capacity will gradually decrease. A frequently used older battery will not power the computer for as long as a new battery, even when both are fully charged.

HINT: 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.

⚠ WARNING The computer drains battery power more quickly at low temperatures. Check your remaining charge frequently if you're working in temperatures below 50 degrees Fahrenheit.

The Windows operating system has additional power management options that can be accessed through an icon in the Control Panel. For more information, see "Power Saver" on page 167.

What to do when the battery alarm sounds

Your Satellite computer can be configured to warn you of a low battery charge condition so you may take the necessary steps to save your work.

You Windows operating system offers two alarms before your system shuts down.

To change the default alarm settings:

1 Click **Start**, then **Control Panel**, and then **Performance and Maintenance.**

2 Double-click the **Toshiba Power Saver** icon.

3 Select the appropriate **Running on Batteries** option.

4 Click the **Details...** button.

5 Select the **Alarms** tab and adjust the settings to suit your needs.

Before your computer runs out of battery power, save your data and take one of the following actions:

❖ Suspend or shut down your computer.

❖ Shut down your computer and replace the main battery with a charged one.

❖ Install a secondary battery module in the computer's Slim SelectBay.

❖ Connect your computer to an AC power source.

Changing batteries

⚠ CAUTION When handling battery packs, don't drop or knock them. Also be careful not to damage the casing or short-circuit the terminals.

To change the battery:

1 Save your work.

2 Shut down and turn off the computer.

3 Remove all cables connected to the computer.

4 Turn the computer over.

5 If the battery lock is in the locked position (toward the edge of the computer), slide it towards the center of the computer to unlock it.

6 Slide the battery release latch to release the battery.
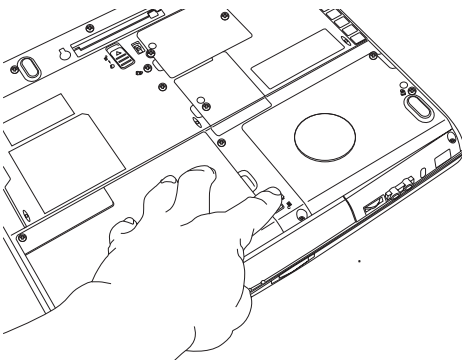
Battery release latch

7 Pull the discharged battery module out of the computer.
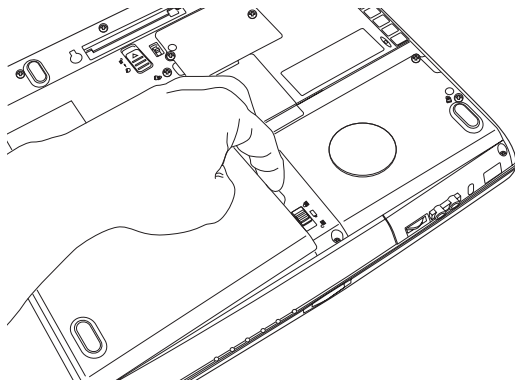
Removing the discharged battery

⚠ 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 safely" on page 137.

8 Insert the charged battery into the slot until the latch clicks.

The battery pack has been designed so that you cannot install it with reverse polarity.

CAUTION If the battery does not slide into the slot easily, move the battery release lock to the unlocked position and try again. Do not force the battery into position.

9 Reset the battery lock to the locked position.

10 Turn the computer right side up.

11 Reconnect any cables.

12 Restart 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 toshiba.com.

❖ Reverse Polarity should be avoided with all batteries. The main battery is designed so that it cannot be installed in reverse polarity.

❖ Charge the battery pack 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, disconnect it from the computer power source at least once a month 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 safely

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: 1 (800) 457-7777.

Conserving 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 hard disk, DVD-ROM/CD-ROM, and diskette drives, or other optional devices.

❖ Where you are working, since operating time decreases at low temperatures.

There are various ways in which you can conserve power and extend the operating time of your battery:

❖ Enable Standby or Hibernation, which saves power when you turn off the computer and turn it back on again.

❖ Use Toshiba's power-saving options.

These power-saving options control the way in which the computer is configured. By using them, you can greatly increase the length of time you can use the computer before you need to recharge the battery.

Toshiba has combined these options into preset power usage modes. Using one of these modes lets you choose between maximum power savings and peak system performance. You may also set individual power-saving options to suit your own needs.

The following sections describe how to choose a power usage mode and discuss each power-saving option.

Power usage modes in Windows XP Professional

In Windows XP Professional, you can choose from predefined power usage modes or select your own combination of power management options. To do this:

1 Click **Start**, then **Control Panel**. Click on the **Toshiba Power Saver** icon.

2 Open the Power Save Modes tab and set your options.

3 For more information, see "Power Saver" on page 167.

Using a hot key to set the power usage mode

You may use a hot key to set the power usage mode.

To set the power usage mode:

1 Press Fn and F2 simultaneously to display the power usage pop-up window.

High Power

Sample Power usage mode pop-up window

2 While continuing to press Fn, press F2 until you select the desired power usage mode.

The power usage modes under battery power are: Long Life, Normal, High Power, DVD-Playback, Presentation, and Super Long Life.

The power usage mode under AC power is Full Power only

3 Release the Fn key.

The pop-up window disappears. You're now in the selected mode.

For more information on setting the battery power usage mode, see "Power Saver" on page 167.

Additional options for power

Depending on the amount of time you spend away from external power sources, the capacity of one battery pack may be sufficient for your needs. However, if you need more portable power, Toshiba provides these options:

❖ Purchase extra battery packs.

❖ Install a secondary battery module in the Slim SelectBay. See "Using Slim SelectBay® modules" on page 80.

❖ Purchase a battery charger that charges one main battery pack and one secondary battery module at a time.

Chapter 6

Exploring Your Options

In this chapter, you will explore some of the special features of your Satellite notebook computer.

Exploring the desktop

The desktop is the launching pad for everything you can do in the Windows® XP or Windows® 2000 operating system (see Appendix A to view situations where Windows® 2000 differs from Windows® XP). You use its features to start programs, find documents, set up system components, and perform most other computing tasks.

HINT: The illustrated examples in this guide may appear slightly different from the screens displayed by your system. The differences are not significant and do not indicate any change in the functionality of your system.

Finding your way around the desktop

Common desktop features include icons, the Start button, and the taskbar.

Icons

Start button

Taskbar

Sample Windows® XP operating system desktop

Icons

An icon represents a file or program that can be quickly activated by double-clicking the icon. The icons initially displayed on your Windows® XP operating system desktop include:

Recycle Bin — Holds files you've deleted. You may be able to retrieve these files until you empty the Recycle Bin.

TECHNICAL NOTE: If you delete a file from a diskette, it does not go into the Recycle Bin. For more information on the Recycle Bin, see Windows® Help.

Internet Explorer — The Microsoft® browser that provides access to the Internet.

Your desktop may contain other icons depending on your configuration. See Windows® XP online Help for more specific information on each icon and how to use it.

Start button

You use the Start button to:

❖ Start programs

❖ Access Microsoft® Windows® XP operating system update information

❖ Open documents

❖ Adjust system settings

❖ Find files

❖ Access Windows® Help

❖ Run programs

❖ Suspend system activity and shut down the computer
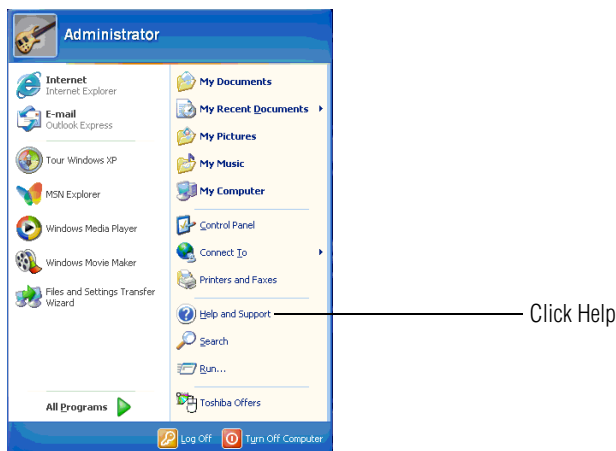
 Click Help

Windows XP Start menu

For answers to common questions, click **Start**, then click **Help and Support** to open the Windows XP online Help.
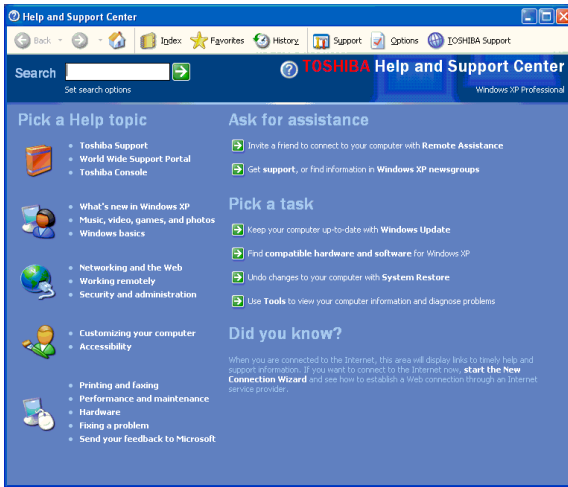
Windows XP online Help

Click an item, or use the Search box to locate a specific topic.

Quick Launch toolbar

The Quick Launch toolbar displays icons of tasks or programs, similar to desktop icons. You can access these icons quickly and conveniently at any time as they are not covered by the windows of other executing programs.

Before you may add icons to the Quick Launch toolbar you must activate it.

Right-click on the Taskbar. On the **Toolbars** submenu, select Quick Launch.

To add an icon to the Quick Launch toolbar, click the icon and drag it to the Quick Launch toolbar.

To activate a specific program, click the appropriate Quick Launch toolbar icon.

Taskbar

Each time you open a program, a button associated with that program appears on the taskbar. With some programs, a button appears on the taskbar for each document or window you open. You can use these buttons to quickly switch between the programs or windows.

To make a program or window the currently active one, click the associated taskbar button.

You can personalize the taskbar to include not only shortcut icons but also your favorite Internet URL addresses.

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 Web site address.

System tray

The System tray displays icons of tasks or programs that run continuously in the background. To learn more about each task, position the cursor over the icon for a few moments and a short description of the task appears.

Typical tasks in the System tray are Current time, Power usage mode, Mouse properties, and speaker volume.

To activate a specific task, double-click the appropriate System tray icon. You may also right-click the icon to see other options.

Exploring audio features

You can play .wav sound files or audio CDs using the built-in speakers, headphones, or external speakers. You can use your

computer to record sounds using the built-in microphone or external microphone.

Using external speakers or headphones

Your computer is equipped with a full stereo sound system with internal speakers. Instead of using the internal speakers, 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 headphones or external speakers:

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.

The headphone jack requires a 16-ohm stereo mini jack.

To adjust the volume:

❖ For external speakers, use the volume controls on each speaker.

❖ For headphones, use the computer's volume control dial.

Recording sounds

You may record sounds and save them as .wav files using the built-in microphone or an external microphone. The easiest way to record is through the computer's built-in microphone.

DEFINITION: A .wav (pronounced "wave") file is the format for storing sound in files in Windows.

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

To record sounds using the microphone:

1   If you want to use an external microphone, connect it to the external microphone jack.

2   Click **Start**, point to **Programs**, **Accessories**, and then click **Entertainment**.

3   Click **Sound Recorder**.

The Sound Recorder screen displays.

