## **TOSHIBA**

## **Leading Innovation** >>>

# Integrated High Definition LED Television User's Guide:

42L6200U 47L6200U 55L6200U 47L7200U 55L7200U

If you need assistance:

Toshiba's Support Web site support.toshiba.com

Toshiba Customer Support Center:

Calling within the United States at (800) 631-3811

Calling from outside the United States at (949) 583-3050

For more information, see "Troubleshooting" on page 176 in this guide.

#### Owner's Record

The model number and serial number are on the back and side of your television. Record these numbers, whenever you communicate with your Toshiba dealer about this Television.

Model name: _	
Serial number:	

Register your Toshiba Television at register.toshiba.com

Note: To display a High Definition picture, the TV must be receiving a High Definition signal (such as an overthe-air High Definition TV broadcast, a High Definition digital cable program, or a High Definition digital satellite program.) For details, contact your TV antenna installer, cable provider, or satellite provider

# **Chapter 7**

# Picture and Sound Controls

## Selecting the picture size

You can view many program formats in several picture sizes—Native, 4:3, Full, TheaterWide 1, TheaterWide 2, TheaterWide 3, Normal, and Dot by Dot.

#### NOTE

The picture size illustrations are examples only. The format of the image (in any of the picture sizes) depends on the format of the signal you are currently watching. Select the picture size that displays the current program in the way that looks best to you.

You can save separate picture size preferences for each input on your TV.

To select the picture size:

- 1 Press the **PIC SIZE** button.
- While the Picture Size screen is open, repeatedly press the PIC SIZE button.

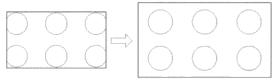
Selecting the picture size

#### NOTE

- Using these functions to change the picture size (i.e., changing the height/width ratio) for any purpose other than your private viewing may be prohibited under the Copyright Laws of the United States and other countries, and may subject you to civil and criminal liability.
- There will be restrictions on the Picture Size settings for 2D to 3D mode, 3D mode, and 2D mode.
- Some picture sizes may not be available depending on the format of the signal being received.
- If you select a TheaterWide® picture size, the top and bottom edges of the picture (including subtitles or captions) may be hidden. To view these edges, adjust the Picture Position or try viewing the program in 4:3 or Full, see "Scrolling the picture" on page 113.

#### **Native**

These settings are for viewing in 480i (HDMI®), 480p (HDMI®), 720p, 1080i, and 1080p signal programs).



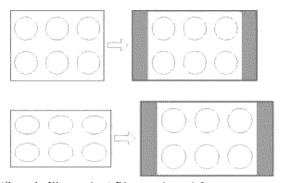
(Sample Illustration) Picture size - Native

- ❖ If receiving a 1080i, 1080p, 720p, 480i (HDMI®), or 480p (HDMI®) signal program, the video is scaled to display the entire picture within the borders of the screen (i.e. no overscanning).
- This is especially useful for external HD sources such as DVHS movies, Video Games, or computer graphics.
- None of the picture is hidden.

#### NOTE

- ❖ This mode is supported only for HDMI® (1080i, 1080p, 720p, 480i, and 480p), ColorStream® (1080i and 720p), and ANT/CABLE (digital) inputs (1080i, 1080p, and 720p).
- Depending on the input signal, the picture's border may be hidden, displayed in black, or noisy.

## 4:3

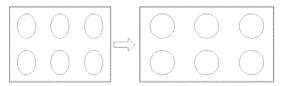


(Sample Illustration) Picture size - 4:3

Some program formats will display with sidebars and/or bars at the top and bottom.

#### Full

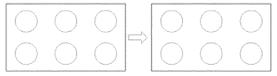
This setting is for viewing in the 16:9 (480i, 480p) source programs only.



(Sample Illustration) Picture size - Full 16:9

If receiving a squeezed 4:3 format program, the picture is stretched horizontally to fill the width of the screen but not stretched vertically.

This setting is for viewing in the 1080i, 1080p, and 720p program source.



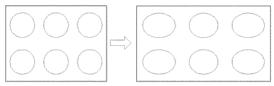
(Sample Illustration) Picture size - Full

The edges of the picture may be hidden.

Selecting the picture size

## TheaterWide 1

This setting is for viewing in 4:3 format programs.

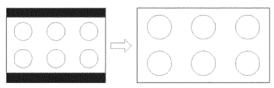


(Sample Illustration) Picture size - TheaterWide I

The center of the picture remains close to its original proportions, but the left and right edges are stretched horizontally to fill the screen.

## TheaterWide 2

This setting is for viewing letter box programs.

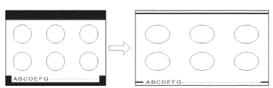


(Sample Illustration) Picture size - TheaterWide 2, letter box

The picture's top and bottom edges may be hidden\*.

## TheaterWide 3

This setting is for viewing letter box programs with subtitles.

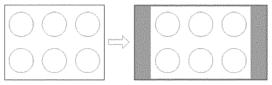


(Sample Illustration) Picture size - TheaterWide 3, letter box with subtitles

The picture's top and bottom edges are hidden\*.

#### Normal

This setting is for viewing SVGA, XGA, WXGA, and SXGA sources.

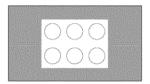


(Sample Illustration) Picture size - Normal

This size is a non-stretched display. Some input signal formats will display with sidebars and/or bars at the top and bottom.

## **Dot by Dot**

This setting is for viewing SVGA, XGA, WXGA, and SXGA sources.



(Sample Illustration) Picture size - Dot by Dot

"Dot by Dot" is a non-scaling display. Depending on the input signal format, the picture appears with sidebars and/or bars at the top and bottom, for example, SVGA input source).

\* To view the hidden areas (such as subtitles or captions), see "Scrolling the picture" on page 113.

## Scrolling the picture

If the edges of the picture are hidden, you can adjust the image's position.

#### NOTE

- You can adjust the picture position when the picture size is set to TheaterWide 2 or TheaterWide 3.
- When viewing ePORTAL, MediaShare (Media Player), or Internet content this feature is not available.
- 1 Press the MENU button. Select SETTINGS, PREFERENCES, Display Settings, and then press the OK button.

