

Battery exhausted time for TOSHIBA WT10-A

Battery type	Sleep Mode	Shut Down Mode
Battery pack (22.5 Wh, 2 cell)	about 10 days	about 6 weeks

Battery exhausted time for TOSHIBA WT8-B

Battery type	Sleep Mode	Shut Down Mode
Battery pack (15 Wh, 1 cell)	about 6 days	about 6 weeks

Extending battery life

To maximize the life of your battery pack:

At least once a month, disconnect the tablet from a power source and operate it on battery power until the battery pack fully discharges. Before doing so, follow the steps as detailed below.

1. Turn off the tablet's power.
2. Disconnect the AC adaptor and turn on the tablet's power - if it does not turn on then go to Step 4.
3. Operate the tablet on battery power for five minutes. If you find that the battery pack has at least five minutes of operating time, continue operating until the battery pack is fully discharged, however, if there is warning to indicate a low battery condition, go to Step 4.
4. Connect the AC adaptor to the Micro-USB port of the tablet, and to a wall outlet that is supplying power.
5. Charge the battery pack until the battery reaches its full capacity.



The tablet can not be powered on by pressing the power button if the battery power is completely exhausted. It is recommended to charge the battery pack by connecting the AC adaptor for 30 minutes before turning on the power.

GPS Function

Your tablet may include a built-in GPS (Global Positioning System).

The performance of GPS will vary depending on the environment. It might happen that a location cannot be determined.

Your current location may not be shown depending on the status of GPS or the location. If you are obtaining your current location information from the tablet, your current location may not be detected due to the information accuracy. Specifically, your current location may not be detected in the following places or situations:

- Inside or directly under a building
- Inside a bag or box
- Among dense trees
- When there is an obstacle (person or object) in the front of the antenna
- Underground tunnel, underground, or underwater
- Buildings streets or residential areas
- Near to the high voltage cables
- Bad weather such as heavy rain or snow

Memory media

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



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



- *This Memory media slot supports the following memory media: microSD/SDHC/SDXC 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.*

Figure 4-7 Examples of memory media (microSD card)



Points to note about the memory media card

microSD/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 tablet or other device, and you may not reproduce any copyrighted material except for your personal enjoyment.

The supported maximum capacity of memory card is 128GB.

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 a memory media card

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



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

Media care

Observe the following precautions when handling the card.

- 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 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.

Inserting memory media

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

1. Turn the memory media so that the contacts (metal areas) face down.
2. Insert the memory media into the memory media slot on the tablet.

3. Press the memory media gently until it clicks into place.

Figure 4-8 Inserting memory media (TOSHIBA WT10-A)

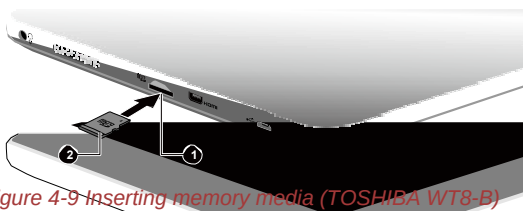
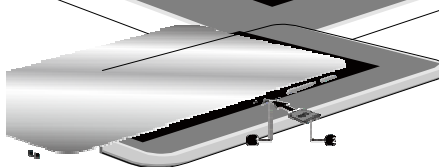


Figure 4-9 Inserting memory media (TOSHIBA WT8-B)



1. Memory media slot

2. Memory media

Product appearance depends on the model you purchased.



- *Make sure the 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 the 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 tablet off or switch to Sleep Mode or Hibernation Mode while files are being copied - doing so may cause data to be lost.*

Removing memory media

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

1. Tap the **Safely Remove Hardware and Eject Media** icon on the Windows Taskbar.
2. Tap **memory media** to eject.
3. Push the memory media until you hear a click to partially release it.
4. Grasp the media and pull it out of the slot.



- *If you remove the memory media or turn off the power while the tablet is accessing the memory media, you may lose data or damage the media.*
- *Do not remove the memory media while the tablet is in Sleep or Hibernation Mode. The tablet could become unstable or data in the memory media could be lost.*

USB Device

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

You can connect the USB device into the Micro-USB port on your tablet directly or through the USB port on the provided "USB Data and Charge Y-Cable" depending on the USB 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.



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

Using the "USB Data and Charge Y-Cable"

The "USB Data and Charge Y-Cable" is provided with some models and it can be used for the following scenarios:

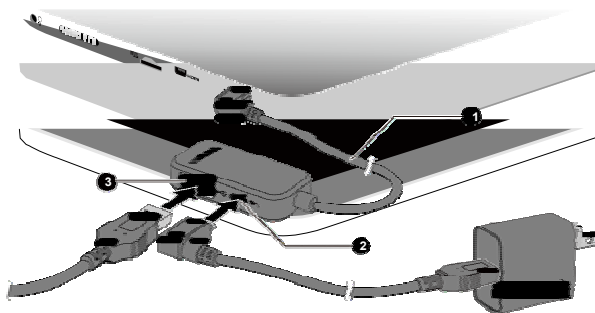
■ Charging only

Charging the tablet as a charging cable connected with the AC adaptor.

■ Charging and Data transfer

Charging the tablet as a charging cable connected with the AC adaptor and connecting to a standard USB device at the same time.

Figure 4-10 USB Data and Charge Y-Cable (TOSHIBA WT10-A for example)



1. USB Data and Charge Y-Cable

2. Micro-USB port (Charge only)

3. Universal Serial Bus (USB 2.0) port

■ Data transfer only

Connecting to a standard USB device only.



■ *Charging the tablet via connecting the "USB Data and Charge Y-Cable" may take longer.*

- *The AC adaptor should not be disconnected with the "USB Data and Charge Y-Cable" if it is connecting with USB device and tablet at the same time. If the USB device works with USB bus power, which comes from "USB Data and Charge Y-Cable", the disconnection of AC adaptor would cause power loss. Even if the USB device has its own power source, the device will stop around 60 miliseconds because USB controller would detect with "no bus power" due to sudden disconnection with AC adaptor. The disconnection may cause data loss and thus Windows may detect error and start data recovery.*
- *Charging the tablet via connecting the "USB Data and Charge Y-Cable" will need 1.5A for charging, and if a USB device is connected to the tablet, it will need 2A for charging. In this case, when charging from PC's USB port which only supports 1A, the power supply may stop working.*
- *When using "USB Data and Charge Y-Cable", there might be a possibility that power charging to the tablet might not work. Possibility will get higher if the USB device connected with the "USB Data and Charge Y-Cable" is non-standard USB 2.0 device.*
- *Tablets other than TOSHIBA WT10-A and TOSHIBA WT8-B cannot support "USB Data and Charge Y-Cable".*

External Display

Your tablet video capabilities can be enhanced with additional displays.