Positioning bar

Record
Stop
Play
Skip forward
Skip backward
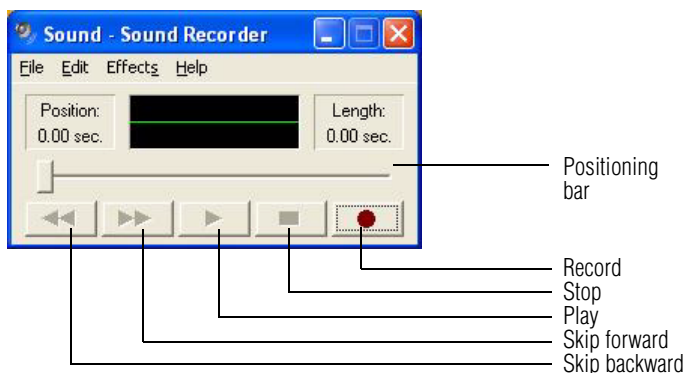
Sound Recorder screen

4 Click the **Record** button.

5 Speak normally into the microphone.

The maximum recording time is 60 seconds.

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

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

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

Adjusting recording quality

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.

2 Click **Start**, point to **Programs**, **Accessories**, **Entertainment**, and then click **Sound Recorder**.

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

4 In the Audio Properties dialog box, adjust the Recording Volume, Preferred device, and Preferred quality according to your needs.

5 Click **OK**.

Your new settings take effect the next time you record.

Playing an audio CD-ROM

Insert an audio CD and close the disc tray. The CD begins to play.

If the computer is turned on, Windows Media™ Player opens and the CD begins to play. You can use the Windows Media™ Player program to control the CD.

To access the Windows Media™ Player, you can open it through the Start menu or activate it from the taskbar.
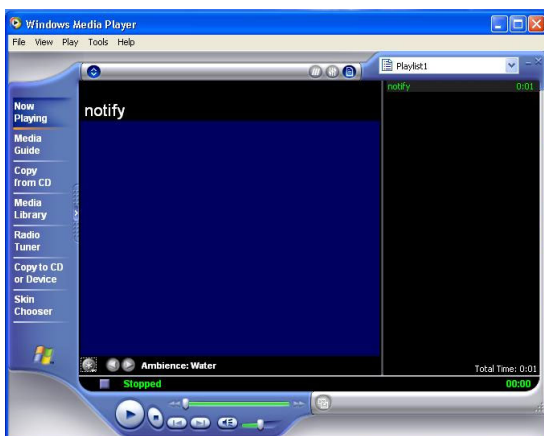
Sample Windows Media™ Player screen

The CD 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.

> **⚠ WARNING** Before using headphones to listen to an audio CD, turn the volume dial down. Playing the CD with the volume set too high could damage your ears.

Exchanging data with another computer

To transfer a large amount of information between computers, you can use the Windows® XP Briefcase, or a specialized synchronization program and the computer's parallel port.

Transferring files

You can transfer files to another computer using your infrared port, or with an adapter cable.

To transfer files through the parallel port, you need an optional LapLink® compatible parallel cable.

1 Connect the cable.

2 Load the transfer program on both computers.

3 Set any specific options.

4 Start the transfer.

5 When you have finished transferring files, close the programs on both computers.

Getting help transferring files

1 Click **Start**, then **Help and Support**.

2 Click the **Index** icon on the toolbar.

3 In the dialog box, type direct cable connection.

4 Follow the online guide instructions.

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 may 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.

> DEFINITION: Although the terms are often used interchangeably, the serial port and COM port are really two different things. The serial port is the physical port on the back of the computer. The COM port is a unique identifier the computer uses to communicate with the serial port or other serial devices.

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:

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

    Windows XP opens the Control Panel.

2   Double-click **Phone and Modem Options**.

    Windows XP displays the **Phone and Modem Options** Properties dialog box.

3   Click the **Modems** tab.

    Your modem should be listed next to one of the computer's COM ports.

4   Make a note of the COM port number.

5   To verify that the modem is set up properly, select the modem you wish to check and then click **Properties** to

bring up the dialog box with information specific to that
modem.

6 Click the **Diagnostics** tab, and then click **Query Modem**.

Windows XP communicates with the modem and displays
identifying information reported by the modem. If Windows
XP cannot communicate with the modem, it displays an error
message. Consult the troubleshooting sections of your
modem and Windows XP documentation.

7 Click **OK** to close the properties dialog box for that
specific modem.

8 Click **OK** to close the Modem Properties dialog box.

9 Close the Control Panel.

Connecting the modem to a telephone line

Before you can use the modem, you must connect it to a
standard voice-grade telephone line. For more information,
see "Connecting to a phone line" on page 88.

Connecting your computer to a network

You can connect your computer to a network to increase its
capabilities and functionality using one of its communication
ports.

Accessing a network

To access a network:

❖ At the office, connect an Ethernet cable to the RJ-45 jack
on your computer. For specific information about
connecting to the network, consult your network
administrator.

❖ While you are at home or traveling, you need a dial-up
connection. Ask your network administrator for the
telephone number of the network.

❖ Wirelessly, you need an optional wireless networking PC Card or an optional Wi-Fi™ module. For more information about wireless networking, refer to your wireless network device documentation or contact your authorized Toshiba service provider.

Setting up the connection

To set up an office connection, consult your network administrator for network settings and additional considerations.

To set up a dial-up connection, use the New Connection Wizard:

1 Click **Start** and point to **All Programs**.

2 Point to **Accessories**, then to **Communications**, and click **New Connection Wizard**.

3 Enter the phone number of your network connection and let the program dial the number.

  The computer connects to the network.

Using the Ethernet LAN Port

When your computer starts, Windows 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 reconfigure Windows to disable the LAN port.

To disable the LAN port:

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

2 Double-click the **System** icon, click the **Hardware** tab, and then click the **Device Manager** button.

3 Select the network adapter in **Network Adapters**.

4 Click the **Properties** icon on the toolbar.

5 Select the **Do not use this device (disable)** option from the **Device usage** drop-down.

6 Click **OK**.

Your LAN port is now disabled.

To enable the Ethernet LAN port, repeat steps one through four. Select the **Use this device (enable)** check box, and click **OK**.

Setting up a wireless connection

For information on how to set up a wireless connection, refer to the online help that came with your operating system, or your network administrator.

Accessing the wireless modules using your computer's system tray

The following information is for systems which have integrated wireless modules.

When using your optional Wi-Fi™ Mini PCI or Bluetooth™ module, your computer may display a PC Card icon in the desktop's System tray to indicate that it is in use. Do not confuse the system tray's icon with other removable PC Card devices you may have installed.

You can use the system tray's PC Card icon to turn off your Wi-Fi™ Mini PCI or Bluetooth™ module. However, if you do so, you will need to restart the computer in order to reactivate the module.

Your Wi-Fi Mini PCI or Bluetooth™ module is integrated into your computer system. It is recommended that you do not remove the module from your computer. For assistance, contact a Toshiba Wireless Authorized Service Provider.

❖ Connecting to the Internet

❖ Surfing the Internet

❖ Internet features

❖ Uploading and downloading files from the Internet

The Internet

The Internet is an association of thousands of networks and millions of computers around the world connected by communications lines. They all work together to share information.

The World Wide Web

The World Wide Web (or "Web") is a subset of the Internet — a collection of interlinked documents (located on computers connected to the Internet) that work together using a specific Internet protocol called Hypertext Transfer Protocol (HTTP).

The World Wide Web offers information as text, images, audio, or video to be referenced from anywhere in the world. Special programs called Web browsers are specifically designed to work with HTTP. They make it easier to connect to a particular network address and send and receive information.

Internet Service Providers

To connect a computer directly to the Internet, many people and businesses use an Internet Service Provider (ISP). An ISP is a company that has the equipment and the telecommunication lines necessary to maintain an Internet connection.

You can connect to the Internet by using a telephone and modem or through other higher-speed communication methods such as Digital Subscriber Lines (DSL), cable, and satellite links.

Connecting to the Internet

To connect to the Internet, you may need:

❖ A modem

❖ A Web browser

❖ A telephone line

❖ An Internet Service Provider (ISP) account

The Microsoft® Web browser Internet Explorer is automatically configured on your system so that when you first start it, it guides you through signing up for a new ISP account, or assists you in setting up your computer to work with your existing ISP.

Once you have established an ISP account, you can connect to the Internet.

1 Connect your computer's modem to a telephone line. For more information on connecting a modem, see .

2 Start your Web browser. Have your modem dial the ISP's telephone number, and establish a connection with the ISP's computer.

If you are using your computer at the office, then you probably connect to the Internet through your company's network. See your network administrator about connecting to the Internet.

Surfing the Internet

Once connected to the Internet, the Web browser displays a home page, for example, your ISP's home page on the Internet or your company's Web site home page.

To visit a desired Web site, type in the Web address. The Web address, or Uniform Resource Locator (URL), is a unique identifier for that computer system linked to the Internet. Web addresses can also appear within a Web page's text, and are

known as links. Clicking a link automatically transfers your Web browser to that site.

You can also use a Search Engine, a Web site specifically designed to help you look for information.

Internet features

The Internet offers many types of communication tools to help you perform many tasks.

❖ Internet email

  To send and receive email of your own, you need a mailbox on the Web, or an email address.

  If you have an account with an ISP, you can probably set up an email address at the same time you sign up for the service.

❖ Internet chat rooms

  A chat room is a Web site that offers a place where people with similar interests and ideas communicate in real-time, one-on-one or in groups, by typing messages which are instantly viewed by others on their computer screens.

❖ Internet news groups

  A newsgroup is similar to a chat room, but instead of using a dedicated site to converse about a specialized subject with others in real-time, it uses a Web site as a clearinghouse where all the messages are placed, like a gigantic bulletin board.

❖ Online shopping

  Many Web sites offer products and services for sale.

Uploading and downloading files from the Internet

Transferring files from one computer to another is termed uploading (transferring data from your computer to a site on the Web), or downloading (transferring data from a site on the Web to your computer).

There are several ways to upload or download data. It can be as simple as attaching a file or document to an email, or you can use the File Transfer Protocol (FTP) features of your Web browser to transfer large amounts of data.

Chapter 7

Toshiba Utilities

Your notebook computer includes several utilities designed to help you reconfigure your system and best meet your individual needs. Together, these allow you to ascertain certain system details, set additional options, and change default values. The Toshiba utilities are:

❖ Fn-esse®

❖ Toshiba HW Setup

❖ Power Saver

Each of these utilities is described in this chapter.

Fn-esse®

Desktop shortcuts and Toshiba's Fn-esse program provide quick ways to open programs, documents, and folders from within any Windows® program without using the Start menu. For more information on creating desktop shortcuts, refer to the operating system documentation that came with your computer.

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® XP operating system program.

❖ Open a file in its associated program.

❖ Display a customized folder of programs and/or files from which to choose.

Fn-esse also has several keys that perform preassigned operations, known as hot keys. For more information, see .

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

Starting Fn-esse

1 Click **Start**, point to **All Programs**, **Toshiba Utilities**, then click **Fn-esse**.

The Fn-esse keyboard appears.

