# TOSHIBA
**Leading Innovation >>>**

# User's Manual

## TOSHIBA WT110

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# TOSHIBA

# Getting Started & Grand Tour

This chapter provides an equipment checklist, grand tour of your device and basic information to start using your device.

⚠️ *Some of the features described in this manual may not function properly if you use an operating system that was not pre-installed by TOSHIBA.*

## Equipment checklist

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

### Hardware

Check to make sure you have all the following items:
- TOSHIBA WT110 Tablet
- AC adaptor and power cord (2-pin plug or 3-pin plug)
- Battery pack (installed in the computer)

### Documentation

- TOSHIBA WT110 User Information Guide
- Instruction Manual for Safety and Comfort

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

### Software

The following Windows® operating system and utility software are preinstalled.
- Windows 7
- TOSHIBA Recovery Media Creator
- TOSHIBA Assist
- TOSHIBA ConfigFree™
- TOSHIBA Disc Creator
- TOSHIBA Face Recognition
- TOSHIBA eco Utility
- TOSHIBA Bulletin Board

- TOSHIBA ReelTime
- TOSHIBA Media Controller
- Online Manual
- TOSHIBA WT110 User's Manual (This manual)

\* You may not have all the softwares listed above depending on the model you purchased.

# Getting Started

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

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

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

## Connecting the AC adaptor

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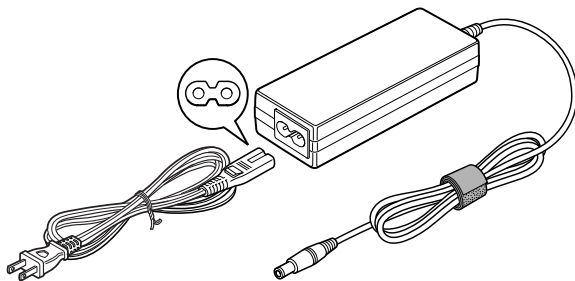


*(Sample Illustration) The AC adaptor (2-pin plug)*
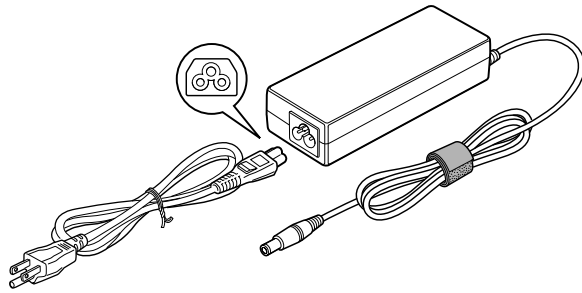
*(Sample Illustration) The AC adaptor (3-pin plug)*

- *Depending on the model, either a 2-pin or 3-pin adaptor/power lead will be bundled with the device.*
- *Do not use a 3-pin to 2-pin conversion plug.*
- *The supplied power cord conforms to safety rules and regulations in the region the device is bought and should not be used outside of this region. In order to use the adaptor/device in other regions, you should please buy a power cord that conforms to the safety rules and regulations in that particular region.*

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

- *Always use the TOSHIBA AC adaptor that was included 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.*
- *Never plug the AC adaptor into a power source that does not correspond to both the voltage and the frequency specified on the regulatory label of the unit. Failure to do so could result in a fire or electric shock, possibly resulting in serious injury.*
- *Always use or purchase power cables that comply with the legal voltage and frequency specifications and requirements in the country of use. Failure to do so could result in a fire or electric shock, possibly resulting in serious injury.*
- *The supplied power cord conforms to safety rules and regulations in the region the device is bought and should not be used outside this region. For use in other regions, please buy power cords that conform to safety rules and regulations in the particular region.*
- *Do not use a 3-pin to 2-pin conversion plug.*

■ *When you connect the AC adaptor to the device, always follow the steps in the exact order as described in the User's Manual. Connecting the power cable to a live electrical outlet should be the last step otherwise the adaptor DC output plug could hold an electrical charge and cause an electrical shock or minor bodily injury when touched. As a general safety precaution, avoid touching any metal parts.*

■ *Never place your device or AC adaptor on a wooden surface, furniture, or any other surface that could be marred by exposure to heat since the device base and AC adaptor's surface increase in temperature during normal use.*

■ *Always place your device or AC adaptor on a flat and hard surface that is resistant to heat damage.*

1. Connect the power cord to the AC adaptor.
2. Connect the AC adaptor's DC output plug to the DC IN 19V jack on the button of the device.
3. Plug the power cord into a live wall outlet - the **Power** indicator on the display panel of the device should glow.

## Turning on the power

This section describes how to turn on the power - the **Power** indicator will then indicate the status.

Press and hold the computer's power button for two or three seconds.
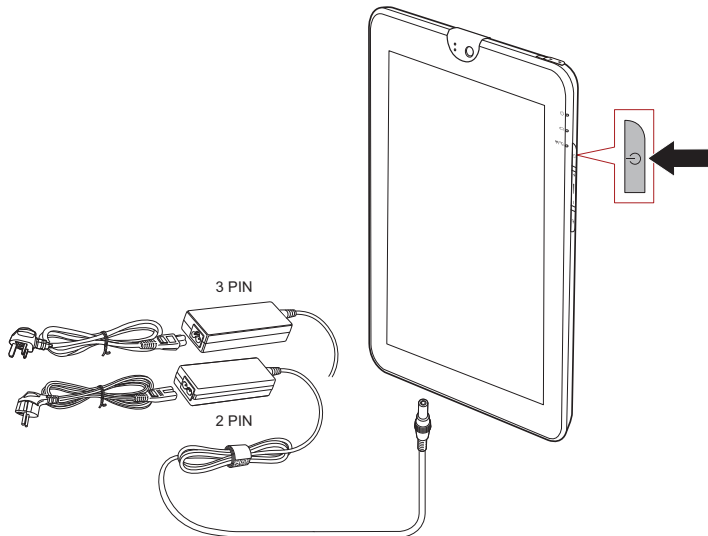


*(Sample Illustration) Turn on the device*

### Starting up for the first time

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

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

### Turning off the power

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

#### *Shut Down Mode*

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

1. If you have entered data, either save it to flash memory or to other storage media.

> ■ *Never turn off the power while an application is running. Doing so could cause loss of data.*
>
> ■ *Never turn off the power, disconnect an external storage device or remove storage media during data read/write. Doing so can cause data loss.*
>
> ■ *In any emergency case, you can also press the power button for about six seconds to force power off.*

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

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

#### *Sleep Mode*

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

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

- *Before entering Sleep Mode, be sure to save your data.*
- *Do not install or remove a memory module while the computer is in Sleep Mode. The computer or the memory module could be damaged.*
- *Do not remove the battery pack while the computer is in Sleep Mode (unless the computer is connected to an AC power source). Otherwise, data in memory could be lost.*

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

### Benefits of Sleep Mode

The Sleep Mode feature provides the following benefits:

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

### Executing Sleep Mode

You can enter Sleep Mode in one of three ways:

- Tap **Start**, tap the arrow icon ( Shut down ▶ ) and then select `sleep` from the menu.

■ Press the power button. Please note that this feature must be enabled within the Power Options (to access it, tap **Start → Control Panel → System and Security → Power Options**).

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

■ *When the computer is in Sleep Mode, the power indicator will blink amber.*

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

### Sleep Mode limitations

Sleep Mode will not function under the following conditions:

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

## Hibernation Mode

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

■ *Save your data. While entering Hibernation Mode, the computer saves the contents of memory to the solid state drive. However, for safety sake, it is better to save your data manually.*

■ *Data will be lost if you remove the battery or disconnect the AC adaptor before the save is completed.*

■ *Do not install or remove a memory module while the computer is in Hibernation Mode. Otherwise, data will be lost.*

### Benefits of Hibernation Mode

The Hibernation Mode feature provides the following benefits:

■ Save data to the solid state drive when the computer automatically shuts down because of a low battery condition.
■ You can return to your previous working environment immediately when you turn on the computer.
■ Save power by shutting down the system when the computer receives no input or hardware access for the time period set by the System Hibernate feature.
■ Allow the use of the panel power off feature.

*Starting Hibernation Mode*

To enter Hibernation Mode, follow the steps below.

1. Tap **Start**.

2. Tap the arrow icon ( Shut down  ▶ ) and then select `Hibernate` from the menu.

*Automatic Hibernation Mode*

The computer can be configured to enter Hibernation Mode automatically when you press the power button or close the lid. In order to define these settings, you can follow the steps as described below:

1. Tap **Start** and tap the **Control Panel**.

2. Tap **System and Security** and tap **Power Options**.

3. Tap **Choose what the power button does** or **Choose what closing the lid does**.

4. Enable the desired Hibernation Mode settings for **When I press the power button** and **When I close the lid**.

5. Tap the **Save changes** button.

*Data save in Hibernation Mode*

When you turn off the power in Hibernation Mode, the computer will take a moment to save the current data in memory to the solid state drive.

After you turn off the computer, and the content of memory has been saved to the solid state drive, turn off the power to any peripheral devices.

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

## Restarting the computer

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

■ You change certain computer settings.

■ An error occurs and the computer does not respond to your keyboard commands.

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

■ Tap **Start**, tap the arrow icon ( Shut down  ▶ ) and then select `Restart` from the menu.

■ Tap the SAS button (once) to display the menu window, then select **Restart** from the **Shut down options**.

■ Press the power button and hold it down for five seconds. Once the computer has turned itself off, wait between ten and fifteen seconds before turning the power on again by pressing the power button.

# System Recovery

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

## Creating Recovery Media

This section describes how to create Recovery Media.

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

A recovery image of the software on your computer is stored on the solid state drive, and can be copied to either DVD or USB Flash Memory by using the following steps:

1. Select either blank DVD or USB Flash Memory.
   The application will allow you to choose from a variety of different media onto which the recovery image can be copied including DVD-R, DVD-R DL, DVD-RW, DVD+R, DVD+R DL, DVD+RW and USB Flash Memory.

- *Please note that some of the above media may not be compatible with the external optical disc drive connected into your computer. You should therefore verify the optical disc drive supports the blank media you have chosen before proceeding.*
- *USB Flash Memory will be formatted and all the data in the USB Flash Memory will be lost when proceeding.*

2. Turn on your computer and allow it to load the Windows 7 operating system from the solid state drive as normal.
3. Insert the first blank disc into the external optical disc drive, or Insert the USB Flash Memory into one available USB port.
4. Double-tap the **Recovery Media Creator** icon on the Windows 7 desktop, or select the application from **Start** Menu.

5.  After Recovery Media Creator starts, select the type of media and the title you wish to copy, and then tap the **Create** button.

## Restoring the pre-installed software from the Recovery solid state drive/created Recovery Media

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

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

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

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

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

*When you reinstall the Windows operating system, the solid state drive will be reformatted and all data will be lost.*

To perform this restoration, follow the steps below:

1.  Turn off your computer.
2.  Turn on your computer - when the `TOSHIBA Leading Innovation >>>` logo screen appears, press the Keyboard button to enter TOSHIBA Setup Manager.

*To restore from the Recovery Media, load the recovery disc into the external ODD or insert the recovery USB Flash Memory into the USB port.*

3.  Use the Keyboard button (emulating as arrow keys) to select the appropriate option according to your actual status, and press the Home button(emulating as ENTER key) to proceed.

*For the buttons location, please refer to Grand Tour.*

4.  Follow the on-screen instructions. You can operating by directly touching the screen now.

*When drivers/utilities are installed, you can setup the respective drivers/utilities from the following place. To open the setup files, tap* **Start → All Programs → TOSHIBA → Applications and Drivers**.

### *Turning the LCD off/on*

You can turn the LCD off (while the system is still on) in the following ways:

■ Press the power button.

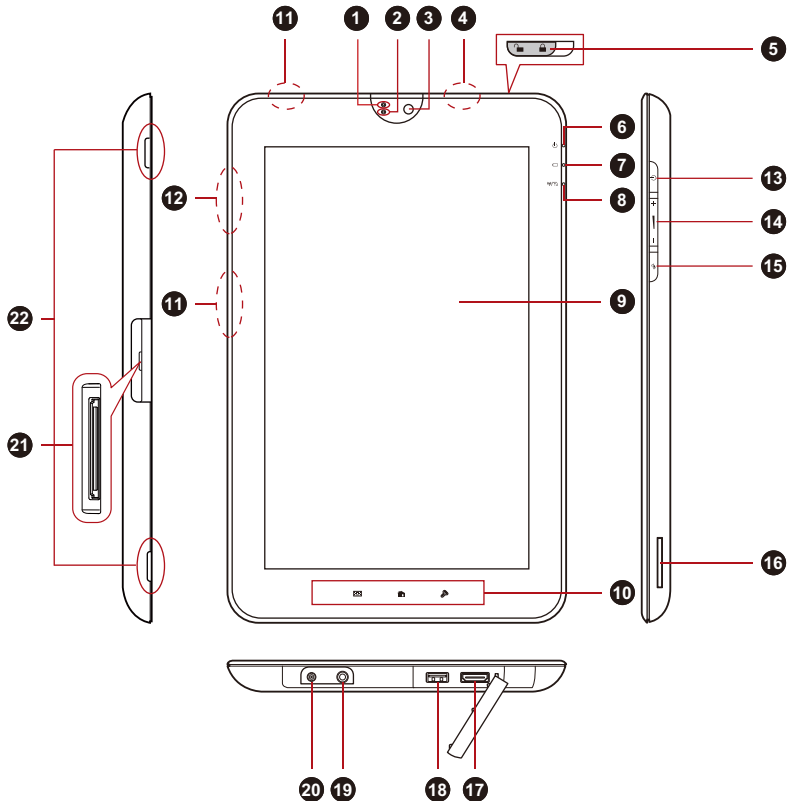■ Set the screen timeout in the **Power Options**.