External displays allows you to share your desktop or extend the desktop area.

HDMI device

HDMI feature is only provided with TOSHIBA WT10-A models.

The tablet is equipped with a Micro HDMI port that can send video by connecting with external devices. Your tablet supports 1080p, 720p signal format. The available format depends on the HDMI device you are connected to.

To connect an HDMI-compatible display device, follow the steps as detailed below:

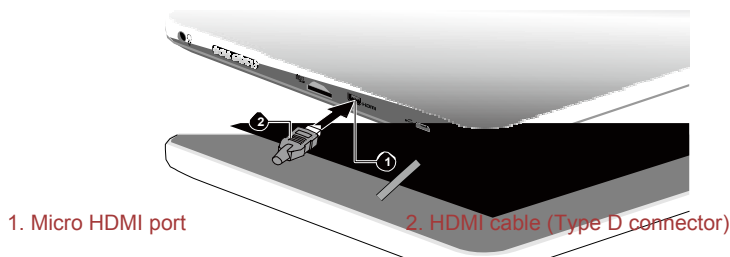


- *As the port operation of all external display devices have not been confirmed, some devices may not function properly.*
- *To connect a device to the Micro HDMI port, you must purchase a suitable HDMI cable.*

1. Plug one end of the HDMI cable into the HDMI in port of the HDMI display device.

2. Plug the other smaller end of the HDMI cable into the Micro HDMI port on your tablet.
3. Turn the HDMI display device's power on.

Figure 4-11 Connecting an HDMI cable



Please do not plug/unplug an HDMI device under the following conditions:

- *The system is starting up.*
- *The system is shutting down.*

When you connect a television or external monitor to the Micro 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.

When you change the display output device, the playback device may not switch automatically. In this case, in order to set the playback device to the same device as the display output device, please adjust the playback device manually by the following steps:

1. Tap **Desktop Assist** -> **Control Panel** -> **Hardware and Sound** -> **Sound** under **TOSHIBA** group in the Apps view.
2. In the **Playback** tab, select the playback device which you want to switch to.
3. To use the internal speakers on your tablet, select **Speakers**. To use the television or the external monitor that you have connected to the tablet, select a different playback device.
4. Tap the **Set Default** button.
5. Tap **OK** to close the **Sound** dialog.

Settings for display video on HDMI

To view video on the HDMI display device, be sure to configure the following settings otherwise you may find that nothing is displayed.



Be sure to select the display device before starting to play video. Do not change the display device while playing video.

Do not change the display device under the following conditions.

- While data is being read or written.
- While communication is being carried out.

Selecting HD Format

To select the display mode, follow the steps as detailed below:

1. Tap **Desktop Assist -> Control Panel -> Appearance and Personalization -> Display -> Change display settings -> Advanced settings -> List All Modes** under **TOSHIBA** group in the Apps view.
2. Select one of the modes at **List All Modes**.

Wireless display

Your tablet may support Wireless display, a wireless technology which utilizes Wi-Fi to allow the tablet to be wirelessly connected to external displays including TVs as extended screens. With Wireless display, documents, streamed/local media contents or other online contents can be shared wirelessly with others.

To use Wireless display, either one of the following devices is required:

- A compatible external display with built-in support for Wireless display.
- An external display with HDMI port and a Wireless display adaptor.

The Wireless display adaptor is a device that connects to the external display via HDMI port and can receive Wi-Fi signals from your tablet.

To wirelessly connect to an external display, you can follow the steps as described below:

1. Tap **Settings** charm.
2. Tap **Change PC settings -> PC and devices -> Devices**.
3. Tap **Add a device**. Your tablet will start searching for the Wireless display device.
4. After the Wireless display device is searched, follow the on-screen instructions to finish connection.

After the connection is established, the name of the Wireless display device will appear under **Projectors**.

To disconnect the Wireless display device, tap the Wireless display device name and then tap **Remove device**.



If wireless display feature is activated before connecting to a Wi-Fi Access Point, wireless display may be disabled. If it happens, please enable wireless display again.

Changing the display settings

After one or more external displays are connected, the operating system can automatically detect, identify and setup the display settings.

You can also manually manage how the external displays will work and change the display settings by tapping **Projector** in the **Devices** charm. If you disconnect the external display before you turn the tablet's power off, be sure to switch to the internal display.

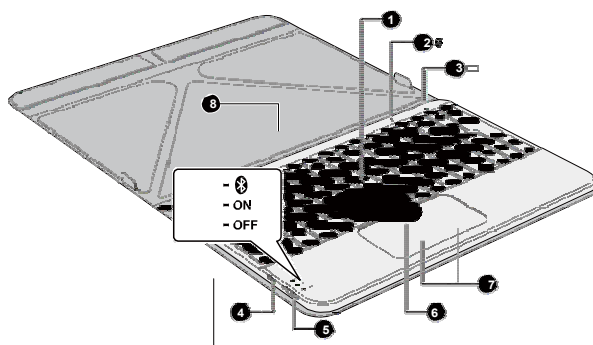
TOSHIBA Bluetooth Keyboard for Encore 2

TOSHIBA Bluetooth Keyboard for Encore 2 is provided with some models of TOSHIBA WT10-A. It provides Bluetooth keyboard with powerful features and great convenience when using your tablet.

Grand tour

The following figure shows an overview of the Keyboard.