Sample Fn-esse window

The keys are color-coded as follows:

❖ Available keys are dark gray with white letters

❖ Assigned keys and keys associated with a popup list are shown on the Fn-esse keyboard in the selected color

❖ Unavailable keys are light gray

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

❖ Using drag-and-drop

❖ Using the keyboard or pointing device

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

Using drag-and-drop to assign a key

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 to which you want to assign 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 keys

To assign a key to open a program or document, start Fn-esse and either:

❖ 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 in the Fn-esse window and press the secondary button.

The Assignment Type dialog box appears.

Sample Fn-esse assignment type dialog box

Making a direct key assignment

1 Select **Direct...** to display the Add/Edit Command dialog box.

2 Enter the Description, Command Line and Working Directory for the new Fn-esse key assignment, or click the **Browse** button to specify this information.

3 Click **OK**.

Making a popup assignment

1 Select **Popup...** to display the Application Explorer dialog box.

2 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 will appear in the popup list.

3   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 Windows® XP operating system documentation.

4   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

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

Fn-esse displays the Assignment Type dialog box.

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

❖   To remove the key assignment, click **Clear**.

Toshiba HW Setup

HW Setup is Toshiba's hardware configuration management tool available through Windows. It lets you view general system settings and specify the display, boot priority, keyboard, USB, LAN, password, device configuration and printer options for your computer. To set the IRQ, I/O Address, and DMA channel for communication ports, use the Windows Device Manager.

| NOTE | If the supervisor password is set and you log onto the computer with the user password, you may not be able to access the HW Setup program. |

Accessing Toshiba HW Setup

To access Toshiba HW Setup, press the TOSHIBA Console button above the right side of the keyboard.

The TOSHIBA Console screen appears.

Double-click on the **HW Setup** icon to open the HW Setup dialog box.
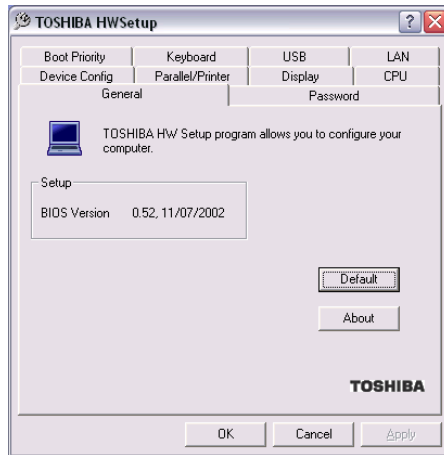
Sample HW Setup

Toshiba HW Setup has the following tabs:

❖ General — Shows the BIOS version

❖ Password — Allows you to set the user password and an owner string

❖ Device Config — Shows the Device configuration options

❖ Parallel/Printer — Allows you to configure the parallel port default settings

❖ Display — Allows you to change various default settings for the built-in LCD display

NOTE   When the computer restarts, it remembers the last configuration. If data does not appear on the display you are using after starting in Standby Mode, press Fn + F5.

❖ CPU — Allows you to enable or disable accessing the processor's serial number

Dynamically Switchable—This mode is the default setting for your computer, and automatically changes the processing frequency and decreases voltage depending on the power source:

❖ AC Power—If your computer is connected to the AC adapter, the CPU frequency mode is set to high for faster processing.

❖ Battery Power—If your computer is running on battery power, the CPU frequency mode is set to low, for slower processing. Switching the CPU to low allows you to conserve power and extend the operating time of your battery.

Always High—Sets the CPU speed to high when using either the battery or the AC adapter.

Always Low—Sets the CPU speed to low when using either the battery or the AC adapter.

By changing any of the options that appear in the dialog boxes and clicking Apply, you can reconfigure that function. Any options that you change will not take effect until after you restart your system.

❖ Boot Priority — Allows you to change the sequence in which your computer searches the various drives for the operating system

❖ Keyboard — Allows you to enable/disable the Wake-on-Keyboard function

❖ USB — Allows you to enable or disable USB Legacy Emulation

❖ LAN—Allows you to set networking functions

By changing any of the options that appear in the dialog boxes and clicking Apply, you can reconfigure that function. Any options that you change will become default settings when you restart your system.

Power Saver

Toshiba's Power Saver utility enhances your computer's power management capabilities. It controls the computer's Power Save Mode, which is a series of settings for power management. In the Power Saver Properties dialog box, you can choose which mode to use, change settings for each mode, or create your own mode.

To access Power Saver Properties:

1   Open the **Start** menu, click **Control Panel,** then **Performance and Maintenance**.

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

The Toshiba Power Saver Properties dialog box appears.

Toshiba Power Saver Properties dialog box

You may also access the Power Saver Properties by pressing the TOSHIBA Console button:

1   Press the TOSHIBA Console above the right side of the keyboard.

The TOSHIBA Console screen appears.

2 Double-click the **Power Saver** icon.

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 or Long Life settings.

Any options that you change become the default settings when you exit the program. You don't have to restart your system before they become default settings.

Mobile Extension

To adjust the settings for docking or using the Slim SelectBay, use the TOSHIBA Mobile Extension Service Configuration.

To use the TOSHIBA Mobile Extension Service Configuration:

1 Click **Start**, then **Control Panel**. Click **TOSHIBA Mobile Extension.**

The TOSHIBA Mobile Extension Service Configuration dialog box appears.

2 Under the Mobile Extension Service tab, you can select behaviors to enable or disable, like Warm Undock Service and Parallel Port Check, by checking or unchecking the appropriate box.
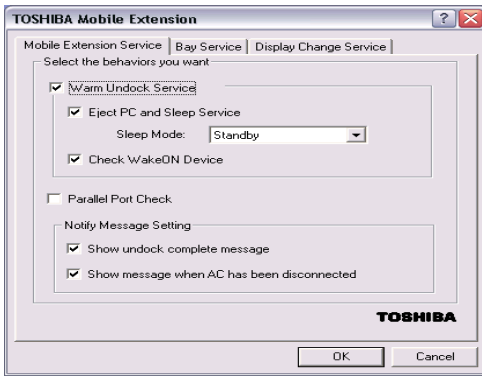
Sample Mobile Extension Service tab options

3 Under the **SelectBay Service** tab, you can select behaviors like Hot Dock and Warm Dock for your Slim SelectBay.
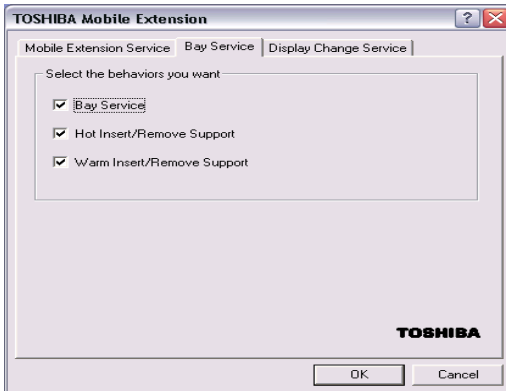
Sample SelectBay Service tab options

For more information about expansion devices, see "Using an expansion device" on page 74.

Chapter 8

Keeping Your Files Safe

You may have files on your computer that you want to keep private. Your computer comes with several options that can help you keep your computer and files safe from unwanted intrusion.

This chapter describes the security options for your notebook computer.

Using passwords in Windows

Setting a password lets you leave your computer, secure in the knowledge that nobody can access your files. When you set a password, you must enter the password before you can work on your computer again.

Toshiba supports the following types of passwords on the Satellite computer:

❖ A power-on (user-level) password that requires you to enter the password whenever you start the computer.

❖ An instant (user-level) password that secures your open programs and files when you need to leave the computer temporarily.

❖ A supervisor-level password that protects system settings by restricting who can make changes in Toshiba Utilities and System Setup. This is useful if more than one person is using the computer.

❖ A hard disk drive password that protects your data by requiring a password when you try to access the hard disk, whether it's in your computer or in another system. You can set a hard disk drive user password and/or a hard disk drive master password.

User-level passwords

The user-level password is the basic level of password security. You can use it as a power-on password. For most users, this is all the password security you'll need.

You can set (register) a user-level password in either Toshiba Hardware Setup or System Setup. If you use System Setup, however, you can also create a password service diskette which can be used to bypass the password function when starting your computer. Once you have used the diskette, you must reset your password and create another password service diskette.

CAUTION   Make sure you use a password you can remember easily. If you ever forget your password, contact your network administrator.

A good way to prevent forgetting your password is to create a password service diskette. Refer to "Setting a user-level password in System Setup" on page 173 for instructions.

Setting a user-level password

You can set a user-level password in Toshiba Console or in System Setup.

Setting a user-level password in Toshiba Hardware Setup

Setting a password leaves your computer secure so that nobody can access your files. You must enter the password before you can work on your computer.

A single user password supports the instant and power-on password functions.

Using an instant password

An instant password secures your system with a single keystroke. Use this feature when you leave your desk for a few minutes and don't want to turn off the computer.

1   Press Fn, then press F1.

    The screen goes blank.

2   Move the Dual Pointing Device, or press a key.

    On the displayed screen, select a user.

3   For the selected user:

    ❖   If you have not registered a user password, press Enter.

    ❖   If you have registered a user password, type the password and press Enter.

    The desktop displays.

Setting a Windows user password

To register a password for the Windows Logon and Instant Password functions:

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

2   Click **User Accounts**.

3   Select **Create a password**.

4   Enter the password and password hint as directed.

5 Click **Create Password**.

6 Click the Close icon (✕) to close the User Accounts window.

When you log into Windows, you will be asked for this password. This password will also be required to bring the machine out of the instant security mode that <Fn><F1> places the machine into.

Setting a user-level password in System Setup

HINT: If you forget your password and have lost your password service diskette, contact Toshiba Technical Support. For more information, refer to "If you need further assistance" on page 213.

To register a user-level password in System Setup and create a password service diskette:

1 Click **Start**, then **Shut Down**. Select **Shut down** and click **OK**.

The computer shuts down and turns itself off.

2 Connect your diskette drive. For instructions, see "Connecting an external diskette drive" on page 72.

3 Insert a write-enabled diskette into the diskette drive.

HINT: Run System Setup outside Windows, at a system prompt. If you try to run System Setup from an MS-DOS session under Windows, results can be unpredictable.

4 Hold down Esc and press and hold the power button in until the on/off light on the system indicator panel turns on (green)—about one second. When you receive the

following message:
"Check system. Then press [F1] key," press F1.

System Setup displays a setup screen.

5 Press P to move to the **PASSWORD** section of the
screen.

6 Press the spacebar.

System Setup asks you to enter a new password.

7 Type a password of 1 to 16 characters and press Enter.

You may use any combination of letters and numbers in your
password.

8 When System Setup prompts you to do so, verify the
password by typing it again and pressing Enter.

If the two passwords match, System Setup displays:
Registered.

If the two passwords don't match System Setup displays an
error message. Repeat steps 7 and 8 to enter the password
again.

9 Press End to save your change.

System Setup asks you to confirm your choice.

10 Press Y to confirm you want to quit.

System Setup prompts you to select the type of diskette you
inserted.

CAUTION: The System Setup process overwrites all existing
information on the password service diskette. Make sure the
diskette you use does not contain any important information.

11 Press 1 if you're using a 1.44 MB diskette or
press 2 if you're using a 720 KB diskette.

System Setup creates the password service diskette and displays a message when it's finished.

12 Remove the diskette and press any key to continue.

System Setup closes, returning you to the system prompt. The next time you start the computer your password will be in effect.