To turn the LCD on:

■ Press the power button again.

# Grand Tour

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

The following figures show the grand tour of your device.

1. Web Camera LED
2. Microphone
3. Web Camera
4. Wireless LAN antennas (not shown)*
5. Battery cover lock
6. Power indicator
7. Battery indicator
8. Wi-Fi/3G indicator
9. Display screen
10. Operation buttons
11. 3G antennas (not shown)*

12. Bluetooth antenna (not shown)*
13. Power button
14. Volume down/up buttons
15. Orientation lock switch
16. SD card slot
17. HDMI out port
18. Universal Serial Bus (USB) 2.0 port
19. Headphone/Microphone combo jack
20. DC IN 19V jack
21. Docking interface
22. Speakers

*Provided with some models.

*(Sample Illustration) Grand tour of the device*

| | | |
|---|---|---|
| | **Web Camera LED** | The Web Camera LED will glow blue when the Web Camera is in operation. |
| | **Microphone** | A built-in microphone allows you to import and record sounds for your application. |
| | **Web Camera (front)** | **Web Camera (front)** is a device that allows you to record video or take photographs with your product. |
| | **Wireless LAN antennas** | Some models are equipped with Wireless LAN antennas. |
| | **Battery cover lock** | Slide this lock to the unlock ( ⌒▬ ) position in order to remove the battery cover. |
| ⏻ | **Power indicator** | The **Power** indicator normally glows white when the computer is turned on. However, if you turn the computer off into Sleep Mode, this indicator will flash white - approximately two second on, two seconds off - both while the system is shutting down and while it remains turned off. |
| ▭ | **Battery indicator** | The **Battery** indicator shows the status of the DC IN and battery's charge - white indicates the battery is fully charged while the power is being correctly supplied from the  AC power adaptor. For details, please refer to *Power conditions* section. |
| ((ı))/ 𝖳ıl | **Wi-Fi/3G indicator** | This indicator glows amber when the communication function is used. |

| | |
|---|---|
| **Display screen** | 29.5 cm (11.6") LCD screen, 16 million colors, is configured with the following resolution depending on the model you have purchased: |
| | ■ HD, 1366 horizontal x 768 vertical pixels |
| | Please be aware that, when the computer is operating on the AC adaptor, the image displayed on the internal screen will be somewhat brighter than when it operates on battery power. This difference in brightness levels is intended to save power when operating on batteries. |
| **Operation buttons** | There are three operation buttons provided on the display panel: |
| | **Keyboard button** ( ⌨ ) This button functions differently depending on the number of the times you press it. |
| | Press once: To open or close touch keyboard. |
| | Press twice quickly: To open or close writing pad. |
| | **Home button** ( 🏠 ) This button functions differently depending on the number of the times you press it. |
| | Press once: To show Media Consumption. |
| | Press twice quickly: To launch TOSHIBA Flash Cards. |
| | Press and hold: To hide Media Consumption. |
| | **SAS button** ( 🔑 )  The function of this button is equivalent to pressing **Ctrl** + **Alt** + **Del** on a standard computer. |
| **3G antennas** | Some models are equipped with the 3G antennas. |
| **Bluetooth antenna** | Some models are equipped with a Bluetooth antenna. |
| ⏻    **Power button** | Press this button to turn the device's power on and off. |
| – ◢ +    **Volume down/up buttons** | Press these buttons to increase or decrease the volume. |

| | **Orientation lock switch** | Slide this switch to lock/unlock automatic rotation of the screen orientation. |
|---|---|---|
| | **SD card slot** | This slot lets you insert an SD™/SDHC™/SDXC™ memory card and miniSD™/microSD™ Card. |
| | | Please refer to the *SD card slot* section in "Hardware & Options Operation" chapter for details. |

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

| | **HDMI out port** | HDMI out port can connect with Type A connector HDMI cable. |
|---|---|---|
| | | You can send video and audio signals via HDMI cable. In addition to this, you can send and receive control signals via it. |
| | | Please refer to the *HDMI device* section in "Hardware & Options Operation" chapter for details. |
| | **Universal Serial Bus (USB 2.0) port** | One Universal Serial Bus port, which complies to the USB 2.0 standard, is provided. The port with the icon ( ⚡ ) has *Sleep and Charge* function. |
| | | Please refer to the *USB device* section in "Hardware & Options Operation" chapter for details. |

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

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

| | **Headphone/ Microphone combo jack** | A 3.5 mm mini headphone/microphone combo jack enables connection of a monaural microphone or a stereo headphone. |
|---|---|---|

*Both the internal and external microphones will be disabled if you use a headset other than a 4-pin headset headphone.*
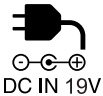
ground mic right Left

| | **DC IN 19V jack** | The AC adaptor connects to this jack in order to power the device and charge its internal batteries. Please note that you should only use the model of AC adaptor supplied with the device at the time of purchase - using the wrong AC adaptor can cause damage to the device. |
|---|---|---|
| DC IN 19V | **Docking interface** | The interface enables the connection of an optional dock described in *Hardware & Options Operation* chapter. |
| | **Speakers** | The speakers emit sound generated by your software as well as audio alarms, such as low battery condition, generated by the system. |

# Power conditions

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

*The LED in the table below refers to the **Battery** indicator.*

|  |  | **Power on** | **Power off (no operation)** |
|---|---|---|---|
| **AC adaptor not connected** | Battery fully charged | • Operate<br>• No charge<br>• White | • No charge<br>• LED: Off |
|  | Battery partially charged or no charge | • Operate<br>• Charge<br>• Amber | • Operate<br>• Quick charge<br>• LED: Off |
|  | No battery installed | • LED: Off | • LED: Off |
| **AC adaptor connected** | Battery fully charged | • Operate<br>• LED: Off |  |
|  | Battery partially charged or no charge | • Operate<br>• LED: Amber |  |
|  | No battery installed | • No operation<br>• LED: Off |  |

# Basic Operations

This chapter describes the basic operations of your device.

## Using the Touch Screen

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

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

■ **Double tap**
Quickly tap your finger twice on icons or folders on the touch screen to open applications or file folders.

■ **Tap & hold**
Tap & hold your finger on the screen one and more seconds and lift your finger to open a right-click menu.

■ **Drag**
Tap & hold an item for a moment and then, without lifting your finger, move your finger on the screen until you reach the target position.

■ **Pinch**
Pinch two fingers together or apart to zoom out or in when viewing photo, web page, email or folder.

■ **Slide**
Quickly move your finger across the surface of the screen, without pausing when first touching (instead of dragging an item) to scroll the web page, email or folder.

## Using the touch keyboard

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

| | **Touch keyboard** | The touch keyboard is like a standard keyboard, but you enter text by tapping the keys with your tablet pen (or your fingers, if touch input is available on your computer). |
|---|---|---|

# Changing the Screen Orientation

You can change the screen orientation to Portrait mode by rotating the device sideways. The screen orientation automatically changes according to the rotation angle detected.

You can also lock the auto rotation and use the device always in Portrait or Landscape mode.

## Locking screen rotation

Slide the **Screen rotation lock switch** to lock position, a red indication will be shown.
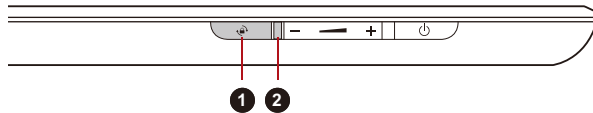
1. Screen rotation lock switch                2. Red indication

## Unlocking screen rotation

Switch the **Screen rotation lock switch** to unlock position, the red indication will be hidden.

- *Always make sure to keep the Web camera on the top ( landscape mode ) or on the left (Portrait mode ) while rotating the screen. Avoid having direct contact with the other edges of the hand held device while the wireless device is turned on and transmitting. Only factories installed wireless transmitter can be used with this hand held device to satisfy RF exposure compliance.*

- *In the Portrait mode, some drivers/utilities may not perform install and uninstall operation. If it occurs, switch to the Landscape mode to proceed.*

# Wireless communications

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

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

- *Do not use the Wireless LAN (Wi-Fi) or Bluetooth functionalities near a microwave oven or in areas subject to radio interference or magnetic fields. Interference from a microwave oven or other source can disrupt Wi-Fi or Bluetooth operation.*

- *Turn all wireless functionalities off when near a person who may have a cardiac pacemaker implant or other medical electric device. Radio waves may affect pacemaker or medical device operation, possibly resulting in serious injury. Follow the instruction of your medical device when using any wireless functionality.*

- *Always turn off wireless functionality if the computer is near automatic control equipment or appliances such as automatic doors or fire detectors. Radio waves can cause malfunction of such equipment, possibly resulting in serious injury.*

- *It may not be possible to make a network connection to a specified network name using the ad hoc network function.*
  *If this occurs, the new network(*) will have to be configured for all computers connected to the same network in order to re-enable network connections.*
  *\* Please be sure to use new network name.*

## Wireless LAN

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

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

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

### *Setting*

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

### *Security*

■ TOSHIBA strongly recommend that you enable encryption functionality, otherwise your computer will be open to illegal access by an outsider using a wireless connection. If this occurs, the outsider may illegally access your system, eavesdrop, or cause the loss or destruction of stored data.

■ TOSHIBA is not liable for the loss of data due to eavesdropping or illegal access through the wireless LAN and the damage thereof.

## Bluetooth wireless technology

Bluetooth wireless technology eliminates the need for cables, such as desktop computers, between your PC and other electronic devices, example of printers and mobile phones.

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

### *Worldwide operation*

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

### *Radio links*

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

### *Security*

Two advanced security mechanisms ensure a high level of security:

■ Authentication prevents access to critical data and makes it impossible to falsify the origin of a message.

■ Encryption prevents eavesdropping and maintains link privacy.

### Bluetooth Stack for Windows by TOSHIBA

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

■ Windows 7

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

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

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

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

### Product Support:

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

# Computer Handling

This section explains computer handling and maintenance.

## Cleaning the computer

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

■ Be careful not to spill liquids into the computer. If the computer does get wet, turn the power off immediately and let the computer dry completely - in these circumstance you should get the computer inspected by an authorized service provider in order to assess the scope of any damage.

■ Clean the plastics of the computer using a slightly water dampened cloth.

■ You can clean the display screen by spraying a small amount of glass cleaner onto a soft, clean cloth and then wiping the screen gently with the cloth.

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

### Moving the computer

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

■ Turn off (shut down) the computer.

■ Disconnect the AC adaptor and all peripherals before moving the computer.

■ Before carrying your computer, shut it down, disconnect the AC adaptor and allow it to cool down - a failure to follow this instruction may result in minor heat injury.

■ Be careful not to subject the computer to impact or shock - a failure to follow this instruction could result in damage to computer, computer failure or loss of data.

■ Never transport your computer with any cards installed - this may cause damage to either the computer and/or the card resulting in product failure.

■ Always use a suitable carry case when transporting the computer.

■ When carrying your computer, be sure to hold it securely so that it does not fall or hit anything.

■ Do not carry your computer by holding any of its protruding elements.

## Heat dispersal

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

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

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

# TOSHIBA

# Utilities & Advanced Usage

This chapter describes the utlities and special features in this computer, and the advanced usage of some utilites.

## Utilities and Applications

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

| | |
|---|---|
| **TOSHIBA PC Diagnostic Tool** | The TOSHIBA PC Diagnostic Tool will display basic system configuration information and allow the functionality of some of the computer's builtin hardware devices to be tested. |
| **TOSHIBA Face Recognition** | TOSHIBA Face Recognition uses a face verification library to verify the face data of users when they login to Windows. If the verification is successful, the user will be logged into Windows automatically. The user can thus avoid having to enter a password or the like, which makes the login process easier. |
| | For more information, please refer to *Using the TOSHIBA Face Recognition* section in "Utilities & Advanced Usage" chapter. |
| **Bluetooth Stack for Windows by Toshiba** | This software enables communication between the computer and external Bluetooth devices such as printers and mobile phones. |