Figure 4-12 Grand tour



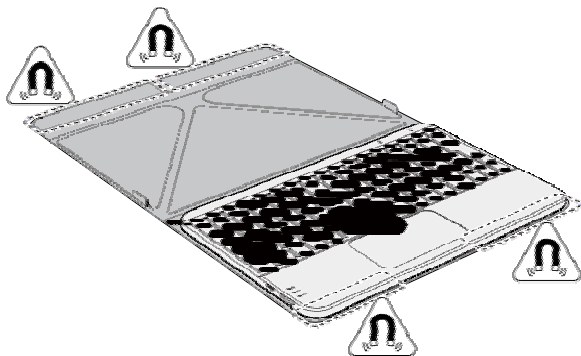
- | | |
|---------------------------------|------------------------------|
| 1. Keyboard | 5. Power switch |
| 2. Bluetooth indicator | 6. Touch Pad |
| 3. Battery indicator | 7. Touch Pad control buttons |
| 4. Micro-USB port (Charge only) | 8. Keyboard cover |

Product appearance depends on the model you purchased.

Magnets location

Please read the following information before using the Keyboard.

Figure 4-13 Magnets location (Keyboard)



Product appearance depends on the model you purchased.



The Keyboard contains magnets that may interfere with pacemakers, defibrillators or other medical devices. If you wear a pacemaker, keep at least 6 inches (approximately 15cm) of separation between your medical device and the Keyboard. If you suspect that the Keyboard is interfering with your medical device, discontinue use and consult your physician for information related to your specific device.



The circled areas in the illustrations above show the location of magnets. Do not place any products utilizing magnetic materials or magnetic data stored devices (for example, credit cards, compass) on the magnetic areas as it may cause damage to the magnetic products.

Keyboard indicators

The Keyboard has two indicators indicating the battery and bluetooth respectively.

Icon	Item	Function
	Battery indicator	Fully charged: When power on, glows white with the charging cable connected. The indicator will be “OFF” if the charging cable is disconnected. Charging: Glows amber Low battery: Blinks amber
	Bluetooth indicator	Searching: Blinks white until pairing is finished

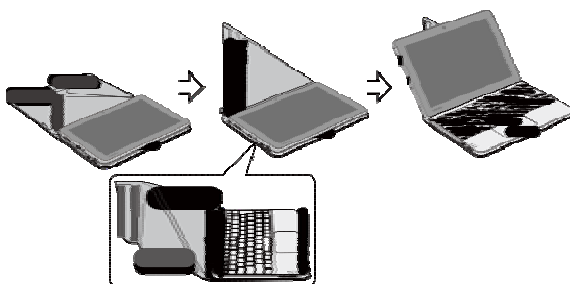
Setting up the Keyboard

Fit your tablet into the Keyboard properly. The Keyboard supports two modes when using it with your tablet.

Stand mode

You can put your tablet onto the Keyboard cover and operate like a laptop when in this mode.

Figure 4-14 Stand mode

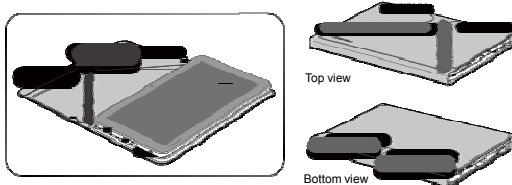


Product appearance depends on the model you purchased.

Portable mode

This mode provides you the convenience to carry the Keyboard and prevent damage or scratch to it.

Figure 4-15 Portable mode



Product appearance depends on the model you purchased.

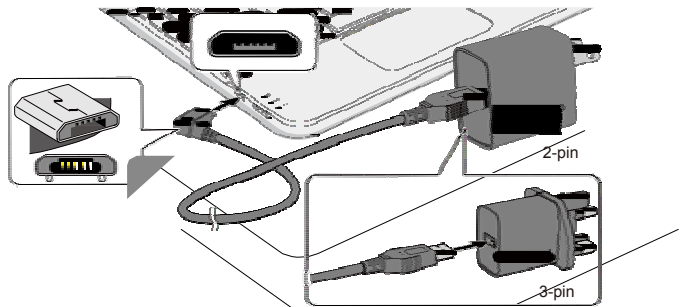
Charging the Keyboard

Before using the Keyboard, it is recommended that you charge the battery. To charge the Keyboard, you can use the provided AC adaptor and Micro-USB cable. Please follow the steps as detailed below to charge the Keyboard:

1. Plug the USB connector of the Micro-USB cable into the AC adaptor.

2. Plug the the smaller connector of the Micro-USB cable into the Micro-USB port on your Keyboard.

Figure 4-16 Charging the Keyboard



Product appearance depends on the model you purchased.

3. Plug the AC adaptor into a live wall outlet.

A full charge takes about 3 hours.



If you are not going to use the Keyboard for a long period of time, turn it off to conserve power.

Connecting your tablet to the Keyboard

Before you start using the Keyboard, it is necessary to do Bluetooth pairing. This is required for the first time and after that, the system will remember this keyboard until manually unpaired.

You may follow the steps as detailed below to do the pairing:

1. On the Keyboard, slide the Power switch to the Bluetooth position for one second and release, the Bluetooth indicator starts blinking white for pairing.
2. On your tablet, swipe in from the right edge of your screen on the desktop to open charms, and then tap **Settings -> Change PC settings -> PC and devices -> Bluetooth**.

The Bluetooth function on your tablet is enabled by default. Your tablet will just start scanning available Bluetooth devices, and you will see a list of available Bluetooth devices for connection.

3. Tap the device named **Bluetooth Keyboard**, a Bluetooth pairing request window will pop up. Follow the on-screen instructions to complete pairing. You will see **Bluetooth Keyboard** as connected after the pairing has been successfully completed.

Now the Keyboard is ready for use.



- *If you want to pair more than one Keyboard with your tablet, it is recommended to do pairing one by one.*
- *One Keyboard only supports one tablet in Bluetooth connecting.*

- To manually disconnect the Keyboard, tap **Bluetooth Keyboard** and tap **Remove device**.
- The touch pad may not work properly by immediate use after turning on the Bluetooth keyboard. If it happens, please turn off/on the keyboard again and wait for over three seconds.

Reconnecting the Keyboard

Under any of the following conditions, the connection between your tablet and the Keyboard will be lost.

- Bluetooth is turned off on your tablet.
- Keyboard is manually disconnected from tablet.
- Keyboard is manually unpaired from tablet.
- Tablet is powered off.
- Keyboard is powered off.
- Keyboard is in idle mode for 10 minutes.

Generally the Keyboard will automatically search the tablet and complete the re-connection by pressing any key. However, if it is not the case, you can try to turn off and on the Keyboard and/or turn off and on the tablet's bluetooth. If you are still not able to get reconnected, you may need to manually re-connect the keyboard.

