TOSHIBA
Leading Innovation >>>

Portégé® Z10-A Series User's Guide

If you need assistance:

Technical support is available online at Toshiba's Web site at support.toshiba.com. At this Web site, you will find answers for many commonly asked technical questions plus many downloadable software drivers, BIOS updates, and other downloads.

For more information, see "If Something Goes Wrong" on page 105 in this guide.

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⚠ 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***.

(BC)   For the state of California only.

Model: Portégé® Z10-A Series

Recordable and/or ReWritable Drive(s) and Associated Software Warranty

The device system you purchased may include Recordable and/or ReWritable optical disc drive(s) and associated software, 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 or provided electronically. 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, INC. ("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, NETWORK SYSTEMS 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 device 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 device PRODUCTS IN ANY CRITICAL APPLICATIONS. IF YOU USE THE device PRODUCTS IN A CRITICAL APPLICATION, YOU, AND NOT TOSHIBA, ASSUME FULL RESPONSIBILITY FOR SUCH USE.**

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FCC Notice "Declaration of Conformity Information"

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

❖ Reorient or relocate the receiving antenna.

❖ Increase the separation between the equipment and receiver.

❖ Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

❖ Consult the dealer or an experienced radio/TV technician for help.

NOTE   Only Peripherals complying with the FCC Class B limits may be attached to this equipment. Operation with noncompliant peripherals or peripherals not recommended by Toshiba is likely to result in interference to radio and TV reception. Shielded cables must be used between the external devices and your device's ports. 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's Support Web site at support.toshiba.com.

Bluetooth® Wireless Technology Interoperability

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

❖ *Bluetooth* Specification as defined and approved by The *Bluetooth* Special Interest Group.

❖ Logo certification with *Bluetooth* wireless technology as defined by The *Bluetooth* Special Interest Group.

CAUTION *Bluetooth* modules enable wireless networks over two or more (up to a total of seven) TOSHIBA portable devices. Please contact TOSHIBA computer product support on Web site http://www.toshiba-europe.com/computers/tnt/ bluetooth.htm in Europe or support.toshiba.com in the United States for more information.

When you use a *Bluetooth* module close to 2.4 GHz Wireless LAN devices, *Bluetooth* transmissions might slow down or cause errors. If you detect certain interference while you use a *Bluetooth* device, always change the frequency, move your device 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 device. Please contact TOSHIBA computer product support on Web site http:// www.toshiba-europe.com/computers/tnt/bluetooth.htm in Europe or support.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 computer product support on Web site http://www.toshiba-europe.com/computers/tnt/ bluetooth.htm in Europe or support.toshiba.com in the United States for more information.

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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 much less than the electromagnetic energy emitted by wireless devices such as 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 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.

CAUTION   Exposure to Radio Frequency Radiation

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

Wireless Interoperability

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

❖ The IEEE 802.11 Standard on Wireless LANs (Revision A/B/G), as defined and approved by the Institute of Electrical and Electronics Engineers.

❖ The Wireless Fidelity (Wi-Fi®) certification as defined by the Wi-Fi Alliance. The "Wi-Fi CERTIFIED" logo is a certification mark of the Wi-Fi Alliance.

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

If you should experience any such problem, immediately turn off your *Bluetooth* or Wireless LAN device.

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

Please note that 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 applies to products that operate with an 802.11a radio device.

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Wireless LAN and Your Health

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

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

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

❖ Using the Wireless LAN equipment on board 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.

CAUTION Exposure to Radio Frequency Radiation

The radiated output power of Wireless LAN is far below the FCC radio frequency exposure limits. Nevertheless, Wireless LAN shall be used in such a manner that the potential for human contact during normal operation is minimized. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Canada – Industry Canada (IC)

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.

This device complies with RSS 210 of Industry Canada.

CAUTION The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site www.hc-sc.gc.ca/rpb. The RF device shall not be co-located with any other transmitter that has not been tested with this device.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

L' utilisation de ce dispositif est soumis aux deux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même s'il est susceptible de compromettre son fonctionnement.

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

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

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

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

Please note that 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.

Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

Veuillez noter que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

NOTE   The above caution applies to products that operate with an 802.11a radio device.

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:

EU Declaration of Conformity

TOSHIBA declares that this product conforms to the following Standards:

Supplementary Information: *The product complies with the requirements of the Low Voltage Directive 73/23/EEC, the EMC Directive 89/336/EEC and/or the R&TTE Directive 1999/5/EC.

This product is carrying the CE-Mark in accordance with the related European Directives. The party responsible for CE-Marking is TOSHIBA Europe GmbH, Hammfelddamm 8, 41460 Neuss, Germany.

The European Union WEEE (Waste from Electrical and Electronic Equipment) Directive Information

The European Union WEEE (Waste from Electrical and Electronic Equipment) Directive is intended to protect the quality of the environment and human health through the responsible use of natural resources and the adoption of waste management strategies that focus on recycling and reuse. This Directive requires producers of electrical and electronic products put on the market in European Union (EU) member countries after August 2005 to mark such products with a crossed-out wheeled bin with a black bar symbol. If the product's battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) defined in the Battery Directive (2006/66/EC), then the chemical symbols for lead (Pb), mercury (Hg) and/or cadmium (Cd) will appear below the crossed out wheeled bin symbol on the battery.

Pb, Hg, Cd
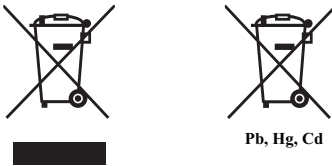
In the European Union, these symbols indicate that when the last end user wishes to discard this product, it must be sent to appropriate facilities for recovery and recycling. This Directive applies to EU member countries only and does not apply to end users in other countries such as the United States.

Although the initial emphasis is in Europe, Toshiba is already working with design engineers, suppliers, and other partners to determine appropriate worldwide product life cycle planning and end-of-life strategies for our products. Please contact your local government for applicable laws and regulations governing the disposal of this product. For information on how to trade-in or recycle your product, visit www.reuse.toshiba.com.

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

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

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

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

O: allowed   x: forbidden

❖ To remain in conformance with European spectrum usage laws for Wireless LAN operation, the above 2.4 GHz and 5 GHz channel limitations apply. The user should use the wireless LAN utility to check the current channel of operation. If operation is occurring outside of the allowable frequencies as listed above, the user must cease operating the Wireless LAN at that location and consult the local technical support staff responsible for the wireless network.

❖ The 5 GHz Turbo mode feature is not allowed for operation in any European Community country.

❖ This device must not be operated in ad-hoc mode using channels in the 5 GHz bands in the European Community. Ad-hoc mode provides a direct communication between two client devices without a Wireless LAN Access Point.

❖ This device must be used with Access Points that have employed and activated a radar detection feature required for European Community operation in the 5 GHz bands. This device will operate under the control of the Access Point in order to avoid operating on a channel occupied by any radar system in the area. The presence of nearby radar operation may result in temporary interruption of operation of this device.

The Access Point's radar detection feature will automatically restart operation on a channel free of radar. You may consult with the local technical support staff responsible for the wireless network to ensure the Access Point device(s) are properly configured for European Community operation.

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 aviation safety and interfere with legal communications. In the event interference is caused, the use of such electric machinery shall be immediately discontinued. Operation of such products can be resumed only when they are modified and can no longer cause interference.

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.

> The frequency bandwidth of this equipment may operate within the same range as industrial devices, scientific devices, medical devices, microwave ovens, licensed radio stations and non-licensed specified low-power radio stations for mobile object identification systems (RFID) used in factory product lines (Other Radio Stations).
>
> 1. Before using this equipment, ensure that it does not interfere with any of the equipment listed above.
>
> 2. If this equipment causes RF interference to other radio stations, promptly change the frequency being used, change the location of use, or turn off the source of emissions.
>
> 3. Contact TOSHIBA Direct PC if you have problems with interference caused by this product to Other Radio Stations.

2. Indication

The indication shown below appears on this equipment.

```
(1)  (2)  (3)
┌─────────────┐
│ 2.4DSOF4    │
│ ■■  ■■  ■■  │
└─────────────┘
      (4)
```
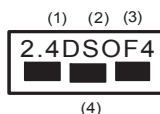
1 2.4: This equipment uses a frequency of 2.4 GHz.
2 DS: This equipment uses DS-SS modulation.
   OF: This equipment uses OFDM modulation.
3 The interference range of this equipment is less than 40m.
4 ■■ ■■ ■■ This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz.
   It is possible to avoid the band of mobile object identification systems.

The indication shown below appears on this equipment.

```
(1)  (2)  (3)
┌─────────────┐
│  2.4FH1     │
│ □  □  □     │
└─────────────┘
      (4)
```
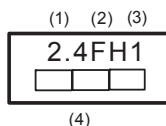
1 2.4: This equipment uses a frequency of 2.4 GHz.
2 FH: This equipment uses FH-SS modulation.
3 The interference range of this equipment is less than 10m.
4 This equipment uses a frequency bandwidth from 2,400 MHz to 2,483.5 MHz.

3. TOSHIBA Direct PC

Monday – Friday: 10:00 – 17:00

Toll Free Tel: 0120-15-1048

Direct Dial: 03-3457-4850

Fax: 03-3457-4868

VCCI Class B Information

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取扱説明書に従って正しい取り扱いをして下さい。

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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.

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

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This Product is licensed under the AVC, the VC-1 and the MPEG-4 Part 2 Visual patent portfolio licenses for the personal and non-commercial use of a consumer to (i) encode video in compliance with the above standards ("Video Standards") and/or (ii) decode AVC, VC-1 and MPEG-4 Part 2 Visual that was encoded by a consumer engaged in personal and non-commercial activity or was obtained from a video provider licensed to provide such video. None of the licenses extend to any other product regardless of whether such product is included with this product in a single article. No license is granted or shall be implied for any other use. Additional information may be obtained from MPEG LA, LLC. See www.mpegla.com.

Device Recycling Information

As part of a commitment to people and the future, Toshiba promotes the efficient use of resources by working to achieve our zero-waste-to-landfill goal at all our production sites. In addition to our existing waste reduction and recycling policies, Toshiba is strongly committed to reducing electronic waste. In order to ensure efficient use of resources and appropriate treatment of hazardous substances, in accordance with recycling regulations in each state, country, and territory, Toshiba wants to make it easy for customers to recycle products at the end of the life cycle. To learn more about Toshiba's sustainability commitment, visit us.toshiba.com/green.

Reuse, Donation, Recycling

Functional devices can be donated to a local charity or resold easily through a Toshiba-branded program.

Non working Toshiba devices can be mailed-back for free recycling.

For additional details, please visit us.toshiba.com/recycle.

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Introduction

Welcome to the world of powerful, portable, multimedia computing. With your Toshiba device, your work and entertainment can accompany you wherever you go.

Your computer is ENERGY STAR® qualified.

Toshiba is a partner in the Environmental Protection Agency's (EPA) ENERGY STAR® Program and has designed this computer to meet the latest ENERGY STAR® guidelines for energy efficiency. Your computer ships with the power management options preset to a configuration that will provide the most stable operating environment and optimum system performance for both AC power and battery modes.

To conserve energy, your computer ships with default power settings that will turn off the display or enter low-power Sleep mode after a specific amount of inactivity. We recommend that you leave this and other energy saving features active, so that your computer will operate at its maximum energy efficiency. You can wake the computer from Sleep mode by pressing the power button. See the "Mobile Computing" section of the Toshiba User's Guide for more information on using power management settings to conserve computer energy.

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When considering additions to your home office, purchase products that have earned the ENERGY STAR® for all your equipment needs, which can save you money, save energy, and help protect the climate.

Visit http://www.energystar.gov or http://www.energystar.gov/powermanagement for more information regarding the ENERGY STAR® Program.

NOTE   This device is compatible with European Union Directive 2002/95/EC, Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS), which restricts use of lead, cadmium, mercury, hexavalent chromium, PBB, and PBDE. Toshiba requires its device component suppliers to meet RoHS requirements and verifies its suppliers' commitment to meeting RoHS requirements by conducting component sampling inspections during the product design approval process.

NOTE   Certain Microsoft® software product(s) included with this device may use technological measures for copy protection. IN SUCH EVENT, YOU WILL NOT BE ABLE TO USE THE PRODUCT IF YOU DO NOT FULLY COMPLY WITH THE PRODUCT ACTIVATION PROCEDURES. Product activation procedures and Microsoft's privacy policy will be detailed during initial launch of the product, or upon certain reinstallations of the software product(s) or reconfigurations of the device, and may be completed by Internet or telephone (toll charges may apply).

Some software may differ from its retail version (if available), and may not include user manuals or all program functionality.

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

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

This guide

This guide introduces the device's features as well as some basic procedures needed to perform tasks in Windows 8. 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.

Safety icons

This manual contains safety instructions that must be observed 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 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 indicates technical information about the device.

HINT: This icon indicates helpful hints and tips.

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

Your device's features and specifications

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

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

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

(Sample Illustration) System icons

Documentation

Your device comes with the following documentation:

❖ An electronic version of the User's Guide (this document)

❖ A Quick Start document

❖ It may also include other documentation

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

Service options

Toshiba offers a full line of service programs to complement its standard limited warranty. Toshiba's standard limited warranty, extended warranty, and service upgrade terms and conditions are available at warranty.toshiba.com.

To stay current on the most recent software and hardware options for your device, and for other product information, be sure to regularly check the Toshiba Web site at support.toshiba.com.

If you have a problem or need to contact Toshiba, see "If Something Goes Wrong" on page 105.

Chapter 1

Getting Started

This chapter provides tips for using your device effectively, summarizes how to connect components, and explains what to do the first time you use your device.

Please read the safety instruction information on the Quick Start document (that shipped with your device) carefully and make sure you fully understand the instructions before you attempt to use your device in order to avoid potential hazards that could cause bodily injury, property damage, or damage the device.

Selecting a place to work

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

Setting up your device

TECHNICAL NOTE: You must complete all setup steps up to and including "Setting up your software" on page 33 before adding external or internal components to your device. These components include, but are not limited to, a mouse, keyboard, and printer.

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

To use external power or to charge the battery you must attach the AC adaptor. See "Connecting to a power source" on page 30.

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

Connecting to a power source

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

⚠ **WARNING**   Never pull on a power cord/cable to remove a plug from a socket. Always grasp the plug directly. Failure to follow this instruction may damage the cord/cable, and/or result in a fire or electric shock, possibly resulting in serious injury.

⚠ **WARNING**   Always confirm that the power plug (and extension cable plug if used) has been fully inserted into the socket, to ensure a secure electrical connection. Failure to do so may result in a fire or electric shock, possibly resulting in serious injury.

Be careful if you use a multiple connector. An overload on one socket could cause a fire or electric shock, possibly resulting in serious injury.

⚠ **WARNING**   Always use the TOSHIBA AC adaptor that was provided with your device, or use AC adaptors specified by TOSHIBA to avoid any risk of fire or other damage to the device. Use of an incompatible AC adaptor could cause fire or damage to the device possibly resulting in serious injury. TOSHIBA assumes no liability for any damage caused by use of an incompatible adaptor.
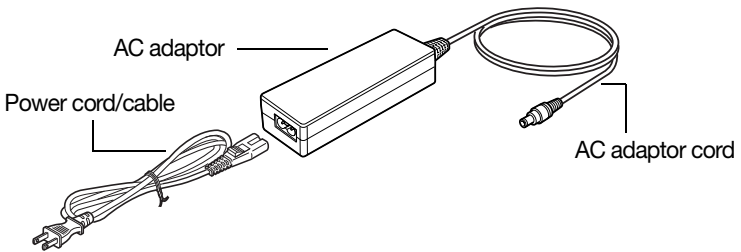
(Sample Illustration) Power cord/cable and AC adaptor

AC adaptor

Power cord/cable

AC adaptor cord

To connect AC power to the device:

1   Connect the power cord/cable to the AC adaptor.
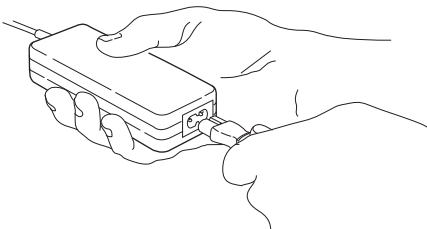
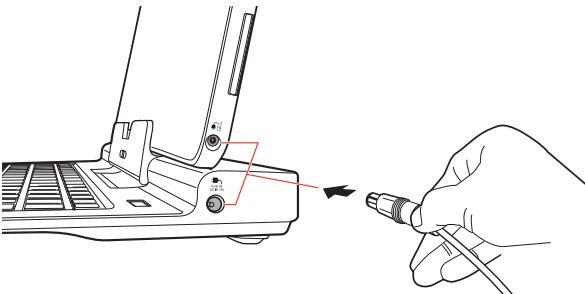*(Sample Illustration) Connecting the power cord/cable to the AC adaptor*

⚠ 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***.

2   Plug the AC adaptor cord into the DC-IN on the side of the device.

(Sample Illustration) Connecting the AC adaptor cord to the device

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

The AC power light on the indicator panel glows white.

⚠ WARNING Never attempt to connect or disconnect a power plug with wet hands. Failure to follow this instruction could result in an electric shock, possibly resulting in serious injury.