*Bluetooth functions cannot be used in models that do not have a Bluetooth module installed.*

| | |
|---|---|
| **TOSHIBA Assist** | TOSHIBA Assist is a graphical user interface that provides access to specific tools, utilities and applications that make the use and configuration of the computer easier. |

| | |
|---|---|
| **TOSHIBA ConfigFree** | TOSHIBA ConfigFree is a suite of utilities that improve the ease and control of communication devices and network connections, help in the identification of communication problems and allow the creation of profiles if you need to switch between different locations and communication networks. To access this utility, tap **Start → All Programs → TOSHIBA → ConfigFree**. |
| **TOSHIBA eco Utility** | This PC is equipped with "eco mode". This mode slightly lowers performance of some devices to reduce electric power consumption. You can realize measurable power savings by using it continuously. TOSHIBA eco Utility helps you monitor your power savings by showing approximate real time power consumption. Furthermore, it shows approximate accumulated power consumption and approximate accumulated power savings when using eco mode daily, weekly, and monthly. You can track power savings by using eco mode continuously. |
| **TOSHIBA Disc Creator** | You can create CDs and DVDs in a number of formats including audio CDs that can be played on a standard CD player, and data CD/DVDs which can store copies of the files and folders on your computer's solid state drive. This software can be used on models connected with a CDRW/ DVD-ROM drive, DVD-R/-RW drive, DVD±R/±RW drive or DVD Super Multi drive.<br><br>To start this utility, tap **Start → All Programs → TOSHIBA → CD&DVD Applications → Disc Creator**. |
| **TOSHIBA HDD/SSD Alert Utility** | This utility includes wizard functions to monitor the Disk Drive operating status and execute the system backup.<br><br>To access the utility, tap **Start → All Programs → TOSHIBA → Utilities → HDD SSD Alert**. |

| | |
|---|---|
| **TOSHIBA Service Station** | This application allows your computer to automatically search for TOSHIBA software updates or other alerts from TOSHIBA that are specific to your computer system and its programs. When enabled, this application periodically transmits to our servers a limited amount of system information, which will be treated in strict accordance with the rules and regulations as well as applicable data protection law. |
| | To access this utility, tap **Start → All Programs → TOSHIBA → Utilities → Service Station**. |
| **TOSHIBA Bulletin Board** | Bulletin Board is a convenient place to pin things to visually organize in a fun and creative way. |
| | Simply drag and drop your favorite pictures, files or notes to pin them on the Board. You can use it to create thumbnail shortcuts, reminders, to-do list and so on according to your personal style. Press the Home button to launch the Bulletin Board. |
| | You can also access this utility by tapping **Start → All Programs → TOSHIBA → TOSHIBA Bulletin Board**. |
| **TOSHIBA ReelTime** | This application is a graphical history/indexing tool that enables you to view recently accessed files in a fun and easy-to-use format. View and scroll through your history of opened or imported files via thumbnails in an intuitive user interface. |
| | To access this utility, tap **Start → All Programs → TOSHIBA → TOSHIBA ReelTime**. |
| **TOSHIBA Sync Utility** | This utility can help you synchronize files and Office Outlook® emails. |
| | With this utility, you can synchronize files between two PCs or between a PC and a removable storage device. |
| | To access this utility, tap **Start → All Programs → TOSHIBA → Utilities → Sync Utility**. |
| | For more information, please refer to the TOSHIBA Sync Utility Help. |

| | |
|---|---|
| **TOSHIBA Media Controller** | This application allows you to control your music, pictures and videos by streaming content to any compatible device in your home. |
| | To access this utility, tap **Start → All Programs → TOSHIBA → TOSHIBA Media Controller → TOSHIBA Media Controller**. |
| | For more information, please refer to the TOSHIBA Media Controller Help. |
| **HW Setup** | This utility allows you to customize your hardware settings according to the way you work with the computer and the peripherals you use. |
| **TOSHIBA Button Support** | TOSHIBA Button Support can update and assign other applications to the function keys. |
| **TOSHIBA Tablet Keyboard** | This utility provides a virtual keyboard, enabling you to enter charatcers, numbers and symbols. |
| | For more information, please refer to the *TOSHIBA Tablet Keyboard* section in this chapter. |
| **TOSHIBA Tablet Touch Pad** | This utility provides a virtual touchpad with two control buttons. |
| | For more information, please refer to the *TOSHIBA Tablet Touch Pad* section in this chapter. |
| **TOSHIBA Tablet Piano** | This utility provides a virtual piano playing with fingers tapping. |
| | For more information, please refer to the *TOSHIBA Tablet Piano* section in this chapter. |

# Special features

The following features are either unique to TOSHIBA computers or are advanced features which make the computer more convenient to use. Access each function using the following procedures.

*1 To access the Power Options, tap **Start → Control Panel → System and Security → Power Options**.

| | |
|---|---|
| **Display automatic power off** [*1] | This feature automatically cuts off power to the computer's display panel when there is no keyboard input for a specified time, with power being restored the next time a key is pressed. This can be specified in the Power Options. |

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

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

# Using TOSHIBA Tablet Feature

The TOSHIBA Tablet feature includes with the following function(s):

■ TOSHIBA Tablet Keyboard

■ TOSHIBA Tablet Touch Pad

■ TOSHIBA Tablet Piano

## TOSHIBA Tablet Keyboard

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

### *Launching Tablet Keyboard*

1. Tap **Start** → **All Programs** → **TOSHIBA** → **Utilities** → **Tablet Keyboard**. Then the Tablet Keyboard appears.

2. Tap where you desire to enter text on the Windows screen, and enter text by finger-tapping the keyboard directly.

■ *Up to two keys can be tapped simultaneously.*

■ *Tapping **Ctrl+Alt+Del** keys is not available on the Tablet keyboard. To perform this action, tap the **SAS** button instead.*

■ ***Ctrl**, **Alt** and **Shift** keys are set to toggle mode respectively. Tap it once to set the function ON (as if the key is being held on a standard computer), and tap it again to release the function.*

■ *Some key functions may not be performed on the Tablet Keyboard, e.g. some key combinations or shortcut keys.*

3. Tap the cross icon on the upper right corner of the Tablet Keyboard when finished entering the text.

### *Switching Keyboard Layouts*

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

## TOSHIBA Tablet Touch Pad

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

### *Launching Tablet Touch Pad*

To launching Tablet Touch Pad, tap **Start → All Programs → TOSHIBA → Utilities → Tablet Touch Pad**.

## Haptics Feedback

You can select to enable the vibration haptics feedback whenever you tap a key on the Slate Keyboard or the Slate touch pad.

To access the Haptics Feedback by one of the following ways:

■ On the Tablet Keyboard window, tap **Settings → Haptics Feedback Settings**.

■ On the Tablet Touch Pad window, tap **Settings → Haptics Feedback Settings**.

Settings can be performed in the following Haptics Feedback Settings window.



*The Tablet Keyboard supports TouchSense® Technology licensed from Immersion Corporation.*

### TOSHIBA Tablet Piano

To launching Tablet Piano, tap **Start → All Programs → TOSHIBA → Utilities → Tablet Piano**. You can play the Tablet Piano with fingers tapping.

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

TOSHIBA Tablet Piano provides several instrument tones as below:

- Piano
- Trumpet
- Electronic piano
- Saxophone
- Drum

# TOSHIBA DeskBand Utility

TOSHIBA DeskBand Utility presents other TOSHIBA utilities on it. You can access the applications and utilities by touching the icon on the TOSHIBA DeskBand.

## Starting the TOSHIBA DeskBand Utility

The TOSHIBA DeskBand Utility will automatically start when Window starup.

## Enabling/Disabling the TOSHIBA DeskBand Utility

You can enable or disable the TOSHIBA DeskBand Utility in the following way:

- Right-click the Taskbar, then choose the Taskbar option, seslect the DeskBand Home option to display the DeskBand Utility and clear the option to hide the utility.

.
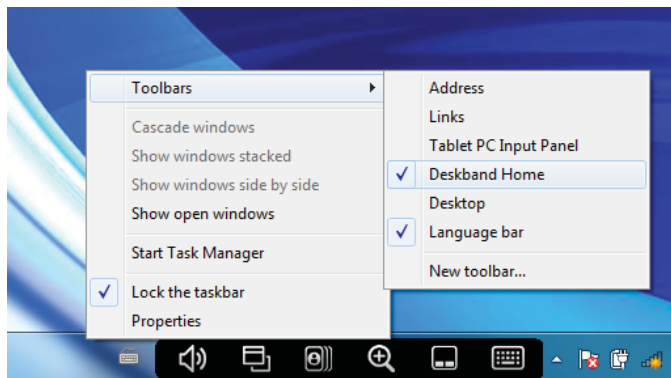
## Applications



> *If the related utility is not installed, the icon will not be shown on DeskBand bar.*

■ Orientation Lock Indicator

Showing the current orientation lock status.

■ Audio Enhancer

Tapping the 🔊 to enable or disable the audio enhancement effect.

■ Video Enhancer

Tapping the ⚙ to enable or disable the video enhancement effect.

■ Window Switcher

Tapping the ⊟ to display or hide the Windows switcher.

> *If there are more than eight tasks, the tasks will be paged with eight tasks every page. You can drag the thumbanils to scroll to next page.*

■ Flash Cards

Tapping the 🔘 to launch the TOSHIBA Flash Cards.

■ Zoom Funtion

Tapping the 🔍 to enter TOSHIBA Zoom module.

You can launch the zoom function by the steps below.

1. If you tap the magnifying glass icon on the Tablet Taskbar and tap the Windows screen, the zoom window will appear around where you tapped.
2. Tap anywhere except the zoom window to close it.

■ Tablet Touchpad

Tapping the ▭ to launch TOSHIBA SW Touchpad.

■ Tablet Keyboard

Tapping the ⌨ to launch TOSHIBA SW Keyboard.

> *For more details about TOSHIBA Tablet Touchpad and TOSHIBA Tablet Keyboard, please refer to TOSHIBA Tablet Touch Pad and TOSHIBA Tablet Keyboard.*

# TOSHIBA Button Support

You can update and assign other applications to the function buttons using the TOSHIBA Button Support utility.

You can open TOSHIBA Button Support by the following way:

■ Click **Start → All Programs → TOSHIBA → Utilities → TOSHIBA Assist**, and then click the **OPTIMIZE** tab in the TOSHIBA Assist window. In the **OPTIMIZE** tab page, click **TOSHIBA Button Support**.

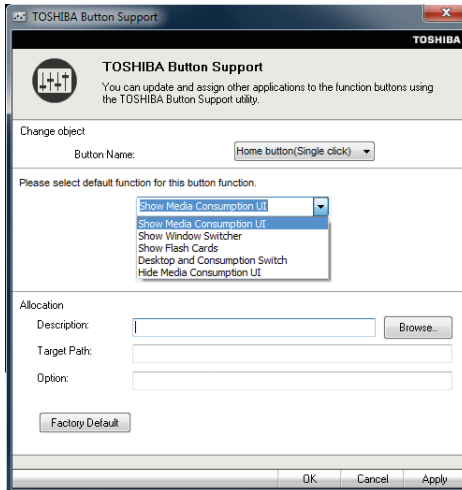The TOSHIBA Button Support dialog box will appear. Follow the following steps to assign a function to the selected button.



1. In the **Button Name** list, select one of the following function button name such as **KB button**, **Home button** and so on.

2. Click **Browse**, select the application you would like to assign to the button, and then click **Open**. The "Description" and "Target Path" of the selected application will appear.

# TOSHIBA Disc Creator

Please be aware of the following limitations when you use the TOSHIBA Disc Creator:

■ DVD Video cannot be created using TOSHIBA Disc Creator.

■ DVD Audio cannot be created using TOSHIBA Disc Creator.

■ You cannot use TOSHIBA Disc Creator's "Audio CD" function to record music to DVD-R, DVD-R (Dual Layer), DVD-RW, DVD+R, DVD+R (Double Layer) or DVD+RW media.

■ Do not use the "Disc Backup" function of TOSHIBA Disc Creator to copy DVD Video or DVD-ROM material that has copyright protection.

■ DVD-RAM discs cannot be backed up using the "Disc Backup" function of TOSHIBA Disc Creator.

■ You cannot back up CD-ROM, CD-R or CD-RW media to DVD-R, DVD-R (Dual Layer) or DVD-RW media using the "Disc Backup" function of TOSHIBA Disc Creator.

■ You cannot back up CD-ROM, CD-R or CD-RW media to DVD+R, DVD+R (Double Layer) or DVD+RW media using the "Disc Backup" function of TOSHIBA Disc Creator.

■ You cannot back up DVD-ROM, DVD Video, DVD-R, DVD-R (Dual Layer), DVD-RW, DVD+R, DVD+R (Double Layer) or DVD+RW to CD-R or CD-RW media using the "Disc Backup" function of TOSHIBA Disc Creator.

■ TOSHIBA Disc Creator cannot record in packet format.

■ You might not be able to use the "Disc Backup" function of TOSHIBA Disc Creator to back up a DVD-R, DVD-R (Dual Layer), DVD-RW, DVD+R, DVD+R (Double Layer) or DVD+RW disc that was made with other software on a different optical media recorder.

■ If you add data to a DVD-R, DVD-R (Dual Layer), DVD+R or DVD+R (Double Layer) disc that you have already recorded to, you might not be able to read the added data under some circumstances. For example, it cannot be read under 16-bit operating systems, such as Windows 98SE and Windows Me, while in Windows NT4 you will need Service Pack 6 or later, and in Windows 2000, you will need Service Pack 2. In addition to this, some DVD-ROM and DVD-ROM / CD-R/RW drives cannot read this added data regardless of the operating system.

■ TOSHIBA Disc Creator does not support recording to DVD-RAM discs - to achieve this you should use Windows Explorer or another similar utility.

■ When you back up a DVD disc, be sure that the source drive supports recording to DVD-R, DVD-R (Dual Layer), DVD-RW, DVD+R, DVD+R (Double Layer) or DVD+RW media - if this is not the case then the source disc might not be backed up correctly.

■ When you back up a DVD-R, DVD-R (Dual Layer), DVD-RW, DVD+R, DVD+R (Double Layer) or DVD+RW disc, be sure to use the same type of disc.

■ You cannot partially delete any data written to a CD-RW, DVD-RW or DVD+RW disc.

### *Data Verification*

To verify that data has been written or rewritten correctly to a data CD/DVD you should follow the steps below before you begin the write/rewrite process:

1. Click **Start** → **All Programs** → **TOSHIBA** → **CD&DVD Applications** → **Disc Creator** to access the **TOSHIBA Disc Creator** utility.
2. Display the setting dialog box by one of the following two steps:
    - Tap the **Recording settings** button ( 🔧 ) for writing on the main toolbar in the **Data CD/DVD** mode.
    - Select **Settings for Each Mode** → **Data CD/DVD** in the **Settings** menu.
3. Mark the **Verify Written Data** check box.
4. Select **File Open** or **Full Compare** mode.
5. Tap the **OK** button.