Unpairing the Keyboard

If you will not use the Keyboard for a long time or no longer need it, you may unpair it from your tablet by the following steps:

1. On your tablet, tap **Settings -> Change PC settings -> PC and devices -> Bluetooth**.
2. Tap **Bluetooth Keyboard** and tap **Remove device** to remove the Keyboard.

Using the Touch Pad

The Touch Pad located in the palm rest may support the following gestures:

Tap	Tap once on the Touch Pad to activate an item, such as an app.
Two-Finger Tap	Tap once on the Touch Pad with two fingers together to display a menu or other function depending on the software you are using. (Similar to right-click)
Pinch or stretch	Place two fingers down on the Touch Pad and move them toward each other (pinch) or away from each other (stretch). This will show different levels of information or visually zooms in or out.

Two-Finger Scroll	Place two fingers down and slide them vertically or horizontally from anywhere on the Touch Pad. This allows you to operate the scroll bars of a window.
Swipe	Quickly move your finger in from the edge of the Touch Pad, without pausing when you first touch it. Swipe from the left edge: shows your recently opened apps. Swipe from the right edge: opens or closes the charms (Search, Share, Start, Devices, Settings). Swipe from the top edge: opens or closes the app command bar.



Some of the Touch Pad operations described in this section are only supported in certain applications.

Function Keys

The function keys (F1 ~ F12) are the twelve keys at the top of your keyboard.



You can configure the function keys' mode as "Special function mode" or "Standard F1-F12 mode" by tapping **Desktop Assist -> Tools & Utilities - > Function Key** under **TOSHIBA** group in the Apps view.

"Special function mode" allows you to use special functions without pressing the **FN** key.

Special function mode	Standard F1-F12 mode	Function
F1	FN + F1	Launches the help file supplied with the software.
F2	FN + F2	Decreases the tablet's touch screen brightness in individual steps.
F3	FN + F3	Increases the tablet's touch screen brightness in individual steps.
F4	FN + F4	Changes the active display device. To use a simultaneous mode, you must set the resolution of the touch screen to match the resolution of the external display device.
F5	FN + F5	Enables or disables the Touch Pad.

Special function mode	Standard F1-F12 mode	Function
F6	FN + F6	Moves media backward.
F7	FN + F7	Plays or pauses media playback.
F8	FN + F8	Moves media forward.
F9	FN + F9	Decreases the tablet's volume.
F10	FN + F10	Increases the tablet's volume.
F11	FN + F11	Turns the sound on or off.
F12	FN + F12	■ Launches the Function Key utility at the first time (by default). You can enable/disable F12 key's function within the utility. ■ Turns the Airplane mode on if the F12 key's function is enabled.



- *The Bluetooth Keyboard will be disconnected when Airplane mode is turned on. To turn it off, you will need to tap the network icon in the **Settings** charm, and then slide the button to the **Off** position under **Airplane mode** option.*
- *F12 key's function can be enabled/disabled by tapping **Desktop Assist** -> **Tools & Utilities** -> **Function Key** under **TOSHIBA** group in the Apps view, and then slide the button under **F12 Key** option to enable/disable the function.*

Special function mode	Standard F1-F12 mode	Function
FN + 1	FN + 1	Reduces the icon size on the desktop or the font sizes within one of the supported application windows.
FN + 2	FN + 2	Enlarges the icon size on the desktop or the font sizes within one of the supported application windows.
FN + Space	FN + Space	Changes the display resolution.



Some functions will show the toast notification at the edges of the screen. Those toast notifications are disabled at factory default. You can enable them in the TOSHIBA Function Key application.

To access it, tap **Desktop Assist -> Tools & Utilities -> Function Key** under **TOSHIBA** group in the Apps view.

Windows special keys

The keyboard provides two keys that have special functions in Windows, the Windows® logo key activates the **Start screen** while the application key has the same function as the secondary (right) mouse button.



This key activates the Windows **Start screen**.



This key has the same function as the secondary (right) mouse button.

Optional TOSHIBA Accessories

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

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

This section describes some of the audio control functions.

Volume Mixer

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

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

Microphone Level

Follow the steps below to change the microphone recording level.

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

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

Video mode

Video mode settings are configured via the **Screen Resolution** dialog.

To open the **Screen Resolution** dialog, tap **Desktop Assist -> Control Panel -> Appearance and Personalization -> Display -> Change display settings** under **TOSHIBA** group in the Apps view.



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

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

Chapter 5

Utilities and Advanced Usage

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

Utilities and Applications

This section describes the pre-installed utilities that come with the tablet 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 Desktop Assist

TOSHIBA Desktop Assist is a graphical user interface that provides access to specific tools and TOSHIBA utilities and applications that make the use and configuration of the tablet easier.

To access this utility, tap **Desktop Assist** under **TOSHIBA** group in the Apps view.

TOSHIBA Display Utility

TOSHIBA Display Utility includes Desktop Text Size utility which allows you to make the text size bigger or smaller on the desktop according to your usage and favorite. You can change the text size on the display and on the title bar of windows by changing the scaling of the text size. When the scaling is smaller, more information will appear on the display simultaneously but the text size becomes smaller. When the scaling is larger, less information will appear on the display simultaneously but the text size becomes larger.

To access this utility, tap **Desktop Assist -> Tools & Utilities -> Display Utility** under **TOSHIBA** group in the Apps view.

For details on this utility, see the help file.

TruCapture

This software is a camera application with special features to take improved photographs of whiteboards, books, printed material, notebooks, etc.

To access it, tap **TruCapture** in the Apps view.

For more information, please refer to the [TruCapture](#) section.

TruNote	This software is note taking application that can take and management handwritten notes. To access it, tap TruNote in the Apps view. For more information, please refer to the TruNote section.
TruRecorder	This software is a recording application that can check recorded data quickly and easily, analyze voices to automatically identify specific speakers, and allow you to mark important statements in the recording. To access it, tap TruRecorder in the Apps view. For more information, please refer to the TruRecorder section.
TOSHIBA Setup Utility	TOSHIBA Setup Utility is a BIOS setup utility that provides you a menu-based user interface so that you can easily view and change BIOS settings. For more information, please refer to the TOSHIBA Setup Utility section.
TOSHIBA Function Key	This utility allows you to perform some features by pressing a specified key or combined with the FN key. To setup this utility, tap Desktop Assist -> Tools & Utilities -> Function Key under TOSHIBA group in the Apps view. For more information, please refer to the TOSHIBA Bluetooth Keyboard for Encore 2 section.
TOSHIBA Service Station	This application allows your tablet to automatically search for TOSHIBA software updates or other alerts from TOSHIBA that are specific to your tablet 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 Desktop Assist -> Support & Recovery -> Service Station under TOSHIBA group in the Apps view.