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

❖ Glows amber while the main battery is being charged (AC adaptor connected)

❖ Glows white when the main battery is fully charged

❖ Is unlit when the main battery has discharged, the battery is not charging, or the AC adaptor is not plugged into the device or AC outlet

❖ Flashes amber when the main battery charge is low and it is time to recharge the main battery or plug in the AC adaptor

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

Charging the main battery

NOTE   The device battery is not accessible by the user.

Before using the battery to power the device, you must charge the battery.

To charge the battery, leave the device plugged into an AC power source with the device turned off until the battery light glows white. After that, the battery will be completely charged and ready to power the device.

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

Using the device for the first time

The device is now ready for you to turn it on and begin using it, see "Exploring Your Device's Features" on page 80.

NOTE   When opening or closing the display panel, place one hand on the palm rest to hold the device in place and use the other hand to slowly open or close 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 device by the display panel.

Do not press or push on the display panel and be careful to remove any pens or other objects from the keyboard area before closing the display panel.

Small bright dots may appear on your screen display when you turn on your device. Your display contains an extremely large number of thin-film transistors (TFT) and is manufactured using high-precision technology. Any small bright dots that may appear on your display are an intrinsic characteristic of the TFT manufacturing technology. Over a period of time, and depending on the usage of the device, the brightness of the screen will deteriorate. This is also an intrinsic characteristic of the screen technology. When the device is operated on battery power, the screen will dim and you may not be able to increase the brightness of the screen while on battery power.

Initial setup

The Windows 8 Startup screen is the first screen displayed when you turn on your device for the first time. Follow the on-screen instructions on each screen in order to properly install the operating system and begin using your device.

Setting up your software

CAUTION   When you turn on the device for the first time, do not turn off the power again until the operating system has loaded completely.

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

The first time you turn on your device, the setup guides you through steps to set up your software. Follow the on-screen instructions.

Registering your device with Toshiba

Product registration is strongly recommended, and allows Toshiba to send you periodic updates, announcements, and special offers applicable to your Product. Product registration can be completed by one of three methods:

1   From the Toshiba Web site at register.toshiba.com: Type in the requested information and complete the registration process.

2   From the Start screen: Type **Registration** while in the Start screen, locate and complete the registration process.

3   From the Desktop: Move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear, click or touch the **Search** (🔍) charm and, in the Search field, type **Registration**. In the list that appears, click or touch **Registration** and complete the registration process.

Failure to complete Product Registration will not diminish your rights under the Toshiba Standard Limited Warranty.

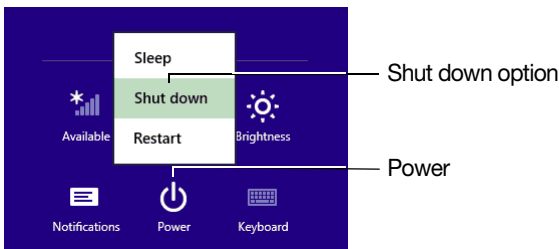**NOTE**   To register online, an Internet connection is required.

To Shut down your device

1   From the Start or Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge.

2   When the Windows® charms appear, click or touch the **Settings** (⚙) charm.

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

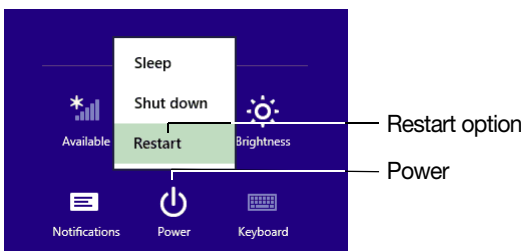3 In the lower right of the screen click or touch the **Power** (⏻) icon.

(Sample Image) Shut down

4 Highlight **Shut down** while holding the Shift key, and then click or touch the **Shut down** option.

The device closes all open applications, shuts down the operating system, and then turns off.

To Restart your device

1 From the Start or Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge.

2 When the Windows® charms appear, click or touch the **Settings** (⚙) charm.

3 In the lower right of the screen click or touch the **Power** (⏻) icon.

(Sample Image) Restart

4 Highlight **Restart**, and then click or touch the **Restart** option.

The device closes all open applications, and restarts the operating system.

To place your device in Sleep mode

1 From the Start or Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge.

2 When the Windows® charms appear, click or touch the **Settings** (▣) charm.

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

3 In the lower right of the screen click or touch the **Power** (⏻) icon.
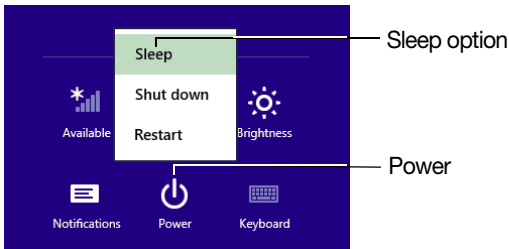
(Sample Image) Sleep

4 Highlight **Sleep**, and then click or touch the **Sleep** option.

Sleep mode saves the current state of the device to memory so that, when you restart the device, you can continue working from where you left off.

Adding optional external devices

NOTE   Before adding external devices, Toshiba recommends setting up your software. See "Setting up your software" on page 33.

After starting your device for the first time you may want to:

❖ Connect external devices (see "Connecting an external device" on page 52)

❖ Connect an external monitor (see "Using external display devices" on page 53)

Adding memory

Your computer comes with enough memory to run most of today's popular applications. Toshiba will not be responsible for any product damage, data loss, service or part replacement made necessary by improper installation of a memory module.

Recovering the Internal Storage Drive

Your device includes recovery utilities to allow you to recover your internal storage drive if necessary.

The following internal storage drive recovery options are available:

Recovery option	*Description*
Creating recovery media	This option allows you to create the recovery media you will use to restore your device.
	See "Creating recovery media" on page 38.
Restoring from recovery media	This option allows you to restore your system from the recovery media you created.
	See "Restoring from recovery media" on page 41.
Refresh your PC (with user's data)	This option allows you to refresh your system without losing your data.
	See "Refresh your PC (with user's data)" on page 42.
Reset your PC	This option allows you to remove all data from your system and reinstall Windows®.
	See "Reset your PC" on page 44.

A recovery image of your device is stored on the internal storage drive, and the image can be restored by running the recovery utilities directly from your internal storage drive as described in the sections below. However, it is strongly recommended that you create recovery media. If the recovery files on your internal storage drive become corrupted or are deleted, you can restore your system from your recovery media. Also, if your original internal storage drive fails, you can restore your system to a new internal storage drive from your recovery media. It is strongly recommended that you create recovery media before using your system for the first time. See "Creating recovery media" on page 38 and "Restoring from recovery media" on page 41.

NOTE	❖ During the recovery process your device must be connected to an external power source via the AC adaptor.
	❖ When you restore your system, only the operating system files, applications, and drivers originally shipped with the device are restored. Any files that you created are not restored during this process. Be sure to separately save the files you have created to external media using Windows® or another backup program. For more information, see "Backing up your work" on page 65.

Creating recovery media

NOTE	To purchase an optional external writable optical disc drive for creating recovery DVDs, please visit the Toshiba web site at accessories.toshiba.com

It is strongly recommended that you create recovery media. If the recovery files on your internal storage drive become corrupted or are deleted, you can restore your system from your recovery media. Also, if your original internal storage drive fails, you can restore your system to a new internal storage drive from your recovery media.

| NOTE	During the recovery process your device must be connected to an external power source via the AC adaptor.

NOTE	When you create recovery media, only the operating system files, applications, and drivers originally shipped with the device are backed up to the external media and can be restored from this media. Any files that you created are not backed up on the recovery media. You will need to separately back up the files you created; for more information, see "Backing up your work" on page 65.

When you create recovery media, the system will prompt you to insert several blank DVDs or connect one or more USB flash drives of a certain minimum capacity to your device. The amount of space required for storing the recovery files varies by device model. Follow the procedure below to determine how much space you will need for storing your system's recovery files.

To create recovery media:

1 From the Start screen begin typing Recovery Media Creator and click or touch your selection. If you are in the Desktop, move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear click or touch the **Search** (🔍) charm and, in the Search field, type **Recovery Media Creator**. In the list that appears, click or touch your selection.

The TOSHIBA Recovery Media Creator dialog box displays.
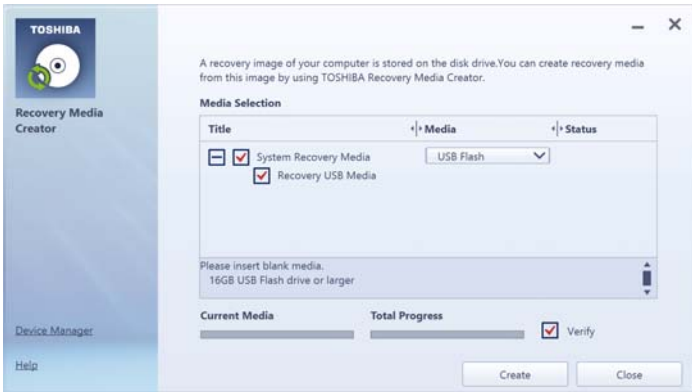
(Sample Image) TOSHIBA Recovery Media Creator dialog box

2 Select **DVD** or **USB Flash** from the drop-down list, depending on the type of external media you want to use.

3 Check the "Information" area of the dialog box to determine the number of DVDs you will need and/or the minimum amount of storage space required for copying your system's recovery files to USB flash drive(s).

4 Do one of the following:

❖ If you are copying files to DVD, insert a blank DVD into the optical disc drive.

❖ If you are copying files to a USB flash drive, connect a USB flash drive of the required minimum capacity (as specified in the TOSHIBA Recovery Media Creator utility) to your device.

CAUTION All information stored on your DVDs or USB flash drive(s) will be erased during the process of creating the recovery media. Be sure to save the information stored on your external media to another storage device before executing this procedure, or use blank media.

5 Click or touch the **Create** button in the TOSHIBA Recovery Media Creator utility dialog box.

6 Follow the on-screen prompts to complete the copy process.

NOTE   If you are copying the recovery files to DVDs, be sure to label each DVD in the set sequentially (for example, "1 of 3," "2 of 3," etc.), so that you will know in which order to insert the discs during recovery.

For information on using the Recovery media you have created with the preceding steps, see "Restoring from recovery media" on page 41.

Restoring from recovery media

CAUTION   The recovery process deletes information stored on the internal storage drive. Be sure to save your work to external media before executing the recovery (see "Backing up your work" on page 65).

NOTE   During the recovery process your device must be connected to an external power source via the AC adaptor.

If you have created recovery media for your system, you can restore your system from such media, if necessary. For example, if your original internal storage drive fails, you can restore your system to a new internal storage drive from your recovery media. For instructions on creating recovery media, see "Creating recovery media" on page 38.

NOTE   When you restore your system, only the operating system files, applications, and drivers originally shipped with the device are restored. Any files that you created are not restored during this process. Be sure to separately save the files you have created to external media using Windows® or another backup program. For more information, see "Backing up your work" on page 65.

To recover your internal storage drive from recovery media:

1   Make sure your device is turned off.

2   Do one of the following:

   ❖   If your recovery files are on DVDs, insert the first recovery DVD into your optical disc drive.

❖ If your recovery files are on a USB flash drive, connect the USB flash drive to your device.

3 Turn on your device while pressing the F12 key on your keyboard.

The Boot menu displays.

4 Using the arrow keys, select the **DVD** option or the **USB Flash** option, depending on which type of media you are using, and then press the ENTER key.

5 A warning screen appears, stating that when the recovery is executed all data on your internal storage drive will be deleted and rewritten. Click or touch **Yes** to continue.

6 Follow the on-screen instructions to complete the recovery process.

When the process is complete, a message displays indicating that the drive has been recovered.

7 Click or touch **Finish** to restart the device.

Refresh your PC (with user's data)

CAUTION Using "Refresh your PC" recovers your internal storage drive to factory default state and attempts to save your data. Toshiba does not guarantee successful data back-up. Please make a complete back up of your data to external media before executing the recovery. For more information, see "Backing up your work" on page 65.

NOTE During the recovery process your device must be connected to an external power source via the AC adaptor.

You can recover the factory default software (refresh your PC), while the device will attempt to back up your data using the utilities stored on your device's internal storage drive:

TECHNICAL NOTE: Your data will be copied into the backup folder. All of the data will be moved to this folder during the recovery process, however the current directory structure will be retained.

1 From the Start or Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge.

2 When the Windows® charms appear click or touch the **Settings** (⚙) charm.

3 Click or touch **Change PC Settings**.

The PC settings window appears.
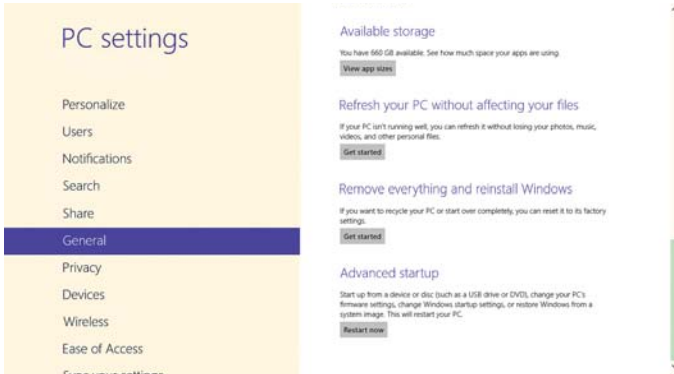
(Sample Image) PC settings screen

4 Click or touch **General**.

5 Scroll down to "Refresh your PC without affecting your files," and click or touch **Get Started**.

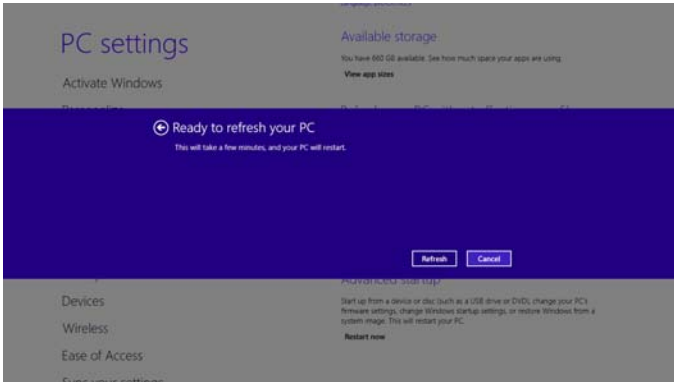The "Refresh your PC" screen appears.
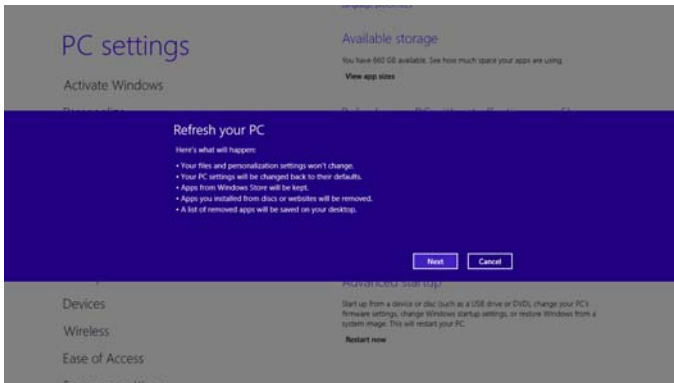
(Sample Image) Refresh your PC screen

CAUTION Toshiba does not guarantee successful data back up. Be sure to save your work to external media before executing the recovery (see "Backing up your work" on page 65).

6   Click or touch the **Next** button to begin.

The "Ready to refresh your PC" screen appears.

(Sample Image) Ready to refresh your PC screen

You will be prompted to refresh your system.

7   Click or touch the **Refresh** button.

8   Your system will restart.

The "Refreshing your PC" window appears. When the process is complete your system will reboot your Windows® operating system.
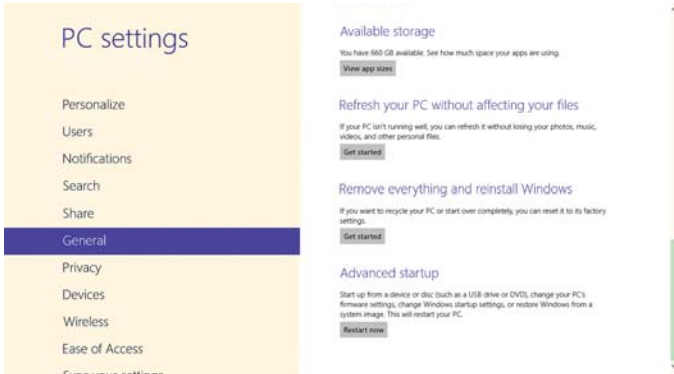
Reset your PC

CAUTION The recovery process deletes information stored on the internal storage drive. Be sure to save your work to external media before executing the recovery (see "Backing up your work" on page 65).

NOTE During the recovery process your device be must connected to an external power source via the AC adaptor.

1   From the Start or Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge.

2   When the Windows® charms appear click or touch the **Settings** (⚙) charm.

3   Click or touch **Change PC Settings**.

The PC settings window appears.

(Sample Image) PC settings screen
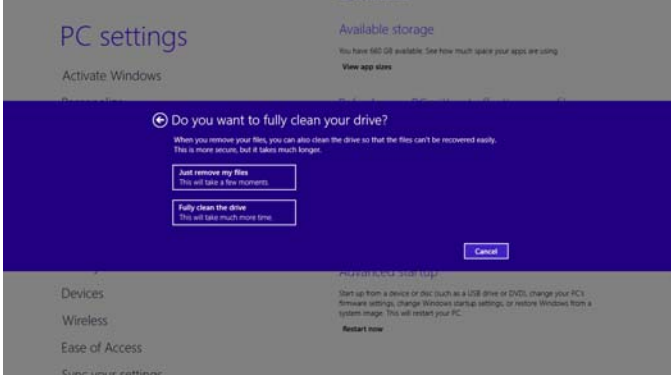
4   Click or touch **General**.