13 Store your password service diskette in a safe place, away from the computer.

CAUTION Don't use your password service diskette for any other purpose. If you try to access the diskette, you'll receive an error message, and will have to reset your password and create a new password service diskette.

Disabling a user password

To cancel the password that supports the instant and power-on password functions:

1 Press the **Toshiba Console** button and click on Security.

2 Click the **User Password** icon.

3 Click **Delete.**

4 Type your password in the Enter Password box and click **Delete**.

5 Click **OK** twice.

TECHNICAL NOTE: You have three tries to enter the correct password. After an incorrect try, an "Incorrect Password" dialog box will appear. Click OK to reenter the password.

After three incorrect tries, this message appears: "Sorry, access denied! Reboot is required to regain access." You will need to turn off the computer, then reboot.

6   Click **OK** to exit.

Disabling a user-level password in System Setup

To register a user-level password in System Setup and create a password service diskette:

1   Click **Start**, then **Shut Down**. Select **Shut down** and click **OK**.

The computer shuts down and turns itself off.

HINT: Run System Setup outside Windows, at a system prompt. If you try to run System Setup from an MS-DOS session under Windows, results can be unpredictable.

2   Hold down Esc and press and hold the power button in until the on/off light on the system indicator panel turns on (green)—about one second. When you receive the following message:
"Check system. Then press [F1] key," press F1.

System Setup displays a setup screen.

3   Press P to move to the **PASSWORD** section of the screen.

4   Press the spacebar.

System Setup asks you to enter a new password.

5 Press Enter.

6 When System Setup prompts you to do so, verify the password by pressing Enter.

7 Press End to save your change.

System Setup asks you to confirm your choice.

8 Press Y to confirm you want to quit.

System Setup closes, returning you to the system prompt. The next time you start the computer, your password will be disabled.

Using the power-on (user-level) password

Whenever you start your computer with a power-on (user-level) password in effect, the computer prompts you to enter the password before it goes through its normal startup procedure.

When your computer prompts you to enter your password, type it in and press Enter. If you enter the password correctly, the computer continues with its normal startup procedure. If you enter an incorrect password, the computer beeps. After three incorrect attempts, the system turns off automatically.

If you've forgotten your password and you have a password service diskette:

1 Connect your diskette drive. For instructions, see "Connecting an external diskette drive" on page 72.

2 Turn on the computer.

The system prompts you for your password.

3 Insert the password service diskette into the diskette drive and press Enter.

The system prompts you, "Set Password Again (Y/N)?"

CAUTION | The password service diskette is not reusable. Once you use it, you must create a new diskette, even if you set the same password.

---

4 To enter System Setup and reset your password, press Y. Follow the instructions in "Setting a user-level password in System Setup" on page 173 to reset your password.

To remove your password, press N. It will no longer be registered.

Using the instant (user-level) password

An instant password secures your system with a single keystroke. Use this feature when you need to leave your desk for a few minutes and don't want to turn off the computer.

To use an instant password, press Fn and F1 simultaneously. Pressing this hot key freezes the keyboard and AccuPoint II and blanks the screen. An instant password has no effect on an optional serial mouse or trackball.

If you have not registered a user-level password, press Enter to unlock your system.

If you have registered a user-level password, type your password and press Enter. If you enter the password correctly, the computer returns to where it was when you pressed the hot key.

Using a supervisor password

A supervisor password prevents other users from changing hardware configuration options.

Setting a supervisor password

1   Click **Start**, then click **All Programs**.

2   Point to **Toshiba Console**, then click the resulting **Toshiba Console** selection.

The Toshiba Console window appears.

3   Select **Security**.

Sample Toshiba Console Security window

4   Click the **Supervisor password** icon, then click on the **Supervisor Password** tab.

5   Select **Set**.

6   Enter a password (then enter it again to verify).

7   Click **Set**.

8   Click **OK** if you want to save the password to a text file on a diskette. Click **Cancel** if you do not want to save the password to a text file on a diskette.

9   Click **OK** to exit.

Deleting a supervisor password

1 Click **Start**, then click **All Programs**.

2 Point to **Toshiba Console**, then click the resulting **Toshiba Console** selection.

The Toshiba Console window appears.

3 Select **Security**.

Sample Toshiba Console Security window

4 Click the **Supervisor password** icon.

5 Select **Delete**.

6 Enter the correct password.

7 Click **Delete**, then click **OK** twice to exit.

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.

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Hard disk drive passwords

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 9

Troubleshooting Guide

Some problems you may encounter when using your notebook computer are relatively easy to identify and solve. Others may require help from your dealer or the manufacturer of a software program.

This chapter aims to help you solve many problems yourself without needing additional help. 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

Occasionally, as you work with your computer, you may encounter one or more of the following problems. Usually, you can solve them relatively easily.

If your computer or one of the devices connected to it isn't working properly, try this procedure first:

1 Turn off the computer and any peripheral devices connected to it. This includes a local printer and any other external devices.

2   Check that the electrical outlet is working by plugging in another appliance such as a lamp.

3   Check that the power cables are firmly plugged in.

4   Check that all cables connecting peripheral devices to the computer are correctly and firmly attached. Loose cables can cause signal errors.

5   Turn on the peripheral devices.

6   Turn on the computer.

7   If you are running the computer on battery power, check that the battery charge isn't low.

If the equipment still isn't working properly, refer to the device-specific sections of this chapter.

Problems when you turn on the computer

These problems may occur when you turn on the power.

The computer won't start.

If you did not follow the steps in the previous section, make sure you attached the power cable properly or installed a charged battery.

Press and hold the power button for a few seconds.

The computer starts, but then shuts down and the on/off light glows amber and blinks.

The computer has become too hot, so it has automatically shut down. Leave the computer turned off until its interior has reached room temperature (88 degrees Fahrenheit/30 degrees Celsius or less).

If the computer will not start after it has been turned off for a while, remove the battery and reinsert it. For instructions on removing the battery, see "Changing batteries" on page 133.

The computer starts but, when you press a key on the keyboard or touch the Dual Pointing Device, nothing happens.

To clear the condition, press Ctrl, Alt, and Del simultaneously.

Clearing the condition may get you 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 191.

The message "Boot system has changed" appears.

Wait for the setting change to be completed. This may take several minutes.

The message "Bad XXXX XXXX" appears after the Toshiba logo is displayed.

Press F1 to enter the setup screen. Then press Home to make sure the computer settings are at their default values.

The message "Warning: XXXX" appears after the Toshiba logo is displayed.

Press Enter several times.

The message "Password=" appears after the Toshiba logo is displayed.

This message is displayed when the password has been set. If this message appears, enter the password and then press Enter.

Three consecutive mistakes in entering the password turns off the computer.

The computer is not accessing the hard disk or the diskette drive.

If the Boot Priority option in Hardware Setup is set to HDD→FDD and you have a hard disk problem, you won't be able to start the computer. Insert a system diskette into the diskette drive and press F12 or the Left/Right Arrow keys while you turn on the power. Select the Floppy Disk icon and press Enter.

The computer displays the Non-system disk or disk error message.

Make sure there is no diskette in the diskette drive. If there is one, remove it and press any key to continue. If pressing any key does not work, press and hold the power button until the computer turns off, and then power the computer on again.

Resolving a hardware conflict

Using the Windows XP troubleshooting feature

If you receive an error message telling you there is a device driver conflict or a general hardware problem, try using Windows Help to troubleshoot the problem first.

1 From the Windows **Help** menu, click the **Contents** tab and select **Troubleshooting**.

2 Click **If you have a hardware conflict** and follow the steps.

If there is still a problem, Windows XP should display a message that explains what the conflict is. For further assistance, contact your system administrator.

A plan of action

The smooth operation of the system depends on the interaction of all devices, programs and features.

The recommended procedure for getting multiple devices to work together is to add and configure 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 CD-ROM 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.

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 Windows XP, avoiding hardware conflicts is easy. Plug and Play is a computer standard that helps the system BIOS (basic input/output system) and Windows XP 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. You simply plug in the device and turn on your computer. Your operating system automatically configures your system to accommodate the new device.

However, if you install an older (legacy) device that Windows cannot detect, Windows may have difficulty assigning system resources to it. As a result, a hardware conflict can occur. To find out what resources Windows has assigned to the legacy device, refer to the section "Checking device properties."

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**, then **Control Panel**.

2   Double-click the **System** icon.

    Windows XP displays the System Properties dialog box.

3   Click the **Hardware** tab.

4   Click the **Device Manager** button.

5   Double-click the device type.

6   To view the properties, double-click the device.

Windows XP displays the Device Properties dialog box, which provides various tabs to choose from. Some of the common ones are:

❖ The General tab, which provides basic information about the device.

❖ The Resources tab, which lists the resources assigned to the device. If you have a device conflict, it is shown in the Conflicting device list.

❖ The Drivers tab, which displays the drivers being used by the device.

For further information about Device Manager, refer to Windows XP online help.

Memory card problems

Incorrectly connected or faulty memory cards may cause errors that seem to be device-related, so it's worthwhile checking for these first.

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

Windows displays the Shut Down Windows dialog box.

2 Select **Shut down**, then click **OK**.

Windows shuts down and turns off the computer automatically.

3 Remove the memory card following the instructions in "Removing a memory module" on page 79.

4 Reinstall the memory card following the instructions in "Installing a memory module" on page 75, and make sure it's seated properly.

5 Replace the memory expansion slot cover.

6 Check for the error again.

7 If the error recurs, remove the memory card entirely and check for the error again.

NOTE   This procedure can only be followed if there is more than one memory card in the computer. If there is only one memory card, removing will prevent the computer from booting up.

If removing the memory card eliminates the error, the memory card may be faulty. If the error recurs without the memory card installed, the error is not caused by the memory card.

Power and the batteries

Your computer receives its power through the AC adapter and power cable or from the system batteries (main battery, real-time clock (RTC) battery and backup battery). Power problems are interrelated. For example, a faulty power cable will neither power the computer nor recharge the batteries.

Here are some typical problems and how to solve them:

The AC power light doesn't come on when you plug in the AC adapter.

Make sure the AC adapter is firmly connected to both the power cable and the computer, and that the power cable is plugged into the electrical outlet.

If the AC power light still doesn't come on, check that the electrical outlet is working properly by plugging in a lamp or other appliance.

The power cable and AC adapter work correctly, but the battery won't charge.

The main battery may not be making a good electrical connection. Turn off the computer, remove the battery and confirm that its contacts are clean. If they are dirty, clean the contacts with a soft, dry cloth and replace the battery.

The battery may be too hot or too cold to charge properly. Its temperature needs to be in the range 5 degrees to 35 degrees Celsius. 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 connected, wait 20 minutes and see whether the battery is charging.

If the battery icon 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 icon doesn't 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-saving features in Power Saver. 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? Is the battery fully charged to begin with? All these conditions affect how long the charge lasts.

For more information on maximizing battery power, refer to "Taking care of your battery" on page 135 and "Conserving power" on page 137.

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 numlock light or cursor control mode light is on, press Fn and F10 simultaneously to turn off the cursor control mode light or Fn and F11 simultaneously to turn off the numlock 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 documentation and check that the program does not assign different meanings to any of the keys.

You've connected an external keyboard and Windows displays one or more keyboard error messages.

The keyboard you connected may be defective or incompatible with the computer. Try using a different make of keyboard.