Dolby® Digital Plus™ Advanced Audio™ Dolby® Digital Plus™ Advanced Audio™ is a suite of audio technologies that enables a PC to deliver a crisp, clear cinematic surround sound experience over its built-in speakers. It also adds clarity to sound from headphones.

To access this utility, tap the **Dolby Digital Plus** icon in the Apps view.



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

Special features

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

Access each function using the following procedures.

^{*1} To access the Power Options, tap **Desktop Assist -> Control Panel -> System and Security -> Power Options** under **TOSHIBA** group in the Apps view.

Display automatic power off ^{*1}	This feature automatically cuts off power to the computer's display 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.
Power on password	Two levels of password security, supervisor and user, are available to prevent unauthorized access to your computer.
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.

TruCapture

TruCapture is a camera application with special features to improve the readability of whiteboards, books, etc. in photographs taken by TruCapture. Those features include reflection reduction, color enhancement and cropping.

To open TruCapture, tap **TruCapture** in **Apps view**.

A **Tutorial** will appear on the screen which provides the basic information about how to use this feature.

Tap **next** if you want to continue viewing the **Tutorial**.

For more detailed information on the use of this feature, tap **More information**. You can also find it by swiping from the right edge of the screen, and then tap **Settings -> Help**.

TruNote

You can use this application to take and manage the handwritten notes.

To open TruNote, tap **TruNote** in **Apps view**.

For more detailed information on the use of this feature, you can swipe in from the right edge of the screen, and then tap **Settings -> Help**.

TruRecorder

TruRecorder is a recording application that can check recorded data quickly and easily, analyze voices to automatically identify specific speakers, and allow you to mark important statements in the recording.

To open TruRecorder, tap **TruRecorder** in **Apps view**.

A **Tutorial** will appear on the screen which provides the basic information about how to use this feature.

Tap **next** if you want to continue viewing the **Tutorial**.

For more detailed information on the use of this feature, tap **More details from**. You can also find it by swiping from the right edge of the screen, and then tap **Settings -> Help**.

TOSHIBA Setup Utility

TOSHIBA Setup Utility is a BIOS setup utility that provides you a menu-based user interface so that you can easily view and change BIOS settings.

To enter the BIOS setup utility, follow the steps below:

1. Save your work.
2. In the **Settings** charm, tap **Power** and then select **Shut down**.
3. After completely shut down the tablet, wait for about 10 seconds. Then hold down the **Power** button and **Volume down** button simultaneously.



Please make sure that fast startup is disabled in the Power Options by following the steps below:

1. Tap **Desktop Assist -> Control Panel -> System and Security -> Power Options** under **TOSHIBA** group in the **Apps view**.
2. Tap **Choose what the power button does**.

3. Tap **Change settings that are currently unavailable** .
4. Deselect the **Turn on fast startup** check box from Shutdown settings.
5. Tap the **Save changes** button.

To save the changes and exit the utility, select **Save and Exit -> Exit Saving Changes -> Yes**. The tablet will restart immediately.

Navigating the utility

TOSHIBA Setup Utility can be navigated through the touch screen.

Some buttons on the tablet are also designated to execute the corresponding unction. Details are described as follows:

Button	Function
Windows	Proceed or confirm operation
Volume up	Select an item
Volume down	Select an item

System Recovery

There is a hidden partition allocated on the internal storage for the System Recovery Options in the event of a problem.

You can also create recovery media and restore the system.

The following items will be described in this section:

- Creating Recovery Media
- Restoring the pre-installed software from your created Recovery Media
- Restoring the pre-installed software from the Recovery Partition

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.
- Do not run software such as screen savers which can put a heavy load on the CPU.
- Operate the tablet 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 internal storage 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 tablet 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.*

A recovery image of the software on your tablet is stored on the internal storage, and can be copied to a USB Flash Memory by using the following steps:



- *To connect a USB Flash Memory to the Micro-USB port, you must purchase a suitable "Micro USB to USB Converter Cable".*
- *USB Flash Memory will be formatted and all the data in the USB Flash Memory will be lost when proceeding.*

1. Turn on your tablet and allow it to load the Windows operating system as normal.
2. Insert the USB Flash Memory into Micro-USB port on your tablet by using the "Micro USB to USB Converter Cable".
3. Tap **Desktop Assist -> Control Panel -> System and Security -> Action Center -> Recovery -> Create a recovery drive** under **TOSHIBA** group in the Apps view.
4. Follow the on-screen instructions to finish creating the Recovery Media.

Restoring the pre-installed software from your created Recovery Media

If the pre-installed files are damaged, you are able to use the Recovery Media you have created to restore the tablet to the state it was in when you originally received it. To perform this restoration, follow the steps below:



Make sure that the AC adaptor is connected during the restoring process.



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

1. Insert the recovery USB Flash Memory into Micro-USB port on your tablet by using the the "Micro USB to USB Converter Cable".
2. In the **Settings** charm, tap **Power** and then select **Shut down**.

3. After completely shut down the tablet, wait for about 10 seconds. Then hold down the **Power** button and **Volume up** button simultaneously until the Boot menu is loaded.
4. Use the **Volume up** and the **Volume down** button to select the appropriate option from the menu according to your actual recovery media and press the **Windows** button to confirm the selection.
5. A menu will be displayed from which you should follow the on-screen instructions.



- **Refresh your PC and Reset your PC** buttons will be displayed as options for recovery. However, only **Yes, repartition the drives** under **Reset your PC** is supported when booting from the recovery media.
- For some models, Office will no longer be present after the recovery completes. To enable users to reinstall Office, please follow the instructions described below:
 - If you have a product key for an Office 365 product, you can enter the key at <https://officesetup.getmicrosoftkey.com/>
You can also go directly to your Office Account at <https://office.microsoft.com/MyAccount.aspx> to install.
 - If you have a product key for Office Home and Student, Office Home and Business or Office Professional, you can go to <https://downloadoffice.getmicrosoftkey.com/> to install.