#### **Picture and Sound Controls**

Using the Auto Aspect feature

- 2 Press the (▲/▼ arrow) buttons to select **Picture Position**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select **Vertical Position**.
- 4 Press the (◀/▶ arrow) buttons to make the appropriate adjustments.

The adjustment range is from -5 to +10.

## **Using the Auto Aspect feature**

When this feature is set to On, the TV will automatically select the picture size when one of the following input sources is received:

- ♦ 480i, 480p, 720p, 1080i digital signal from the ANT/CABLE input
- ♦ 480i signal from the ColorStream HD or Video input
- 480i, 480p, 720p, 1080i, 1080p, or VGA (60/72/75 Hz) signal from the HDMI® 1/2/3/4 input

#### NOTE

The auto aspect ratio feature is not applicable to the PC input.

- 1 Press the MENU button. Select SETTINGS, PREFERENCES, Display Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Auto Aspect**.
- 3 Press the (◀/▶ arrow) buttons to select **On**. Press the **EXIT** button.

## Using the 4:3 Stretch

When 4:3 Stretch is activated, the TV displays 4:3 programs as a full-screen picture.

#### NOTE

This feature is available when Auto Aspect is set to On.

- 1 Press the MENU button. Select SETTINGS, PREFERENCES, Display Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **4:3 Stretch**.
- 3 Press the (◀/▶ arrow) buttons to select **On**. Press the **EXIT** button.

## Adjusting the picture

## Selecting the picture mode

You can select your desired picture settings from the modes described below.

Mode:	Description:
AutoView <sup>®</sup>	Automatically adjusts picture settings based on ambient light conditions and input signal content
Dynamic	Bright and dynamic picture
Standard	Standard picture settings
Movie	Lower contrast for a darkened room
Game	Designed for playing a video game requiring split-second timing between the screen display and input from the controller
PC	Designed for the viewing of computer tables and documents

#### NOTE

PC mode is available for  $HDMI^{\circledast}$  and PC inputs only (not displayed for other input sources).

Game mode cannot be turned on when the ANT/CABLE input, Internet content, or MediaShare (Media Player) is selected.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Picture Mode.
- 2 Press the (◀/▶ arrow) buttons to select a mode. Press the EXIT button.

#### NOTE

The picture mode you select affects the current input only. You can select a different picture mode for each input.

## Adjusting the picture quality

The adjustments you make to picture quality under a picture mode are saved to that picture mode.

Selection	Pressing (◀)	Pressing ( >)
Backlight*	Darker	Lighter

## 116

### **Picture and Sound Controls**

Adjusting the picture

Selection	Pressing (◀)	Pressing (▶)
Contrast	Lower	Higher
Brightness	Darker	Lighter
Color	Paler	Deeper
Tint	Reddish	Greenish
Sharpness	Softer	Sharper

<sup>\*</sup> Backlight: Adjusts the brightness of the entire screen. When in video mode and no signal is input, this selection is set to 0. (Settings are stored in memory.)

#### NOTE

Some settings cannot be adjusted in the following cases:

- AutoView is selected
- TheaterLock is set to On

To adjust the picture quality:

- 1 Press the **MENU** button. Select **SETTINGS**, **PICTURE**, the setting you would like to adjust (Backlight, Contrast, Brightness, Color, Tint, or Sharpness).
- 2 Press the (◄/▶ arrow) buttons to adjust the setting. Press the EXIT button.

#### NOTE

- Any picture settings that you adjust affect the current input only. You can adjust the picture quality separately for each input.
- Depending on a Sharpness value, the Edge Enhancer effect may be reduced

To reset to the factory defaults:

- 1 Select the picture mode you want to reset.
- 2 Press the MENU button. Select SETTINGS, PICTURE, Reset, and then press the OK button.

A confirmation screen appears.

3 Press the (◀/▶ arrow) buttons to select **Yes**, and then press the **OK** button.

## Using the advanced picture settings features

#### NOTE

Some of the Advanced Picture Settings features will not be available for adjustment when the Picture Mode is set to AutoView.

## **Edge Enhancer**

The Edge Enhancer feature lets you adjust the levels for your desired picture settings and achieve a sharper picture.

To set Edge Enhancer:

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Edge Enhancer**, and then press the **OK** button.
- 3 Press the (◀/▶ arrow) buttons to select **On**.
- 4 Press the (▲/▼ arrow) buttons to highlight **Level**. Press the (◄/▶ arrow) buttons to select either 1, 2, 3, 4, or 5. Press the **EXIT** button.

#### NOTE

- When the Picture Mode is set to AutoView, the level range is from -2 to +2.
- If the Picture Mode is set to Game or PC, Edge Enhancer is not available.
- This feature may not work properly depending on the content.
- Noise may appear on the image depending on the device connected to the TV (e.g. a device with a specific enhancer function).

## **Dynamic Contrast**

Dynamic Contrast detects changes in picture quality that affect the appearance of your contrast settings and then automatically adjusts the video.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Dynamic Contrast**.
- 3 Press the (◀/▶ arrow) buttons to adjust the level. The adjustment range is from 0 to 10. Press the **EXIT** button.

Using the advanced picture settings features

#### NOTE

When the Picture Mode is set to AutoView, the level range is from -5 to +5.

## **DynaLight®**

The DynaLight® feature automatically strengthens the black coloring of dark areas in the video according to the level of darkness.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **DynaLight**.
- 3 Press the (◀/▶ arrow) buttons to select Off/Low/Middle/High. Press the EXIT button.

#### Static Gamma

The static gamma feature lets you adjust the levels of black in the picture.

To adjust the static gamma settings:

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Static Gamma**.
- 3 Press the (◀/▶ arrow) buttons to adjust the level. The adjustment range is within ±15 from center. Press the EXIT button.

## ClearScan®

This feature helps to eliminate video shaking.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select ClearScan.
- 3 Press the (◀/▶ arrow) buttons to select Cinema, Smooth, Standard, or Off. Press the EXIT button.

#### NOTE

ClearScan® is for the L7200U model and Cinema Mode is for the L6200U model.

If the picture mode is set to Game or PC mode, this feature is automatically not available.