### *How to learn more about TOSHIBA Disc Creator*

Please refer to the Help files for additional TOSHIBA Disc Creator information.

# Using the TOSHIBA Sleep Utility

The TOSHIBA Sleep Utility is used for changing settings of Sleep and Charge function.

## Sleep and Charge

Your computer can supply USB bus power (DC5V) to the USB port even when the power of the computer is turned OFF. "Power OFF" includes Sleep Mode, Hibernation Mode or shutdown state.

This function can be used for ports that support the Sleep and Charge function (hereinafter called "compatible ports").

Compatible ports are USB ports that have the ( ⚡ ) symbol icon.

You can use the "Sleep and Charge function" to charge certain USB-compatible external devices such as mobile phones or portable digital music players.

However, the "Sleep and Charge function" may not work with certain external devices even if they are compliant with the USB specification. In those cases, turn the power of the computer ON to charge the device.

■ *When Sleep and Charge function is enabled, USB bus power (DC5V) will be supplied to compatible ports even when the power of the computer is turned OFF.*
*USB bus power (DC5V) is similarly supplied to the external devices which are connected to the compatible ports. However, some external devices cannot be charged solely by supplying USB bus power (DC5V).*
*As for the specifications of the external devices, please contact the device manufacturer or check the specifications of the external devices thoroughly before use.*

■ *Using the sleep and charge function to charge external devices will take longer than charging the devices with their own chargers.*

■ *If Sleep and Charge function is enabled, the computer's battery will discharge during hibernation or when the computer is turned off. It is recommended that you connect the AC adaptor to the computer when enabling the Sleep and Charge function.*

■ *External devices connected to the USB bus power (DC5V) function that interfaces with the power ON/OFF of the computer may always be in an operational state.*

■ *When there is a current overflow of the external devices connected to the compatible ports, USB bus power (DC5V) supply may be stopped for safety reasons.*

■ *When Sleep and Charge function is enabled, the USB Wakeup function does not work for compatible ports.*
*In that case, if there is a USB port that does not have the Sleep and Charge function-compatible icon ( ⚡ ), attach the mouse or keyboard to it. If all USB ports have the Sleep and Charge function-compatible icon ( ⚡ ), change to disable Sleep and Charge function.*
*The USB Wakeup function will now work, but the Sleep and Charge function will be disabled.*

*Metal paper clips or hair pins/clips will generate heat if they come into contact with USB ports. Do not allow USB ports to come into contact with metal products, for example when carrying the computer in your bag.*

## Starting the TOSHIBA Sleep Utility

To start the utility, tap **Start** → **All Programs** → **TOSHIBA** → **Utilities** → **Sleep Utility**.

## Enabling Sleep and Charge

This utility can be used to enable and disable the Sleep and Charge function.

Select the **Enable Sleep and Charge** check box to enable this function for the compatible USB ports. The default state is disabled.

### Power supply mode settings

Your PC has multiple charging modes so that many different USB devices can be supported for Sleep and Charge function. **Auto Mode** (Default) is suitable for a wide range of digital audio players.

However, determining which mode is suitable for your USB device is unknown without trying. Try each mode, using the following procedure, from **Auto Mode** to **Alternate Mode** to find the suitable mode for your USB device to charge.

This function may not be able to be used with some connected external devices even if the appropriate mode is selected. In this situation, clear the "Enable Sleep and Charge" check box and stop using this function.

### Battery Settings

This utility can be used to specify the lower limit of remaining battery life for Sleep and Charge. Move the slider bar to specify the lower limit. If the remaining battery life falls below the setting, the Sleep and Charge function will be stopped. Clearing the "Enable under Battery Mode" check box sets the utility to only charge when the AC adaptor is connected.

# Using the TOSHIBA Face Recognition

TOSHIBA Face Recognition uses a face verification library to verify the face data of users when they log in to Windows. The user can thus avoid having to enter a password or the like, which makes the login process easier.

- *TOSHIBA Face Recognition does not guarantee the correct identification of a user. Changes to the likeness of a registrant, such as hair style changes, wearing a cap, or wearing glasses may effect the recognition rates when such changes occur after the registrant had registered.*

- *TOSHIBA Face Recognition may incorrectly recognize faces that are similar to a registrant.*

- *For high security purposes, TOSHIBA Face Recognition is not a suitable substitute for Windows passwords. When security is a high priority, use your established Windows passwords to log in.*

- *Bright background light and/or shadows may prevent a registrant from being recognized correctly. In that case, log in using your Windows password. If recognition of a registrant fails repeatedly, refer to your computer documentation to learn ways to improve recognition performance.*

- *TOSHIBA Face Recognition records face data in a log when face recognition fails. When transferring ownership or disposing of your computer, please uninstall the application or delete all the logs created by the application. For details on how to do this, see help file.*

- *TOSHIBA Face Recognition can be used only in Windows Vista and Windows 7.*

## Disclaimer

Toshiba does not guarantee that the face recognition utility technology will be completely secure or error-free. Toshiba does not guarantee that the face recognition utility will accurately screen out unauthorized users at all times. Toshiba is not liable for any failure or damage that might arise out of the use of the face recognition software or utility.

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.

## How to register the Face Recognition Data

Take a picture for facial verification purposes, and register the data needed when you log in. To register the data needed when you log in, follow the steps as described below:

1. To launch this utility, tap **Start → All Programs → TOSHIBA → Utilities → Face Recognition**.

   ■ The **Registration** screen is displayed for a logged-in user whose face has not been registered.

   ■ The **Management** screen is displayed for a logged-in user whose face has already been registered.

2. Tap **Run as administrator** in lower left of the **Management** screen, and then tap the **Register** button. The **Registration** screen is displayed.

   ■ If you wish to practice, tap on the **Next** button in the **Registration** screen.

   ■ If you do not wish to practice, tap on the **Skip** button in the **Registration** screen.

3. Tap the **Next** button to start the guide. Please follow the guide to practice.

   ■ Tap the **Back** button to practice the guide once more.

4. Tap the **Next** button to start image-capturing process.

5. Adjust the position of your face so that it fits within the face-shaped frame.

6. Once your face has been positioned properly, the recording will commence.
   Start moving your neck very slightly to the left and right, and then move your neck down and up.

7. Registration will end after you have repeatedly moved your neck left, right, down and up.
   When the register succeeds, below message will be displayed on the screen:
   "**Registration successful. Now we'll do the verification test. Click the Next button.**"
   Tap the **Next** button to perform the verification test.

8. Perform the verification test. Face the screen as you do when you register.
   ■ If verification fails, tap the **Back** button and re-register. Please refer to step 5 to step 7.

9. If verification is successful, tap the **Next** button and register an account.

10. Register the account.
    Fill in all the fields.

11. The **Management** screen is displayed.
    The registered account name will be displayed. Tapping on it will cause the captured image of your face to be displayed on the left.

## How to Delete the Face Recognition Data

Delete image data, account information, and personal record data created during registration. To delete the Face Recognition Data, follow the steps as described below:

1. To launch this utility, tap **Start → All Programs → TOSHIBA → Utilities → Face Recognition**.
   The **Management** screen is displayed.

2. Select a user which is displayed in the **Management** screen.

3. Tap the **Delete** button. "**You are about to delete the user data. Would you like to continue?**" will be displayed on the screen.
   ■ If you do not want the data to be deleted, tap the **No** button and you will then be returned to the **Management** screen.
   ■ Tapping on the **Yes** button will remove the selected user from the **Management** screen.

## How to launch the help file

For further information on this utility, please refer to help file.
■ To launch the help file, tap the Help icon in the Management screen.

## Windows Logon via TOSHIBA Face Recognition

This section explains how to login to Windows with TOSHIBA Face Recognition. Two authentication modes are provided.
■ **1:N Mode Login screen**: If the face authentication tile is selected by default, you can log in without using the keyboard or mouse.

■ **1:1 Mode Login screen**: This mode is essentially the same as AUTO mode, but the **Select Account** screen will appear before the **Display Captured Image** screen, and you will need to select the user account to be authenticated in order to start the authentication process.

### 1:N Mode Login screen

1. Turn on the computer.
2. The **Select Tiles** screen will be displayed.
3. Select **Start face recognition** (  ).
4. "`Please face the camera`" will be displayed.
5. Verification will be performed. If the authentication is successful, the image data taken in step 4 will be faded in and placed over one another.
   ■ If an error occurs during authentication, you will be returned to the **Select Tiles** screen.
6. The Windows **Welcome** screen will be displayed, and will be logged in automatically to Windows.

### 1:1 Mode Login screen

1. Turn on the computer.
2. The **Select Tiles** screen will be displayed.
3. Select **Start face recognition** (  ).
4. The **Select Account** screen will be displayed.
5. Select the account, and tap the **arrow** button.
6. "`Please face the camera`" will be displayed.
7. Verification will be performed. If the authentication is successful, the image data taken in step 6 will be faded in and placed over one another.
   ■ If an error occurs during authentication, you will be returned to the **Select Tiles** screen.
8. The Windows **Welcome** screen will be displayed, and will be logged in automatically to Windows.
   ■ If authentication was successful, but an authentication error subsequently occurred during the login to Windows, you will be asked to provide your account information.

# HW Setup

This chapter explains how to use TOSHIBA HW Setup program to configure your computer and how to set passwords.

TOSHIBA HW Setup allows you to configure settings for General, Password, Display, Boot Priority, USB.

*If the supervisor password is set, access to the TOSHIBA HW Setup program can be prevented when the user password is used to log on to the computer.*

### Accessing HW Setup

To start the utility, tap the Windows Start button → **All Programs** → **TOSHIBA** → **Utilities** → **HWSetup**.

### HW Setup window

The HW Setup window contains the following tabs: General, Password, Display, Boot Priority, Keyboard, USB, LAN and SATA.

There are also three buttons: **OK**, **Cancel** and **Apply**.

| | |
|---|---|
| **OK** | Accepts your changes and closes the HW Setup window. |
| **Cancel** | Closes the window without accepting your changes. |
| **Apply** | Accepts all your changes without closing the HW Setup window. |

#### *General*

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

| | |
|---|---|
| **Default** | Returns all HW Setup values to the factory settings. |
| **About** | Displays the HW Setup version. |

#### *Setup*

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

#### *Password*

#### *User Password*

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

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

To enter a user password:

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

   **Enter Password:**

   Enter a password of up to 10 characters. The character string you enter is displayed as a string of asterisks. For example, if you enter a password consisting of four characters, the display is shown as:

   **Enter Password: \*\*\*\***

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

   **Verify Password:**

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

   **Entry Error!!!**

To delete a user password:

1. Select **Not Registered** to display the following prompt:

   **Enter Password:**

2. Enter the currently registered password. The character string you enter is displayed as a string of asterisks.

   **Enter Password: \*\*\*\***

3. Tap the **OK** button. If the character string you enter matches the registered password, the password option is reset and the display changes to:

   **Not registered**

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

   **Incorrect Password.**

- *If you enter the password incorrectly three times in a row, the computer need to shut off.*

- *You will not be able to access the password option in the HW Setup. In this case you must turn the power off and back on to retry the procedure.*

4. Follow the same procedures described in the earlier section, How to set the password, to set a new user password.

### *Display*

This tab allows you to customize your computer's display settings for either the internal LCD screen or for an external monitor.

### *Power On Display*

Allows you to set the display to be used when the computer is booted.

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

### *Boot Priority*

### *Boot Speed*

This feature allows you to select system boot-up speed.

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

### *USB*

### *Legacy USB Support*

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

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

# TOSHIBA PC Health Monitor

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

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

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

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

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

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

## Starting the TOSHIBA PC Health Monitor

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

- ■ Tap **Start → All Programs → TOSHIBA → Utilities → PC Health Monitor**.

- ■ Tap the icon ( 🖥 ) in the notification area, then tap the "`Enable PC Health Monitor...`" message the first time you run the application and "`Run PC Health Monitor...`" every time thereafter.

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

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

# TOSHIBA

# Hardware & Options Operation

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

- *Please handle your device carefully to avoid scratching or damaging the surface.*
- *This device cannot be used as a mobile phone.*
- *Content that is copyright protected or has limited access rights, cannot be played on this device.*

## Hardware

This section describes the hardwares of your device.