5   Scroll down to "Remove everything and reinstall Windows," and click or touch **Get Started**.

The "Reset your PC" screen appears.
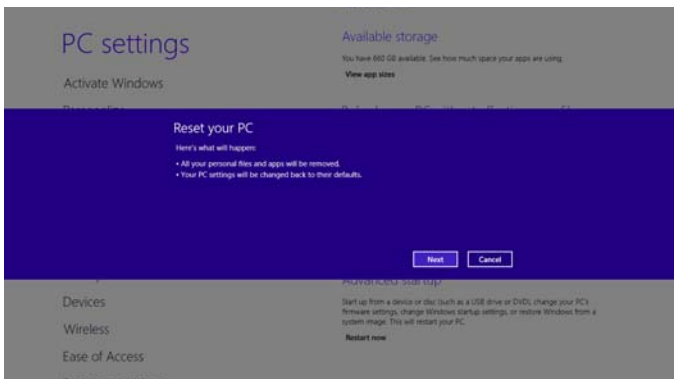
(Sample Image) Reset your PC screen

6 Click or touch the **Next** button.

The "Do you want to fully clean your drive?" screen appears.

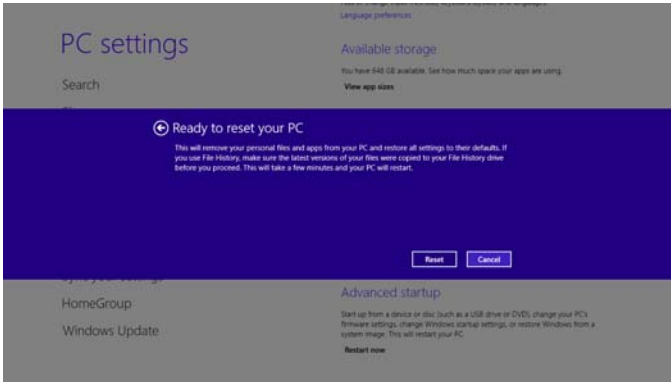(Sample Image) Do you want to fully clean your drive screen

7 Select one of the following options:

❖ **Just remove my files**
❖ **Fully clean the drive**

The "Ready to reset your PC" screen appears.

(Sample Image) Ready to reset your PC screen

8 Click or touch the **Reset** button.

The "Resetting your PC" window appears. When the process is complete your system will reboot your Windows® operating system.

NOTE   Selecting the "Fully clean the drive" option may take several hours.

Installing drivers and applications

The TOSHIBA Application Installer allows you to reinstall the drivers and applications that were originally bundled with your device.

To reinstall drivers and applications:

1   From the Start screen begin typing **TOSHIBA Application Installer** and click or touch your selection. If you are in the Desktop, move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear click or touch the **Search** (🔍) charm and, in the Search field, type **TOSHIBA Application Installer**. In the list that appears, click or touch your selection.
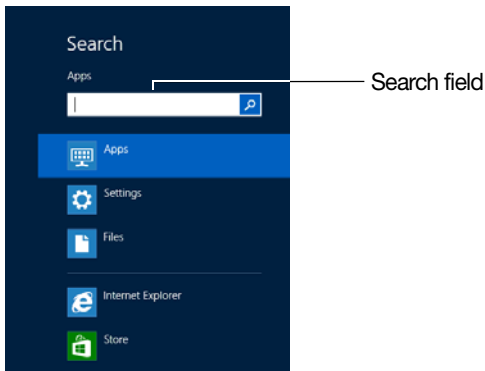
(Sample Image) Installing drivers and applications

2   Click or touch **Next**.

3   Click or touch the item you want to install.

4   Click or touch **Install**.

5   Follow the on-screen prompts to complete the installation process, see "TOSHIBA Application Installer" on page 103.

Using the TOSHIBA Dual Pointing Device

AccuPoint® II pointing device

AccuPoint® II primary button

Touch pad

Touch pad primary button

AccuPoint® II secondary button

Touch pad secondary button
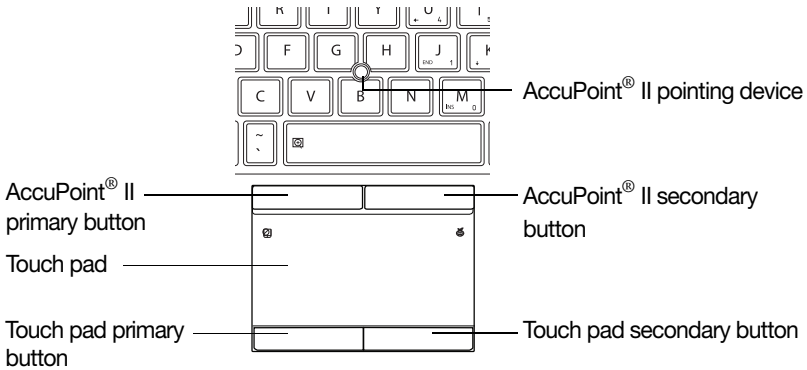
(Sample Illustration) TOSHIBA Dual Pointing Device buttons

AccuPoint® II pointing device—Moves the cursor and selects 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.

AccuPoint® II 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.

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

For more information, see "Disabling or enabling the Dual Point" on page 132

Using the touch pad
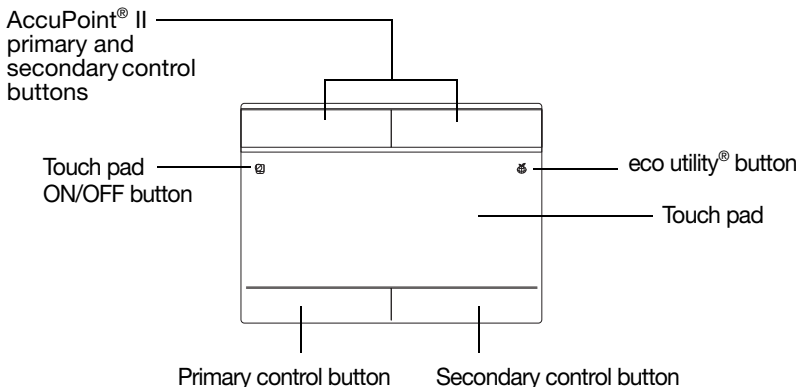
NOTE	Some of the touch pad operations described in this section are only supported in certain applications, and only on certain models.

NOTE	The touch pad driver is pre-installed on your device. If this driver is removed, the touch pad and touch pad buttons will not work. You will need to reinstall the touch pad driver using the TOSHIBA Application Installer. For more information, see "TOSHIBA Application Installer" on page 103.

NOTE	The touch pad will not work in DOS, BIOS setup, or the recovery menu.

You can use the touch pad (the small, touch-sensitive area in front of the keyboard) and the adjacent control buttons to:
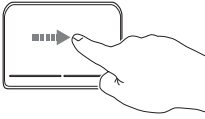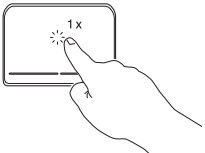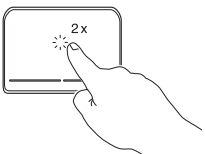
❖ Move the pointer on the screen

❖ Select an item on the screen

❖ Open or activate an item on the screen

❖ Scroll through a document or information

❖ Zoom in for a close-up view

❖ Zoom out to see more information at once

AccuPoint® II primary and secondary control buttons

Touch pad ON/OFF button

eco utility® button

Touch pad

Primary control button   Secondary control button
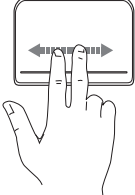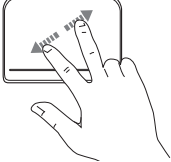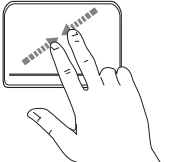
(Sample Illustration) The touch pad and associated control buttons

Refer to the table below for specific instructions on performing each operation.

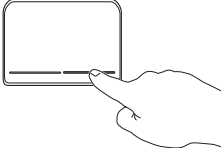| *To:*	*Do the following:*	*Example:*
Move the on-screen pointer	Slide your finger across the touch pad in the direction you want to move the pointer. To move the pointer a longer distance, slide your finger several times across the touch pad in the preferred direction.	*(Sample Illustration) Pointer moves to the right*
Select an item	1 Move the pointer to the item you want to select. 2 Do one of the following: ❖ Tap the touch pad once OR ❖ Press and release the primary (left-hand) control button	*(Sample Illustration) Tap once to select*
Open or activate an item	1 Move the pointer to the item you want to open/activate. 2 Do one of the following: ❖ Tap the touch pad twice in rapid succession OR ❖ Press and release the primary control button twice in rapid succession	*(Sample Illustration) Tap twice to open*

To:	Do the following:	Example:
Right-click an item	1 Move the pointer to the item you want to right-click. 2 Press and release the secondary control button. This feature varies by program. Check your program documentation for specific instructions on right-clicking.	*(Sample Illustration) Click the secondary (right-hand) control button*
Scroll vertically	Slide two fingers along the right edge of the touch pad in the direction you want to scroll. Repeat to scroll a longer distance.	*(Sample Illustration) Vertical scrolling active area*
Scroll horizontally	Slide two fingers along the bottom edge of the touch pad in the direction you want to scroll. Repeat to scroll a longer distance.	*(Sample Illustration) Horizontal scrolling active area*
Zoom in/out	To zoom in: ❖ Place two fingers close together on the touch pad and then slide them apart. To zoom out: ❖ Place two fingers slightly apart on the touch pad and then slide them together.	*(Sample Illustration) Zooming in* *(Sample Illustration) Zooming out*

Adjusting touch pad settings

While you are typing, the on-screen pointer may seem to move or jump around "by itself" to random locations on the screen. The on-screen pointer may also seem to automatically select text, click buttons, and activate other user interface elements. For help with these problems, try one or more of the following:

❖ Try adjusting your typing technique to avoid accidental contact with the touch pad. You may be inadvertently brushing the touch pad with the heel of your hand as you type. Also, accidental light touches or taps on the touch pad may select an item or text on the screen, and potentially the item or text may be replaced by the next character you type.

❖ Temporarily disable the touch pad, so that it does not respond to touch or button presses while you type. See "Disabling or enabling the touch pad" on page 52.

❖ Adjust the sensitivity of the touch pad, so that it is less responsive to accidental light taps and lighter finger pressure.

NOTE   Touch pad setting options vary by device model. The touch pad settings are accessible through the Mouse Properties option of the Windows Control Panel. For more information, please visit support.toshiba.com.

Disabling or enabling the touch pad

The touch pad is enabled by default. To enable/disable the touch pad, press F5. For more information, see "Disabling or enabling the Dual Point" on page 132.

Connecting an external device

NOTE   Depending on your system, some models may include USB 3.0 port(s). To distinguish these ports, please look for the blue inset within the USB 3.0 port (if available).

You can easily attach an external device to your device.

To do this:

1   Read the directions that came with the external device to see if you first need to install new software.

2   Connect the external device's video or USB cable to the port on your device and to the external device.

3   Connect the external device's power cable to a live electrical outlet (if applicable).

4   Turn on the external device (if applicable).

Your device may automatically detect the external device.

Using external display devices

Your device comes with a built-in display, but you can also connect the following types of external display devices to the video ports described below:

❖   An HDMI™-compatible television or external display device via the HDMI™ Out port

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

RGB (monitor) port on keyboard dock

HDMI™ Out port on keyboard dock

Micro HDMI™ port on display panel
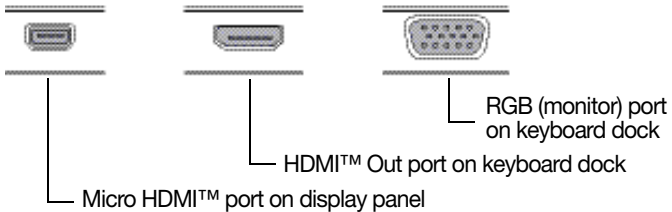
(Sample Illustration) Video ports

Selecting video cables

To connect a device to the HDMI™ or Micro HDMI™ ports, you must purchase the appropriate cable.

Connecting an HDMI™-compatible television or display device

To connect an HDMI™-compatible television or display device:

❖   Connect one end of the cable (not included with your device) to the HDMI™/Micro HDMI™ Out port on the side of your device, and then connect the other end of

the cable to your television or display device. Refer to the manual that came with the television or display device for more information.

Your device should automatically detect the external display device.

Connecting an external monitor or projector

You can easily attach an external monitor or projector to your device if you need a larger screen.

To do this:

1 Read the directions that came with the monitor to see if you first need to install new software.

2 Connect the monitor's video cable to the RGB (monitor) or HDMI™ port on the back of the keyboard dock.

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

4 Turn on the external device.

Your device will automatically detect the external display device.

NOTE You can change the display settings by pressing the (⊞) + P keys, or by configuring the display properties settings.

Directing the display output when your device is attached to the keyboard dock

Once you have connected an external display device, you can choose to use the internal display only, the external device only, or both simultaneously.

NOTE Some modes are only available with the appropriate device attached and turned on.

The quickest way to change the display output settings is to use the (⊞) + P keys:

Press the (⊞) + P keys repeatedly until the setting you want takes effect. Briefly pause each time you press the (⊞) + P keys to allow time for the display to change.

This cycles through the settings in the following order (the last two options are available if an external monitor is connected):

❖ PC screen only

❖ Duplicate

❖ Extend

❖ Second screen only
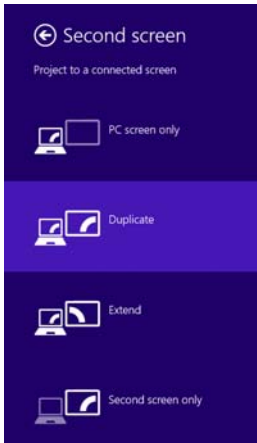
(Sample Image) Display options window

NOTE The (⊞) + P keys navigate through the options without activating a selection. Press ENTER to activate a selection.

NOTE You may also use Fn+F5, and then press ENTER to activate a selection.

Directing the display output when your device is in tablet mode

You can select the display output using the following steps:

1 From the Start or Desktop screen, move your pointer over the upper or lower right corner of the screen or swipe in from the right edge.

2 When the Windows® charms appear, select **Devices (◲)**.

3   Select **Second screen** (⬛).
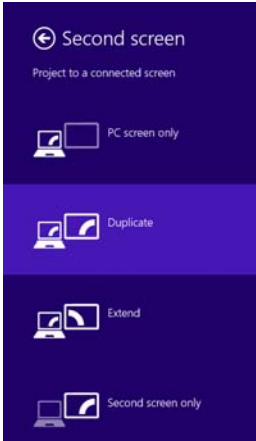
(Sample Image) Display options window

4   Select the desired display setting.

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.

Customizing your device's settings

There are several ways in which you can customize your device to suit your particular requirements. You can go into your device settings to make adjustments to your device to suit your needs.

From the Start or Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear, click or touch the **Settings** (⚙) charm, and then click or touch **Change PC Settings**. Then choose a category you wish to change. Refer to your operating system documentation or Help and Support for details.

You may also wish to customize your power usage settings. For more information, see "Power Plans" on page 75. There are additional custom settings you can choose. See "Utilities" on page 91.

Caring for your device

This section gives tips on cleaning and moving your device. For information about taking care of your device's battery, see "Taking care of your battery" on page 77.

| NOTE | Please handle your device carefully to avoid scratching or damaging the surface. |

Cleaning the device

| CAUTION | Keep liquids, including cleaning fluid, out of the device's keyboard, speaker, and other openings. Never spray cleaner directly onto the device and/or display. Never use harsh or caustic chemical products to clean the device. |

To keep your device clean, gently wipe the display panel and exterior case with a lightly dampened cloth.

Moving the device

Before moving your device, even across the room, make sure all drive activity has ended (the internal storage drive and optical disc drive indicator lights stop glowing) and all external peripheral cables are disconnected.

| CAUTION | Do not pick up the device by its display panel or by the back. Doing so could damage the system. |

Chapter 2

Learning the Basics

This chapter gives some computing tips and provides important information about basic features.

Computing tips

❖ Save your work frequently.

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

See for further information.

HINT: Some programs have an automatic save feature that can be activated. This feature saves your file to the internal storage drive at preset intervals. See your software documentation for details.

❖ Back up your files to external media on a regular basis. Label the backup copies clearly and store them in a safe place.

It is easy to put off backing up because it takes time. However, if your internal storage drive suddenly fails, you will lose all the data on it unless you have a separate backup copy. For more information, see "Data and system configuration backup in the Windows® operating system" on page 123.

❖ Use Error-checking and Disk Defragmenter regularly to check and optimize disk space and improve performance.

❖ Scan all new files for viruses.

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

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

❖ Do not turn off the device if a drive indicator light indicates a drive is active.

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

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

Attaching and detaching the keyboard

To attach the keyboard:

❖ Align the guides on the keyboard bracket to the guide points at the bottom edge of the tablet and gently press the tablet straight down into the bracket until it clicks in place. When the keyboard is properly attached, the Windows® button is at the center of the bracket.