#### Cinema Mode

This feature provides smoother motion and a crisper image.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select Cinema Mode.
- 3 Press the (◀/▶ arrow) buttons to select **On** or **Off**. Press the **EXIT** button.

#### NOTE

If the Picture Mode is set to Game or PC mode, this feature is automatically set and is not available.

#### MPEG NR

The MPEG noise reduction feature allows you to reduce visible interference caused by MPEG compression.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Noise Reduction**, and then press the **OK** button.
- 3 Press the ( $\triangle/\nabla$  arrow) buttons to highlight MPEG NR.
- 4 Press the (◀/▶ arrow) buttons to select either **Low**, **Middle**, **High**, or **Off**. Press the **EXIT** button.

#### NOTE

If the Picture Mode is set to Game or PC, this feature is not available.

## DNR

DNR allows you soften the screen representation of a weak signal to reduce the noise effect.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Noise Reduction**, and then press the **OK** button.
- 3 Press the ( $\triangle/\nabla$  arrow) buttons to select **DNR**.
- 4 Press the (◀/▶ arrow) buttons to select **Low**, **Middle**, **High**, **Auto**, or **Off**. Press the **EXIT** button.

#### **Picture and Sound Controls**

Using the advanced picture settings features

#### NOTE

The differences may not always be noticeable. For the best results, use lower settings, as picture quality may be greatly reduced if the setting is too high.

If the picture mode is set to Game or PC, this feature is not available.

## **Auto Brightness Sensor**

When the Auto Brightness function of Auto Brightness Sensor is set to On, the TV optimizes the backlighting levels to suit ambient light conditions.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Auto Brightness Sensor Settings**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select **Auto Brightness** Sensor.
- 4 Press the (◄/▶ arrow) buttons to select On or Off. Press the EXIT button.

#### NOTE

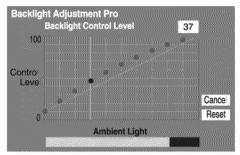
When the Picture Mode is set to AutoView, this feature is automatically set to On.

## **Backlight Adjustment Pro**

This feature adjusts the backlight so that it can change to match the ambient light conditions.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Auto Brightness Sensor Settings**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select Backlight Adjustment Pro, and then press the OK button.
  - The Backlight Control Level screen appears.
- 4 Press the **OK** button to display the adjustment window.
- 5 Press the (◀/▶ arrow) buttons to select the point.

6 Press the (▲/▼ arrow) buttons to adjust the level. The adjustment range is from 0 to 100.



(Sample Illustration) Backlight adjustment window

- 7 Press the **OK** button to fix the adjustment.
  - To cancel the adjustment when selecting a point, select **Cancel** on the screen.
  - To reset the adjustments of all points to the factory defaults, select **Reset** on the screen, and then press the **OK** button.

NOTE

If the Auto Brightness Sensor is set to Off, this feature will not be available.

## ColorMaster™

The ColorMaster<sup>TM</sup> feature allows you to adjust standard colors.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select ColorMaster, press the (◄/▶ arrow) buttons to select On. Press the EXIT button.

## **Base Color Adjustment**

When ColorMaster<sup>TM</sup> is set to On, the list of base colors appears. You can select a base color to adjust.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Base Color Adjustment**, and then press the **OK** button.

The Base Color Adjustment screen appears.

#### **Picture and Sound Controls**

Setting the expert picture settings

- 3 Press the (▲/▼ arrow) buttons to select a color. Press the (▶ arrow) button.
- 4 Press the (◄/▶ arrow) buttons to select Hue, Saturation, or Brightness.
- 5 Press the ( $\triangle/\nabla$  arrow) buttons to adjust the setting.
- 6 Repeat Steps 3 through 5 to adjust other colors. To reset the adjustments to the factory defaults, select **Reset** on the screen, and then press the **OK** button.

## **Color temperature**

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select Color Temperature.
- 3 Press the (◀/▶ arrow) buttons to adjust the level. The adjustment range is 0 (warm) to 10 (cool). Press the EXIT button.

#### NOTE

When the Picture Mode is set to AutoView, the adjustment range is -5 to +5.

## Resetting to the factory default

- 1 Press the MENU button. Select SETTINGS, PICTURE, Advanced Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Reset**, and then press the **OK** button.

A confirmation screen appears.

3 Select Yes, and then press the OK button.

## Setting the expert picture settings

### **Test Pattern**

When the test pattern is on screen, you can navigate the Picture submenus without removing the image. When you move to a non-Picture menu, or close the menus, regular video will be restored.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Expert Picture Settings, and then press the OK button.
- 2 Select Test Pattern.

- 3 Press the ( / arrow) buttons to select On.
- 4 Adjust picture settings.

NOTE

When the TV is in 3D mode, this feature is not available.

#### **RGB** Filter

This feature individually enables or disables the red, green, and blue components of the picture to allow for more accurate adjustment of each color.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Expert Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select RGB Filter, and then press the OK button.
- 3 Press the (▲/▼ arrow) buttons to select **Red**, **Green**, or **Blue** to adjust.
- 4 Press the (◀/▶ arrow) buttons to select **On**.
- 5 Press the (▼ arrow) button to select **Color** or **Tint**, press the (◄/▶ arrow) buttons to adjust. Press the **EXIT** button.

NOTE

It is not possible to turn off all three colors simultaneously.

## White Balance

## **Window Display**

This feature displays the Window Pattern to adjust the white balance with a measuring device.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Expert Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select White Balance, and then press the OK button.
- 3 Press the (▲/▼ arrow) buttons to select **Window Display**.
- 4 Press the (◀/▶ arrow) buttons to select On.
- 5 Adjust the picture settings.

Locking the picture settings

## **Setting Type**

You can adjust the white balance setting.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Expert Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select White Balance, and then press the OK button.
- 3 Press the (▲/▼ arrow) buttons to select 2P White Balance, and then press the OK button.
- 4 Press the (▲/▼ arrow) buttons to select Red-Offset, Green-Offset, Blue-Offset, Red-Gain, Green-Gain, or Blue-Gain.
- 5 Press the (◀/▶ arrow) buttons to adjust.

## **Copy to All Inputs**

This feature copies White Balance on the current input to all other inputs. Individual settings that are not allowed for a specific input will not be copied.