The recovery partition can be removed depending on the model. For the models that the recovery partition can be removed, if you have previously chosen to remove the recovery partition without creating "Recovery Media", the "Recovery Media" cannot be created.

However, if you have already created a "Recovery Media", you can use it to restore the recovery partition.

If you have not created "Recovery Media", please contact TOSHIBA support for assistance.

Restoring the pre-installed software from the Recovery Partition

A portion of the internal storage 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 internal storage 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 internal storage, you may find that it becomes impossible to setup your tablet.



Make sure that the AC adaptor is connected during the restoring process.



When you reinstall the Windows operating system, the internal storage may be reformatted and all data may be lost. For detailed information, please refer to the Windows Help and Support.

1. In the **Settings** charm, tap **Power** and then select **Shut down**.
2. After completely shut down the tablet, wait for about 10 seconds. Then hold down the **Power** button and **Volume up** button simultaneously until the Boot menu is loaded and then select **HDD Recovery**.
3. A dialog box will appear asking if you are sure you want to continue. Select **Yes**.
4. Select **Troubleshoot**.
5. Select **Reset your PC**.
6. Follow the on screen instructions to finish the recovery.

You can also perform the restoration through PC settings in the operating system:

1. Tap the **Settings** charm and tap **Change PC settings**.
2. Tap **Update and recovery** under PC settings and then tap **Recovery**.
3. Tap **Get started** under **Remove everything and reinstall Windows**.
4. Follow the on screen instructions to finish the recovery.

Enabling System Protection for System Restore

Depending upon your system, the Windows® System Protection feature, that automatically creates restore points, may be disabled to conserve space on your system. You can enable this feature by the following steps:

1. Tap **Desktop Assist -> Control Panel -> System and Security -> System -> System protection** under **TOSHIBA** group in the Apps view.
2. In the **System Protection** tab, tap **Configure**, and then tap **Turn on system protection** to enable the function.

After the **System Protection** feature is enabled, you can undo changes by reverting your tablet to a previous state by creating a restore point.

Chapter 6

Troubleshooting

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

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

Problem solving process

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

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

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

Preliminary checklist

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

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

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

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

Analyzing the problem

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

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

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

Software

The problems may be caused by your software. If you cannot load a software package, the media may be damaged or the program might be corrupted - in these instances try loading another copy of the software if possible.

If an error message appears while you are using a software package you should refer to the documentation supplied with it as this will usually include a problem solving section or a summary of error messages.

Next, you should check any error messages against the operating system documentation.

Hardware

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



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

If something goes wrong

Your program stops responding

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

To close a program that has stopped responding:

1. Press and hold the Windows Taskbar, and then select **Task Manager** from the sub menu. The Windows Task Manager window appears.
2. Select the program you want to close, then tap **End Task**. Closing the failed program should allow you to continue working. If it does not, continue with the next step.
3. Close the remaining programs one by one by selecting the program name, then **End Task**. Closing all programs should allow you to continue working. If it does not, power off your computer and then restart it.

The computer will not start

Make sure you attached the AC adaptor and the Micro-USB cable properly.

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

Verify that the computer is on.

If you are using an AC adaptor, verify that the computer is receiving power from the external power source.

The computer will not load advanced options during startup

The advanced option will be loaded when you hold down the following buttons as described during startup.

Advanced option	Key & button operations
BIOS utility	Hold down Power button and Volume down button simultaneously.
Boot menu	Hold down Power button and Volume up button simultaneously.

If your computer starts to load the Operating System instead of desired advanced options, follow the steps below:



Please make sure that fast startup is disabled in the Power Options by following the steps below:

1. Tap **Desktop Assist -> Control Panel -> System and Security -> Power Options** under **TOSHIBA** group in the Apps view.
 2. Tap **Choose what the power button does**.
 3. Tap **Change settings that are currently unavailable**.
 4. Deselect the **Turn on fast startup** check box from Shutdown settings.
 5. Tap the **Save changes** button.
1. In the **Setting** charm, tap **Power** and then select **Restart**.
 2. Hold down the corresponding buttons until the advanced option is loaded.
 3. Follow the on-screen instructions to proceed.

Hardware and system checklist

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

- | | |
|---------------------|--------------------|
| ■ Power | ■ USB device |
| ■ Touch screen | ■ Sound system |
| ■ Internal Storage | ■ External monitor |
| ■ Memory Media Card | ■ Wireless LAN |
| | ■ Bluetooth |

Power

When the computer is not plugged into an AC power outlet, the battery pack is the primary power source. Your computer also has Real Time Clock (RTC) function. All of the power resources are interrelated with anyone having the ability to produce apparent power problems.

Overheating power down

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

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

AC power

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

Battery

Problem	Procedure
Battery doesn't power the computer	The battery may be discharged - connect the AC adaptor to recharge the battery.
Battery doesn't charge when the AC adaptor is attached.	If the battery is completely discharged, it will not begin charging immediately, in these instances you should wait a few minutes before trying again. If the battery still does not charge, you should check that the power outlet the AC adaptor is connected to is supplying power - this can be tested by plugging another appliance into it.
Battery doesn't power the computer as long as expected	If you frequently recharge a partially charged battery, the battery might not charge to its full potential - in these instances you should fully discharge the battery and then attempt to charge it again.

Real Time Clock

Problem	Procedure
The BIOS setting and system date/ time are lost.	The lasting time of the Real Time Clock (RTC) has run out - you will need to set the date and time in the BIOS setup utility by using the following steps: 1. Launch the BIOS setup utility. Please refer to the TOSHIBA Setup Utility section for further information. 2. Set the date in the System Date field. 3. Set the time in the System Time field. 4. Select Save and Exit -> Exit Saving Changes- a confirmation message will be displayed. 5. Select Yes - the BIOS setup utility will end and the computer will restart.

Display screen

Apparent computer's display screen problems may be related to the computer's setup and configuration.

Problem	Procedure
No display	Adjust the display priority, and to make sure it is not set for output to an external monitor.
Markings appear on the screen	These marks may have come from contact with the touch screen. You should try to remove the marks by gently wiping the screen 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 screen dry properly.