AccuPoint II problems

Some of the keyboard problems already listed may affect the AccuPoint II. In addition:

Your finger slides off the AccuPoint II easily.

If the AccuPoint II cap is oily, remove the cap and clean it with a cotton swab dipped in rubbing alcohol.

To remove the cap:

1 Firmly grasp the cap and pull it straight up.
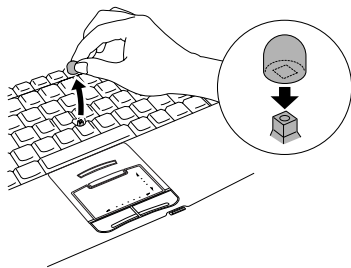
Removing the AccuPoint II cap

2 After cleaning the cap, position it on the peg and press it into place.

NOTE   The peg is square, so be careful to align the cap's hole with the peg.

Display problems

The screen is blank.

Display Auto Off may have taken effect. Press any key to reactivate the screen.

You may have activated the instant password feature by pressing Fn and F1 simultaneously. If you have registered a user-level password, press the Enter key, type the password, and press Enter to return to work.

If you are using the built-in screen, try changing the display priority to make sure it is not set for an external monitor. To do this, press Fn and F5 simultaneously.

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 electrical 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 that the display priority is not set for the built-in LCD screen.

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.

Windows displays a message that there is a problem with your display settings and that the adapter type is incorrect or the current settings don't work with your hardware.

Reduce the size of the color palette to one that is supported by the computer's internal display.

The display is set to a simultaneous display mode (LCD/ CRT or LCD/TV) and the external display device doesn't work.

Make sure the resolution of the external display device and the internal display match. For example, if the external device is only capable of displaying resolutions up to 800 x 600, you'll need to change the resolution of the internal display to 800 x 600.

You are using an external display device and part of the desktop isn't visible.

If the desktop area is set to a resolution greater than 640 x 480, the external device goes into "virtual" display mode. This means that part of the desktop will not display on the screen. You can view the "lost" area by scrolling to it.

Even if your desktop area is set to 640 x 480, some of the desktop will be outside of the viewing area. This is because most televisions and video projectors overscan by 15 to 20 percent. You can view the edge of the desktop by scrolling to it.

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.

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 some of the data appears to be missing.

Make sure you're identifying the drive by its correct name (A for the diskette drive or C for the primary hard disk).

Run Windows XP Check Disk, which analyzes the directories, files and File Allocation Table (FAT) on the disk and repairs any damage it finds.

To run Check Disk:

1   Open **My Computer** and right-click on the drive you wish to check.

2   Click **Properties**.

3   Click the **Tools** tab.

4   Click **Check Now**.

    Windows opens the Check Disk window.

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 in Windows XP:

1 Click **Start**, then point to **Programs**.

2 Point to **Accessories**, then point to **System Tools**.

3 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 by using utility software, which is available from your network administrator.

Some programs run correctly but others do not.

This is probably a configuration problem. When a program doesn't run properly, refer to its documentation and check that the hardware configuration meets its needs.

A diskette won't go into the 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 by its label 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 loose labels 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're starting the computer from the hard disk, make sure there's no diskette in the diskette drive.

If you're starting the computer from a diskette, the diskette in the drive doesn't have the files necessary to start the computer. Replace it with a bootable diskette.

The drive can't read a diskette.

Try another diskette. If you can access the second diskette, the first diskette (not the diskette drive) is probably causing the problem. Run Check Disk on the faulty diskette.

If you're using the diskette drive externally, unplug the cable and plug it back in to make sure the connection between the diskette drive cable and the port is secure.

Modem problems

The modem dials the line but doesn't connect, or cannot maintain the connection.

You may be connected to a noisy telephone line. To check this, connect an ordinary telephone to the telephone line and try placing a phone call. If you hear an unusual amount of noise or static, try connecting the modem to a different telephone line or connecting at a later time.

There may be an incorrect setting in the communications software. Refer to the communications software documentation to customize the modem settings.

The modem won't receive or transmit properly.

Make sure the RJ-11 cable (the one that goes from the modem to the telephone line) is firmly connected to the modem's RJ-11 jack and the telephone line socket.

Check the serial port settings to make sure the hardware and software are referring to the same COM port.

Check the communications parameters (baud rate, parity, data bits, and stop bits) specified in the communications program.

The modem is on, configured properly, and still won't 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.

Problems with the DVD-ROM or multi-function drive

You cannot access a disc in the drive.

Make sure the tray which holds the CD-ROM or DVD-ROM is closed properly. Press gently until it clicks into place.

Open the tray and remove the disc. Make sure the tray is clean. Any dirt or foreign object can interfere with the laser beam.

Examine the disc to see if it is dirty. If necessary, wipe it with a clean cloth dipped in water or a neutral cleaner.

Replace the disc in the tray. Make sure that the disc is lying flat, label side uppermost. Make sure the disc snaps into place. Close the tray carefully, making sure it has shut completely.

Make sure the disk is seated properly on the spindle. It should click into place when pushing gently onto the spindle.

You press the DVD-ROM or multi-function drive eject button, but the drive tray doesn't slide out.

Make sure the computer is connected to a power source and turned on. The DVD-ROM or multi-function drive eject mechanism requires power to operate.

If you need to remove a disc and cannot turn on the computer (for example, if the battery is completely discharged), use a narrow object, such as a straightened paper clip, to press the

manual eject button. This button is in the small hole next to the CD-ROM or DVD-ROM eject button on the face of the DVD-ROM or multi-function drive tray.

Some discs run correctly but others do not.

Check the type of disc you are using. The DVD-ROM drive supports the Digital Versatile Disc (DVD) formats DVD-ROM, DVD-R (read-only), CD-ROM, CD-R (read-only), and CD-RW (read-only). The CD-ROM drive supports CD-ROM, CD-R (read-only), and CD-RW (read-only).

HINT: The DVD-ROM drive is initially set for Region 1 (North America) DVDs.

If the problem is with a data CD or DVD, refer to the software's documentation and check that the hardware configuration meets the program's needs.

The disc will not come out of the drive when you click the eject button on the screen.

Press the button on the DVD-ROM or multi-function drive itself.

Sound system problems

You don't hear any sound from the computer.

Adjust the volume control. There is a volume control dial on the computer, a volume control feature in the Windows Control Panel ("Sounds"), or it might be muted. There may also be a volume control on your speakers or headphones or in your audio application.

If you are using an external microphone 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.

If you have changed the settings for the Record Monitor feature in the Recording Control Utility (default Off) or the Mute feature in the Mixer Utility (default Enabled), these may cause feedback. Revert to the default settings.

Optional devices

Optional devices can include a printer, PC Cards, an external monitor, or any other device you connect to your computer to expand its capabilities.

For an external monitor, see "Display problems" on page 198.

PC Card problems

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. Refer to "Resolving a hardware conflict" on page 191.

Card information structure (CIS)

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 CIS. Sometimes the CIS contains enough information for you to use the card immediately. Other cards must be configured before you can use them.

Some card manufacturers use special software called enablers to support their cards. Enablers result in nonstandard

configurations that can cause problems when installing another PC Card.

If Windows doesn't have built-in drivers for your PC Card and the card didn't come with a Windows driver, it may not work under Windows. Contact the manufacturer of the PC Card for information about operating the card under your version of Windows.

PC Card checklist

❖ Make sure the card is compatible with your operating system.

❖ Make sure the card is inserted properly into the slot. Refer to "Inserting and removing PC Cards" on page 84 for how to insert PC Cards, and to the documentation that came with the PC Card.

❖ Make sure all cables are securely connected.

❖ Make sure the computer has only one version of Card and Socket Services loaded.

❖ 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 slots appear to be dead. PC Cards that used to work no longer work.

To view the PC Card status:

1 Click the **My Computer** icon with the secondary button, then click **Properties**.

   Windows displays the System Properties dialog box.

2 Click the **Hardware** tab.

3 Click the **Device Manager** button.

4 Double-click **PC Card (PCMCIA)**.

5 Double-click the device listed as your PC Card.

Windows displays your PC Card's Properties dialog box. This dialog box 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. Make sure each device has its own I/O base address.

Since all PC Cards share the same socket, each card is not required to have its own address.

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 Click the **PC Card** icon on the taskbar.

2 Click **Stop** *xxxx*, where *xxxx* is the identifier for your PC Card.

Windows XP displays a message saying you may safely remove the card.

3 Remove the card from the slot.

There is still a yellow exclamation point (⚠) over the PCMCIA controller icon in Device Manager (Windows XP).

You've installed the PC Card as described in "Using PC Cards" on page 112, but the system still reports the controller with a yellow exclamation point (⚠).

Remove and re-install the PCMCIA controller device following the instructions on the Recovery media.

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 doesn't print.

Check that the printer is connected to a working electrical outlet and is turned on.

Check that the printer has plenty of paper. Some printers won't 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 both the computer and the printer.

Make sure the Parallel Port Mode option in Hardware Setup is set correctly for your printer. If your printer is ECP-compatible, this option should be set to ECP. If your printer is not ECP-compatible, this option should be set to Std. Bi-Direct.

If your printer is ECP- or IEEE 1284-compliant, make sure you have an IEEE 1284 printer cable.

Run the printer's self test to check for any problem with the printer itself.

Make sure you installed the proper printer drivers.

You may have connected the printer while the computer was turned on. Turn off the computer, and turn off the printer. Turn the printer back on, make sure it's ready (on line), then turn the computer back on.

The printer doesn't print what I 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.

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't 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, missed period ("dot") or other mistake makes it impossible for your browser to locate the site.

My browser can't 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 to temporary repair. Try again later.

DVD operating problems–Windows XP

If you experience a problem playing DVDs, you may be able to fix the problem yourself.

For general problems playing a DVD title, try the following steps:

1 Check that the disc is in a format that the drive supports (DVD-ROM or DVD-R).

2 Ensure that the drive is properly installed in the Slim SelectBay. It must be inserted completely.

3 Ensure that the DVD-ROM disk is properly inserted in the drive tray.

4 Clean the DVD disc and try again.

A dirty drive can also cause audio problems. If you have tried several discs and all fail, consider sending your drive to an authorized service provider to get it cleaned.

5 Verify that your computer recognizes your DVD-ROM drive. To do this:

Double-click the **My Computer** icon on the desktop. The DVD-ROM drive should appear in the list.

6 See "Checking device properties" on page 193 for instructions on using Device Manager to view the DVD-ROM properties.

7 Check the Toshiba Web site for new information on DVD-ROM drives and their operation.

A blank screen appears while watching a DVD-ROM movie or title.

Disable the Shut off Monitor feature in the Toshiba Power Saver Properties using the following steps:

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

The Control Panel window appears.

2 Double-click the **Toshiba Power Saver** icon.

3 Click the **Details** button (for the mode you are using).

4 Click the **Power Save Mode** tab.

5 Set the **Turn off Monitor** slider to **Never**.

6 Click **OK** to close the **Details** window.

7 Click **OK** to close the **Toshiba Power Saver** window**.**

Jumping video lines appear around the DVD-ROM video window.

To change the screen's display resolution:

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

The Control Panel window appears.

2 Double-click the **Display** icon.

The Display Properties dialog box appears.

3 Click the **Settings** tab.

4 Next to the words **Screen Area**, move the slider to a lower setting, such as 800 x 600 or 640 x 480.

5 Click **OK**.

The screen saver runs while you are watching a movie or title.