- 1 Press the MENU button. Select SETTINGS, PICTURE, Expert Picture Settings, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select White Balance, and then press the OK button.
- 3 Press the (▲/▼ arrow) buttons to select Copy to All Inputs, and then press the OK button.
  - A confirmation screen appears.
- 4 Select **Yes**, and then press the **OK** button.

## Locking the picture settings

The TheaterLock™ feature lets you lock items in the PICTURE menu that affect the picture's display. These items cannot be modified when TheaterLock is set to On.

- 1 Press the MENU button. Select SETTINGS, PICTURE, TheaterLock.
- 2 Press the (◀/▶ arrow) buttons to select On. Press the EXIT button.

## Adjusting the audio

## Muting the sound

Press the **MUTE** button to partially reduce (1/2 Mute) or turn off (Mute) the sound. Each time you press the **MUTE** button, the mute mode changes in the following order: 1/2 Mute, Mute, Volume, 1/2 Mute, etc.

If the closed caption mode is set to **Off** when you select **MUTE** mode, the closed caption feature becomes active if the TV program is closed captioned. To mute the audio without activating the closed captioning, press the **VOL** (-) button to set the volume to 0.

#### NOTE

If you modify items in the **SOUND** menu while Mute is active, Mute is cancelled.

## Selecting stereo/SAP broadcasts

The MTS (multi-channel TV sound) feature is only available for analog signals on the ANT/CABLE input. When the TV receives a stereo or SAP (second audio program) broadcast, the icon STEREO or SAP appears on screen when the **INFO** button is pressed.

To listen in stereo sound:

- 1 Press the MENU button. Select SETTINGS, SOUND, and then MTS
- 2 Press the (◄/▶ arrow) buttons to select **Stereo**, and then press the **EXIT** button.

#### NOTE

- ❖ You can typically leave the TV in Stereo mode because it outputs the type of sound being broadcast (stereo or monaural).
- If the sound is noisy, select Mono.
- If there is no sound in SAP mode, select Stereo.

## Adjusting the audio balance

You can adjust the audio balance.

- 1 Press the MENU button. Select SETTINGS, SOUND, and then Balance.
- 2 Press the (◀/▶ arrow) buttons to adjust the balance, and then press the **EXIT** button.

Adjusting the audio

## Adjusting the range

You can adjust bass and treble.

- 1 Press the MENU button. Select SETTINGS, SOUND, and then Bass or Treble.
- 2 Press the (◀/▶ arrow) buttons to adjust the range, and then press the EXIT button.

## Selecting the optical audio output format

You can select the optical audio output format when you connect a Dolby® Digital decoder or other digital audio systems to the TV's DIGITAL AUDIO OUT terminal.

- 1 Tune to a digital source on the ANT/CABLE input.
- 2 Press the MENU button. Select SETTINGS, PREFERENCES, AV Connection, and then press the OK button.
- 3 Press the (▲/▼ arrow) buttons to select **Digital Audio Output**.
- 4 Press the (◄/▶ arrow) buttons to select Auto or PCM. Press the EXIT button.

## **Using the Dolby® Digital Dynamic Range Control feature**

You can further compress Dolby® Digital and Dolby® Digital Plus dynamic range so you can switch from digital to analog broadcasts at the same dynamic range.

- 1 Press the MENU button. Select SETTINGS, SOUND, and then Dynamic Range Control.
- 2 Press the (◀/▶ arrow) buttons to select On.

#### NOTE

This feature is available when Dolby® Digital or Dolby® Digital Plus is input to the TV in the following situations:

- When tuned to a digital RF channel
- ❖ When an HDMI<sup>®</sup> input is used

This feature is automatically set to Off when Dynamic Volume (Audyssey Dynamic Volume®) is set to Low or High.

This feature will also affect Digital Audio Output when the optical audio output format is set to PCM.

## Audyssey Premium Television™

These televisions use a suite of technologies for better sound including:

- ❖ Audyssey EQ®—provides clear, accurate and natural sound right out of the box. This technology ensures you enjoy your audio experience as much as your video.
- Audyssey ABX<sup>™</sup>—technology uses sophisticated driver analysis and low frequency monitoring to extend the range and bass of small speakers. This enables the system to produce lower frequencies than would be possible with a traditional system of the same size.
- Audyssey Dynamic Volume®—automatically adjusts volume to provide a consistent sound level between television programs, commercials, and between the loud and soft passages of movies.
- Audyssey Volume Extension®—doubles the volume capability in small speakers while blocking distortion so your TV gets loud and still sound great.
- Day/Night Modes—automatically keep the volume of the TV at the perfect level for day or night.
- Wall/Table Modes—automatically keep the volume at the perfect level for television mounted on a wall or located on a table-top.

## Using Audyssey EQ® for Wall Mounted or Table-top TVs

This feature automatically keep the volume at the perfect level for television mounted on a wall or located on a table-top.

- 1 Press the MENU button. Select SETTINGS, SOUND, Audyssey Premium Television, TV Mounting.
- 2 Press the (◀/▶ arrow) buttons to select **Wall** or **Table**.

## **Using Audyssey Dynamic Volume** ®

This feature provides a consistent sound volume between television programs, commercials, and between the loud and soft passages of movies.

- 1 Press the MENU button. Select SETTINGS, SOUND, Audyssey Premium Television, Dynamic Volume.
- 2 Press the (**◄/**▶ arrow) buttons to select **Night**, **Day**, or **Off**.

Using the surround sound feature

#### NOTE

- If Dynamic Range Control is set to On, this feature is automatically set to Off.
- This feature does not affect the audio signal output from the DIGITAL AUDIO OUT terminal.

## Audyssey ABX™

Audyssey ABX<sup>TM</sup> technology uses sophisticated driver analysis and low frequency monitoring to extend the range and bass of small speakers.

To turn on Audyssey ABXTM:

- 1 Press the MENU button. Select SETTINGS, SOUND, Audyssey Premium Television, Audyssey ABX.
- 2 Press the (◀/▶ arrow) buttons to select Off/Low/High.

Audyssey EQ® and Audyssey Volume Extension® are default settings that are set to On.

## Using the surround sound feature

Surround settings help to create a thrilling surround sound experience with deep, rich bass from stereo sound sources. Your TV's audio will sound fuller, richer, and wider.