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

### *Processor*

| | |
|---|---|
| **CPU** | Your device is equipped with an Intel® Processor. |

### *Memory*

| | |
|---|---|
| **Memory on board** | This device is equipped with a 2GB memory on board. |
| **Solid state drive** | This device is equipped with a solid state drive (SSD). |

## *Power*

| | |
|---|---|
| **Battery pack** | The device is powered by one detachable lithium-ion battery pack. |
| **AC adaptor** | The AC adaptor provides power to the system and recharges the batteries when they are low. It comes with a detachable power cord which will either have a 2-pin or 3-pin plug enclosure. |
| | As the AC adaptor is universal, it can receive a range of AC voltages from 100 to 240 volts, however you should note that the output current varies among different models. Using the wrong adaptor can damage your device. |

## *Display*

The device's internal display panel supports high-resolution video graphics and can be set to a wide range of viewing angles for maximum comfort and readability.

| | |
|---|---|
| **Display panel** | 29.5 cm (11.6") LCD screen, 16 million colors, is configured with the following resolution: |
| | ■ HD, 1366 horizontal x 768 vertical pixels |
| **Graphics controller** | The graphics controller maximizes display performance. |

## *Multimedia*

| | |
|---|---|
| **Web Camera** | **Web Camera** is a device that allows you to record video or take photographs with your device. You can use it for video chatting or video conferences using a communication tool. |

## *Communications*

| | |
|---|---|
| **Bluetooth** | Some models have Bluetooth wireless communication function which eliminates the need for cables between electronic devices such as computers, printers and mobile phones. When it is enabled, Bluetooth provides the wireless personal area network environment which is safe and trustworthy, that is quick and easy. |
| **Wireless LAN** | The device is equipped with a Wireless LAN module that is compatible with other Wireless LAN systems based on Direct Sequence Spread Spectrum/Orthogonal Frequency Division Multiplexing radio technology that complies with the IEEE 802.11 Standard. |

| **3G** | Some models are equipped with a 3G module. |
|--------|--------------------------------------------|

*FCC compliance and Industry Canada (IC) compliance does not apply to this product with a 3G module installed.*

## CAUTION

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

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

Please visit the following website:
In Europe visit http://www.toshiba-europe.com/computers/tnt/bluetooth.htm
In the United States visit http://www.pc.support.global.toshiba.com

## Battery

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

### Battery pack

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

When the AC adaptor is not connected, the device's main power source is a removable lithium ion battery pack. You can purchase additional battery packs for extended use of the device away from an AC power source although you should not change the battery pack while the AC adaptor is connected.

Before you remove the battery pack, save your data and shut down the device.

### Real Time Clock (RTC) battery

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

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

### Care and use of the battery pack

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

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

■ *Make sure the battery is securely installed in the device before attempting to charge the battery pack. Improper installation could generate smoke or fire, or cause the battery pack to rupture.*

■ *Keep the battery pack out of reach of infants and children. It can cause injury.*

■ *The lithium ion battery pack can explode if not replaced, used, handled or disposed of properly. Dispose of the battery as required by local ordinances or regulations. Use only batteries recommended by TOSHIBA as replacements.*

■ *The device's RTC battery is a lithium battery and should be replaced only by your dealer or by a TOSHIBA service representative. The battery can explode if not properly replaced, used, handled or disposed. Dispose of the battery as required by local ordinances or regulations.*

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

■ *Never install or remove the battery pack without first turning off the power and disconnecting the AC adaptor. Never remove the battery pack while the device is in Suspend Mode. Data could be lost.*

### *Charging the batteries*

When the power in the battery pack becomes low, the **Battery** indicator will blink amber to indicate that only a few minutes of battery power remain.

You must recharge a battery pack when it becomes discharged.

### *Procedures*

To recharge a battery pack while it is installed in the device, connect the AC adaptor to the DC IN 19V jack and plug the other end into a working outlet.

*Use only the device connected to an AC power source, a TOSHIBA Tablet NAS Dock, a TOSHIBA Tablet USB Cradle or a TOSHIBA Tablet Cradle to charge the battery pack. Never attempt to charge the battery pack with any other charger.*

### *Battery charging notice*

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

■ The battery is extremely hot or cold (if the battery is extremely hot, it might not charge at all). To ensure the battery charges to its full capacity, you should charge it at room temperature of between 5°C to 35°C (41°F to 95°F).

■ The battery is nearly completely discharged. In this instance you should leave the AC adaptor connected for a few minutes and the battery should begin charging.

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

■ The battery has not been used for a long time.

■ The battery has completely discharged and been left in the device for a long time.

■ A cool battery is installed in a warm device.

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

1. Fully discharge the battery by leaving it in the device with the power on until the system automatically turns itself off.

2. Connect the AC adaptor to the DC IN 19V jack of the device, and to a wall outlet that is supplying power.

3. Charge the battery until the **Battery** indicator glows white.

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

### *Charging time*

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

**Charging time (hours)**

| Battery type | Power on | Power off |
|---|---|---|
| Battery pack (23Wh, 6 cell) | about 5 | about 3.5 |

*Please be aware that the charging time when the device is on is affected by ambient temperature, the temperature of the device and how you are using the device - if you make heavy use of external devices for example, the battery might scarcely charge at all during operation.*

### *Battery life*

The following table shows the approximate battery life of a fully charged battery.

**Battery life**

| Battery type | Time |
|---|---|
| Battery pack (23Wh, 6 cell) | about 7 ~ 20 hours (in use) |
| | about 5 days (Suspend Mode) |

*Please be aware that the battery life will be affected by how you are using the device.*

## Replacing the Battery Pack

Please be aware that the battery pack is classified as a consumable item. The operating life of the battery pack will gradually reduce through repeated charging and discharging, and will need to be replaced when it reaches the end of its operating life. In addition to this, you might also replace a discharged battery pack with a charged spare when you are operating your device away from an AC power source for an extended period of time.

This section explains how to remove and install the battery pack, and begins with the removal process which is detailed through the following steps.

⚠️ *Do not touch the battery release latch while holding the device or the battery pack might fall out due to the unintentional release of the battery release latch and cause injuries.*

### *Removing the battery pack*

To remove a discharged battery, follow the steps as detailed below:

1. Save your work.
2. Turn the device's power off.
3. Remove all cables and peripherals that are connected to the device.
4. Turn the device upside down.
5. Slide the cover lock into its unlock ( 🔓 ) position.
6. Slide your finger under the cover recess and lift this corner up first.
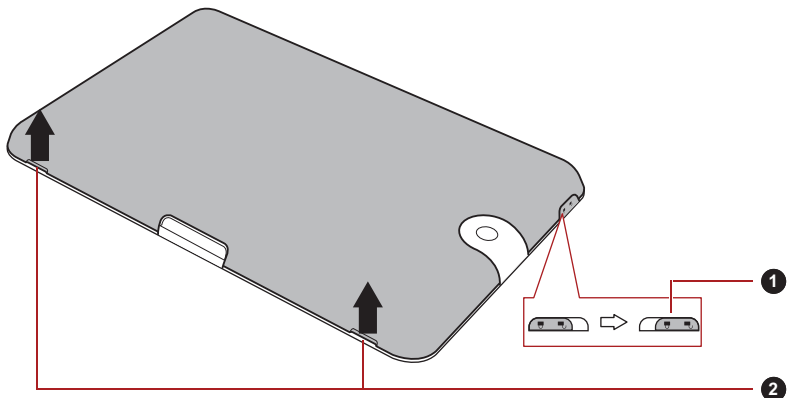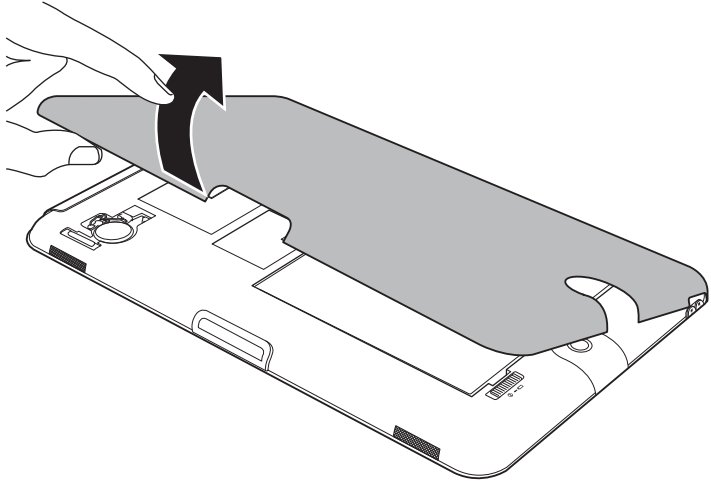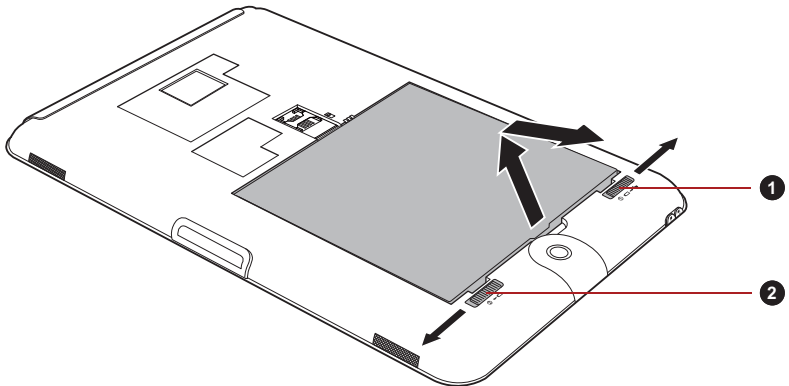


1. Cover lock      2. Cover recess

*(Sample Illustration) Removing the cover-1*

7. Lift the cover up according to the following figure and then remove the cover.



*(Sample Illustration) Removing the cover-2*

8. Slide the battery lock into its unlock ( 🔓 ) position.

9. Slide and hold the battery release latch to disengage the battery pack and then lift it up to remove it from the device.
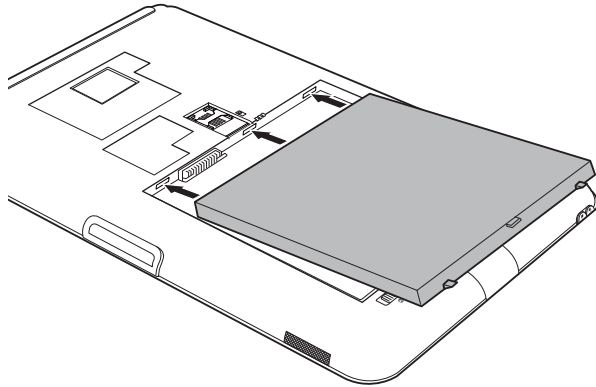


1. Battery lock                    2. Battery release latch

*(Sample Illustration) Removing the battery pack*

### *Installing the battery pack*

To install a battery pack, follow the steps as detailed below:

1. Align the connectors of the battery pack with that of the device and gently insert the battery pack into the device at about a 30 degree angle.

*(Sample Illustration) Installing the battery pack*

2. Ensure that the battery pack is securely in place and the battery lock is in its lock ( ⬜ ) position.

3. Seat the cover in place and slide the cover lock to its lock ( 🔒 ) position.

# Optional devices

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

### *Cards*

■ SD card slot
   ■ Secure Digital™ (SD) Card (SD memory card, SDHC memory card, SDXC memory card, miniSD Card, microSD Card)
   ■ MultiMediaCard
■ SIM card slot

### *Peripheral devices*

■ USB device
■ HDMI device
■ TOSHIBA Tablet NAS Dock
■ TOSHIBA Tablet USB Cradle
■ TOSHIBA Tablet Cradle

## SD card slot

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

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

### *Memory media*

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

### *Points to note about the SD/SDHC/SDXC memory card*

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

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

- SD, SDHC and SDXC memory cards appear the same externally. However, the logo on SD, SDHC and SDXC memory cards is different, so pay careful attention to the logo when purchasing.

- *The SD memory card logo is ( ).*
- *The SDHC memory card logo is ( ).*
- *The SDXC memory card logo is ( ).*

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

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

### Memory media format

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

### Formatting an SD/SDHC/SDXC memory card

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

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

### Media care

Observe the following precautions when handling the card.

### Card care

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

### Memory card care

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

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

### About the write-protect

The following memory media have a function for protect.

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

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

## Inserting a memory media

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

1. Turn the memory media so that the contacts (metal areas) are face down.
2. Insert the memory media into the memory media slot on the right side of the device.
3. Push the memory media gently to ensure a firm connection is made.
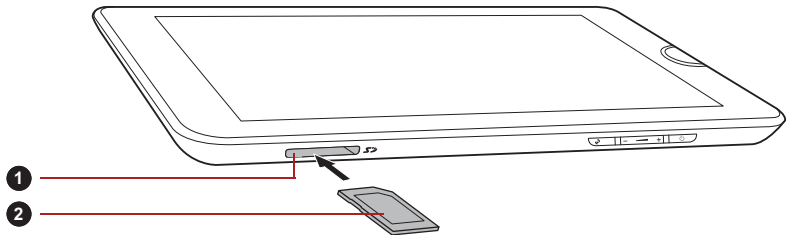


1. SD card slot    2. Memory media

*(Sample Illustration) Inserting a memory media*

■ *Make sure memory media is oriented properly before you insert it. If you insert the media in wrong direction, you may not be able to remove it.*

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

■ *Do not turn the device off or switch to Suspend Mode while files are being copied - doing so may cause data to be lost.*

## Removing a memory media

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

1. Make sure all file operations are finished.
2. Tap the **Safely Remove Hardware and Eject Media** icon on the Windows Taskbar.
3. Tap **Eject Media**.
4. Push the memory media until you hear a click and pull it out of the slot.

■ *Do not remove the memory media while the device is in Suspend mode. The device could become unstable or data in the memory media could be lost.*

■ *Do not remove only the miniSD/microSD Card while leaving the adaptor in the memory media slot.*

## SIM card slot

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

*This section only applies to models with 3G modules.*

### *Inserting a SIM card*

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

1. Turn off your device. Remove the cover and the battery pack as described in the *Removing the battery pack* section.

2. Locate the SIM card slot beside the battery pack slot.

3. Slide your SIM card into the SIM card slot with your finger as shown on the figure below.
   You can slide the SIM card with your finger in the opposite direction to remove the SIM card.
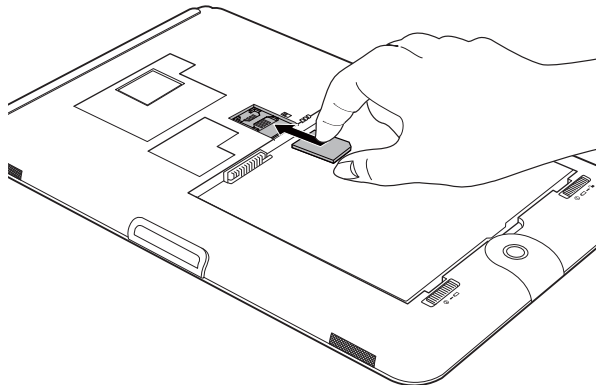


*(Sample Illustration) Inserting a SIM card*

4. Install the battery pack and the cover in place.
   Now you can power on your device to use your provider's mobile networks.