Release button
Eject button
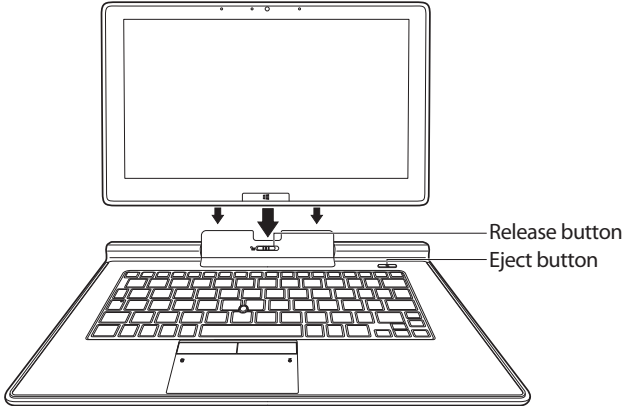
(Sample Image) Attaching the keyboard

To detach the keyboard:

1 Press the **Eject** button located at the upper-right of the keyboard.

2 When the Eject keyboard icon appears in the task bar, slide the release button on the bracket to the left while gently pulling the tablet straight out of the bracket. Be sure to firmly hold down the keyboard while pulling the tablet from the bracket.

NOTE   When you rotate the device from portrait to landscape (or vice versa), the screen orientation automatically changes according to the rotation angle. To lock the screen so that it does not rotate automatically, orient the device in the desired screen rotation (portrait or landscape) and press the Rotation lock button.

NOTE   To locate the Rotation lock button please refer to the Quick Start document.

Using the keyboard

Your device's keyboard dock contains character keys, control keys, function keys, and special Windows® keys.
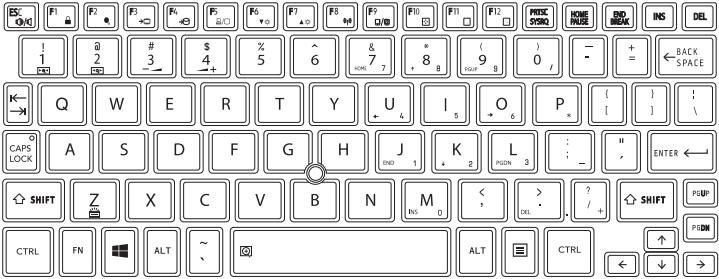
(Sample Illustration) Keyboard

Function keys

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

(Sample Illustration) 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 device. For example, F9 turns the touch pad ON/OFF. For more information, see "TOSHIBA Function Keys" on page 129.

Special Windows® keys

Windows® key

Application key
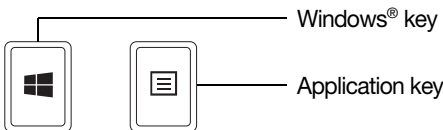
(Sample Illustration) Special Windows® keys

Your device's keyboard has one key and one button that have special functions in Windows®:

❖ **Windows® key**—Toggles between the Desktop screen and the last app opened on the Start screen. For more information refer to Help & Support, or see "Exploring the Start screen" on page 80

❖ **Application key**—Has a similar function as the secondary mouse button

Backlit keyboard dock

Your keyboard may have a backlight illumination feature. If the keyboard backlight setting is set to Auto, the backlight turns on when you type on the keyboard and turns off after a certain interval when you stop typing. You can modify the time-out interval or change the keyboard backlight setting to always on or always off.

Touch screen

NOTE   Your device may come with a digitizer feature, enabling direct interaction with display, apps, and programs.

Your device comes with a touch screen, enabling direct interaction with displayed apps and programs through simple or multi-touch gestures.

Touch screen navigation

Use your finger to manipulate the on-screen icons, buttons, menu items, and other items on the touch screen. You can also change the screen's orientation.

⚠ CAUTION   The screen is made of glass so avoid contact with sharp, rough, or abrasive objects or substances as screen may break or scratch if not handled properly. If you see a crack in the glass, discontinue use of the device to avoid injury.

Touch—Touch to activate items displayed on the screen, such as app and setting icons or on-screen buttons. Touch to type using the keyboard.

Touch & hold—Touch and hold an item on the screen by touching and holding the item in place until an action occurs.
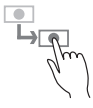
Drag—Touch and hold an item for a moment and then, without lifting your finger, move the item until you reach the target position. For example, drag items on any app screen to reposition them.

Swipe or slide—To swipe or slide, quickly move your finger across the surface of the screen without pausing. For example, swipe your finger to the left from the right edge of the screen to display the Windows® charms.

Double-tap—Tap quickly twice to zoom in. For example, double-tap a section of a Web page to zoom in on that section. Double-tap again to zoom out.

Pinch—In some apps (such as Maps and Games), you can zoom in and out by placing two fingers on the screen at once and pinching them together (to zoom out) or spreading them apart (to zoom in).

Rotate—Place two or more fingers on an item and rotate your hand. The item rotates in the direction you turn your hand. (Not functional in all apps).

Mouse properties

NOTE   These mouse properties only apply to the touch pad and touch pad buttons.

Mouse properties allow you to change your pointing device or mouse settings.

To access Mouse properties:

1   Move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear click or touch the **Search** (🔎) charm, click or touch **Settings** and, in the Search field, type **Mouse**. In the list that appears, click or touch your selection.

The Mouse Properties screen appears.

You may change some of the settings in the following categories:

❖ Buttons
❖ Pointers

❖   Pointer Options

❖   Wheel

❖   Hardware

❖   Device Settings

You may see additional categories depending on your particular pointing device.

2   Adjust the settings as desired, and then click or touch **OK**.

Starting an app

To Start an app on the Start screen, move your pointer over the appropriate tile and click or touch to open.

To Start an app from the Desktop, move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms slide out from the right, click or touch the **Start** (⊞) charm.

Starting an app from the Start screen

To Start an app on the Start screen, move your pointer over the appropriate tile and click or touch to open, or swipe your finger to the left from the right edge of the screen.

To Start an app using the Search function, move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms slide out from the right, cl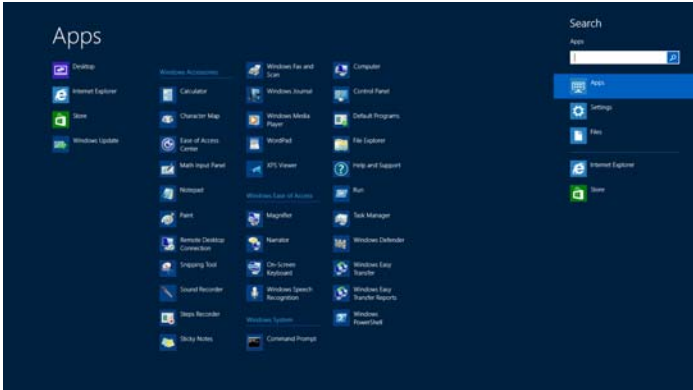ick or touch the **Search** (🔍) charm. The apps screen appears with the available system apps to choose from or you can enter your search in the search field.

Below is an example using the Search field to start an app:

1 Move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear click or touch the **Search** (🔍) charm.

(Sample Image) Searching for apps

2 Start typing the app's name in the Search field.

As you type, all matching files and apps are displayed.

3 Click or touch the app you wish to open.

Saving your work

Before you turn off the device using the Shut down command, save your work on the internal storage drive, external media, flash media, or optical disc. This is one of the most important rules of computing.

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

Backing up your work

Back up all the files you create in case something happens to your device. You can back up your files to different types of media such as CDs, DVDs, external storage media, or to a network, if available.

To back up several files at one time, use the Microsoft® Windows® file recovery program preinstalled on the device's internal storage drive. Also see "Backing up your data or your entire device with the Windows® operating system" on page 125.

HINT: Backing up all the files on your internal storage drive may take a considerable amount of time and multiple CDs/DVDs. You may prefer to use a high-capacity file recovery system, such as an external hard drive.

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 127.

Chapter 3

Mobile Computing

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

Toshiba's energy-saver design

Your device enters a low-power suspension 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 preset by Toshiba. We recommend you leave these features active, allowing your device to operate at its maximum energy efficiency, so that you can use it for longer periods while traveling.

Running the device on battery power

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

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Battery Notice

Battery life rating is for comparison purposes only, and does not indicate the battery life that will be obtained by any individual user. Actual battery life may vary considerably from specifications depending on product model, configuration, applications, power management settings and features utilized, as well as the natural performance variations produced by the design of individual components. The battery life rating is only achieved on the select models and configurations tested by Toshiba under the specific test settings at the time of publication and is not an estimate of a system's battery life under any conditions other than the specific test settings.

Recharge time varies depending on usage. Battery may not charge while the device is consuming full power. After a period of time, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is normal for all batteries.

To ensure that the battery maintains its maximum capacity, operate the device on battery power at least once a month. The Lithium-Ion battery has no memory effect so it is not necessary to let the battery fully discharge each time. However, for better accuracy of the battery meter, it is helpful to fully discharge the battery periodically. Please see "Maintaining your battery" on page 78 for procedures. If the device is continuously operated on AC power, either through an AC adaptor or a port replicator (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 may cause the battery meter to be inaccurate.

NOTE For best performance when playing streaming media (especially streaming video), either power the device from its AC adaptor, or set up a power plan that keeps the device running at full performance even when powered from its battery. For more information about Windows® power plans, see "Power Plans" on page 75.

The device 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 device is turned off.

TECHNICAL NOTE: Depending on your system, the RTC battery may only charge while the device is turned on.

Power management

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

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

Charging batteries

The battery needs to be charged before you can use it to power the device.

CAUTION Always use the AC adaptor specified by Toshiba. You can order a Toshiba AC adaptor from Toshiba's Web site at accessories.toshiba.com.

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

Charging the main battery

The battery needs to be charged before you can use it to power the device.

To charge the main battery, plug the device into a live electrical outlet. The battery charges whether the device is on or off.

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

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 (50 to 80 degrees Fahrenheit, 10 to 26 degrees Celsius).

❖ The battery is almost completely discharged.

Leave the power connected and the battery should begin charging after a few minutes.

HINT: Once the battery is fully charged, we recommend that you periodically operate your device on battery power until the battery discharges completely.

CAUTION Please make a complete back up of your data to external media before discharging the battery. For more information, see "Backing up your work" on page 65

Charging the RTC battery

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

The RTC battery may have become completely discharged while your device was shipped, resulting in a CMOS error message during startup. The error message may vary by device model.

NOTE   Depending on your system, the RTC battery may only charge while the device is turned on.

To recharge the RTC battery, plug the device into a live electrical outlet and leave the device powered on for 24 hours.

NOTE   It is seldom necessary to charge the RTC battery because it charges while the device is on. If the RTC battery is low, the real-time clock and calendar may display the incorrect time and date or stop working.

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

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

Monitoring battery power

The device's main battery light gives you an indication of the main battery's current charge.

❖   Glows amber while the main battery is being charged (AC adaptor connected)

❖   Glows white when the main battery is fully charged

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

❖   Flashes amber when the main battery charge is low and it is time to recharge the main battery or plug in the AC adaptor

NOTE   If the AC power light flashes amber during charging, either a battery pack is malfunctioning, or it is not receiving correct input from the AC power supply.

HINT: Be careful not to confuse the battery light (▭), the power light (⏻), and the power button light.

When the power light or power button light flashes amber, it indicates that the system is suspended (using the Windows® operating system Sleep command).

ON/OFF button/light

AC power light/Battery light

System indicator lights
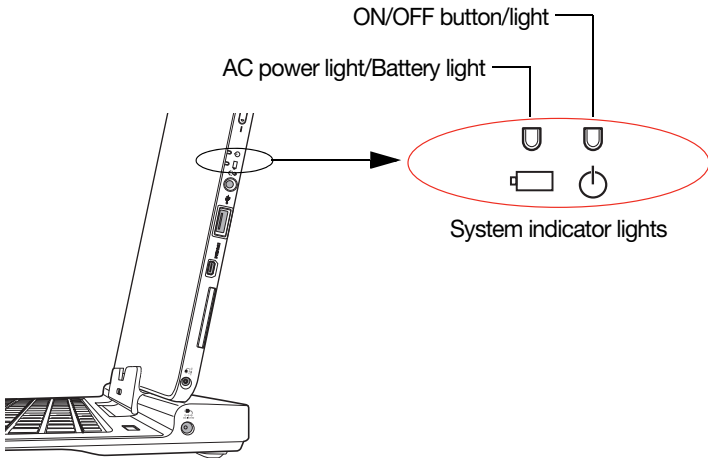
(Sample Illustration) Power and battery light locations

Determining remaining battery power

NOTE   Wait a few moments after turning on the device before trying to monitor the remaining battery power. The device needs this time to check the battery's remaining capacity and perform its calculations.

Move the pointer over the power icon in the notification area, see "Finding your way around the desktop" on page 82 for more information on the notification area. A pop-up message displays the remaining battery power as a percentage.

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

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

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

What to do when the main battery runs low

When the main battery runs low you can:

❖ Plug the device into an external power source and recharge the main battery

❖ Save your work and turn off the device

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

Setting battery notifications

You can set two notifications. Each notification can be set to alert you when a specified percentage of remaining battery power has been reached. You can also set the device to enter Sleep mode or Hibernation mode or to completely shut down when the notification goes off.

To change the default notification settings:

1 While on the desktop, click or touch the **Battery** (🔋) icon in the notification area.

2 Click or touch **More power options**.

The Power Options window appears.

3 Click or touch **Change plan settings** under the power plan to be customized.

The Edit Plan Settings window appears.

4 Click or touch **Change advanced power settings**.

The Advanced settings tab of the Power Options window appears.

5   Double-click or touch **Battery** to display the battery options.
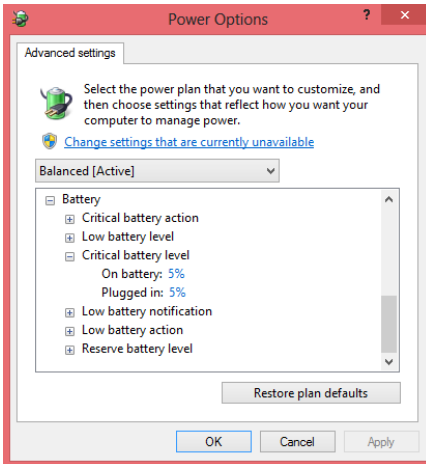
(Sample Image) Advanced settings tab of Power Options screen

6   Configure the alarm settings to suit your needs.

Conserving battery power

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

❖   How the device is configured

❖   How much you use the internal storage drive, optical disc drive, 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 Sleep or Hibernation, which saves power when you turn off the device and turn it back on again

❖   Use the Windows® power-saving option plans

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

Microsoft® has combined these options into preset Power Plans. Using one of these power plans 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 Plan and discuss each power-saving option.

Power Plans

You can choose a predefined Power Plan or select your own combination of power options.

To do this:

1   While on the desktop, click or touch the **Battery** (⬛) icon in the notification area.

2   Click or touch **More power options**.

The Windows® Power Options window appears.
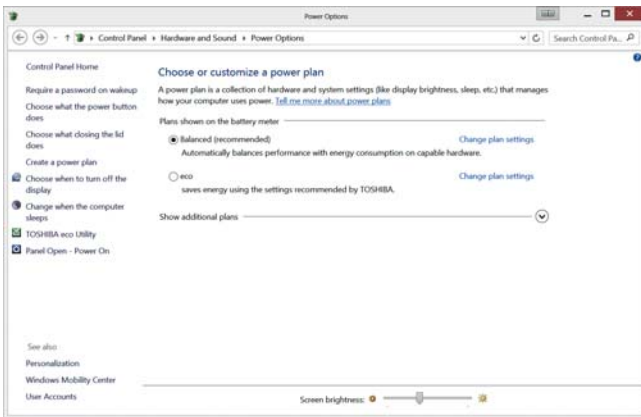
(Sample Image) Windows® Power Options window

3   Select an appropriate plan for your work environment or create your own custom plan.

4   Click or touch **Create a power plan** in the left pane to set up a new plan.

5   Click or touch **Change plan settings** to choose the plan you want to edit.

This screen allows you to change basic settings.

6   Click or touch **Change advanced power settings** to access settings for battery notification levels, internal storage drive power save time, etc.

You can click or touch the plus signs to expand each item and to see what settings are available for each item.

7   Click or touch **OK** to save the plan changes you have performed.

Depending on your model, the two power plans eco and Balanced are satisfactory for most people and do not need to be edited. The eco plan is the best used for maximum battery time. The Balanced plan is a compromise between battery time and performance.

Using the eco power plan

This device is equipped with the eco power plan. Operating the device with this power plan enabled reduces electrical power consumption by slightly lowering system performance. For example, when this power plan is enabled, the brightness of the display is reduced and the interval before Sleep mode takes effect is shortened. To enable or disable the eco power plan, see "Power Plans" on page 75.

The eco Utility® monitors your power savings from using the eco power plan by tracking real-time power consumption and accumulated savings over time. To learn how to access the utility, see "eco Utility®" on page 92.

For more information on the eco power plan, see the Help file in the eco Utility® window.

Changing the main battery

When your main battery has run out of power, plug in the AC adaptor.

If you find that a new battery is needed, contact the location where you purchased the device for more information on replacing the battery. Toshiba will not be responsible for any product damage, data loss, service, or part replacement made necessary by improper installation of a new battery.

⚠ **WARNING** If the device is leaking or its case is cracked, put on protective gloves to handle it.