Press the MENU button. Select SETTINGS, SOUND, Surround, and then select On or Off.

# **Chapter 8**

## Advanced features

## Using your home network

- This TV can share videos, music, and photos across your home network and other connected products through the MediaShare feature. In order to do this, you will have to configure the network settings on your TV, see "ePORTAL MediaShare (Videos, Music, and Photos)" on page 157.
- If you want to use your home network with an Internet connection, you will have to configure the network settings on your TV. If necessary, change the network settings, see "Setting up the Network" on page 131.

If you use Internet services, see the following note before use.

Third party Internet services are not provided by Toshiba, may change or be discontinued at any time, and may be subject to third party restrictions. Toshiba makes no warranties, representations, or assurances about the content, availability, or functionality of third party content or services. Third party internet services may require the creation of a separate account through a computer with internet access, and payment of one-time and/or recurring charges.

Certain features currently not available in Canada/Mexico.

## When using a Wireless network connection

## Wireless LAN and your Health

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

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

In some situations or environments, the use of Wireless LAN may be restricted by the proprietor of the building or responsible representatives of the organization. Such restrictions may apply in environments 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 to the use of wireless devices in a specific organization or environment, you are encouraged to ask for authorization to use the Wireless LAN device prior to turning on the equipment.

## Using the TV in a wireless LAN environment

- It is recommended to use IEEE 802.11a or IEEE 802.11n on 5 GHz for audio and SD video streaming.
- It is recommended to use IEEE 802.11n on 5 GHz for HD video streaming.
- It is recommended that the encoding rate of video content be 20 Mbps or less.
- It is not recommended to use 2.4 GHz for audio and video streaming.
- Content playback may be interrupted by surrounding interference.

## **Setting up the Network**

You can select the Network Type.

- 1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to highlight **Network Type**.
- 3 Press the ( // arrow) buttons to select **Wired** or **Wireless**.
- 4 If you select **Wired**, see "Advanced Network Setup" on page 136. If you select **Wireless**, see the next section.

## Wireless Setup

#### NOTE

Continued AP (Access Point) connection is not guaranteed. Connection may be lost while watching TV.

There are three methods for wireless setup:

- Easy Setup (WPS)
  - If AP supports WPS, this can be used.
  - WPS is a standard designed to simplify the connection of wireless LAN equipment and the setup of network security features.
- Assisted Setup (setup using the AP's notification information) Network Name, Authentication, and Encryption are decided based on information from the AP. You need to manually set the Security Key.
- Manual Setup
   Requires manually entering all settings.

#### NOTE

In order to secure your home network, it is strongly recommended that you use a wireless access point with encryption.

## **Easy Setup using PBC (Push button configuration)**

- 1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Wireless Setup**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select **Easy Setup**, and then press the **OK** button.

## Setting up the Network

- 4 Press the ( / > arrow) buttons to select **PBC**.
- 5 Press the (▼ arrow) button to select Start Scan, and then press the OK button.
- **6** Following the on-screen instructions, push the appropriate button on your AP.
- When a screen reporting that "the setup has succeeded" appears, press the **OK** button.

To cancel searching for the AP:

❖ Press the BACK button while searching for the AP. A message appears. Press the (◄/▶ arrow) buttons to select Yes, and then press the OK button.

## Easy Setup using PIN (Personal Identification Number)

- 1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Wireless Setup**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select **Easy Setup**, and then press the **OK** button.
- 4 Press the (◀/▶ arrow) buttons to select **PIN**.
- 5 Press the (▼ arrow) button to select Start Scan, and then press the OK button.

The Scan screen appears.

- 6 Enter the PIN displayed on this screen into your computer or AP.
- 7 Press the (▲/▼ arrow) buttons to select the desired AP, and then press the **OK** button.

#### NOTE

Check the MAC address on the label or in the manual of the AP and select an AP.

**8** When a screen reporting that "the setup succeeded" appears, press the **OK** button.

To cancel searching for the AP:

❖ Press the BACK button while searching for the AP. A message appears. Press the (◄/▶ arrow) buttons to select Yes, and then press the OK button.

## **Assisted Setup**

- 1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Wireless Setup**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select **Assisted Setup**, and then press the **OK** button.
- 4 Press the (▲/▼ arrow) buttons to select the desired AP, and then press the **OK** button.

#### NOTE

Check the MAC address on the label or in the manual of the AP and select an AP

- 5 Select **Security Key**, and then press the **OK** button.
  - The Software Keyboard appears.
- 6 Input the Security Key using the Software Keyboard. For more information, see "Using the software keyboard" on page 139.
- 7 To save your settings, press the **BLUE** button.

#### NOTE

The Security Key must adhere to the following conditions:

- ❖ TKIP/AES: 8-63 ASCII or 64 Hex characters
- ❖ WEP: 5 or 13 ASCII or 10 or 26 Hex characters
- 8 Select **Done**, and then press the **OK** button.

#### NOTE

Settings are not saved if the **BACK** button is pressed before Done is selected.

## **Manual Setup**

- 1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Wireless Setup**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select Manual Setup, and then press the OK button.

## Setting up the Network

4 Press the (▲/▼ arrow) buttons to select **Network Name**, and then press the **OK** button.

The Software Keyboard window appears.

- 5 Input the Network Name using the Software Keyboard. For more information, see "Using the software keyboard" on page 139.
- 6 To save your settings, press the **BLUE** button.
- 7 Press the (▲/▼ arrow) buttons to highlight Authentication. Press the (◄/▶ arrow) buttons to select Open/Shared, WPA-PSK, or WPA2-PSK.
- 8 Press the (▲/▼ arrow) buttons to highlight Encryption. Press the (◄/▶ arrow) buttons to select None, WEP, TKIP, or AES.

#### NOTE

Certain encryption types are only compatible with specific authentication types.

- When Authentication is Open/Shared, only WEP or None are compatible.
- When Authentication is WPA-PSK or WPA2-PSK, only TKIP or AES are compatible.

When incompatible Authentication/Encryption pairings are attempted, a warning message will be displayed, and no connection attempt will be made until the incompatibility is resolved.