If the screen saver is enabled, it runs on top of any movie or title you are watching. To disable the screen saver:

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

The Control Panel window appears.

2 Double-click the **Display** icon.

The Display Properties dialog box appears.

3 Click the **Screen Saver** tab.

In the Screen Saver list, the current screen saver is highlighted.

4 Click the down arrow at the right of the current screen saver name.

A list of screen savers displays.

5 Click and hold the up arrow by the list or move the slide to the top.

6 Click **None**.

7 Click **OK**.

Developing good computing habits

This section suggests some good habits to develop so you are prepared if things go wrong.

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 shouldn't rely solely on this feature. Save your work! It only takes a few moments, and it could save you many hours of work to recreate files.

On a regular basis, back up the information stored on your hard disk.

Files held in your network partition will be backed up for you, but you need to back up any important files that reside only on the Tecra's hard disk.

Here are a few ways you can do this:

❖ Use Windows to copy files to diskettes.

❖ Connect a storage device to the system and use specialized software to copy all your data from hard disk to a tape.

❖ Connect the system to a LAN and copy files to some other location on the network.

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've added software to your system, you should back up the software as well as the data. If something goes wrong that requires you to format your hard disk and start again, reloading all your software and data from a backup will save time.

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.

Try the following 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, you can access Toshiba on the Internet using any Internet browser by typing pcsupport.toshiba.com

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.

❖   Back up copies of your operating system and all other preloaded software on diskettes or CD-ROM.

❖   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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Excelsiorlaan 40
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Szerencs utca 202
1147 Budapest
Hungary

Italy
Progetto Elettronica 92 s.r.l.
Viale Certosa 138,
20156 Milano
Italy

Latin America and Caribbean
Toshiba America Information Systems
9740 Irvine Blvd.
Irvine, California 92618
USA

800-457-7777 (within the US)

949-859-4273 (outside of the US - this call may incur long distance charges)

France
Toshiba Systèmes (France) S.A.
7, Rue Ampère
92804 Puteaux Cédex
France

Greece
Ideal Electronics S.A.
109 Syngrou Avenue
176 71 Kalithea
Athens
Greece

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Toshiba Information Systems
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United Kingdom

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1-1, Shibaura 1-Chome
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Informática, Lda.
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Ur. Quinta Grande
2720 Alfragide
Portugal

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HTC a.s.
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Slovakia

Morocco
C.B.I.
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Morocco

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Irvine, California 92618
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Addlestone Road
Weybridge KT15 2UL
United Kingdom

The Rest of Europe
Toshiba Europe (I.E.) GmbH
Hammfelddamm 8
D-4-1460 Neuss
Germany

Appendix A

Windows 2000 Supplemental Information

This section describes the features that are available under the Windows 2000 Professional operating system.

Using your computer for the first time

The first time you turn on the computer, the Windows 2000 Professional Setup Wizard installs the devices it finds on your system, then guides you through several essential steps for setting up your computer.

Setting up your software

During the software setup process, these steps may or may not appear in the following order:

❖ Select your time zone.

Select one of the time zones listed by clicking the up and down arrow keys to highlight the appropriate time zone, then click **Next** to change the setting.

❖ Confirm acceptance of the Microsoft End User License Agreement and complete information about the operating system.

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After the software setup process is complete, be sure to register your computer with Toshiba by double-clicking the Registration icon on your desktop. Registering your computer lets Toshiba keep you up-to-date with information about new products and upgrades, and also extends your Toshiba limited warranty worldwide at no charge to you.

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

To register your computer at a later time, select **No, I do not want to register at this time**.

❖   Read about limited Warranty Extensions and Upgrades.

This step provides important information from Microsoft.

Completing installation

Upon completion, you will be prompted to click **Finish.** You may be prompted to restart your computer.

Completing the initial startup procedure

When the computer starts again, a dialog box appears prompting you for your password. If you did not create a password, leave the password box empty and click **OK**.

Depending on your configuration, you may see the Getting Started with Windows 2000 screen when you continue. If you do not see this screen, your system will display the desktop.

The Getting Started screen has three options:

❖   Register Now—Click this option to register your copy of the Windows 2000 Professional operating system with Microsoft.

If you prefer, click **Register Later** and you will be prompted to register at a later time.

❖   Discover Windows—Click this option to read and learn more about the Windows 2000 Professional operating system.

❖   Connect to the Internet—Click this option to start the Internet Connection Wizard.

If you prefer, you can set up your Internet connection later.

At the bottom of the Getting Started with Windows 2000 screen there is a box labeled "Show this screen at startup." The check mark in the check box indicates that this screen will appear each time you start your system. To hide this screen, click the check box to remove the check mark.

Connecting to the Internet

Start the Internet Connection Wizard by clicking either:

❖   The Connect to the Internet option on the Getting Started with Windows 2000 screen, or

❖   The Connect to the Internet icon on your desktop

The wizard will assist you in setting up the computer to work with your existing Internet account, if you have one, or it will sign you up for a new Internet account.

Setting up a printer

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**, **Settings**, then **Printers** and double-click the **Add Printer** icon.

The Add Printer Wizard starts, and guides you through setting up your printer.
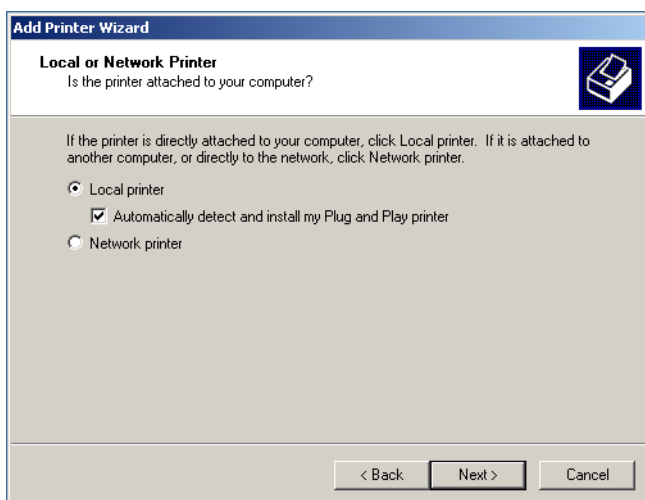
Sample Add Printer Wizard

2 Follow the instructions on the screen to add your printer.

If your printer is not found, or to install the driver manually, use the printer driver that came with the printer to complete the setup process.

3 Enter a name for your printer, or use the name supplied in the Printer name text box.

4 To set the printer as the default printer for Windows - based programs, click **Yes**, then click **Next**.

5 To print a test page, click **Yes (recommended)**, then click **Finish**.

TECHNICAL NOTE: Some printers require a specific installation process. In this case, the Windows 2000 Add Printer Wizard will display an error message. If this happens, refer to your printer installation guide for further instructions.

Turning off the computer

NOTE   Avoid turning off the power while a disk light on the system indicator panel is on. Doing so may damage your hard disk, diskette drive, CD-ROM, DVD-ROM or DVD-ROM /CD-RW multi-function drive.

To shut down the computer completely and turn it off, use the Shut down command.

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

The Shut Down Windows dialog box appears.

Sample Shut Down Windows dialog box

2 Select **Shut down** and click **OK**.

The computer shuts down and turns itself off.

Exploring the desktop

Using the Start menu

The Start menu enables you to:

❖ Access Microsoft Windows 2000 Professional update information

❖ Start programs

❖ Open documents

❖ Adjust system settings

❖ Find files

❖ Access Windows Help

❖ Run programs

❖ Suspend system activity and shut down the computer

To open the menu, click the Start button.
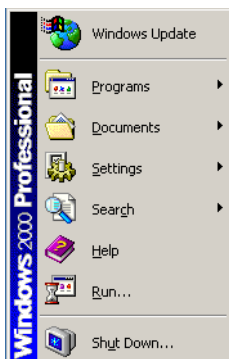
Sample Windows 2000 Professional Start menu

Using Windows 2000 Professional online Help

For answers to common questions, click **Start**, then click **Help** to open the Windows 2000 Professional online Help.
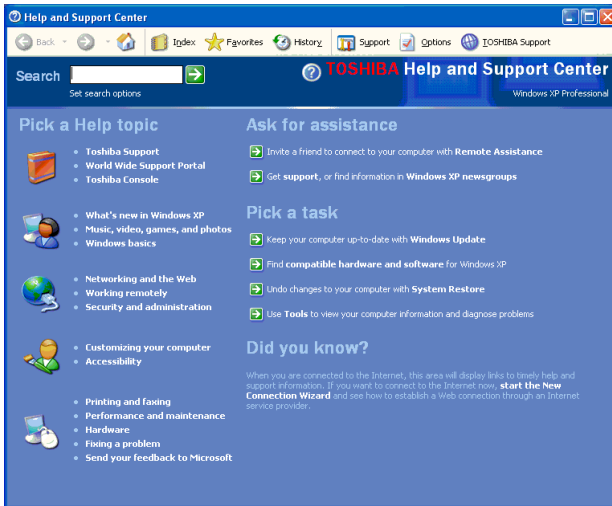
Sample Windows 2000 Professional online Help window

Click an item on the Contents tab, or use the Index and Search tabs to locate a specific topic.

You computer's desktop includes several standard features: icons, Start button, Shortcut tray, Taskbar, System tray, and background pattern.

Icons

An icon represents a file or program that can be quickly activated by double-clicking the icon. The icons initially displayed on your desktop include:

My Documents — Shows the documents in the My Documents folder that you've created or edited most recently.

My Computer — Shows the file system for your computer and the network (if any).

My Network Places — Contains the most recent Network sites you've visited.

Recycle Bin — Holds files you've deleted. You may be able to retrieve these files until you empty the Recycle Bin.

TECHNICAL NOTE: If you delete a file from a diskette, it does not go into the Recycle Bin. For more information on the Recycle Bin, see Windows Help.

Internet Explorer — The Microsoft browser that provides access to the Internet.

Connect to the Internet — A shortcut command to connect with your Internet Service Provider (ISP) and establish a link to the Internet using your browser.

Viewing your computer's contents

Using Windows Explorer

Windows Explorer gives you a view of your computer's contents as a hierarchy or "tree." You can easily see the content of each drive and folder on your computer. To access Windows Explorer either click **Start**, point to **Programs**, **Accessories**, then click **Windows Explorer** or you can right-click **Start** and then click **Explore**.

Naming your files

The Windows 2000 Professional operating system supports file names of up to 255 characters. You may use all the letters and numbers on the keyboard plus the following characters: _ ^ $ ~ ! # % & { } ( ) @ [ ] + - ; and '. The names can include spaces.

Backing up your work

To back up several files at one time, use the Windows 2000 Professional operating system Backup 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**, point to **Programs**, **Accessories**, **System Tools**, then click **Backup**.