Taking care of your battery

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

Safety precautions

⚠ **WARNING** Always immediately turn the power off and disconnect the power cable/cord plug from the plug socket and stop using the device if you observe any of the following conditions:

❖ Offensive or unusual odor

❖ Excessive heat

❖ Discoloration

❖ Deformation, cracks, or leaks

❖ Smoke

❖ Other unusual events during use, such as abnormal sound

Do not expose the device to fire. The battery could explode

Do not turn on the device's power again until an authorized Toshiba service provider has checked it for safety. Continued use could cause a fire or rupture possibly resulting in serious injury or device failure including but not limited to the loss of data.

Maintaining your battery

Fully discharging your battery pack will allow better accuracy of the battery meter.

To fully discharge your battery pack:

❖ Periodically, disconnect the device from a power source and operate it on battery power until the battery pack fully discharges.

Disposing of your device

⚠ WARNING   Never attempt to dispose of a computer by burning or by throwing it into a fire, and never allow exposure to a heating apparatus (e.g., microwave oven). Heat can cause a computer to explode and/or release caustic liquid, both which may possibly cause serious injury.

Discard this device in accordance with applicable laws and regulations.

Disposal of this product may be regulated due to environmental considerations. For disposal, reuse or recycling information, please contact your local government.

For more information, see "Device Recycling Information" on page 18, or for complete information about Toshiba's recycling programs and initiatives, please visit http://us.toshiba.com/recycle.

Traveling tips

The environmental precautions listed in "Selecting a place to work" on page 29, also apply while traveling.

❖ Never leave your device on a sunny ledge or in a place where it could get wet or covered in dust.

❖ Always travel with the device in a carrying case. Toshiba offers a choice of carrying cases for the device. They all provide plenty of extra space for manuals, power cords, and compact discs. Contact your authorized Toshiba representative for more information or visit Toshiba's Web site at accessories.toshiba.com.

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

NOTE   Before using your device aboard an aircraft, make sure the Wireless antenna is OFF (Airplane mode is ON) if your device has wireless LAN capability.

NOTE   To enable or disable wireless communication, use the F12 key. For more information see "TOSHIBA Function Keys" on page 129.

Chapter 4

Exploring Your Device's Features

In this chapter, you will explore some of the special features of your device.

Exploring the Start screen

The Start screen is the launching pad for everything you can do in the Windows® operating system, providing new and easy ways to access everything from your favorite apps and Web sites to your contacts and other important information.

When you move your pointer to the upper-right corner of the screen or swipe in from the right edge, a list of Windows® charms will slide out from the right. These Windows® charms perform various commands, including basics tasks like turning off the power and advanced PC settings.

You can go to the Start screen by clicking or touching the **Start** charm, see "Charms" on page 81. You can also use the Windows® key (▦) on your keyboard or on the LCD screen to go to the Start screen. For detailed information, please refer to the Windows® Help and Support.

By clicking on or touching the **Desktop** tile from the Start screen, you will find the Windows® settings and features you are most familiar with.

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For detailed information on the new Windows 8 functionality, refer to the Windows® Help and Support.
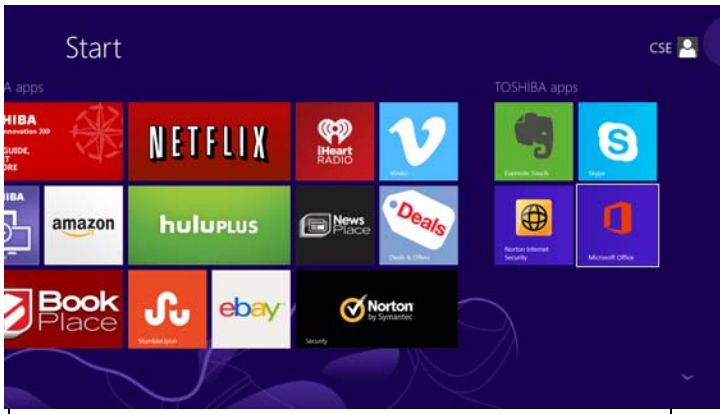
App tiles

(Sample Image) Windows® Start screen

Charms

Use the Windows® charms to start apps, find documents, set up system components, and perform most other computing tasks.

By moving your pointer to the upper-right corner of the screen or swiping in from the right edge your screen, you will find a list of charms: **Search**, **Share**, **Start**, **Devices** and **Settings**.

Search—This charm allows you to search for most anything you need to locate on your device. It can help you find apps, documents, photos, and your favorite music.

Share—This charm allows you to share music and photos with your favorite social Web sites.

Start—This charm allows you to view all of the available apps downloaded to your system.

Devices—This charm allows you to manage your hardware devices.

Settings—This charm allows you to manage your system settings.

Tiles

Tiles can be accessed and launched from the Start screen.

Typical Start screen tiles are the Desktop tile and Mail tile, as well as tiles representing all other applications downloaded to your system.

Exploring the desktop

You can use its features to start applications, 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

Your device's desktop includes several standard features: icons, taskbar, notification area, notification, and background pattern.

Icons

Notifications

Taskbar   Notification area
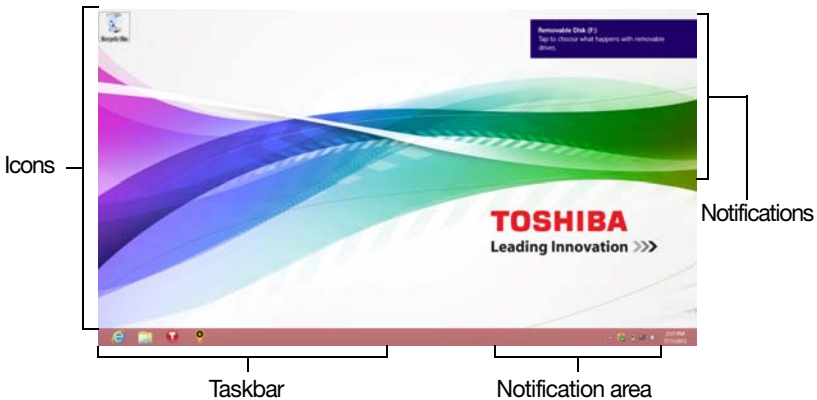
(Sample Image) Windows® Desktop screen

Icons

An icon represents a folder, file, or program that can be quickly activated by double-clicking or touching the icon.

You can create a new desktop icon for any folder, file, or program by dragging the element's icon from its location in a window to the desktop area.

You may see various icons displayed on your system desktop, for example:

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

❖ TECHNICAL NOTE: If you delete a large number of files or very large files from the internal storage drive, there may be insufficient space available in the Recycle Bin to hold these files. In this case, Windows® will prompt you to either permanently delete the file(s) or cancel the deletion.

❖ If you delete a file (of any size) from an external media or flash media, it does not go into the Recycle Bin. The file is permanently deleted.

❖ Permanently deleted files cannot be recovered from the Recycle Bin.
For more information on the Recycle Bin, see Windows® online Help.

NOTE If you place the pointer over an icon, a popup description of the file contents appears.

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

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 or touch the associated taskbar button.

Notification area

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

Typical tasks in the notification area are Current time, Power usage mode, network connectivity status, and speaker volume.

To activate a specific task, click or touch the appropriate notification area icon.

Notifications

There are many types of notifications you can employ to help you with the many tasks you perform every day.

User experience notifications can be set for toast, tile, badge, and raw notifications.

Toast notifications—Designed for time-sensitive delivery of personalized content, such as an instant message from a friend.

Tile notifications—Used by applications that are not currently running with an at-a-glance characteristic, giving you a quick preview of the subject line of your latest email or the current weather conditions.

Badge notifications—A specialized type of tile notification (shown on the Start screen tile) using glyphs to indicate the number of applications that have updates available or the status of a running application.

Raw notifications—These run a background task on behalf of an application while that application is not running in order to make available the latest content, such as an online newspaper.

Windows® Store

Although many applications will be pre-installed or built-in to your device, you will also have the ability to download many other applications with a touch or the click of your mouse.

In the Windows® Store you can search for and browse thousands of apps, all grouped into easy to find categories.

Setting up for communications

To connect to the Internet you need:

❖ A browser or communications program

❖ An Internet Service Provider (ISP) or online service if you plan to use the Internet

❖ A way to connect to the ISP (for example Wi-Fi®/broadband connection, etc.)

Connect to the Internet

NOTE
Wireless connectivity and some features may require you **to purchase additional software, external hardware or** services. Availability of public wireless LAN access points may be limited.

Follow the steps below to set up your Wireless connection.

1 Move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear, click the **Settings** (⚙) charm.

2 Click or touch the **Wi-Fi** (📶) icon.

The Networks screen appears.

3 Select your network.

4 Click or touch **Connect**.

5 Enter the network security key (if applicable).

6 Click or touch **Next**.

Your device should then be connected.

NOTE
To enable or disable wireless communication, use the F12 key. For more information see "TOSHIBA Function Keys" on page 129.

NOTE
When Airplane mode is OFF, the wireless indicator light (📡) will be lit.

For help with common Wi-Fi® networking problems, see "Wireless networking problems" on page 120.

Connecting your device to a network

You can connect your device to a network to increase its capabilities and functionality.

Accessing a network

For specific information about connecting to the network, consult your network administrator. Many hotels, airports, and offices offer Wi-Fi® access.

Exploring audio features

You can use your device to record sounds using the device's internal microphones (available on certain models) or an optional external microphone. You can listen to sound files or audio CDs using the built-in speakers, headphones, or external speakers.
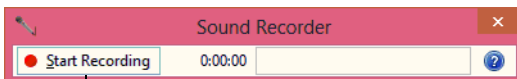
Recording sounds

You may record sounds using the device's internal microphones or by connecting an optional external microphone.

Using a microphone

NOTE   To locate your headphone/microphone jack, please refer to your Quick Start document.

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

2   From the Start screen begin typing **Sound Recorder** and click or touch your selection. If you are in the Desktop, move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear click or touch the **Search** (🔍) charm and, in the Search field, type **Sound Recorder**.

Start Recording/Stop Recording button

(Sample Image) Sound Recorder screen

3   Click or touch the **Start Recording** button.

4   Speak normally into the microphone.

5   When you have finished recording, click or touch the **Stop Recording** button.

The **Save As** dialog box appears.

6   To save the file, type a file name, and then click or touch **Save**.

Using external speakers or headphones

NOTE   To locate your headphone/microphone jack, please refer to your Quick Start document.

Your device 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.

A CAUTION   Before putting on headphones to listen, turn the volume down. Do not set the volume too high when using headphones. Continuous exposure to loud sound can harm your hearing.

TECHNICAL NOTE: When using amplified speakers, use speakers that require an external power source. Other types of speakers will be inadequate to produce sound from the device.

To play back sound files through external speakers or headphones:

1   Locate the headphone/microphone jack on the device.

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

The headphone/microphone jack requires a 16-ohm stereo mini connector.

To adjust the volume:

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

❖   For headphones, use the device's volume control.

Using the Web Camera

Your device comes with two built-in Web Cameras. With these Web Cameras you can do the following:

❖ Take pictures and record videos with your device

❖ Chat with others and have them see you while using instant messaging (IM) programs

❖ Have video conference calls

NOTE   To email, instant message or video conference, you must be connected to the Internet.

To access the Web Camera, on the Start screen click or touch the **Camera** tile. The Web Camera indicator light glows when the Web Camera is active.

You can switch between the cameras within the Camera application by selecting **Change camera**.

NOTE   When the Web camera is not active the indicator light is off.

Using the Memory card reader

The Memory card reader supports the use of Secure Digital™ (SD™, SDHC™, SDXC™), miniSD™, microSD™, or MultiMediaCard® (MMC®) media. These media can be used with a variety of digital products: digital music players, cellular phones, PDAs, digital cameras, digital video camcorders, etc.

CAUTION   To use a microSD™ or miniSD™ Card, an SD™ adapter is required.

The Memory card reader may also support other types of media.

NOTE   Do not use the Copy Disk function for this type of media. To copy data from one media to another, use the drag-and-drop feature of the Windows® operating system.

Inserting memory media

The following instructions apply to all types of supported media devices.

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

2   Push the media into the adapter until it stops.
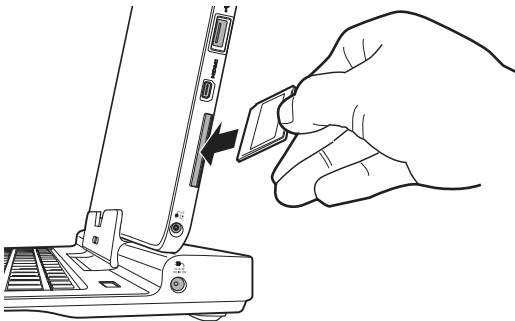
(Sample Illustration) Inserting memory media

CAUTION   When inserting memory media, do not touch the metal contacts. You could expose the storage area to static electricity, which can destroy data.

NOTE   Always remove memory media when not in use.

Removing memory media

1   If you are not currently on the Desktop, choose the Desktop tile on the Start screen, otherwise skip to step 2.

2   Prepare the card for removal by clicking on or touching the **Show hidden icons** button (▲), if necessary, in the notification area and then selecting the **Safely Remove Hardware and Eject Media** icon.

3   Highlight, and then click or touch the item you would like to eject.

If the system is unable to prepare the media for safe removal, a message will tell you to try again later. If the media can be removed now, the system displays **Safe to Remove Hardware**.

If the device has a spring-loaded adapter slot, see step 4; otherwise, skip to step 5.

4   Gently press the card inward to release it.

The card pops out slightly.

5   Grasp the card and pull it straight out.
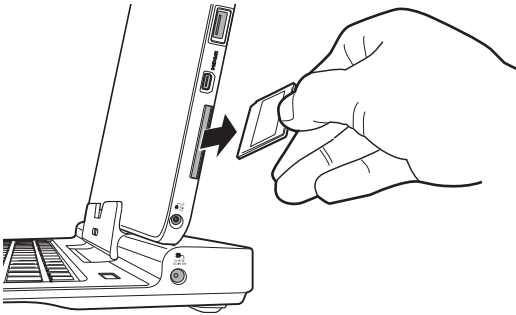
(Sample Illustration) Removing memory media

CAUTION   Do not remove memory media while data is being written or read. Even when the Windows® message "copying..." disappears, writing to the media might still be in progress and your data could be destroyed. Wait for the indicator light to go out.

Chapter 5

Utilities

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

NOTE   The utilities described in this chapter, and the icons shown in the sample images are applicable only if the related utility is available on your system.

❖   eco Utility®

❖   Supervisor password

❖   User password

❖   System Settings

❖   Function Key

❖   Recovery Media Creator

❖   Service Station

❖   TOSHIBA Application Installer
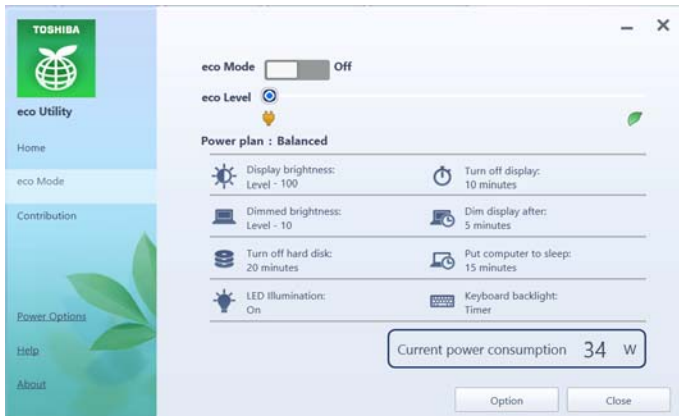
❖   PC Health Monitor

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eco Utility®

The eco Utility® monitors your power savings from using the eco power plan by tracking real-time power consumption and accumulated savings over time.

To access the eco Utility®:

1   From the Start screen begin typing **eco Utility**.

2   Click or touch **eco Utility**.

The eco Utility® window appears.

(Sample Image) eco Utility® window

3   To activate the eco power plan, select **eco Mode** on the left side.

4   Click or touch the **eco Mode** button.

5   Click or touch **Close**.

For more information on the eco power plan and utility, click or touch the **Help** button at the bottom of the window.

Password Utility

Setting a password lets you walk away from your device while providing additional protection for your files. When you set a password, you must enter the password before you can work on your device again.

TOSHIBA supports different types of passwords on your device:

❖ A supervisor password—Prohibits unauthorized users from accessing certain functions such as System Settings. This is useful if more than one person uses the device.

❖ A user password—Prevents unauthorized users from starting the device.

When setting up passwords, keep the following in mind:

❖ The supervisor password must be set before the user password, or the user password must be deleted and then re-entered after the supervisor password is set.

❖ The user password can be set up under the supervisor password.

Using a supervisor password

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

Setting a supervisor password

CAUTION If you choose to set a supervisor or user password, TOSHIBA strongly recommends that you save your password in a location where you can later access it should you not remember it.

TOSHIBA is not responsible for any losses that may occur to you, your organization or others as a result of the inability to access your device.

To set a supervisor password:

1 To access Supervisor Password from the Start screen begin typing **Password Utility**.

2 Click or touch **Password Utility**.

(Sample Image) Supervisor Password tab

3 Click or touch **Supervisor Password**.

4 Click or touch **Set**.

5 Enter your password, and then enter it again to verify.

6 Click or touch **Set**.

NOTE Under User Policy, this option may or may not ask for password verification.