## USB device

This device is equipped with a USB port that complies with USB 2.0 standard.
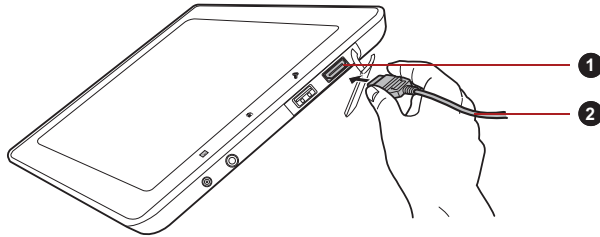
To connect a USB device, plug the device's connector into the USB port on your device.

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

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



1. USB port                              2. USB connector

*(Sample Illustration) Connecting a USB device*
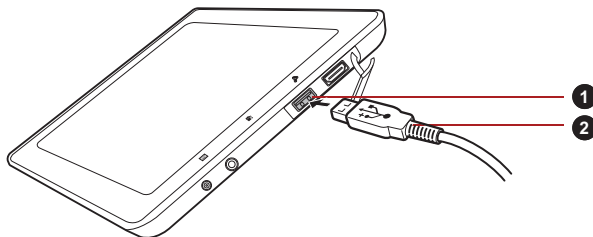
## HDMI device

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

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

ℹ *As the port operation of all HDMI (High-Definition Multimedia Interface) monitors has not been confirmed, some HDMI monitors may not function properly.*

1. Plug one end of the HDMI cable into the HDMI port of the HDMI device.
2. Plug the other end of the HDMI cable into the HDMI out port on your device.



1. HDMI out port                         2. HDMI cable

*(Sample Illustration) Connecting a HDMI cable*

*Please connect or disconnect an HDMI device to or from the computer under the following conditions:*

■ *The computer is turned on.*

■ *The computer is completely turned off.*

*Do not do so when the computer is in Sleep Mode or Hibernation Mode.*

■ *When you connect a television or external monitor to the HDMI port, the display output device is set to HDMI.*

■ *When you unplug the HDMI cable and re-plug it, please wait at least 5 seconds before you re-plug the HDMI cable again.*

# TOSHIBA Tablet Dock

Your device can accommodate some kinds of docks providing extra ports and network-attached storage (NAS) function, so that you can charge the battery.

| Dock Type | Feature |
|-----------|---------|
| TOSHIBA Tablet NAS Dock | ■ Power supply and battery charge<br>■ Built in speaker<br>■ Extra ports<br>■ NAS function |
| TOSHIBA Tablet USB Cradle | ■ Power supply and battery charge<br>■ Extra ports |
| TOSHIBA Tablet Cradle | ■ Power supply and battery charge |

## Using the TOSHIBA Tablet Dock

### *Connecting the AC adaptor*

1. Connect the power cord to the AC adaptor.
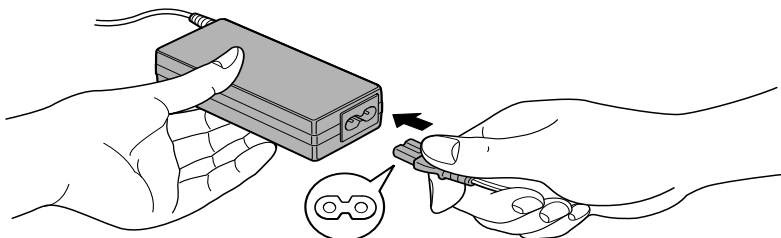


*(Sample Illustration) Connecting the power cord to the AC adaptor (2-pin plug)*
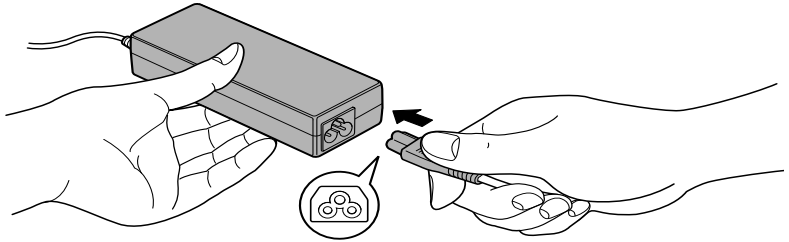
*(Sample Illustration) Connecting the power cord to the AC adaptor (3-pin plug)*

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

2. Connect the AC adaptor's DC output plug to the DC IN 19V jack on the back of the dock.

3. Plug the power cord into a live wall outlet.

*The AC adaptor is only equipped with TOSHIBA Tablet NAS Dock.*

## Connecting the TOSHIBA Tablet NAS Dock

- ■ *You must connect the AC adaptor before you connect to the dock.*
- ■ *When the dock is connected to your device, you can not use the following ports on your device: DC IN 19V jack and HDMI out port.*

1. Turn on the TOSHIBA Tablet.

2. Align the docking interface on the left side of your device with the docking connector on the dock.
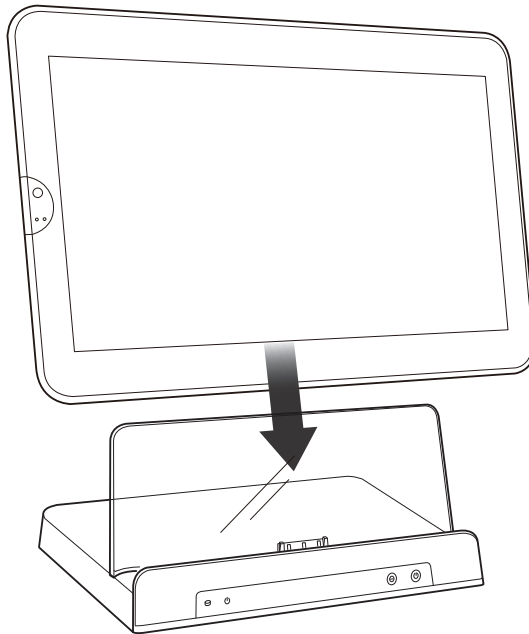
*(Sample Illustration) Connect your device with the dock*

3. Press the **Power** button on the front side of the dock and a notice of docking will appear on the Windows Taskbar of your device.

- *The **Power** indicator blinks orange while starting the dock. Then you must wait for several minutes until the **Power** indicator blinks white.*
- *You can use the USB ports and HDMI port after the power supplied.*

To disconnect your device by using following steps:

1. Press the **Undock** button on the front side of the dock to undock your device.

- *Make sure the HDD indicators is off. If you press the **Undock** button while a disk is being accessed, you may lose data or damage the disk.*
- *Never remove your device from the dock without pressing the **Undock** button. Doing so could cause loss of data.*

2. Wait for a notice of undocking appears on the Windows Taskbar and remove your device from the dock.

### *Docking the TOSHIBA Tablet NAS Dock via WLAN*

You are able to dock the TOSHIBA Tablet NAS Dock via a wireless local area network (WLAN).

1. Turn on the TOSHIBA Tablet.
2. Connect your device to a wireless local area network.

3. Press the **Power** button on the front side of the dock without connecting the device.
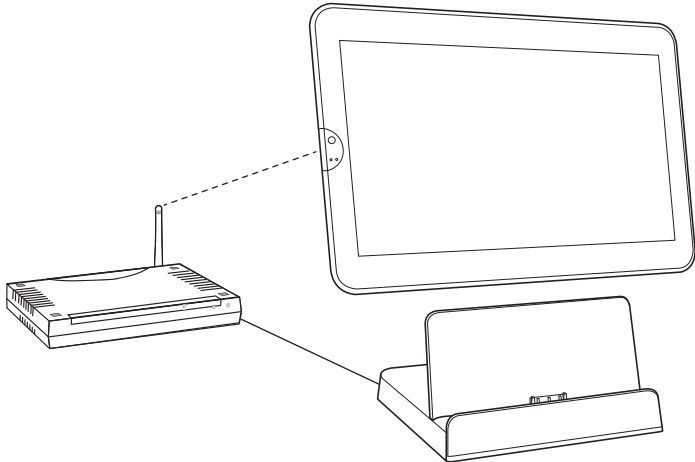


*(Sample Illustration) Connect your device via WLAN*

*Make sure that your device is connected to the network via wireless while the TOSHIBA Tablet NAS Docking is connected to the network via LAN cable.*

To connect to a WLAN by setting your WLAN firstly:

1. Please make sure that the **Wireless Communication function** is turned on.
2. Tap **Start → Control Panel → Network and Internet → Network and Sharing Center**.
3. Tap **Set up a new connection or network**.
4. Follow the wizard. You will need the name of the wireless network together with security settings. Consult the documentation accompanied with your router or ask your wireless network administrator for the settings.
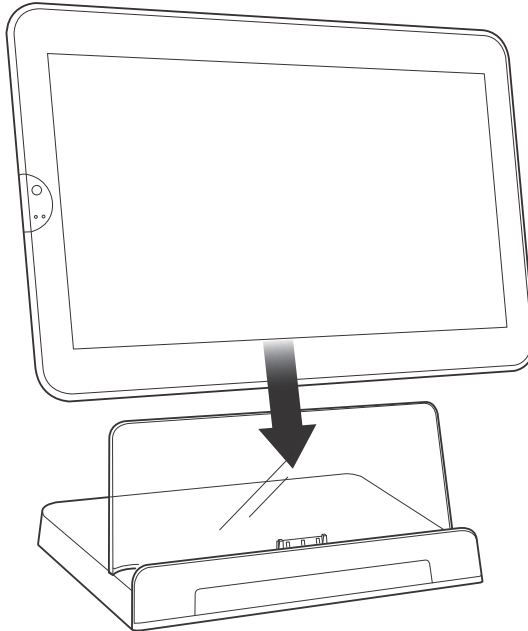
*A notice of docking will appear on the Windows Taskbar of your device.*

### Connecting the TOSHIBA Tablet USB Cradle / TOSHIBA Tablet Cradle

■ *You must connect the AC adaptor before you connect to the dock.*

■ *When the dock is connected to your device, you can not use the following ports on your device: DC IN 19V jack and HDMI out port.*

1. Turn on the TOSHIBA Tablet.
2. Align the docking interface on the left side of your device with the docking connector on the dock.



*(Sample Illustration) Connect your device with the dock*

A notice of docking will appear on the Windows Taskbar of your device.

To disconnect your device, remove your device following the connector direction.

### The Grand Tour of the dock

The following figures show the buttons and ports on the dock.

## TOSHIBA Tablet NAS Dock
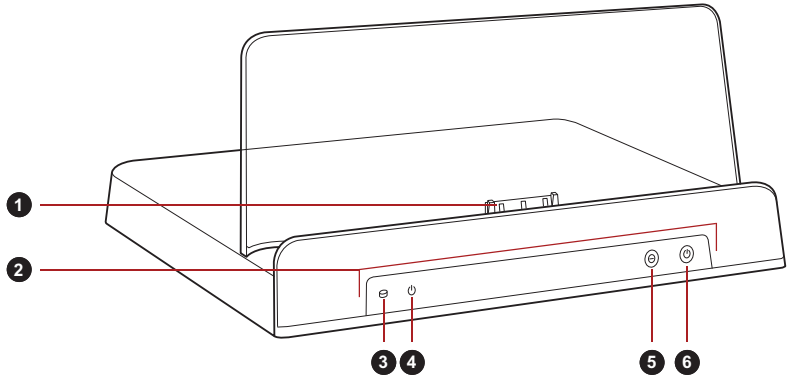


1. Docking connector      2. Speakers
3. HDD indicator      4. Power indicator
5. Undock button      6. Power button

*(Sample Illustration) Front of the dock*
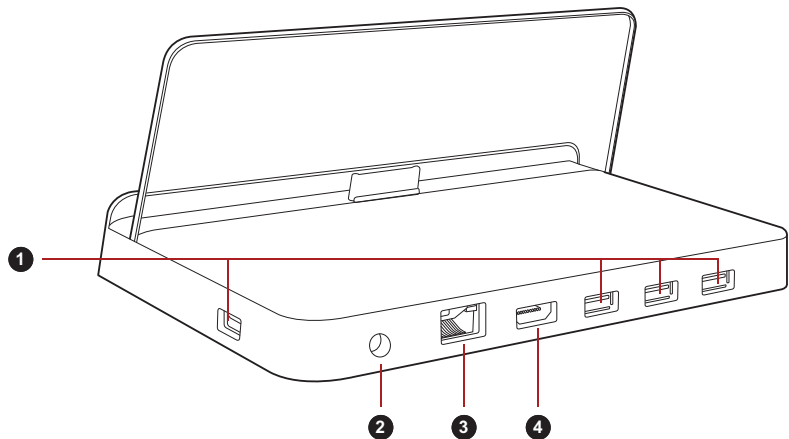