Internal Storage

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

Memory Media Card

For further information, please refer to [Operating Basics](#).

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

USB device

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

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

Sound system

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

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

External monitor

Please also refer to [Operating Basics](#), and 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. change the display priority and ensure that it is not set for the internal display only. Check to see if the external monitor is connected. When the external monitor is set as the primary display device in extended desktop mode, it will not display when the computer wakes up from Sleep Mode if the external monitor has been disconnected while in Sleep Mode. To keep this from happening, do not disconnect the external monitor while the computer is in Sleep or Hibernation Mode. Remember to turn off the computer before disconnecting the external monitor. When the display panel and an external monitor are set to clone mode and they are turned off by the timer, the display panel or the external monitor may not display when turned on again. If this occurs, re-set the display panel and external monitor to clone mode.
Display error occurs	Check that the cable connecting the external monitor to the computer is firmly attached. If you are still unable to resolve the problem, contact TOSHIBA Support.

Wireless LAN

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

Bluetooth

Problem	Procedure
Cannot access Bluetooth device	Check to ensure the computer's Wireless Communication function is on. Check to ensure the Bluetooth Manager application is running on the computer and that power to the external Bluetooth device is turned on. Check to ensure that no optional Bluetooth Adaptor is installed in the computer - the built-in Bluetooth hardware cannot operate simultaneously with another Bluetooth controller. If you are still unable to resolve the problem, contact TOSHIBA Support.

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/>

Chapter 7

Appendix

Specifications

This section summarizes the tablet's technical specifications.

Physical Dimensions

Physical Dimensions shown below do not include parts that extend beyond the main body. The physical dimensions may vary depending on the model you purchased.

TOSHIBA WT10-A	Approximately 258.8 (w) x 175 (d) x 9.1 (h) millimeters (not including parts that extend beyond the main body).
TOSHIBA WT8-B	Approximately 132 (w) x 210.62 (d) x 9.6 (h) millimeters (not including parts that extend beyond the main body).

Environmental Requirements

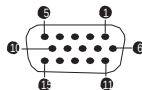
Conditions	Ambient temperature	Relative humidity
Operating	5°C (41°F) to 35°C (95°F)	20% to 80% (noncondensing)
Non-operating	-20°C (-4°F) to 60°C (140°F)	10% to 90% (noncondensing)
Wet-bulb temperature	29°C maximum	

Conditions	Altitude (from sea level)
Operating	-60 to 3,000 meters
Non-operating	-60 to 10,000 meters maximum

Power Requirements

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

External RGB monitor port pin assignment



Pin	Signal Name	Description	I/O
1	CRV	Red Video Signal	O
2	CGV	Green Video Signal	O
3	CBV	Blue Video Signal	O
4	Reserved	Reserved	
5	GND	Ground	
6	GND	Ground	
7	GND	Ground	
8	GND	Ground	
9	+5V	Power Supply	
10	GND	Ground	
11	Reserved	Reserved	
12	SDA	Data Signal	I/O
13	HSYNC	Horizontal Sync Signal	O
14	VSNC	Vertical Sync Signal	O
15	SCL	Data Clock Signal	O

I/O (I): Input to computer

I/O (O): Output from computer

AC Power Cord and Connectors

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

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

Certification agencies

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

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

For the United States and Canada, two pin plug configuration must be a 2-15P (250V) or 1-15P (125V) and three pin plug configuration must be 6-15P (250V) or 5-15P (125V) as designated in the U.S. National Electrical code handbook and the Canadian Electrical Code Part II.

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

USA



UL approved

United Kingdom



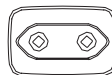
BS approved

Australia



AS approved

Europe



Approved by the appropriate
agency

Canada



CSA approved

China



CCC approved

Information for Wireless Devices

Wireless Technology 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, b/g/n or Revision a/b/g/n/ac), as defined and approved by the Institute of Electrical and Electronics Engineers.

Bluetooth® Modules 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 (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.

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



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 Module.

In Europe visit

<http://www.toshiba-europe.com/computers/tnt/bluetooth.htm>

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 are 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.

Wireless LAN Technology

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 for 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.

Security

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

Card Specifications

Compatibility	■ IEEE 802.11 Standard for Wireless LANs
Network Operating System	■ Microsoft Windows Networking
Media Access Protocol	■ CSMA/CA (Collision Avoidance) with Acknowledgment (ACK)

Radio Characteristics

Radio Characteristics of Wireless LAN module may vary according to:

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

Wireless communication is often subject to local radio regulations. Although Wireless LAN wireless networking products have been designed for operation in the license-free 2.4GHz band, local radio regulations may

impose a number of limitations to the use of wireless communication equipment.

Radio Frequency	■ Band 2.4GHz (2400-2483.5 MHz) (Revision b/g and n)
------------------------	--

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

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

Bluetooth wireless technology

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

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

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.

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.

Radio Regulatory Information

The Wireless device 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.

Canada - Industry Canada (IC)

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

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

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.



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

Taiwan

Article 12

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

Article 14

The low power radio-frequency devices shall not influence aircraft security and interfere legal communications;

If found, the user shall cease operating immediately until no interference is achieved.

The said legal communications means radio communications is operated in compliance with the Telecommunications Act.

The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices.

Using this equipment in Japan

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

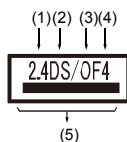
1. Important notice

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

1. Before using this equipment, ensure that it does not interfere with any of the equipment listed above.
2. If this equipment causes RF interference to other radio stations, promptly change the frequency being used, change the location of use, or turn off the source of emissions.
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

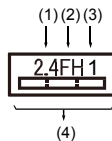
The indication shown below appears on this equipment.



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 10m.

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

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.

- Broadcom BCM43340 802.11abgn Wireless LAN and Bluetooth

The Name of the radio equipment: TBD

DSP Research, Inc.

Approval Number: TBD

The following restrictions apply:

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

Radio approvals for wireless devices

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



If you use this equipment in the countries/regions which are not listed in the table blow, please contact TOSHIBA Support.