7 Click or touch **OK** to save your password as a text file.

NOTE Password Utility will suggest "memo.txt" for the text file name. If you have saved a password previously, using the same name may overwrite your password text file with the new password. By using a different name, you can prevent overwriting your previously stored passwords.

8 Click or touch **Save**.

9 Click or touch **OK**.

Deleting a supervisor password

To delete a supervisor password:

1 To access Supervisor Password from the Start screen begin typing **Password Utility**.

2 Click or touch **Password Utility**.

A pop-up screen appears asking for a password.

3 Enter your password, and then click or touch **Verify**.

4 Click or touch **Supervisor Password**.

5 Click or touch **Delete**.

An authority verification pop-up screen appears.

6 Click or touch **Delete**.

7 Enter the password, and then click or touch **Verify**.

8 Click or touch **OK** to exit.

Using a user password

A user password provides power-on password protection.

Setting a user password

CAUTION | If you choose to set a supervisor or user password, TOSHIBA strongly recommends that you save your password in a location where you can later access it should you not remember it.

TOSHIBA is not responsible for any losses that may occur to you, your organization or others as a result of the inability to access your device.

To register a password for the power-on password functions:

1 To access User Password from the Start screen begin typing **Password Utility**.

2 Click or touch **Password Utility**.

3 Click or touch **User Password**.
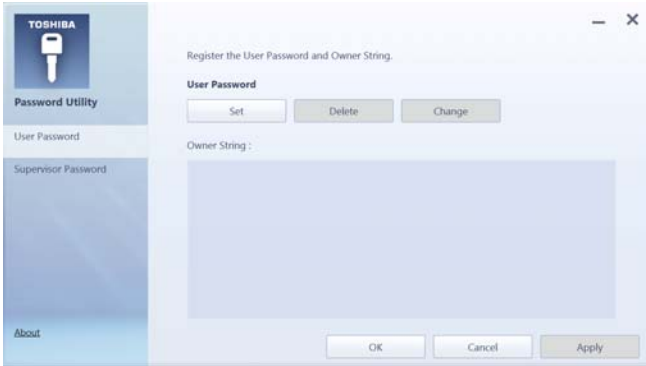
(Sample Image) User Password tab

4 Click or touch **Set**.

5 Enter your password, and then enter it again to verify.

6 Click or touch **Set**.

7 Click or touch **OK** to save your password as a text file.

NOTE   Password Utility will suggest "memo.txt" for the text file name. If you have saved a password previously, using the same name may overwrite your password text file with the new password. By using a different name, you can prevent overwriting your previously stored passwords.

8 Click or touch **Save**.

9 Click or touch **OK**.

Deleting a user password

To cancel the power-on password function:

1   To access User Password from the Start screen begin typing **Password Utility**.

2   Click or touch **Password Utility**.

A pop-up screen appears asking for a password.

3   Enter your password, and then click or touch **Verify**.

4   Click or touch **Delete**.

An authority verification pop-up screen appears.

5   Click or touch **Delete**.

6   Enter the password, and then click or touch **Verify**.

7   Click or touch **OK** to exit.

System Settings

System Settings is the TOSHIBA configuration management tool available through the Windows® operating system. To access it:

1   To access System Settings from the Start screen begin typing **System Settings**.

2   Click or touch **System Settings**.

The System Settings screen appears.
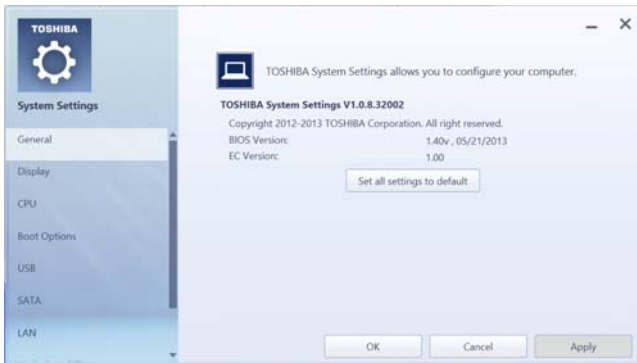
(Sample Image) System Settings screen – General tab options

The System Settings screen may have the following tabs:

❖   **General**—Allows you to view the current BIOS version or change certain settings back to their default values

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

---

NOTE   When the device restarts, it remembers the last configuration. If data does not appear on the display you are using after starting in Sleep mode, press the (⊞) + P keys to toggle the display. For more information, see "Directing the display output when your device is attached to the keyboard dock" on page 54.

❖   **CPU**—Configure the power saving modes associated with the processor.

❖ **Boot Options**—Allows you to change the sequence in which your device searches the drives for the operating system

   ❖ **Boot Priority**—Allows you to configure boot priority settings.

   ❖ **Panel open/Power on**—Allows you to turn on the device when opening the display panel while the device is turned off.

   ❖ **Power On By AC**—Enable the Power on by AC function. When you plug in the AC connecter while your device is turned off, the system will boot up automatically.

❖ **USB**—Allows you to enable or disable USB Legacy Emulation and internal USB 3.0 controller

❖ **SATA**—Allows you to set conditions for SATA

❖ **LAN**—Allows you to set networking functions

❖ **Undock and Sleep**—Enables the Undock and Sleep function. When the device lid is closed, device will enter sleep mode after undock operation.

❖ **Advanced Options**—Allows you to set conditions for various devices and functions

Function Key

TOSHIBA Function Key enables you to activate functions by pressing specific keys either singly or in combination with Fn. Some functions show the toast notification at the edge of the screen. These settings turn notifications ON/OFF.

1   To access Function Key from the Start screen begin typing **Function Key**.

2   Click or touch **Function Key**.

The Function Key screen appears.
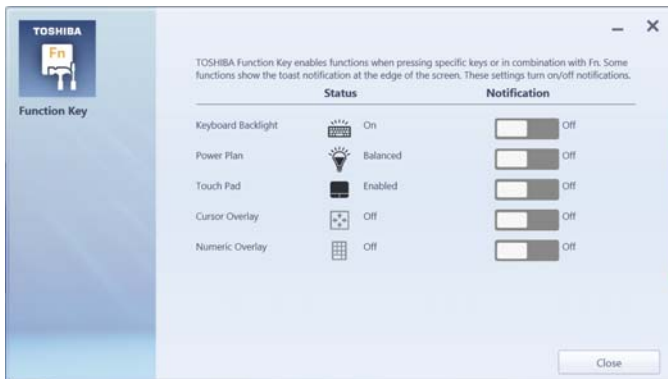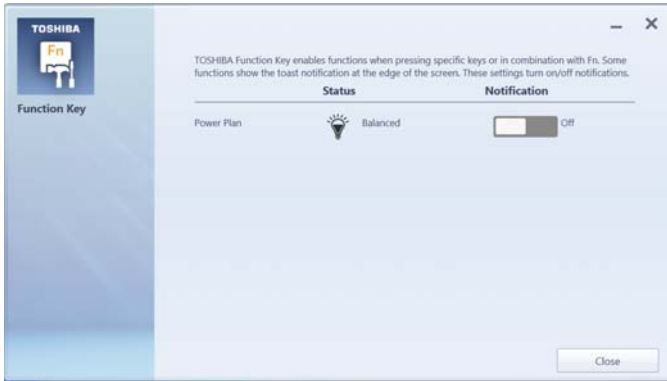

(Sample Image) Function Key, attached to keyboard dock

3   Slide the ON/OFF switch to enable/disable each notification.

4   Click or touch **Close**.

With the device attached to the keyboard dock, you can turn notifications ON/OFF for:

❖   Keyboard backlight

❖   Power plan

❖   Touch pad

❖ Cursor overlay

❖ Numeric overlay

(Sample Image) Function Key, detached from keyboard dock

With the device detached from the keyboard dock, you can turn notifications ON/OFF for the power plan.

Recovery Media Creator

The Recovery Media Creator utility enables you to create recovery media that can be used to return your system to its out-of-box state, if necessary. For detailed information on using the utility to create recovery media, see "Creating recovery media" on page 38.

Service Station

The Service Station helps you keep your new device running at its best by notifying you when updated software, firmware, documentation or other information is available for your device. The Service Station will alert you when updates are available, and you can then choose to install the updates if you wish.
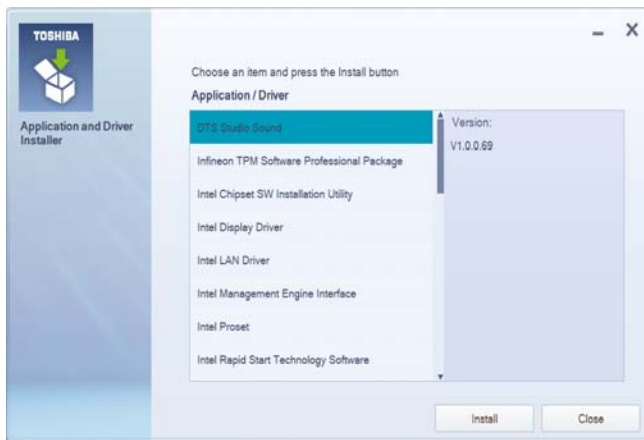
TOSHIBA Application Installer

The TOSHIBA Application Installer allows you to reinstall the drivers and applications that were originally bundled with your device.

To reinstall drivers and applications:

1   To access TOSHIBA Application Installer from the Start screen begin typing **Application Installer**.

2   Click or touch **TOSHIBA Application Installer**.

The TOSHIBA Application Installer window appears.

(Sample Image) TOSHIBA Application Installer selection screen

3   Click or touch the item you want to install.

4   Click or touch **Install**, then follow the on-screen prompts to complete the installation process.

PC Health Monitor

The PC Health Monitor software program monitors device system functions such as power consumption, the cooling system and the 3D Accelerometer (available on certain models). It alerts users to specific system conditions via pop-up messages. It also tracks the usage of the device and related devices and logs service-relevant information on the device's internal storage drive.

The collected information includes device operation time and number of actuations or status changes (e.g.: number of power button and Fn key combination uses, and AC adaptor, battery, LCD, fan, HDD, sound volume, wireless communication switch, docking and USB information), date of initial system use, and also computer and device usage (e.g.: power settings, battery temperature and recharging, CPU, memory, and temperatures for various devices). The collected information is not limited to the examples specified here. The stored data uses a very small portion of the total hard disk capacity (approximately 3 MB or less per year).

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

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

You may disable the PC Health Monitor at any time by uninstalling the software via the Windows® Control Panel. Doing so will automatically delete all collected information from the internal storage drive.

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

Chapter 6

If Something Goes Wrong

Some problems you may encounter when using your device are relatively easy to identify and solve. Others may require help from your network administrator or the manufacturer of the software program.

This chapter aims to help you solve many problems by yourself. It covers the problems you are most likely to encounter.

If all else fails, contact Toshiba. You will find information on Toshiba's support services at the end of this chapter.

Problems that are easy to fix

Your program or application stops responding.

NOTE   The Windows 8 operating system allows for the use of both applications ("Apps" used with the Windows® "Modern UI") and programs (used in the traditional Windows® desktop environment). For the purpose of simplifying the information we will use the terms interchangeably in this chapter.

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

To close a program that has stopped responding:

1   Press Ctrl, Alt, and Del simultaneously (once), and then click or touch **Task Manager**.

    The Task Manager window appears.

2   Select the program or application you want to close, and then click or touch **End Task** in the lower right corner.

    Closing the failed program should allow you to continue working. If it does not, continue with the next step.

3   Close the remaining programs one by one by selecting the program name, then select **End Task**.

    Closing all programs should allow you to continue working. If it does not, power off your device, and then restart it.

Your device is not responding

If you continue to have trouble after trying the steps above, and the device will not shut down, use the Reset button, located on the side of the device between the Power and Rotation buttons, to shut down the system.

To use the Reset button:

The button is actually a hole that can be used to access the button located inside the unit. Gently insert a slender object such as a straightened paper clip into the Reset button to force shut down when the device is non-responsive. Then press the power button to restart the device. Never use a pencil to press the Reset button. Pencil lead can break off inside the device and damage it.

To locate your reset button, please refer to your Quick Start document.

Problems when you turn on the device

These problems may occur when you turn on the power.

The device will not start.

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

Press and hold the power button for at least 10 seconds.

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

Verify that the device is on by looking at the Power button. If the button is glowing, the device is on. If the button is not lit, try turning the device off and then on again.

If you are using an AC adaptor, verify that the device is receiving power from the external power source by checking the AC power light located on the left side of the device. If the indicator is glowing, the device is connected to a live external power source.

The device displays the WARNING RESUME FAILURE/Windows Error Recovery – Windows did not shut down successfully **message.**

To continue, select **Start Windows normally**. This can happen if the device was put into Sleep mode and the battery has discharged. If you performed a shutdown before this message was displayed, a program or driver may have prevented Windows® from shutting down.

Data stored in the device's memory has been lost. Data stored in the device's internal storage drive may not be affected.

Always save your data even when you are using Sleep mode. If your battery fully discharges, information that has not been saved will be lost. Your device can be configured to warn you when the battery is running low see "What to do when the main battery runs low" on page 73.

If you are running on battery power, it is recommended that you do not leave the device in Sleep mode for long periods of time.

To charge the battery, leave the device plugged into a live wall outlet for several hours. For more information see "Charging the main battery" on page 69.

The AC power light is blinking.

If the AC power light is blinking, try the following steps:

1   Connect the AC adaptor to a different power outlet, preferably in a different room. If the device starts normally, there may be a problem with the AC outlet itself, or the voltage level available from it.

2   Verify that the AC adaptor is the correct unit for your device model. The device may not be able to start from an AC adaptor that is rated for less current (amperage) than the device requires, even if the rated voltage is correct, and the plug fits correctly in the DC-IN socket. The labels on the bottom of the device and the AC adaptor show the specifications for voltage ("V") and current ("A") for each device. The voltage level must match exactly. The amperage rating of the AC adaptor must be equal to or greater than that required by the device.

3   The battery may need charging, may be depleted, or may be defective. With AC power connected, turn the device on, and then leave the device running for several hours, which will deliver a slow, steady "trickle-charge" to the battery. Once the battery has been trickle-charged, it may begin working correctly again.

If the trickle-charging does not prove effective, you can connect to Support Online by going to Toshiba support at support.toshiba.com.

The battery light is blinking when the device is on.

If the battery light is blinking when the device is on, this indicates a power mismatch. Do the following:

1   Check the OUTPUT specifications on the AC adaptor (for example, DC 19V – 3.95A)

2   Check the INPUT specifications on the bottom of the device.

The output specifications of the AC adaptor must match the input specifications of the device.

3   If the specifications do not match, locate and use the AC adaptor that shipped with your device. If the specifications do match, contact Toshiba. See "Contacting Toshiba" on page 127.

The Windows® operating system is not working

Once you are familiar with your device and used to the way the operating system responds to your work routine, you can easily detect if the operating system is not working correctly. For example:

❖   The operating system fails to start after the initial startup appears.

❖ The operating system takes a long time to start.

❖ The operating system responds differently from the normal routine.

❖ The screen does not look right.

Unless a hardware device has failed, problems usually occur when you change the system in some way such as installing a new program or adding a device.

If you experience any of these problems, use the options in the Startup menu to fix the problem.

Using Startup options to fix problems

If the operating system fails to start properly, you may need to troubleshoot the Operating System and/or its settings. There are several options to choose from depending on the severity of the problem and your level of expertise with computers.

If Windows® fails to start properly twice, the Windows® Boot menu will launch. To enter the Boot menu manually:

1 Press Ctrl, Alt, and Del simultaneously (once).

2 Press the **Power** button in the lower right corner of your screen.

3 Click or touch the **Restart** option from the menu.

4 Click or touch **Troubleshoot** from the menu.

You now have several options:

Refresh your device

❖ Your files and personalization settings won't change

❖ Your device settings will be changed back to their defaults

❖ Your Apps from the Windows® Store are retained

❖ Apps you installed from discs or Web sites are removed

❖ A list of removed apps is saved to your desktop

For more information, see "Refresh your PC (with user's data)" on page 42.

Reset your device

❖ All of your personal files and apps are removed

❖ Your device settings are changed back to their defaults

For more information, see .

Advanced options

Choosing this option presents you with another set of options:

System Restore

❖ System Restore allows you to use a Restore point to return the device to a state at which it was performing properly. Restore points are created:

    ❖ When new hardware or software is installed

    ❖ Manually by the user

System Image Recovery

Windows® will "Recover" the Operating system using a specific image provided by the user.

Automatic Repair

This feature automates the repair process. The Operating System will automatically look for problems and repair them if possible.

Command Prompt

The command prompt is a very powerful tool for advanced users.

Startup Settings

In previous Operating Systems the majority of the options found on this menu were available by pressing the F8 key during the Windows® boot process:

❖ Enable low resolution video mode

Restarts Windows® using your current video driver at low resolution. This allows you to reset your display settings in the event they have been improperly set.

❖ Enable debugging mode

Starts Windows® in an advanced troubleshooting mode

❖ Enable boot logging

Creates a file that lists all the drivers that are installed during startup

❖ Enable Safe Mode

Starts Windows® with a minimal set of drivers and services. If the device starts and runs in Safe Mode, you will know the Operating System is most likely working properly and that you should look to third-party applications or drivers for the source of your problem.