9 Press the (▲/▼ arrow) buttons to select Security Key, and then press the OK button.

The Software Keyboard window appears.

- 10 Input the Security Key using the Software Keyboard. For more information, see "Using the software keyboard" on page 139.
- 11 To save your settings, press the **BLUE** button.

#### NOTE

This item is grayed out when Encryption is set to None.

12 Select **Done**, and then press the **OK** button.

When Encryption is set to None, a message appears.

13 Press the (◄/▶ arrow) buttons to select **Yes**, and then press the **OK** button.

#### NOTE

Settings are not saved if the **BACK** button is pressed before Done is selected.

## Wireless Information

The settings configured in Wireless Setup can be confirmed.

- 1 Press the **QUICK** button. Select **Wireless Information**, and then press the **OK** button.
- 2 Press the RED button to check the availability of surrounding APs.

A Wireless Information screen appears when a connection is successfully made.

Item:	Description:
Status	The message, "Connected" appears when the TV is connected to the AP
	The message, "Disconnected" appears when the TV is disconnected from the AP
Signal	Connection signal strength with the AP (STRONG/MEDIUM/WEAK)
Speed	The link speed with the AP
Mode	Working mode (11a, 11b, 11g, 11n)
Channel	The channel in use (1-165)
Network name	SSID set
Authentication	Authentication set
Encryption	Encryption set
Security key	Security Key set
AP MAC address	The AP's MAC address appears when the TV is connected to the AP
TV MAC address	The TV's MAC address
DHCP	The message, "Enabled" appears when you use DHCP.
	The message, "Disabled" appears when you do not use DHCP.
IP address	The TV's IP address
Subnet Mask	Value of the Subnet Mask
Default Gateway	Default GATEWAY's address

#### **Advanced features**

Setting up the Network

***************************************	
***************************************	
Item:	Description:
DNS	DNS's address
***************************************	

#### NOTE

Even if an AP for IEEE 802.11n is used when Encryption is set to WEP or TKIP, the Speed value might be low. We recommend that the Encryption setting are changed to AES (Under manual setup).

## **Advanced Network Setup**

#### NOTE

- When the DHCP function of the router connected to this TV is On, you can set Auto Setup to On or Off. (Usually set it to On.)
- When the DHCP function of the router is Off, set Auto Setup to Off, and manually set the IP Address or DNS Address.

## **IP Address Setup**

#### NOTE

The settings in Auto Setup are linked to those selected in the DNS Setup menu. If Auto Setup is set to On, then Auto Setup in the DNS Setup menu will also be set to On.

#### Auto Setup:

- 1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Advanced Network Setup**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select **IP Address Setup**, and then press the **OK** button.
- 4 Select **Auto Setup**. Press the (**◄**/**▶** arrow) buttons to select **On**.

#### NOTE

Other items are grayed out when Auto Setup is set to On.

#### Manual Setup:

1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.

- 2 Press the (▲/▼ arrow) buttons to select **Advanced Network Setup**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select **IP Address Setup**, and then press the **OK** button.
- 4 Select **Auto Setup**. Press the (**◄**/**▶** arrow) buttons to select **Off**.
- 5 Press the (▲/▼ arrow) buttons to highlight **IP Address**. Then press the **OK** button.
- 6 Press the (◀/▶ arrow buttons to select the **IP Address** field and use the 0-9 buttons to enter in a digit. Use the (▶ arrow) button to select the subsequent fields. To save the setting, press the **OK** button.

#### NOTE

IP address field numbers must be between 0 and 255. If you input an incompatible number and press the **OK** button. The field number will be reset to the previous value.

- 7 Press the (▲/▼ arrow) buttons to highlight **Subnet Mask**, and edit in the same way as IP Address.
- 8 Press the (▲/▼ arrow) buttons to highlight **Default Gateway**, and edit in the same way as IP Address.

#### NOTE

If you manually set the IP address, you must not use the same IP address for any other device. The IP address you use should be a private address. If you do not know the correct values to use, contact your network administrator or internet service provider.

## **DNS Setup**

#### NOTE

- When the DHCP function of the router connected to this TV is Off, set Auto Setup to Off, and manually set the DNS address(es). Your Internet Service Provider should have provided these to you.
- The settings in Auto Setup are linked to those selected in the IP Address Setup menu. If Auto Setup is set to On, then Auto Setup in the IP Address Setup menu will also be set to On.

#### Auto setup:

1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.

Setting up the Network

- 2 Press the (▲/▼ arrow) buttons to select Advanced Network Setup, and then press the OK button.
- 3 Press the (▲/▼ arrow) buttons to select **DNS Setup**, and then press the **OK** button.
- 4 Select **Auto Setup**. Press the (**◄**/**▶** arrow) buttons to select On.

#### NOTE

Other items are grayed out when Auto Setup is set to On.

#### Manual setup:

- 1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select Advanced Network Setup, and then press the OK button.
- 3 Press the (▲/▼ arrow) buttons to select **DNS Setup**, and then press the **OK** button.
- 4 Select **Auto Setup**. Press the (**◄**/**▶** arrow) buttons to select **Off**.
- 5 Press the (▲/▼ arrow) buttons to highlight Primary DNS Address.
- 6 Press the (◀/▶ arrow) buttons to highlight the field you want to change, and then use the number buttons to input the Primary DNS Address. To save the setting, press the OK button.

#### NOTE

DNS address field numbers must be between 0 and 255. If you input an incompatible number and press the OK button, the field number will be reset to the previous value.

7 Press the (▲/▼ arrow) buttons to highlight Secondary DNS Address, and edit in the same way as Primary DNS Address.

## **MAC Address**

You can view the fixed MAC address for the TV.

- 1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select Advanced Network Setup, and then press the OK button.

3 Press the (▲/▼ arrow) buttons to select MAC Address, and then press the OK button.

#### **Network Connection Test**

This function checks Internet connectivity.

- 1 Press the MENU button. Select NETWORK > Network Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Network Connection Test**, and then press the **OK** button.

A message appears to indicate whether the connection was successful or not.

#### NOTE

Favorable Network Connection Test results do not guarantee an Internet Connection. Depending on the situation, some Internet features may not be available.