The Backup Wizard dialog box appears.
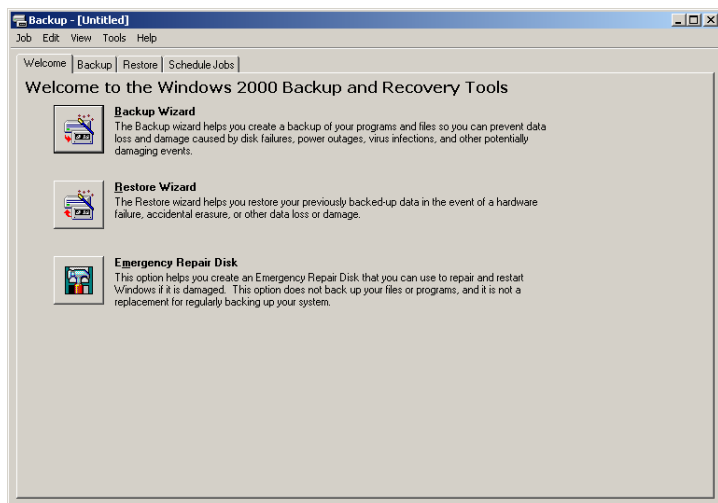
Sample Backup Wizard

3 Click **Backup Wizard** and follow the instructions on the screen.

Restoring your work

The Restore Wizard feature allows you to restore previously backed-up work in the event of a hardware failure, accidental erasure, or other data loss or damage.

1 Connect the backup device to your computer as shown in the manufacturer's instructions.

2 Click **Start**, point to **Programs**, **Accessories**, **System Tools**, then click **Backup**.

A dialog box that includes the Restore Wizard appears (see *Sample Backup Wizard* box above).

3 Click **Restore Wizard** and follow the instructions on the screen.

Running the computer on battery power

To ensure that the battery pack maintains its maximum capacity, operate the computer on battery power at least once a month until the battery pack is fully discharged. Refer to "Maximizing battery life" on page 136 for procedures. If the computer is continuously operated on AC power, either through an AC adapter or a docking station for an extended period, more than a month, the battery may fail to retain a charge. It may not function efficiently over the expected life of the battery and the Battery LED may not indicate a low-battery condition.

For more information on running your system on battery power, consult "Running the computer on battery power" on page 127.

Powering down the computer

When you power down the computer, you have three options to choose from:

❖ Shut down, which powers off the computer

❖ Hibernation, which saves the current operating mode to the hard disk and powers off the computer

❖ Standby, which saves the current operating mode to memory and enters a low power mode

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.

Shut down command

The Shut down command powers off the computer. When you start up again, the computer runs a self-test and loads the operating system. You must open any programs and files you want to use.

Factors to consider when choosing Shut down:

❖ No power is used while the computer is shut down. This is the most efficient mode if you will be away from your computer for an extended time.

❖ Restarting from 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.

Hibernation command

The Hibernation command powers off the computer, but it first saves the current mode 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 mode 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 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 mode 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.

❖ When starting up again, this choice uses less time and battery power than does Shut down or Hibernation.

❖ On restarting, the computer returns to the mode 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 Shut down

To power down the computer using the Shut down command, click **Start**, **Shut Down**, select **Shut down**, then click **OK**.

Sample Shut Down Windows dialog box

The computer turns itself off.

Shutting down more quickly

You can also shut down the computer by either pressing the power button or closing the display panel.

To use either of these methods, you first need to turn on the feature in Toshiba's Power Saver utility.

1   Open the **Start** menu, point to **Settings**, then click **Control Panel.**

2 In the Control Panel window, double-click the **Toshiba Power Saver** icon.

The Power Saver Properties dialog box appears.

3 In the Running on batteries area, choose the power mode of your choice, and click the **Details...** button. Select the **System Power Mode** tab.

A Properties dialog box appears.
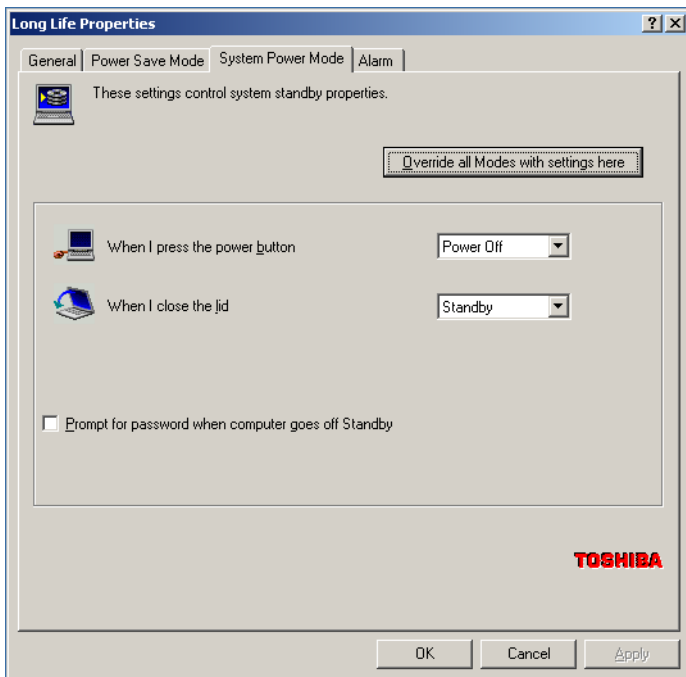
Sample Long Life Properties dialog box

4 Select **Shutdown** for the options you want.

❖ **When I press the power button**
Set this option to Shutdown so that the computer shuts down when you press the power button.

❖ **When I close the lid**
Set this option to Shutdown so that the computer shuts down when you close the display panel.

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

6 In the Set to range dialog box, 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.

7 Click **OK**.

8 Click **OK** again, then close the Control Panel.

NOTE   For more information about the Power Saver utility, see "Power Saver" on page 167.

Starting again after Shut down

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

If you shut down the computer by closing the display panel, you can start it again by opening the display panel.

Using Hibernation

Enabling the Hibernation Command

To use Hibernation, you must first enable the Hibernate option in the Toshiba Power Saver utility.

To access Power Saver Hibernate Properties:

1 Open the **Start** menu, point to **Settings**, then click **Control Panel**.

2 In the Control Panel window, double-click the **Toshiba Power Saver** icon.

To enable the Hibernation mode from the Toshiba Power Saver Properties dialog box:

1 Click the **Hibernate** tab**.**
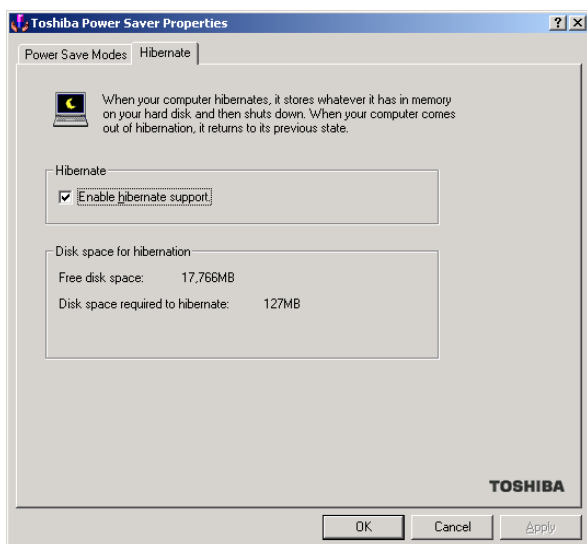
Sample Toshiba Power Saver Hibernate tab

2 Check the box associated with Enable hibernate support.

3   Click **OK** to close the dialog box and click **OK** to close
the Toshiba Power Saver utility. Then, close the Control
Panel.

To power down the computer using the Hibernation option,
click **Start**, **Shut Down**, select **Hibernate**, then click **OK**.

Sample Shut Down Windows dialog box

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 by
either pressing the power button or closing the display panel.

To use either of these methods, you first need to turn on the
feature in Toshiba's Power Saver utility.

1   Open the **Start** menu, point to **Settings**, then click
Control Panel.

2   In the Control Panel window, double-click the **Toshiba
Power Saver** icon.

3   In the Running on batteries area, choose the power mode
of your choice, and click the **Details...** button. Select the
System Power Mode tab.

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

❖ **When I press the power button**
Set this option to Hibernation so that the computer goes into Hibernation mode when you press the power button.

❖ **When I close the lid**
Set this option to Hibernation so that the computer goes into Hibernation mode when you close the display panel.

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

6 In the Set to range dialog box, 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.

7 Click **OK**.

8 Click **OK** again, then close the Control Panel.

NOTE For more information about the Power Saver utility, see

Starting again from Hibernation

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

If you activate Hibernation by closing the display panel, you can restart the computer by opening the display panel.

Using Standby

To power down the computer using the Standby command, click **Start**, **Shut Down**, select **Stand by**, then click **OK**.

Sample Shut Down Windows dialog box

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

Going into Standby mode more quickly

You can put the computer into Standby mode by either pressing the power button or closing the display panel. You can also specify an amount of time after which the computer automatically goes into Standby mode.

To use any of these methods, you first need to enable them in Toshiba's Power Saver utility.

1   Open the **Start** menu, point to **Settings**, then click **Control Panel.**

2   In the Control Panel window, double-click the **Toshiba Power Saver** icon.

    The Power Saver Properties dialog box appears.

3   In the Running on batteries area, choose the power mode of your choice, and click the **Details...** button. Select the **System Power Mode** tab.

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

❖ **When I press the power button**
Set this option to Standby so that the computer goes into Standby mode when you press the power button.

❖ **When I close the lid**
Set this option to Standby so that the computer goes into Standby mode when you close the display panel.

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

6 In the Set to range dialog box, 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.

7 Click **OK**.

8 Click **OK** again, then close the Control Panel.

NOTE   For more information about the Power Saver utility, see "Power Saver" on page 167.

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 it again by opening the display panel.

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.

Quickly changing your Shut down mode

You can quickly and easily change your Shut down mode by using a hot key.

To change your Shut down mode to Standby:

1 Press Fn and F3 simultaneously to display the Standby mode pop-up window.
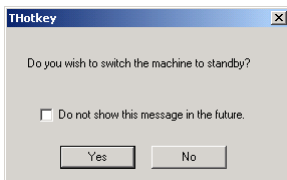
Sample Standby mode window

2 Click **Yes** to select Standby.

To change your Shut down mode to Hibernation:

1 Press Fn and F4 simultaneously to display the Hibernation mode pop-up window.
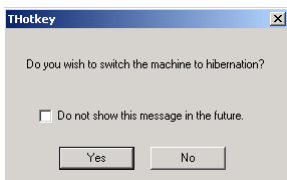
Sample Hibernation mode window

2   Click **Yes** to select Hibernation.

Toshiba Utilities

Your notebook computer includes several utilities designed to help you reconfigure your system and best meet your individual needs. These utilities are detailed in "Toshiba Utilities" on page 159. This chapter describes the Toshiba Hardware Setup utility.

Toshiba Hardware Setup

Toshiba Hardware Setup is the Toshiba configuration management tool available through the Windows operating system. It lets you view general system settings and specify the display, boot priority, keyboard, USB, PC Card, password, device configuration and printer options for your computer.

NOTE   To set the IRQ, I/O Address and DMA channel for communication ports, use the Window Device Manager.

To access Toshiba Hardware Setup, click **Start**, point to **Settings**, **Control Panel**, and double-click the **HW Setup** icon.