❖ Disable driver signature enforcement

Allows drivers containing improper signatures to be installed

❖ Disable early-launch anti-malware protection

Allows drivers to initialize without being measured by the Anti-malware driver

❖ Disable automatic restart on system failure

Prevents Windows® from automatically restarting if an error causes it to fail. Choose this option only if Windows® is stuck in a loop where it fails, attempts to restart, and fails again repeatedly.

Internet problems

My Internet connection is very slow.

Many factors contribute to the speed with which you can surf the Internet. They include: network speed, network conditions, time of day (when everyone else is surfing, your access can be slow) and popularity of the sites you are trying to access. If accessing a particular site is very slow, try later.

My browser cannot find the URL address I typed in.

Make sure you separated the domain names of the address with the forward slash (/). Check the spelling of each name and the syntax of the address carefully. A single incorrect letter or missed character will make it impossible for your browser to locate the site.

My browser cannot find a site I bookmarked.

The World Wide Web is constantly changing. A site you bookmarked yesterday may not be available today or its server may be down for temporary repair. Try again later.

The Windows® operating system can help you

If the operating system has started properly but you still have a problem using your device, the online Help can assist you in troubleshooting the problem. Getting to the online Help will differ depending on which interface you are in:

❖ **Start screen**—Type **Help and Support**

NOTE   As soon as you begin typing, the search feature automatically begins.

❖ **Desktop**—Press the F1 key

When the "Windows Help and Support" screen appears, do one or both of the following:

❖ In the open search field type the topic you need help with and follow the on-screen instructions

❖ Click or touch one of the options listed in the window and follow the instructions

You can connect to Support Online by going to Toshiba support at support.toshiba.com.

Fixing a problem with Device Manager

Device Manager provides a way to check and change the configuration of a device.

CAUTION   Changing the default settings using Device Manager can cause other conflicts that make one or more devices unusable. Device Manager is a configuration tool for advanced users who understand configuration parameters and the ramifications of changing them.

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 From the Start screen, type **Device**.

   The search feature appears.

2 Click or touch **Settings**.

3   From the list of device(s), click or touch **Device Manger**.

4   To view the device(s) installed, double-click or touch the device type.

The operating system displays the device Properties dialog box, which provides an array of tabs. They may include:

❖   The **General** tab, which provides basic information about the device.

❖   The **Resources** tab, which lists resources assigned to the device. This tab does not appear if the device is not using resources.

❖   The **Driver** tab, which displays the drivers being used by the device. This tab also provides options for updating the driver or rolling back the driver in case the new version is causing a problem.

The tabs that appear in the dialog box vary from one device to another.

For more information about Device Manager, refer to Windows® online Help.

Power and the batteries

NOTE   The device battery is not accessible by the user.

Your device receives its power through the AC adaptor and power cord/cable or from the system batteries (battery and real-time clock (RTC) battery). Power problems are interrelated. For example, a faulty AC adaptor or power cord/cable will neither power the device nor recharge the batteries.

Here are some typical problems and how to solve them:

The AC power light does not come on when you plug in the AC adaptor and power cord/cable.

Make sure the AC adaptor and power cord/cable are firmly plugged into both the wall outlet and the device.

If the AC power light still does not come on, check that the wall outlet is working properly by plugging in a lamp or other appliance.

The AC adaptor and power cord/cable work correctly, but the battery will not charge.

The battery does not charge while the device is consuming full power. Try turning off the device.

The battery may be too hot or too cold to charge properly. If you think this is the probable cause, let the battery reach room temperature and try again.

If the battery has completely discharged, it will not begin charging immediately. Leave the AC adaptor and power cord/cable connected, wait 20 minutes and see if the battery is charging.

If the battery light is glowing after 20 minutes, let the device continue charging the battery for at least another 20 minutes before you turn on the device.

If the battery light does not glow after 20 minutes, the battery may have reached the end of its useful life.

The battery appears not to power the device for as long as it usually does.

If you frequently repeat shallow charge and discharge, the battery meter may become inaccurate. Let the battery discharge completely, then try charging it again.

Check the power options via your Power Plans (see "Power Plans" on page 75). Have you added a device that takes its power from the battery? Is your software using the internal storage drive more? Is the display power set to turn off automatically? Was the battery fully charged to begin with? All these conditions affect how long the charge lasts.

After a period of time, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is normal for all batteries. Visit the Toshiba Web site at accessories.toshiba.com. Refer to this site often to stay current on the most recent software and hardware options for your device, and for other product information.

For more information on maintaining battery power, see "Changing the main battery" on page 77.

Keyboard problems

You have connected an external keyboard and the operating system displays one or more keyboard error messages.

You may need to update your keyboard driver. Refer to the documentation that came with the keyboard or to the keyboard manufacturer's Web site.

The keyboard you connected may be defective or incompatible with the device. Try using a different make of keyboard.

Touch pad problems

You have used the recovery media to image your device and the touch pad on the keyboard dock is no longer working.

The touch pad driver is pre-installed on your device. If this driver is removed, the touch pad and touch pad buttons will not work. You will need to reinstall the touch pad driver located in the Application Installer.

For more information, see "TOSHIBA Application Installer" on page 103.

Display problems

Here are some typical display problems and their solutions:

The screen is blank.

Display Auto Off may have gone into effect. Press any key to activate the screen.

If you are using the built-in screen, make sure the display priority is not set for an external monitor. To do this, press F4. If this does not correct the problem, press F4 again to return the display priority to its previous setting.

HINT: Pressing the F4 key several times will advance you through the display options.

If you are using an external monitor:

❖ Check that the monitor is turned on.

❖ Check that the monitor's power cord/cable is firmly plugged into a working power outlet.

❖ Check that the cable connecting the external monitor to the device is firmly attached.

❖ Try adjusting the contrast and brightness controls on the external monitor.

❖ Press F4 to make sure the display priority is not set for the built-in screen.

The screen does not look correct.

Choose a theme for your desktop background, under **Change the visuals and sounds on your device**, in the **Themes** panel. You can also change the setting for individual components separately by selecting an item from just below the **Themes** panel (**Desktop Background, Color, Sounds**, and **Screen Saver**).

For more information, see the Windows® online Help.

A message displays saying that there is a problem with your display settings and that the adapter type is incorrect or the current settings do not work with your hardware.

Reduce the size of the color palette to one that is supported by the device's internal display.

To change the display properties:

1 Right-click or touch & hold in a blank area of the Windows® desktop.

2 Click or touch **Personalize**, and then **Display**.

3 Use the menu on the right hand side of the page to:

❖ Adjust resolution

❖ Adjust brightness

❖ Calibrate color

❖ Change display settings

❖ Project to a second screen

❖ Adjust ClearType text

4 Click or touch **OK**.

The display mode is set to Simultaneous and the external display device does not work.

Make sure the external monitor is capable of displaying at resolutions of 1280 x 800 or higher. Devices that do not support this resolution will only work in Internal/External mode, and not simultaneous mode.

Small bright dots appear on your TFT display when you turn on your device.

Small bright dots may appear on your screen display when you turn on your device. Your display contains an extremely large number of thin-film transistors (TFT) and is manufactured using high-precision technology. Any small bright dots that may appear on your display are an intrinsic characteristic of the TFT manufacturing technology. Over a period of time, and depending on the usage of the device, the brightness of the screen will deteriorate. This is also an intrinsic characteristic of the screen technology. When the device is operated on battery power, the screen will dim and you may not be able to increase the brightness of the screen while on battery power.

Disk or storage drive problems

Problems with the storage drive or with external media usually show up as an inability to access the drive or as sector errors. Sometimes a drive problem may cause one or more files to appear to have garbage in them.

Error-checking

NOTE   This feature is not available for optical disc drives.

Run Error-checking, which analyzes the directories and files on the storage drive and repairs any damage it finds.

To run Error-checking:

1   From the Start screen, type **computer**.

2   Click or touch **Computer** from the list that appears.
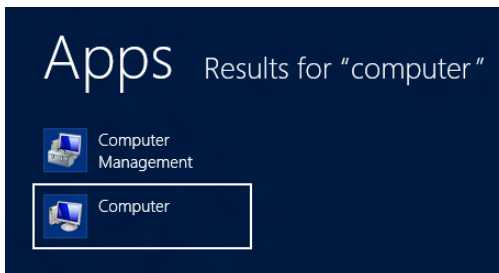
(Sample Image) Search results for "computer"

3 Right-click or touch the drive you wish to check.
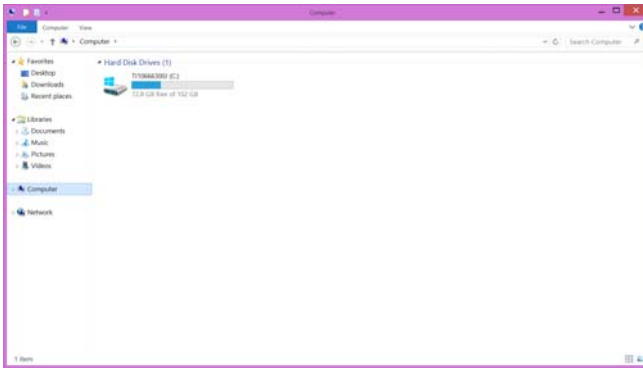
(Sample Image) Selecting the drive

4 In the pop-up menu, click or touch **Properties**.

The drive's Properties box appears.

5 Click or touch the **Tools** tab.

6 Click or touch the **Check** button.

The Error Checking box appears.

The system will alert you if you need to scan the drive.

7 Even if you do not need to scan the drive for errors you can scan by clicking or touching **Scan drive**.

Error-checking tests and repairs the storage drive.

Your hard disk seems very slow.

If you have been using your device for a long time, your files may have become fragmented. Run Disk Defragmenter.

To do this:

1 Move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear click or touch the **Search** (🔍) charm, then click or touch **Settings** and, in the Search field, type **Defragment**.

2 Click or touch **Defragment and Optimize Drives**.

3 From the Optimize Drives menu click or touch the drive you wish to defragment.

4   Click or touch the **Optimize** button.

The system will display the status as it optimizes and defragments the drive.

Your data files are damaged or corrupted.

Refer to your software documentation for file recovery procedures. Many software packages automatically create backup files.

You may also be able to recover lost data using utility software. Consult your network administrator.

Some programs run correctly but others do not.

This is probably a configuration problem. If a program does not run properly, refer to its documentation and check that the hardware configuration meets its needs.

Sound system problems

No sound is coming from the device's speakers.

Adjust the volume control.

Try pressing the F11 key to see if volume mute is disabled.

Check that the volume control on the device is turned up.

If you are using external headphones or speakers, check that they are securely connected to your device.

The device 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.

Printer problems

This section lists some of the most common printer problems.

The printer will not print.

Check that the printer is connected to a working power outlet, turned on and ready (on line).

Check that the printer has plenty of paper. Some printers will not start printing when there are just two or three sheets of paper left in the tray.

Make sure the printer cable is firmly attached to the device and the printer.

Run the printer's self-test to check for any problem with the printer itself.

Make sure you installed the proper printer drivers as shown in the instructions that came with the printer.

You may have connected the printer while the device is on. Disable Sleep mode, turn off the device, and turn off the printer. Turn the printer back on, make sure it is online, and then turn the device back on.

Try printing another file. For example, you could create and attempt to print a short test file using Notepad. If a Notepad file prints correctly, the problem may be in your original file.

If you cannot resolve the problem, contact the printer's manufacturer.

The printer will not print what you see on the screen.

Many programs display information on the screen differently from the way they print it. See if your program has a print preview mode. This mode lets you see your work exactly as it will print. Contact the software manufacturer for more information.

Wireless networking problems

NOTE   This section provides general troubleshooting tips for networking problems, specifically wireless (Wi-Fi®) networking.

The terms and concepts used assume a basic understanding of networks, and may be for more advanced users. If you need assistance or if you are not familiar with the terminology, please see Windows® Help and Support or contact your computer technician.

❖   If your device is equipped with an internal Wi-Fi® adapter, verify that Airplane mode is OFF (the wireless indicator light ((ɪ)) will be lit).

❖   Verify that your device can detect access points or routers. If it can detect a Wi-Fi® access point or router then it may be a configuration issue.

❖   Verify that signal strength is good using the utility provided with the Wi-Fi® adapter.

❖ If another device is on the same network, verify that it has network access, and can connect to the Internet. If, for example, the other device cannot browse to a public Web site, the ISP's (Internet Service Provider) service may be disrupted.

❖ Verify that the Service Set Identifier (SSID), or network name, is correct - i.e., that it matches the SSID assigned to the access point you are attempting to connect through. SSIDs are case-sensitive.

❖ Check the Windows® Control Panel's Device Manager to verify that the Wi-Fi® adapter is recognized by the Windows® operating system, and that the driver is loaded. To access the Device Manager, from the Start screen begin typing **Computer**. If you are in the Desktop screen, move your pointer to the upper-right corner of the screen or swipe in from the right edge. When the Windows® charms appear click or touch the **Search** (🔍) charm, and then type **Computer**. Click or touch **Control Panel**, **System and Security**, and then **System**. Carefully note any error messages - these will be very helpful if you should confer with a support technician at a later time.

NOTE   To enable or disable wireless communication, use the F12 key. For more information see "TOSHIBA Function Keys" on page 129.

❖ Use IPCONFIG to verify that the device has a useful IP address - one other than the private address of 169.254.xxx.xxx assigned by Windows®.

1 From the Start screen, type Cmd.

2 Click **Command Prompt**.

3 Enter IPCONFIG/ALL, and then press ENTER.

The IP address for each active network adapter will be displayed.

❖ Connect your device directly to your router or broadband modem, by plugging a standard CAT5 Ethernet patch cable (sold separately) into your device's RJ45 Ethernet port. If your connection problem disappears, the problem lies in the Wi-Fi® part of your network.

❖ If you have enabled any security provisions (closed system, MAC address filtering, Wired Equivalent Privacy [WEP], etc.), check the access point vendor's Web site for recent firmware upgrades. Problems with WEP keys, in particular, are frequently addressed in new firmware releases.

Develop good computing habits

Save your work frequently.

You can never predict when your device will lock, forcing you to close a program and lose unsaved changes. Many software programs build in an automatic backup, but you should not rely solely on this feature. Save your work! See "Computing tips" on page 58 for instructions.

On a regular basis, back up the information stored on your internal storage drive.

Use Windows® to back up files, or the entire device, to an optical disc, or external hard disk. Here are some ways you can do this:

❖ Use the Windows® operating system to back up files or your entire device to an optical disc, or external hard disk.

❖ Copy files to a rewritable external storage device.

❖ Connect your device to the office network and copy files to your network partition.

Some people use a combination of these methods, backing up all files weekly and copying critical files to external media on a daily basis.

If you have installed your own programs, you should back up these programs as well as your data files. If something goes wrong that requires you to reformat your internal storage drive and start again, reloading all your programs and data files from a backup source will save time.

Read the documentation.

It is very difficult to provide a fail-safe set of steps you can follow every time you experience a problem with the device. Your ability to solve problems will improve as you learn about how the device and its software work together.

Get familiar with all of the documentation provided with your device, as well as the information that may come with the programs and devices you purchase.

Your local computer store or book store sells a variety of self-help books you can use to supplement the information in the manuals.

Data and system configuration backup in the Windows® operating system

The Windows® operating system offers some easy-to-use features for backing up your Windows® settings and your data - documents and other important files. Take advantage of these features to protect yourself from much more difficult and time-consuming restoration procedures, and to safeguard your valuable data from loss.

Saving system configuration with restore points

The System Restore feature of the Windows® operating system quickly creates restore points - 'snapshots' of your Windows® operating system configuration - and saves them for later recall. If you experience problems after installing some new hardware or software, you can easily select a previously established Control Point to 'turn back the clock,' restoring the Windows® operating system to the state it was in just prior to the installation. This is much easier and more effective than uninstalling the hardware or software, which often leaves behind unwanted files and settings. It is also easy to undo a restore point selection, if you change your mind.

Follow these steps to create a restore point using the System Restore utility:

1   From the Start screen, type **Control**. Click or touch **Control Panel** from the list that appears.

2   Click or touch **System and Security**, and then **System**.

3   In the left pane, click or touch **System Protection**.

    The System Protection tab of the System Properties window appears.

4   Click or touch **Configure**.

5   Under **Restore settings** select **Turn on System Protection**.

6   Click or touch **OK**.

7   Click or touch **Create**.

8   In the input field, enter a name that is descriptive enough to be easily understood in the future, such as "Before installing Brand X Accounting app." Then click or touch **Create**.

     The Windows® operating system creates the restore point, automatically stamps it with the current date and time, and displays a message that the restore point was successfully created.

9   Click or touch **Close**.

Then, at a later time, you can re-establish your Windows® configuration using the saved restore point. To do this:

1   From the Start screen, type **Control**. Click or touch **Control Panel** from the list that appears.

2   Click or touch **System and Security**, and then **System**.

3   In the left pane, click or touch **System Protection**.

     The System Protection tab of the System Properties window appears.

4   Click or touch **System Restore…**

5   Click or touch **Next**.

6   Click or touch the Restore point you want to use then click or touch **Next**.

     The time stamp and description of each Restore point is displayed.

NOTE   At this point you can click or touch "Scan for affected programs" to determine what the impact of using the chosen Restore Point will be.

7   Verify that the Restore point you chose is the correct one. If it is not, click or touch **Back** to return to the previous step.