As of September August 2014

Austria	Belgium	Bulgaria	Canada
Cyprus	Czech Rep	Denmark	Estonia
Finland	France	Germany	Greece
Hong Kong	Hungary	Iceland	India
Indonesia	Ireland	Italy	Japan
Korea	Latvia	Liechtenstein	Lithuania
Luxembourg	Malta	Monaco	Netherlands
Norway	Philippines	Poland	Portugal
Romania	Slovak Republic	Slovenia	Spain
Sweden	Switzerland	UK	USA

Legal Footnotes

Non-applicable Icons

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

CPU

Central Processing Unit (CPU) Performance Legal Footnotes.

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

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

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

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

Memory (Main System)

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

graphics system, applications utilized, system memory size and other factors.

If your computer is configured with more than 3 GB memory, the memory might be displayed as approximately 3 GB only (depending on the computer's hardware specifications).

This is correct because the operating system usually displays the available memory instead of the physical memory (RAM) built into the computer.

Various system components (like the video adapter's GPU and PCI devices like Wireless LAN, etc.) require their own memory space. Since a 32-bit operating system cannot address more than 4 GB of memory, these system resources overlap the physical memory. It is a technical limitation that the overlapped memory is not available to the operating system. Even though some tools might display the actual physical memory built into your computer, the memory available to the operating system will still be approximately 3 GB only.

Computers configured with a 64-bit operating system can address 4 GB or more of system memory.

Battery Life

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

After going through many charge and discharge cycles, the battery will lose its ability to perform at maximum capacity and will need to be replaced. This is a normal phenomenon for all batteries. To purchase a new battery pack, see the accessories information that is shipped with your computer.

Internal Storage Capacity

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

LCD

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

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

Graphics Processing Unit (GPU)

Graphics processing unit (GPU) performance may vary depending on product model, design configuration, applications, power management settings and features utilized. GPU performance is only optimized when operating in AC power mode and may decrease considerably when operating in battery power mode.

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

Wireless LAN

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

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

Copy Protection

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

Glossary

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

Abbreviations

AC:	Alternating Current
AMT:	Intel Active Management Technology
ASCII:	American Standard Code for Information Interchange
BIOS:	Basic Input/output System
BD-ROM:	Blu-ray Disc Read-only Memory
bps:	bits per second
CD:	Compact Disc
CD-ROM:	Compact Disc Read-only Memory
CD-RW:	Compact Disc-rewritable

CMOS:	Complementary Metal-oxide Semiconductor
CPU:	Central Processing Unit
DC:	Direct Current
DDR:	Double Data Rate
DIMM:	Dual Inline Memory Module
DVD:	Digital Versatile Disc
DVD-R:	Digital Versatile Disc-recordable
DVD-RAM:	Digital Versatile Disc-random Access Memory
DVD-R DL:	Digital Versatile Disc Recordable Dual Layer
DVD-ROM:	Digital Versatile Disc-read Only Memory
DVD-RW:	Digital Versatile Disc-rewritable
DVD+R DL:	Digital Versatile Disc Recordable Double Layer
FAT:	File Allocation Table
FCC:	Federal Communications Commission
FHD:	Full High Definition
GB:	gigabyte
GBps:	gigabytes per second
HD:	High Definition
HD+:	High Definition Plus
HDD:	Hard Disk Drive
HDMI:	High-definition Multimedia Interface
HDMI CEC:	High-definition Multimedia Interface Consumer Electronics Control
HTML:	Hypertext Markup Language
IEEE:	Institute of Electrical and Electronics Engineers
I/O:	Input/Output
IRQ:	interrupt request
ISP:	Internet Service Provider
KB:	kilobyte
LAN:	Local Area Network
LCD:	Liquid Crystal Display
LED:	Light Emitting Diode
MB:	megabyte
MBps:	megabytes per second
MMC:	Multi Media Card

OCR:	Optical Character Recognition (Reader)
PC:	Personal Computer
PCI:	Peripheral Component Interconnect
PCMCIA:	Personal Computer Memory Card International Association
RAM:	Random Access Memory
RGB:	Red, Green, and Blue
RFI:	Radio Frequency Interference
ROM:	Read Only Memory
RTC:	Real Time Clock
S/P DIF:	Sony/philips Digital Interface Format
SD:	Secure Digital
SDHC:	Secure Digital High Capacity
SDXC:	Secure Digital Extended Capacity
SDRAM:	Synchronous Dynamic Random Access Memory
SSD:	Solid State Drive
TFT:	Thin-film Transistor
URL:	Uniform Resource Locator
USB:	Universal Serial Bus
	WAN: Wide Area Network
	WQHD: Wide Quad High Definition
www:	World Wide Web

Index

A

- AC adaptor
 - additional 4-26
 - connecting 2-3

B

- Battery
 - extending life 4-11
 - monitoring capacity 4-10
 - save mode 5-3

- Bluetooth 7-7

C

- Cleaning the computer 1-16

- Cooling vents 3-8

D

- Display
 - automatic power off 5-3
 - screen 3-2, 3-6

- Documentation list 2-1

E

- Equipment checklist 2-1

- External monitor
 - problems 6-9

G

- Graphics Processing Unit 3-9

H

- HDMI out port 3-4

K

- Keyboard
 - Function keys F1...F12 4-24

M

- Media care
 - Card care 4-13

- memory media card
 - inserting 4-13
 - removing 4-14

- Memory media slot 4-12

- Moving the computer 1-16

P

- Password
 - power on 5-3

- Power
 - Hibernation Mode 2-10
 - Shut Down mode 2-8
 - Sleep Mode 2-9
 - turning off 2-8
 - turning on 2-5

Problems

Analyzing the problem 6-2

Battery 6-5

External monitor 6-8

Hardware and system
checklist 6-4

HDD 6-7

Internal display panel 6-6

Memory Media Card 6-7

Overheating power
down 6-4

Power 6-4

Real Time Clock 6-6

Sound system 6-8

TOSHIBA support 6-10

USB device 6-7

U

USB device
problems 6-7

V

Video mode 4-27

Video RAM 3-9

W

Web Camera 3-3, 3-6

Wireless communication 7-5

R

Recovery hard disk drive 5-7

Recovery Media 5-6

Restarting the computer 2-8

S

SD/SDHC/SDXC Card
formatting 4-13
note 4-12

Sleep Mode
setting 2-9

Sound system
problems 6-8

T

TOSHIBA Desktop Assist 5-1

Touch Screen 4-1