The Toshiba HW Setup dialog box appears.
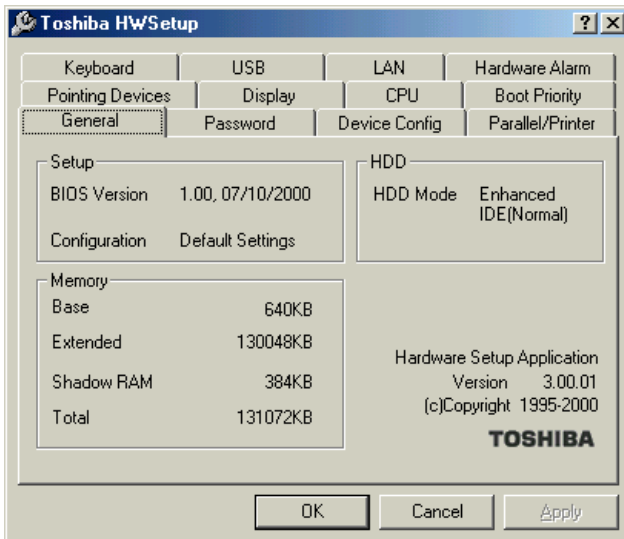
Sample Toshiba HW Setup

Toshiba HW Setup contains these tabs:

❖ General—Shows the BIOS version, memory configuration, and Hard Disk Drive (HDD) mode.

❖ Password—Allows you to set the user password and an owner string.

❖ Device Config—Shows the Device configuration options.

❖ Parallel/Printer—Allows you to configure the parallel port default settings.

❖ Display—Allows you to change various default settings for the built-in LCD display.

NOTE   When the computer restarts, it remembers the last configuration. If data does not appear on the display you are using after starting in Standby Mode, press Fn + F5.

❖ CPU—Allows you to set the CPU Frequency Mode.

❖ Boot Priority—Allows you to change the sequence in which your computer searches the various drives for the operating system.

❖ Keyboard—Allows you to enable/disable the Wake-On-Keyboard function.

❖ USB—Allows you to enable or disable USB Legacy Emulation.

❖ LAN — Allows you to enable or disable the Wake on LAN feature.

By changing any of the options that appear in the dialog boxes and clicking **Apply**, you can reconfigure that function. Any options that you change will become default settings when you restart your system.

Appendix B

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 or above 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.

Instant password security

Fn +   This hot key blanks the display.

For more information about the instant password, see "Using the instant (user-level) password" on page 178.

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Without a password

The Fn + F1 key combination turns off the display and activates the instant security. Using the AccuPoint II or pressing any key will activate a log in screen. See "Using the instant (user-level) password" on page 178 for more information.

With a password

The Fn + F1 key combination turns off the display and activates instant security.

1 Press Fn, then press F1. The screen goes blank.

2 Move the AccuPoint II or press a key.

   On the displayed screen, select a user:

3 For the selected user:

   ❖ If you have not registered a user password, press Enter.

   ❖ If you have registered a user password, type the password and press Enter.

   The desktop displays.

For the Windows® XP operating system, you type the user or supervisor password into the Windows® security screen dialog box.

To activate the password feature:

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

2 Double-click the **Display** icon.

3 Select the **Screen Saver** tab.

4 Click the **On resume, password protected** check box.

5 Click **OK**.

Power usage mode

Fn + ⌨[F2] This hot key displays the power usage pop-up window and cycles through the battery save modes.

The power usage modes in the operating system under battery power are:

Long Life, Normal, and High Power; DVD Playback, Presentation and Super Long Life

Sample power usage modes

The power usage mode in Windows XP under AC power is Full Power only.

The properties of each mode are set in the Toshiba Power Saver utility. For more information, see

Standby mode

Fn +   This hot key puts the computer into Stand By mode.

A message box is displayed by default to confirm that the computer is going into Stand By mode. This message box can be set so it doesn't display.
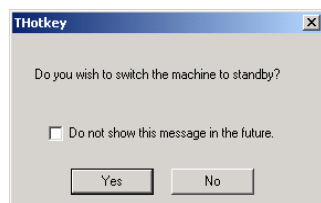
Sample Stand By confirmation box

For more information on Standby mode, see "Using Standby" on page 122.

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. The message box can be set so it doesn't display.
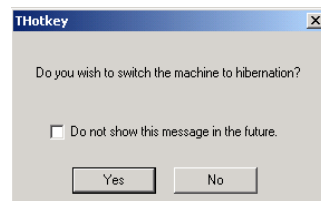
Sample Hibernation confirmation box

If Hibernation mode is disabled, this hot key will not respond. For more information on Hibernation mode, see "Using Hibernation" on page 120.

Display modes

Fn +   This hot key cycles through the power-on display options.

The display modes are:

❖ Built-in display only

❖ Built-in display and external device simultaneously

❖ External device only

❖ Built-in display and TV (or other external video device) simultaneously

NOTE This setting is available only if you have the controller option set to dual. The default setting is single.

*See *

Restarting the system returns the controller option to single.

❖ TV (or other external video device) 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 + [F6 ▾☼]   This hot key decreases the screen brightness.

Fn + [F7 ▴☼]   This hot key increases the screen brightness.

Wireless device enable/disable

Fn + [F8 📶]   This hot key enables the optional wireless devices installed in your computer.

The wireless modes are:

Bluetooth™ enabled—This enables the Bluetooth™ module (See "Using Bluetooth™" on page 154).

Wi-Fi enabled—This enables the Wi-Fi module.

Disabling or enabling the Touchpad/AccuPoint II

Fn + [F9 ▫/▫]   This hot key enables/disables the Dual Pointing Device.

To use the TouchPad, see "Disabling or enabling the Dual Pointing Device" on page 99.

Sample disable and enable Dual Pointing Device windows

Keyboard hot keys
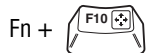
Fn + This hot key turns the cursor control overlay on and off.
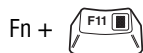
Fn + This hot key turns the numeric overlay on and off.
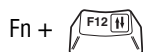
Fn + This hot key turns the scroll lock feature on and off.

Fn +
[Spacebar] This hot key toggles the resolution between XGA (1024 x 768) and SXGA+ (1400 x 1050).

Appendix C

Power Cable Connectors

The computer features a universal power supply you can use worldwide. This appendix shows the shapes of the typical AC power cable connectors for various parts of the world.

USA and Canada

UL approved
CSA approved

United Kingdom
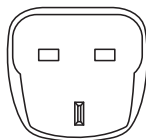
BS approved

Australia

AS approved

Europe

VDA approved
NEMKO approved

Appendix D

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 254.

❖ 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 255.

❖ 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 257.

❖   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 258

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 253.

❖ **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.
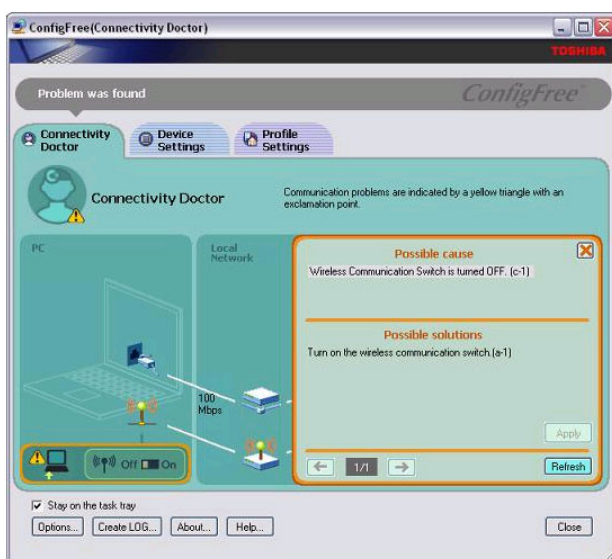
The Connectivity Doctor

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.
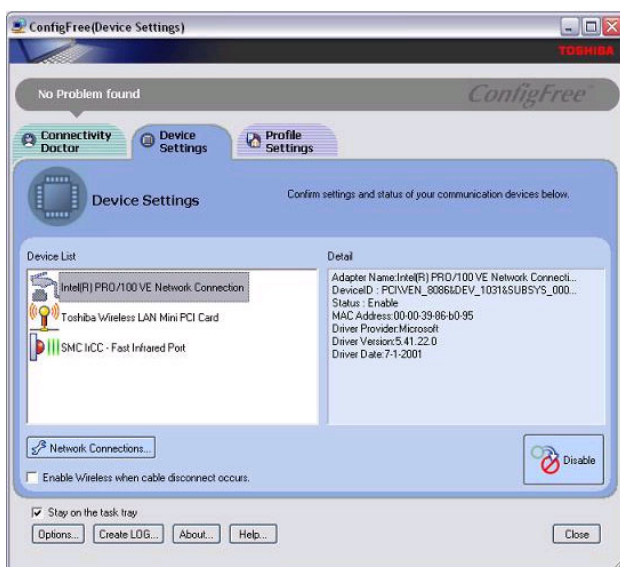
Viewing the device settings

❖ **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 259.

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.
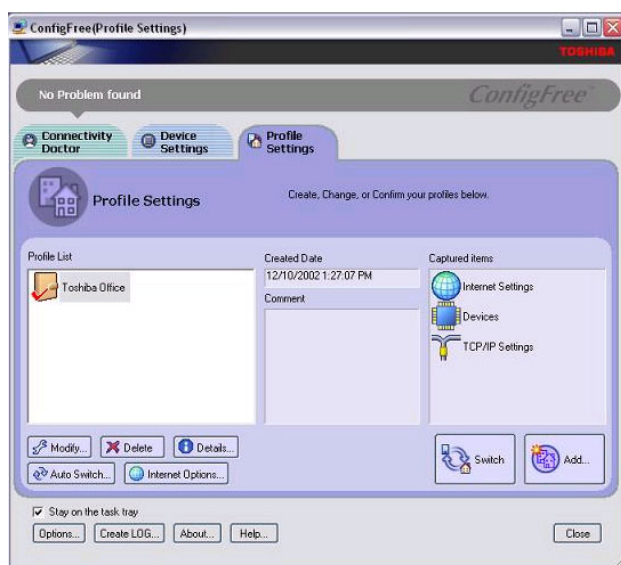
Viewing registered profiles

❖ **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 259.

❖ **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 5GHz (802.11a), Quick Connect will change this mode to 2.4GHz (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 260.

❖ **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 260.

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
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
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	universal 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. This term originates from the 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 the AccuPoint control button or mouse button without moving the AccuPoint or mouse. In Windows, this refers to the left mouse button or primary AccuPoint 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 another.

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 the user does 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 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 the AccuPoint control button or mouse button rapidly twice without moving the AccuPoint or mouse. In Windows, this refers to the primary AccuPoint control button or left 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 the AccuPoint control button or mouse button while moving the cursor to drag a selected object. In Windows, this refers to the primary AccuPoint control button or left 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.

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 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 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 AccuPoint.

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.*

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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.*

multi-function drive—A DVD drive that can read and write to CD and DVD media.

multimedia—A combination of two or more media, such as sound, animation, and video in a computer program or presentation.

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 Windows 2000 and Windows NT.

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 your computer, the parallel port provides a parallel communications interface between the computer and an appropriate device. Most modern printers are parallel. Compare *serial.*

password—A unique string of characters entered by a user to verify his or her 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 AccuPoint 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*.

RJ-11—A modular connector used on most U.S. telephone systems and direct-connect modems. The RJ-11 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. On your computer, the serial port provides a serial interface between the computer and an appropriate device. 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 MS-DOS, generally a drive letter followed by a "greater than" sign) indicating where users are to enter commands.

T

TFT display—See *active-matrix display.*

U **universal serial bus (USB)**—A serial bus that supports a data transfer rate of up to 12 Mbps (12 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. Wi-Fi 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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