To cancel Network Connection Test, press the **EXIT** button while searching for the Internet connection.

## Using the software keyboard

You can enter text using the Software Keyboard. Two modes are available: full keyboard and keypad. Keypad is the default mode.

The Software Keyboard window will appear when you press the **OK** button on a field that accepts character input.

#### NOTE

When using the SmartTV features, software keyboard availability depends on the Internet service being accessed.

## Enter text using the keypad

- Highlight the desired character on the on-screen software keyboard.
- 2 Repeat Step 1 and 2 until you have entered all desired text.
- 3 Press the **BLUE** button to save your settings and return to the previous screen.

## Enter text using the full keyboard

- Highlight the desired character on the on-screen software keyboard.
- 2 Press the **OK** button.

#### **Advanced features**

Performing a Software Upgrade

- 3 Repeat Step 1 and 2 until you have entered all desired text.
- 4 Press the **BLUE** button to save your settings and return to the previous screen.

#### NOTE

If the **BACK** button is pressed, changes are not saved and the software keyboard window is closed.

#### Input operation on the remote control:

Item:	Description:
OK)	Inputs the selected character
0-9	Inputs numbers directly in keyboard mode. In keypad, these keys are used to select a character for entry.
VA4>	Moves the character highlight
	Moves the cursor
	Moves the cursor to the head of a character string
CONTRACTOR IN THE REAL PROPERTY OF THE PROPERT	Moves the cursor to the end of a character string
RED	Deletes one character to the left of the cursor
GREEN	Selects full keyboard or keypad mode
YELLOW	Chooses an accented version of the current letter, if applicable
BLUE	Saves changes and closes the Software Keyboard window
BACK	Closes the Software Keyboard window without saving changes

## Performing a Software Upgrade

TOSHIBA may offer upgrades for the TV's software in the future. The TV's software is upgraded via the Network.

#### NOTE

An Internet connection is required.

Before downloading software:

1 Configure your TV to connect to the Internet.

#### NOTE

- You will not be able to use the TV set while performing the upgrade.
- ❖ Do not turn off the TV during the upgrade.
- ❖ By upgrading, the factory default values may be changed.
- 2 Press the MENU button. Select GET HELP, Software Upgrade, and then press the OK button.

The Network Upgrade screen appears.

3 Press the **OK** button.

#### NOTE

If the network is not available, a warning message appears.

4 After a successful download, the TV software upgrade will start automatically.

## **Viewing the Software Licenses**

The Licenses for the software used in this TV are available for viewing.

❖ Press the MENU button. Select GET HELP, Software Licenses, and then press the OK button.

A screen appears displaying all the licensing information required for the television's software.

## **Using the SmartTV features**

#### NOTE

- You need to connect to the Internet before using this feature, see "Setting up the Network" on page 131.
- Certain services may not be currently available in your area.
- User registration or login may be required to use some services.
- Third party internet services are not provided by Toshiba, may change or be discontinued at any time and may be subject to Internet service provider restrictions. Toshiba makes no warranties, representations, or assurances about the content, availability or functionality of third-party content or services. Use of third party Internet services may require the creation of a separate account through a computer with Internet access and/or payment of one-time and/or recurring charges and membership. Not all third party services may be available on or compatible with this product. In order to experience the full suggested capabilities of this product, fully-compatible devices may be required.

#### NOTE

- ❖ If the display of the date and time is wrong, turn off the TV, and turn it on again.
- The menu items for features like the Apps may change in the upgrade process.

## **eMANUAL**

The eMANUAL provides on-screen, context-sensitive, instructions that describe the TV features.

## ePORTAL page

The ePORTAL is the "home page" that allows you to control the various elements of your Smart TV system. This includes traditional features such as Apps, Internet (web browser), and MediaShare (Media Player), as well as other unique Toshiba features such as SearchAll, MediaGuide, Events, and Messages.

## ePORTAL SearchAll

The SearchAll function scours the Internet and your connected devices for content. This search finds content from:

❖ TV programming and Video On Demand (VOD)

- MediaShare (Media Player): Connected Media Servers and USB devices
- The Internet

## **Performing a Search**

You can perform a search using the **SEARCH** button on the remote control or the SearchAll bar on the ePORTAL page.

1 From the remote control, press the **SEARCH** button while watching television programs.

Or

- **2** From the ePORTAL, select the SearchAll bar at the top of the screen and press **OK**.
- 3 Type a keyword into the Search Bar using the on-screen keyboard or the wireless QWERTY keyboard. A maximum of 50 characters can be entered for a search.
- 4 After entry is complete, select the **SEARCH** button on the screen and press **OK**.
- 5 The search results page will display a list of content containing the keyword. The Search may take up to 60 seconds to complete.
- 6 Highlight a search result and press the OK button to view the content.
- 7 To view more search results, select MORE ...> and press OK. The MORE ...> button will jump to each category's search results.
  - ♦ When you select **MORE** ..> in the MediaShare (MediaPlayer), you may need to search again.

#### NOTE

- Depending on the status of the target device (media server), the Media Player Search and Search All features may not function correctly, such as if the server is busy or does not support a search function.
- Additional options are dependent on the current source and/or content.
- The search keywords that you enter are stored in memory. The maximum number that can be stored at one time is 30. After 30 words is reached, the oldest words will be deleted as new words are added.

## ePORTAL Apps

The ePORTAL Apps can be used to display bonus content through content service providers such as:

- ♦ Netflix®
- ♦ VUDU Apps<sup>TM</sup>
- ❖ VUDU Movies<sup>TM</sup>
- ❖ YouTube<sup>®</sup>
- ❖ CinemaNow<sup>®</sup>
- MediaGuide
- ❖ eMANUAL

#### NOTE

Certain services may not be available in your area.

# Select an App from the ePORTAL

To select an App from the ePORTAL:

- 1 Open the ePORTAL page.
- 2 Click on the Apps icon.
- 3 A new page opens displaying the available Apps.
- 4 Select the desired App and press OK.

## **Netflix®**

# Watching movies with Netflix®

- 1 Press the NETFLIX button or press the APPS button on the remote control and select the Netflix icon.
- **2** Follow the on-screen instructions.