1. Universal Serial Bus 2.0 port      2. DC IN 19V jack
3. LAN jack      4. HDMI out port

*(Sample Illustration) Back of the dock*

## TOSHIBA Tablet USB Cradle
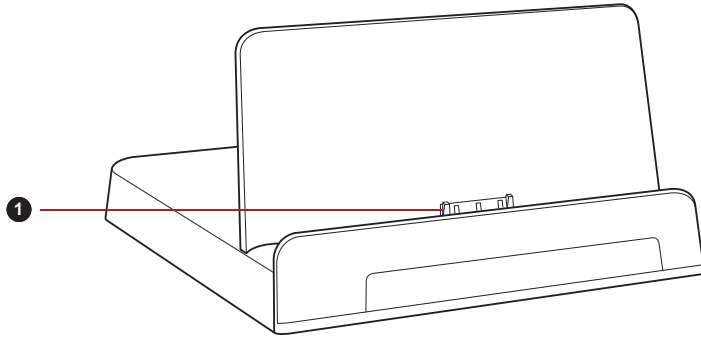
1. Docking connector

*(Sample Illustration) Front of the dock*
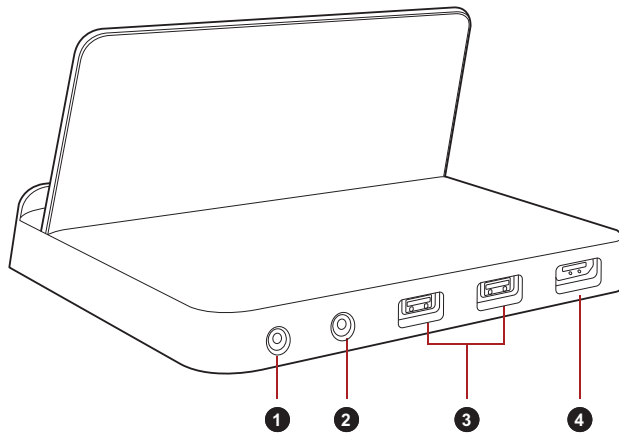
1.DC IN 19V jack                    2.Headphone jack
3. Universal Serial Bus 2.0 port      4. HDMI out port

*(Sample Illustration) Back of the dock*

## TOSHIBA Tablet Cradle
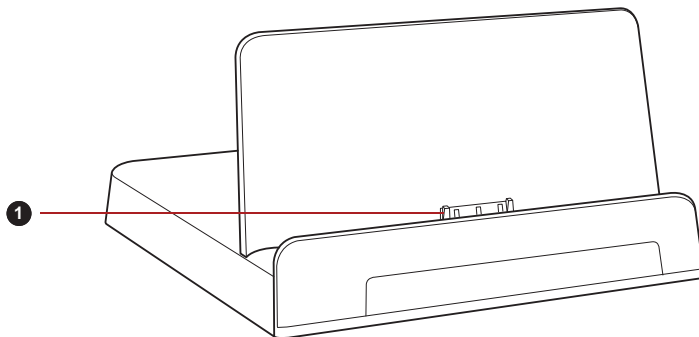


1. Docking connector

*(Sample Illustration) Front of the dock*
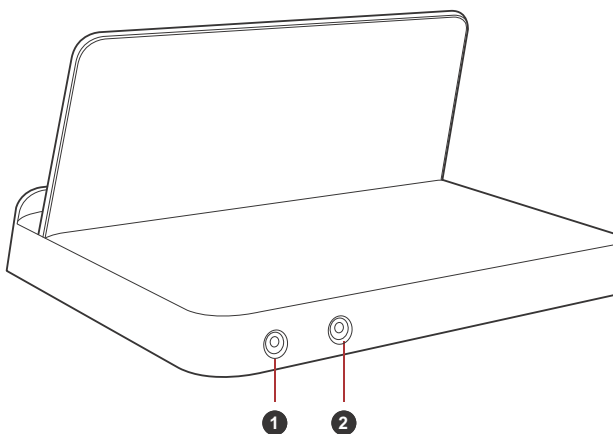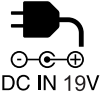


1. DC IN 19V jack                    2. Headphone jack

*(Sample Illustration) Back fo the dock*

| | | |
|---|---|---|
| | **Docking connector** | TOSHIBA Tablet connects the dock via docking connector. |
| | **Speakers** | The speakers emit sound generated by your software as well as audio alarms, such as low battery condition, generated by the system. |
| | **HDD indicator** | The **HDD** indicator glows white whenever the device is accessing the built-in hard disk drive or optical disc drive device. |

| | | |
|---|---|---|
| ⏻ | **Power indicator** | The **Power** indicator normally glows white when the dock is turned on. However, this indicator will glow orange while starting the dock. |
| ⏏ | **Undock button** | Press this button to Undocking your device. For details, please refer to *Connecting the AC adaptor* section. |
| ⏻ | **Power button** | Press this button to turn the dock on and off. |
| ⟜•←• | **Universal Seral Bus 2.0 port** | Four Universal Serial Bus ports, which comply to the USB 2.0 standard, are provided. |
| DC IN 19V | **DC IN 19V jack** | The AC adaptor connects to this jack in order to power the device and charge its internal batteries. Please note that you should only use the model of AC adaptor supplied with the device at the time of purchase - using the wrong AC adaptor can cause damage to the device. |
| ⎓ | **LAN jack** | This jack lets you connect to a LAN. The adaptor has built-in support for Ethernet LAN (10 megabits per second, 10BASE-T), Fast Ethernet LAN (100 megabits per second, 100BASE-TX). Some models are equipped with a Gigabit Ethernet LAN (1000 megabits per second, 1000BASE-T). |
| HᴰMI | **HDMI out port** | HDMI out port can connect with Type A connector HDMI cable. HDMI cable can send video and audio signals. In addition to this, it can send and receive control signals. |

## Using TOSHIBA Network Attached Storage Utility

This utility is only for TOSHIBA Tablet NAS dock.

- *You must dock the device to a NAS Dock before you use TOSHIBA Network Attached Storage Utility.*
- *Refer to Using the TOSHIBA Tablet Dock section in this chapter for details.*

You are able to access TOSHIBA Tablet NAS Dock easily by using Network Attached Storage Utility.

To launch Network Attached Storage Utility, tap **Start → All Programs → TOSHIBA → Utilities → TOSHIBA Network Attached Storage Utility.**
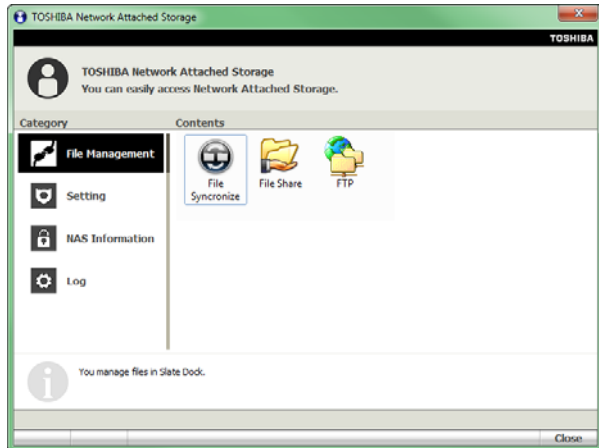
*(Sample Illustration) TOSHIBA Network Attached Storage window*

## *Managing files in a NAS Dock*

You are able to create sync copies of outlook or local files in a NAS Dock and restore them through it.

To manage files in a NAS Dock through following steps.

1. Tap **File Management** button.
2. Double tap **File Syncronize** icon to launch **TOSHIBA Sync Utility**.
3. Tap **Add Task** button to add an outlook sync task, a local file sync task or a bidirectional task and tap **Start** button to do sync operation.

*Please refer to the help file of TOSHIBA Sync Utility to learn more information by tapping **Help** button.*

## *Accessing Shared files in a NAS Dock*

The internal hard disk drive of a NAS Dock will be shared via the local area network.

To access shared files in a NAS Dock through following steps.

1. Tap **File Management** button.
2. Double tap **File Share** icon to open a shared directory window and access the folders and files in this directory.

*Please entry **admin** in **User Name** textbox and leave **Password** textbox empty if the login screen appears.*

*(Sample Illustration) Login sreen setup*

## *Using File Transfer Protocol (FTP) function*

The NAS Dock can setup a FTP Server conveniently. You are able to access the FTP Server with your TOSHIBA Tablet device or other computers in the same local area network.

To access the FTP site on the NAS Dock through following steps.

1. Tap **File Management** button.
2. Double tap **FTP** icon to browse the FTP site on the NAS Dock.

## *Accessing Internet via a NAS Dock*

You are able to accessing internet via a NAS Dock pluging in the network cable.

To acceccing Internet via a NAS Dock through following steps.

1. Plug an ethernet network cable in the LAN jack on the back of the NAS Dock.
2. Tap **Start → All Programs → TOSHIBA → Utilities → TOSHIBA Network Attached Storage Utility** to launch Network Attached Storage Utility.
3. Tap **Setting** button.
4. Double tap **Access Internet via Dock** icon.

*A notice window will appear and tap Yes to confirm. The network will disconnect temporarily.*

# Optional accessories

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

| | |
|---|---|
| **Universal AC Adaptor** | If you frequently use your device at more than one site, it may be convenient to purchase an additional AC adaptor to be kept at each site in order to remove the need to always carry the adaptor with you. |
| **Battery Pack** | An additional battery pack can be purchased for use as either a spare or replacement. |
| **TOSHIBA Tablet NAS Dock** | The TOSHIBA Tablet NAS Dock provides the ports available on your device in addition to a HDMI out port, four Universal Serial Bus ports (USB 2.0), a LAN jack and a DC IN 19V jack. It also provides you the network attached storage function for your TOSHIBA Tablet device. |
| **TOSHIBA Tablet USB Cradle** | The TOSHIBA Tablet NAS Dock provides the ports available on your device in addition to a HDMI out port, two Universal Serial Bus ports (USB 2.0), a Headphone jack and a DC IN 19V jack. |
| **TOSHIBA Tablet Cradle** | The TOSHIBA Tablet Cradle provides the power charging for your TOSHIBA Tablet device. |

# Troubleshooting

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

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

## Problem solving process

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

■ Stop immediately when you recognize a problem exists as taking further action may result in data loss or damage, or you may destroy valuable problem related information that can help solve the problem.

■ Observe what is happening - write down what the system is doing and what actions you performed immediately before the problem occurred.

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

### Preliminary checklist

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

■ Make sure you turn on all peripheral devices before you turn on the device - this includes any other external device you are using.

■ Before you attach an external device you should first turn the device off, then when you turn your device back on again it will recognize the new device.

■ Make sure all optional accessories are configured properly in the device's setup program (please refer to the documentation included with the optional accessories for further information on its installation and configuration).

■ Check all cables to ensure they are correctly and firmly attached to the device - loose cables can cause signal errors.

■ Inspect all connecting cables for loose wires and all connectors for loose pins.

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

# Hardware and system checklist

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

| | |
|---|---|
| ■ Internal display panel | ■ External monitor |
| ■ Memory Card | ■ Wireless LAN |
| ■ USB device | ■ Bluetooth |
| ■ Sound system | |

### Internal display panel

Apparent device's display panel problems may be related to the device's setup and configuration.

| Problem | Procedure |
|---|---|
| Markings appear on the device's display panel. | These marks may have come from contact with the touch screen. You should try to remove the marks by gently wiping the display panel with a clean dry cloth or, if this fails, with a good quality LCD screen cleaner. In this latter instance you should always follow the instructions with the screen cleaner and always ensure you let the display panel dry properly before closing it. |
| Problems above remain unresolved or other problems occur | You should initially refer to the documentation supplied with you software to determine if it is this that is causing the problems.<br><br>If you are still unable to resolve the problem, contact your reseller, dealer or service provider. |

### Memory Card

| Problem | Procedure |
|---|---|
| Memory Card error occurs | Remove the Memory Card from the device and then reinsert it in order to ensure it is firmly connected.<br><br>If the problem persists, then you should refer to the documentation supplied with your Memory card for further information. |

| Problem | Procedure |
|---|---|
| You cannot write to a Memory Card | Remove the Memory Card from the device and check to ensure that it is not write protected. |
| You cannot read a file | Check to ensure the required file is actually on the Memory Card that is inserted into the device. |
| | If you are still unable to resolve the problem, contact your reseller, dealer or service provider. |

### USB device

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

| Problem | Procedure |
|---|---|
| USB device does not work | Remove the USB device from the device and then reconnect it in order to ensure it is firmly attached. |

### Sound system

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

| Problem | Procedure |
|---|---|
| No sound is heard | Adjust the volume. |
| | Check the software volume settings. |
| | Please check to see if Mute is turned to Off |
| | Check to make sure the headphone connection is secure. |

### External monitor

Please also refer to the documentation supplied with your monitor for further information.

| Problem | Procedure |
|---|---|
| Monitor does not turn on | After confirming that the monitor's power switch is on, you should check the connections to make sure that the power cord/adaptor is firmly connected to the monitor and to a working power outlet. |
| No display | Try adjusting the contrast and brightness controls on the external monitor. |

| Problem | Procedure |
|---------|-----------|
| Display error occurs | Check that the cable connecting the external monitor to the device is firmly attached. |
| | If you are still unable to resolve the problem, contact your reseller, dealer or service provider. |

### Wireless LAN

If the following procedures do not restore LAN access, consult your LAN administrator.

| Problem | Procedure |
|---------|-----------|
| Cannot access Wireless LAN | Make sure the device's Wireless communication functionality is set to on. |
| | If problems persist, contact your LAN administrator. |

### Bluetooth

| Problem | Procedure |
|---------|-----------|
| Cannot access Bluetooth device | Check to ensure the device's Wireless Communication functionality is set to on. |

## TOSHIBA support

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

### Before you call

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

■ Review troubleshooting sections in the documentation supplied with your software and/or peripheral devices.