8   Close all programs and save all open files.

9   Click or touch **Finish**, and then **Yes** to begin the system restore.

     Your Windows® operating system configuration will now be restored to the state it was in when the chosen restore point was created, and then the device will be automatically restarted.

Backing up your data or your entire device with the Windows® operating system

The most valuable component of your device system is the data you create and store on its internal storage drive. Since problems with either hardware or software can make the data inaccessible or even destroy it, the next most valuable component of your device system may be a recent backup of your data.

Fortunately, the Windows® operating system offers a convenient way to back up your device or just your important files to optical disc drives, or hard drives. An external hard drive is recommended in case the internal storage drive fails. No additional software is required. External optical disc writers are also widely available.

Follow these steps to back up your device or files to optical discs, or a storage drive:

NOTE   You cannot back up the device while running on battery power. Connect the AC adaptor before continuing.

1   From the Start screen, type **Control**. Click or touch **Control Panel** from the list that appears.

2   Click or touch **Save backup copies of your files with File History** under the **System and Security** heading. Follow the on-screen instructions to back up your files.

For additional Help, while in the Windows® Desktop screen, press the F1 key to launch the Windows® Help and Support screen. Search for "back up files".

General tips for installing hardware and software

Here are a few tips to help ensure safe and easy installation of new hardware (printers, pointing devices, external hard drives, optical disc drive writers, scanners, etc.) and software (applications like Microsoft® Office and Adobe® Photoshop®, or utility software such as special toolbars for your web browser).

❖   Create a restore point (refer to "Saving system configuration with restore points" on page 123). Before installing anything, use the System Restore utility to set a restore point (see the section titled restore points). If anything goes wrong, you will then be able to easily

restore the Windows® operating system to the state it was in prior to the installation, undoing any changes that the installation process introduced.

❖ Back up your critical data (see "Backing up your data or your entire device with the Windows® operating system" on page 125).

❖ Have your back up DVD(s) on hand in case you need any files from them.

❖ Do not guess - follow directions carefully! It is often necessary to run an installation utility first - before connecting a new hardware item to the device. If the device is connected first, it may be very difficult to complete the installation successfully. Always carefully follow the installation instructions that accompany the hardware or software.

❖ Restart the Windows® operating system. Always restart the Windows® operating system after each installation, even if the installation utility does not prompt you to do so. This will ensure that the installation is completed, and will clean up anything that the installation utility left behind.

❖ Do one installation at a time. If you have several new items to add to your device system, install just one at a time, creating restore points immediately before each successive installation. This will make it much easier to determine the origin of any new problems. For best results, follow this sequence:

1 Back up critical data.

2 Create a restore point.

3 Install one item of hardware or software.

4 Restart the Windows® operating system.

5 Use the new hardware or software for a while, noting any new problems. Make sure that your critical applications (email, business applications, etc.) are working correctly, and verify that important devices are still functioning.

6 For each additional hardware or software item, repeat these steps, starting at step 1 if any of your critical data has changed, or starting at step 2 if no critical data has changed.

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.

Since some problems may be related to the operating system or the program you are using, it is important to investigate all sources.

❖ 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 device and/or program. Your dealer is your best source for current information.

For the detailed specifications for your device, visit support.toshiba.com.

Contacting Toshiba

Toshiba's Technical Support Web site

For technical support, or to stay current on the most recent software and hardware options for your device, and for other product information, be sure to regularly check the Toshiba Web site at support.toshiba.com.

Other Toshiba Internet Web sites

toshiba.com	Worldwide Toshiba corporate site
us.toshiba.com	Marketing and product information in the USA
accessories.toshiba.com	Accessories information in the USA
www.toshiba.ca	Canada
www.toshiba-Europe.com	Europe
www.toshiba.co.jp/index.htm	Japan
latin.toshiba.com	Mexico and all of Latin America
acclaim.toshiba.com	Toshiba USA Self-Service support web site
laptopforums.toshiba.com	Community discussion forums for Toshiba laptop users

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Weybridge, Surrey KT15 2UL
United Kingdom

United States
Toshiba America Information
Systems, Inc.
9740 Irvine Boulevard
Irvine, California 92618
United States

The Rest of Europe
Toshiba Europe (I.E.) GmbH
Hammfelddamm 8
D-4-1460 Neuss
Germany

For more information on additional Toshiba worldwide
locations, please visit: www.toshiba.co.jp/index.htm.

Appendix A

TOSHIBA Function Keys

TOSHIBA Function keys provide a quick way to modify selected system functions and to launch applications.

Functions

TOSHIBA Function keys are used to set or modify the following system functions:

❖ Lock (Instant security)

❖ Power Plan

❖ Sleep

❖ Hibernation

❖ Output (Display switch)

❖ Brightness control

❖ Wireless

❖ Touch pad

❖ Mute

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Lock (Instant security)

Fn+ [F1 🔒]

This TOSHIBA Function key activates instant security.

The user logon screen will appear and a user with a valid account will need to log back on to gain access to the computer.

Power plan

Fn+ [F2]

This TOSHIBA Function key displays the currently selectable power plans and cycles through the power plans.

The properties of each power plan, and the power plans that are displayed by this function, are set in the Power Options window (see "Power Plans" on page 75).

This TOSHIBA function key also allows you to enable notifications for power plans. The notifications are disabled by default.

Sleep mode

Fn+ [F3]

This TOSHIBA Function key places the computer into Sleep mode.

Hibernation mode

Fn+ [F4]

This TOSHIBA Function key places the computer into Hibernation mode.

If Hibernation mode is disabled, this Function key will not respond.

Output (Display switch)

Fn+ [F5 ▯/☐]
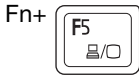
This TOSHIBA Function key cycles through the display options and highlights the available options. (Only the first option is available when you do not have an external monitor attached.)

❖ PC screen only

❖ Duplicate

❖ Extend

❖ Second screen only
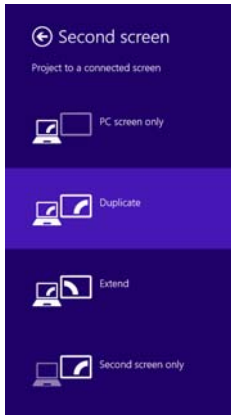
(Sample Image) Display mode options window

NOTE All of the above modes are always displayed on the screen, however only the available modes for your system are functional, depending on the attached external display(s).

Display brightness

Fn+ ⌨F6 ▼☼

This TOSHIBA Function key decreases the screen brightness.

Fn+ ⌨F7 ▲☼

This TOSHIBA Function key increases the screen brightness.

Disabling or enabling wireless devices

Fn+ ⌨F8 ((ᵖ))

This TOSHIBA Function key enables / disables the Wi-Fi® antenna in your computer.

The wireless modes are:

❖ Disables the wireless antenna (Airplane mode is ON).

❖ Enables the wireless antenna (Airplane mode is OFF).

Disabling or enabling the Dual Point

Fn+ ⌨F9 ▯/▨

This TOSHIBA Function key enables/disables the Dual Point.

To enable/disable the Dual Point press F5.

For more information on using the Dual Point, see "Using the TOSHIBA Dual Pointing Device" on page 48.

Disabling or enabling the cursor control overlay

Fn+ ⌨F10 ▦

This TOSHIBA Function key enables/disables the cursor control overlay.

Disabling or enabling the numeric overlay

Fn+ [F11]
This TOSHIBA Function key enables/disables the numeric overlay.

Disabling or enabling the scroll lock

Fn+ [F12]
This TOSHIBA Function key enables/disables the scroll lock.

Volume Mute

Fn+ [ESC]
This TOSHIBA Function key enables/disables volume mute on your computer.

When volume mute is enabled, no sound will come from the speakers or headphones.

Keyboard Function keys

Fn+ [Z]   This TOSHIBA Function key enables/disables the keyboard backlight.

Fn+ [PRTSC SYSRQ]   This TOSHIBA Function key takes a snapshot of your display screen.

Fn+ [! 1]   This TOSHIBA Function key allows you to zoom out.

Fn+ [@ 2]   This TOSHIBA Function key allows you to zoom in.

Fn+ [# 3]   This TOSHIBA Function key decreases the speaker volume.
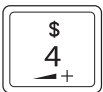
Fn+ [$ 4]   This TOSHIBA Function key increases the speaker volume.

Zoom (Display resolution)

Fn+

Fn+ [Space bar]   This TOSHIBA Function key switches screen resolution.

Cycle through the screen resolutions, and then select the desired resolution.

Appendix B

Power Cord/Cable Connectors

Your device ships with the correct power supply for the country of purchase. This appendix shows the shapes of the typical AC power cord/cable connectors for various parts of the world.

USA

UL approved

Canada

CSA approved

United Kingdom

BS approved

Europe

VDA approved
NEMKO approved

Australia

AS approved

Glossary

TECHNICAL NOTE: Some features defined in this glossary may not be available on your device.

Acronyms

The following acronyms may appear in this User's Guide.

AC	Alternating Current
BIOS	Basic Input/Output System
BD-ROM	Blu-ray Disc Read-Only Memory
bps	bits per second
CD	Compact Disc
CD-ROM	Compact Disc Read-Only Memory
CD-RW	Compact Disc Rewrite Memory
CMOS	Complementary Metal-Oxide Semiconductor
CPU	Central Processing Unit
DC	Direct Current
DMA	Direct Memory Access
DIMM	Dual Inline Memory Module
DOS	Disk Operating System

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DPI	Dots Per Inch
DVD	Digital Versatile (or Video) Disc
DVD-ROM	Digital Versatile (or Video) Disc Read-Only Memory
eSATA	external Serial Advanced Technology Attachment
FAT	File Allocation Table
FCC	Federal Communications Commission
GB	gigabyte
GBps	gigabytes per second
HDD	Hard Disk Drive
HDMI	High-Definition Multimedia Interface
HDMI CEC	High-Definition Multimedia Interface Consumer Electronics Control
HTML	Hypertext Markup Language
IEEE	Institute of Electrical and Electronics Engineers
I/O	Input/Output
IRQ	interrupt request
ISP	Internet Service Provider
KB	kilobyte
LAN	Local Area Network
LCD	Liquid Crystal Display
LED	Light Emitting Diode
MB	megabyte
MBps	megabytes per second
MIDI	Musical Instrument Digital Interface
PC	Personal Computer
PCI	Peripheral Component Interconnect
PCMCIA	Personal Computer Memory Card International Association
RAM	Random Access Memory
RGB	Red, Green Blue light (monitor)

RFI	Radio Frequency Interference
ROM	Read-Only Memory
RTC	Real-Time Clock
SD	Secure Digital
SDRAM	Synchronous Dynamic Random Access Memory
SSD	Solid State Drive
TFT	Thin Film Transistor
USB	Universal Serial Bus
URL	Uniform Resource Locator
WAN	Wide Area Network
www	World Wide Web

Terms

The following terms may appear in this User's Guide.

A   **active-matrix display**—A liquid crystal display (LCD) made from an array of liquid crystal cells using active-matrix technology. Also known as a "TFT display," in its simplest form there is one thin film transistor (TFT) for each cell. This type of display works well with 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*.

Blu-ray Disc (BD)—Offering more storage capacity than DVDs, the format was developed to allow for more data storage and to enable recording and playback of high-definition video (HD).

BIOS (Basic Input/Output System)—Basic instructions, stored in read-only memory (ROM), containing the information the computer needs to check hardware and load the operating system when you start up the computer.

bits per second (bps)—A way of measuring the speed at which information is passed between two devices. This is the basic unit of measure used in modem communications, and is similar, but not identical, to the baud rate. See also *baud rate*.

boot—To start the computer. The term "boot" originates from bootstrap program (as in "pulling itself up by its bootstraps"), a program that loads and initializes the operating system. See also *reboot*.

boot disk—See *system disk*.

boot priority (startup sequence)—The order in which the computer accesses its internal storage drives to locate the startup files. Under the default startup sequence, the computer looks for the startup files in the external media before checking the internal storage drive.

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.

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.

Charm/charms—Start screen icons that slide out from the right side of the screen and direct you to various Windows® functions.

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 pointing device's primary button without moving the pointing device. In the Windows® operating system, this refers to the pointing device's left 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—An on-screen symbol (usually a flashing vertical line) that indicates the position where characters will appear when you enter data.

D **Desktop**—Offers the traditional look and feel of the Windows® desktop found in Windows® 7 and earlier releases of the Windows® operating system.

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 material, 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 hard disks. Compare *disc*. See also *hard disk*.

disk drive—The device that reads and writes information and programs on external media or hard disk. It rotates the disk at high speed past one or more read/write heads.

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 and release the pointing device's primary button rapidly twice without moving the pointing device. In the Windows® operating system, this refers to the pointing device's left button, unless otherwise stated.

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 mouse button while moving the pointer to drag a selected object. In the Windows® operating system, this refers to the 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*.

eSATA—An external device that supports hot swapping and fast data transfer. Very useful in storing and transferring large files.

executable file—A computer program that is ready to run. Application programs and batch files are examples of executable files. Names of executable files usually end with a .bat or .exe extension.

expansion device—A device that connects to a computer to expand its capabilities. Other names for an expansion device are port expander, port replicator, docking station, or network adapter.

extension—See *file extension*.

external device—See *device*.

F **file**—A collection of related information, saved on disk with a unique name. A file may be a program, information used by a program, or a document. See also *document*.

File Allocation Table (FAT)—The section of a storage drive that keeps track of the location of stored files.

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 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.

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   **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 some external media 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.

hardware—The physical components of a computer system. Compare *software*.

HDMI (High-Definition Multimedia Interface)—An interface used to transmit high quality audio and video signal via a single cable in digital format, providing better picture quality than analog signal.

HDMI-CEC (HDMI Consumer Electronics Control)— One A/V component can control another while using this function, if connected with HDMI cables. See also *HDMI*.

Hibernation—A feature of many Toshiba computers that saves to the internal storage drive 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 *Sleep, Suspend*.

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 a mouse.

L L1 (level one) cache—Memory cache built into the processor to help improve processing speed. See also *cache, CPU cache, L2 cache*.

L2 (level two) cache—Memory cache installed on the motherboard to help improve processing speed. It is slower than L1 cache and faster than main memory. See also *cache, CPU cache, L1 cache*.

LAN (Local Area Network)—A group of computers or other devices dispersed over a relatively limited area and connected by a communications link that enables any device to interact with any other on the network.

LED (Light Emitting Diode)—A solid state lamp (SSL) that uses light-emitting diodes (LEDs) as the source of light, which offers long life and high efficiency output. Multiple diodes are used together, since the light created by individual light-emitting diodes is small compared to incandescent and compact fluorescent lamps.

LCD (Liquid Crystal Display)—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   **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 also *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.

motherboard—The computer's main circuit board that 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 internal storage drive, such as online documentation or online Help, or to information coming from another company on a company network or the Internet.

operating system—A set of programs that controls how the computer works. Examples of operating systems are the Windows Vista®, Windows® 7, and Windows 8 operating systems.

optical disc drive—A drive which reads plastic coated discs on which   information is recorded digitally, and uses a laser to read data, music, or videos.

P   **palette**—See *color palette*.

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 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 computer to configure itself automatically to work with the device.

pointer—An icon (usually an arrow) that moves on the screen when you slide your finger across the touch pad or move a mouse. Used to point to and select/activate on-screen items, such as icons, menu items, and buttons. The shape and purpose of the pointer varies depending on the program you are using and what you are doing.

pointing device—Any device, such as the touch pad or a mouse, that enables you to move the pointer 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. Volatile here means 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 Flash drive 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*.

RGB (Red, Green, Blue) monitor—A monitor that reproduces all colors by mixing red, green, and blue light in various combinations.

RJ45 connector—An eight-wire connector used to connect a computer to a network.

ROM (Read-Only Memory)—Non-volatile memory that can be read but not written to. Non-volatile here means 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 **Secure Digital (SD)**—A small, portable, non-volatile memory card used to store and transfer data between digital products, providing encryption capability for content security.

select—To highlight or otherwise specify text, data, or graphics with the intent to perform some operation on it.

shortcut—See *keyboard shortcut*.

Sleep—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.

software—See *program*. Compare *hardware*.

solid state drive—A data storage device that utilizes solid-state memory as opposed to a hard disk (see also *hard disk*). Solid state drives hold a large amount of information and are used for storage of programs and data.

Start screen—Displays the new Windows® operating system look and feel.

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.

Swipe—Swipe an open window to the left or right of the screen to display the next or previous window.

system prompt—The symbol (in the MS-DOS® operating system, generally a drive letter followed by a "greater than" sign) indicating where users are to enter commands.

T **TFT display**—See *active-matrix display*.

Touch—To activate items displayed on the screen, such as apps, setting icons, and on-screen buttons by touching them with your finger.

Tile/Tiles—A list of square or rectangular icons on the Start screen representing applications that can be accessed by selecting them.

U **Universal Serial Bus (USB)**—USB is a serial bus that supports data transfer. 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)*.

USB Flash drive—A small, portable flash memory card that plugs into a computer's USB port and functions as a portable hard drive. They are smaller and more durable than an external hard drive because they do not contain any internal moving parts, but have less storage capacity. See also *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 registered trademark term of the Wi-Fi Alliance that stands for Wireless Fidelity, and is another term for the communication protocol to permit an Ethernet connection using wireless communication components.

World Wide Web (www)—The worldwide network of Web sites linked together over the Internet. A user of the Web can jump from site to site regardless of the location of the computer hosting the site. See also *Internet*.

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