■ If a problem occurs when you are running software applications, consult the software documentation for troubleshooting suggestions and consider calling the software company's technical support department for assistance.

■ Consult the reseller or dealer from where you purchased your computer and/or software - they are your best resource for current information and support.

## TOSHIBA technical support

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

# TOSHIBA

# Specifications

This appendix summarizes the device's technical specifications.

## Physical Dimensions

| | |
|---|---|
| **Size** | 196 (w) x 296 (d) x 14.2 (h) millimeters (not including parts that extend beyond the main body). |

## Environmental Requirements

| Conditions | Ambient temperature | Relative humidity |
|---|---|---|
| **Operating** | 5°C (41°F) to 40°C (104°F) | 0% to 85% (noncondensing) |
| **Non-operating** | -30°C (-22°F) to 60°C (140°F) | 0% to 90% (noncondensing) |
| **Conditions** | **Altitude (from sea level)** | |
| **Operating** | 0 to 10,000 feet (3,048 meters) | |
| **Non-operating** | 0 to 40,000 feet (12,192 meters) | |

### *Power Requirements*

| | |
|---|---|
| **AC adaptor** | 100-240 volts AC |
| | 50 or 60 hertz (cycles per second) |
| **Device** | 19V DC |

# Wireless information

## Wireless LAN Interoperability

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

- The IEEE 802.11 Standard on Wireless LANs (Revision a/b/g/n or b/g/n), as defined and approved by the Institute of Electrical and Electronics Engineers.

- The Wireless Fidelity (**Wi-Fi®**) certification as defined by the **Wi-Fi Alliance®**.

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

## Bluetooth wireless technology Interoperability

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

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

- Logo certification with Bluetooth wireless technology as defined by the Bluetooth Special interest Group.

# CAUTION about Wireless Devices

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

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

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

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

*In Europe visit http://www.toshiba-europe.com/computers/tnt/bluetooth.htm*

*Your Bluetooth product is not compatible with devices using Bluetooth Version 1.0B specifications.*

# Wireless Devices and your health

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

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

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

■ Using the Wireless products equipment on board of airplanes, or

■ In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

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

# Radio Regulatory Information

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

### *Europe*

### *Restrictions for Use of 2400.0-2483.5MHz Frequencies in Europe*

| | | |
|---|---|---|
| **France:** | Outdoor use limited to 10mW e.i.r.p. within the band 2454-2483.5MHz | Military Radiolocation use.Refarming of the 2.4GHz band has been ongoing in recent years to allow current relaxed regulation Full implementation planned 2012. |
| **Italy:** | - | For private use, a general authorization is required if WAS/RLAN's are used outside own premises. For public use, a general authorization is required. |
| **Luxembourg:** | Implemented | General authorization required for network and service supply. |
| **Norway:** | Implemented | This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Alesund. |
| **Russian Federation:** | - | Only for indoor applications. |

### *Restrictions for Use of 5150-5350MHz Frequencies in Europe*

| | | |
|---|---|---|
| **Italy:** | - | For private use, a general authorization is required if WAS/RLAN's are used outside own premises. |
| **Luxembourg:** | Implemented | General authorization required for network and service supply. |

| **Russian Federation:** | Limited | e.i.r.p 100mW. Permitted to use only for indoor applications, closed industrial and warehouse areas, and on board aircraft. |
|---|---|---|
| | | 1. Permitted to use for local networks of aircraft crew service communications on board aircraft in area of the airport and at all stages of flight. |
| | | 2. Permitted to use for public wireless access local networks on board aircraft during a flight at the altitude not less than 3000m. |

*Restrictions for Use of 5470-5725MHz Frequencies in Europe*

| **Italy:** | - | For private use, a general authorization is required if WAS/RLAN's are used outside own premises. |
|---|---|---|
| **Luxembourg:** | Implemented | General authorization required for network and service supply |
| **Russian Federation:** | Limited | e.i.r.p 100mW. Permitted to use only for indoor applications, closed industrial and warehouse areas, and on board aircraft. |
| | | 1. Permitted to use for local networks of aircraft crew service communications on board aircraft in area of the airport and at all stages of flight. |
| | | 2. Permitted to use for public wireless access local networks on board aircraft during a flight at the altitude not less than 3000m. |

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

### Canada - Industry Canada (IC)

This device complies with RSS 210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

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

## USA-Federal Communications Commission (FCC)

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

Refer to the *FCC information* section for the detailed information.

## Caution: Exposure to Radio Frequency Radiation

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

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

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

## Caution: Radio Frequency Interference Requirements

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

### *Taiwan*

| | |
|---|---|
| **Article 12** | Without permission granted by the NCC, any company, enterprise, or user is not allowed to change frequency, enhance transmitting power or alter original characteristic as well as performance to an approved low power radiofrequency devices. |

| **Article 14** | The low power radio-frequency devices shall not influence aircraft security and interfere legal communications; |
| --- | --- |
| | If found, the user shall cease operating immediately until no interference is achieved. |
| | The said legal communications means radio communications is operated in compliance with the Telecommunications Act. |
| | The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices. |

## Using this equipment in Japan

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

### 1. Important notice

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

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

### 2. Indication for Wireless LAN

The indication shown below appears on this equipment.
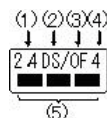


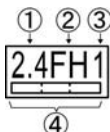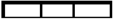| (1) | 2.4 | : This equipment uses a frequency of 2.4GHz. |
| --- | --- | --- |
| (2) | DS | : This equipment uses DS-SS modulation. |
| (3) | OF | : This equipment uses OFDM modulation. |
| (4) | 4 | : The interference range of this equipment is less than 40m. |
| (5) ▪ ▪ ▪ | | :This equipment uses a frequency bandwidth from 2,400MHz to 2,483.5MHz. It is possible to avoid the band of mobile object identification systems. |

### 3. Indication for Bluetooth

The indication shown below appears on this equipment.



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

(2) FH           : This equipment uses FH-SS modulation.

(3) 1            : The interference range of this equipment is less than 10 m.

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

### 4. About the JEITA

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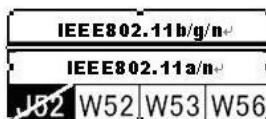


# Device Authorization

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

- Atheros Atheros WB263 Wireless Network Adapter b/g/n (b/g) module
  The Name of the radio equipment: AR6003
  DSP Research, Inc.
  Approval Number: xxxxxxxxxx
- Atheros Atheros WB263 Wireless Network Adapter b/g/n (b/g) module
  The Name of the radio equipment: AR6003+AR3012
  DSP Research, Inc.
  Approval Number: xxxxxxxxxx

The following restrictions apply:

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

When using the wireless device in any country or region, refer to the section Approved Countries/Regions for use in the online manual.

# Radio approvals for wireless devices

## Approved Countries/Regions for the Atheros® AR6003 Wireless Network Adapter b/g/n (b/g) Wireless LAN

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

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

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

As of Mar. 2011

| | | | |
|---|---|---|---|
| Albania | Australia | Austria | Azerbaijan |
| Argentina | Bahrain | Belgium | Bolivia |
| Bosnia and Herzegovina | Bulgaria | Canada | Cambodia |
| Chile | China | Colombia | Costa Rica |
| Croatia | Cyprus | Czech Republic | Denmark |
| Dominican Republic | Ecuador | Egypt | El Salvador |
| Estonia | Finland | France | Germany |
| Ghana | Greece | Guatemala | Hong Kong |
| Hungary | Iceland | India | Indonesia |
| Ireland | Italy | Japan | Jordan |
| Kazakhstan | Kenya | Kuwait | Kyrgyzstan |
| Latvia | Lebanon | Liechtenstein | Lithuania |
| Luxembourg | Macedonia | Malaysia | Malta |
| Mexico | Monaco | Montenegro | Netherlands |
| New Zealand | Norway | Oman | Panama |
| Pakistan | Papua New Guinea | Paraguay | Peru |
| Philippines | Poland | Portugal | Puerto Rico |
| Qatar | Romania | Saudi Arabia | Serbia |
| Singapore | Slovak Republic | Slovenia | South Africa |
| South Korea | Spain | Sri Lanka | Sweden |
| Switzerland | Taiwan | Thailand | Turkey |
| UAE | UK | Ukraine | USA |

| Uruguay | Venezuela | Vietnam | Yemen |
|---------|-----------|---------|-------|
| Zimbabwe | | | |

## Approved Countries/Regions for the Atheros® AR6003 Wireless Network Adapter b/g/n (b/g) Wireless LAN

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

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

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

As of Mar. 2011

| | | | |
|---|---|---|---|
| Albania | Australia | Austria | Azerbaijan |
| Argentina | Bahrain | Belgium | Bolivia |
| Bosnia and Herzegovina | Bulgaria | Canada | Cambodia |
| Chile | China | Colombia | Costa Rica |
| Croatia | Cyprus | Czech Republic | Denmark |
| Dominican Republic | Ecuador | Egypt | El Salvador |
| Estonia | Finland | France | Germany |
| Ghana | Greece | Guatemala | Hong Kong |
| Hungary | Iceland | India | Indonesia |
| Ireland | Italy | Japan | Jordan |
| Kazakhstan | Kenya | Kuwait | Kyrgyzstan |
| Latvia | Lebanon | Liechtenstein | Lithuania |
| Luxembourg | Macedonia | Malaysia | Malta |
| Mexico | Monaco | Montenegro | Netherlands |
| New Zealand | Norway | Oman | Panama |
| Pakistan | Papua New Guinea | Paraguay | Peru |
| Philippines | Poland | Portugal | Puerto Rico |
| Qatar | Romania | Saudi Arabia | Serbia |
| Singapore | Slovak Republic | Slovenia | South Africa |
| South Korea | Spain | Sri Lanka | Sweden |
| Switzerland | Taiwan | Thailand | Turkey |

| UAE | UK | Ukraine | USA |
|---------|-----------|---------|-------|
| Uruguay | Venezuela | Vietnam | Yemen |
| Zimbabwe | | | |

# TOSHIBA

# Regulatory information

## Copyright

*TOSHIBA WT110 User's Manual*

First edition March 2011

## Disclaimer

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

## Trademarks

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

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# FCC information

## FCC notice "Declaration of Conformity Information"

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

■ Reorient or relocate the receiving antenna.

■ Increase the separation between the equipment and receiver.

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

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

*Only peripherals complying with the FCC class B limits may be attached to this equipment. Operation with non-compliant peripherals or peripherals not recommended by TOSHIBA is likely to result in interference to radio and TV reception. Shielded cables must be used between the external devices and the TOSHIBA WT100 device's Universal Serial Bus (USB 2.0) ports, HDMI port and microphone/headphone jack. Changes or modifications made to this equipment, not expressly approved by TOSHIBA or parties authorized by TOSHIBA could void the user's authority to operate the equipment.*

## FCC conditions

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

1. This device may not cause harmful interference.

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

### Contact

**Address:** TOSHIBA America Information Systems, Inc.
9740 Irvine Boulevard
Irvine, California 92618-1697

**Telephone:** (949) 583-3000

### Caution: Exposure to Radio Frequency Radiation.

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

In the usual operating configuration, the distance between the antenna and the user should not be less than 20cm. Please refer to the "Grand Tour" section in this manual for the details regarding antenna location.

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

# CE compliance

This product is CE marked in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. Responsible for CE marking is Toshiba Europe GmbH, Hammfelddamm 8, 41460 Neuss, Germany. A copy of the official Declaration of Conformity can be obtained from following website: http://epps.toshiba-teg.com.

# Working environment

The Electromagnetic Compliance (EMC) of this product has been verified typically for this product category for a so called Residential, Commercial & Light Industry Environment. Any other working environment has not been verified by Toshiba and the use of this product in these working environments is maybe restricted or cannot be recommended. Possible consequences of the use of this product in non verified working environments can be: Disturbances of other products or of this product in the nearby surrounding area with temporarily malfunction or data loss/corruption as result. Example of non verified working environments and related advices:

Industrial environment (e.g. where 3-phase 380V mains is being used mainly): Danger of disturbances of this product due to possible strong electromagnetic fields especially near to big machinery or power units.

Medical environment: The compliance to the Medical Product Directive has not been verified by Toshiba, therefore this product cannot be used as a medical product without further verification. The use in usual office environments e.g. in hospitals should be no problem if there is no restriction by the responsible administration.

Automotive environment: Please search the owner instructions of the related vehicle for advices regarding the use of this product (category).

Aviation environment: Please follow the instructions of the flight personnel regarding restrictions of use.

# Additional environments not related to EMC

Outdoor use: As a typical home/office equipment this product has no special resistance against ingress of moisture and is not strong shock proofed.

Explosive atmosphere: The use of this product in such special working environment (Ex) is not allowed.

# REACH - Compliance Statement

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

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

# Following information is only valid for EU-member States:

## Disclosure of products

The crossed out wheeled dust bin symbol indicates that products must be collected and disposed of separately from household waste. Integrated batteries and accumulators can be disposed of with the product. They will be separated at the recycling centres.
The black bar indicates that the product was placed on the market after August 13, 2005.
By participating in separate collection of products and batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health.
For more detailed information about the collection and recycling programmes available in your country, please visit our website (http://eu.computers.toshiba-europe.com) or contact your local city office or the shop where you purchased the product.

### Disposal of batteries and/or accumulators

**Pb, Hg, Cd**

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

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

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

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

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

# Canadian regulatory information (Canada only)

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

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

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

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

# Canada – Industry Canada (IC)

This device complies with RSS 210 of Industry Canada.

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

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