After having activated Netflix® player and prepared an Instant Queue, movies and TV episodes in your Instant Queue will appear on the TV screen. Select the desired content using the remote control.

- ❖ The resolution of video content streamed from Netflix® varies depending on the communication speed and bit-rate.
- Future upgrades can change the screens and messages displayed in the Netflix® feature.
- Netflix® is supported in the U.S. and Canada, and may not be available in other countries or regions.

To close Netflix®, press the **EXIT** button.

To confirm the Netflix ESN (Electronic Serial Number):

- 1 Press the MENU button. Select NETWORK > Smart Apps Setup > Netflix Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **ESN**, and then press the **OK** button.

The Netflix ESN screen appears.

To deactivate your device:

- 1 Press the MENU button. Select NETWORK > Smart Apps Setup > Netflix Setup, and then press the OK button.
- 2 Press the ( $\blacktriangle/\blacktriangledown$  arrow) buttons to select **Deactivation**, and then press the **OK** button.
- 3 Press the (◀/▶ arrow) buttons to select **Yes**, and then press the **OK** button.

## **VUDU™**

VUDU<sup>TM</sup> is an on-demand service that offers high definition movies on the Web.

- 1 Press the **APPS** button on the remote control, or select the Apps icon on the ePORTAL.
- 2 Press the (◀/▶ arrow) buttons to select VUDU, and then press the OK button.

#### NOTE

Use of VUDU<sup>™</sup> requires a working broadband Internet connection (1 to 2 Mbps for SD video, 2.25 to 4.5 Mbps for HD video, and 4.5 to 9 Mbps for HDX video).

To close VUDU, press the **EXIT** button.

To deactivate your device:

Using the SmartTV features

- 1 Press the MENU button. Select NETWORK > Smart Apps Setup > VUDU Deactivation, and then press the OK button.
- 2 Press the (◄/▶ arrow) buttons to select Yes, and then press the OK button.

#### NOTE

If the VUDU™ icons are not shown in the ePORTAL, you may need to update the TV firmware. You can access VUDU™ through the web browser.

## YouTube™

YouTube is a video-sharing service managed by YouTube  $^{\mbox{\tiny TM}}, LLC.$ 

This TV allows you to view YouTube  $^{\text{TM}}$  video content.

- 1 Press the **APPS** button on the remote control or select the Apps icon on the ePORTAL.
- 2 Press the (◀/▶ arrow) buttons to select **YouTube**, and then press the **OK** button.
- 3 Press the ( $\triangle/\nabla/\blacktriangleleft/\triangleright$  arrow) buttons to select the file you wish to view, and then press the **OK** button.

To close YouTube  $^{\mathrm{TM}}$ , press the **EXIT** button.

#### NOTE

If the YouTube<sup>TM</sup> icon is not shown in the ePORTAL, you may need to update the TV firmware. You can also access YouTube<sup>TM</sup> through the web browser.

- YouTube™ content has been independently managed by YouTube™, LLC.
- Not all YouTube™ content that can be accessed by computer may be viewed with this TV.
- This TV may not be able to do some operations that computer can do.
- Depending on network environment and the use situation, content may be difficult to view.
- Though the same volume value, the actual volume might be greatly different depending on content.
- This TV might take time during start-up and the playback of content.
- ◆ Content that the user may feel is improper or offensive may be included in the content of YouTube™.
- ❖ We do not assume any responsibility for content that YouTube™ offers.
- If you have any questions about YouTube™ content, contact YouTube™, LLC.
- The content of service and the screen that can be used may be changed without notice.
- You will need to use a computer to post videos to YouTube™.
- Not all content can be viewed normally when you access Web sites other than YouTube™ Leanback through this TV.

## CinemaNow®

CinemaNow® is an on-demand service that offers high definition movies on the Web.

- 1 Press the APPS button on the remote control or select the Apps icon on the ePORTAL.
- 2 Press the (◀/▶ arrow) buttons to select CinemaNow, and then press the OK button.

To close CinemaNow®, press the **EXIT** button.

## ePORTAL Internet

#### Web Browser

The web browser on this TV lets you explore everything the web has to offer. Along with access to popular places, you'll be able to

search for and browse your favorite sites, and find all the content you want, with simple, intuitive navigation.

The web browser on this device:

- does not support platform-dependent technologies such as ActiveX.
- only supports preinstalled plug-ins.
- may not support media formats other than the following: JPEG / PNG / GIF.
- uses a single built-in font. Some text may not be displayed as intended.
- does not support downloading of files or fonts.
- ❖ is a TV browser. It may work differently than PC browsers.
- does not support parental control or locks, and it is the responsibility of the user to monitor browser usage by minors.

In addition, some web pages may exceed the memory allotment of the web browser. The web browser will close when this happens.

#### NOTE

Some pages may not be displayed correctly or may display differently on different devices.

## Using the web browser

- 1 Connect to the network.
- 2 Press the **ePORTAL** button on the remote control to access the ePORTAL page.

#### NOTE

Pressing the **INTERNET** button on the remote control will also launch the web browser.

3 Use the  $(\triangle/\nabla/\langle - \rangle)$  arrow) buttons to scroll to the **Internet** icon and press **OK**.

The web browser page is displayed.

- 4 Use the (▲/▼/◀/▶ arrow) buttons to scroll to the URL Address Bar and press OK.
- 5 Enter the desired URL address by using the (▲/▼/◄/▶ arrow) buttons or by using the Wireless QWERTY keyboard. Press the BLUE button on the remote control or QWERTY keyboard when finished

6 You can now browse websites on your TV using the (▲/▼/◄/▶ arrow) buttons on the remote control or by using the Wireless QWERTY keyboard.

#### NOTE

Select Mouse Emulation by pressing the **GREEN** button on the remote control to navigate with a generic USB wireless mouse (wireless mouse is not included).

## **Browsing favorite websites**

- Connect to the network.
- 2 Press the ePORTAL button on the remote control to access the ePORTAL page.

#### NOTE

Pressing the **INTERNET** button on the remote control will also launch the web browser.

- 3 Use the (▲/▼/◄/▶ arrow) buttons to scroll to the **Internet** icon and press **OK**.
- 4 Use the (▲/▼/◄/▶ arrow) buttons to scroll to **Favorites STAR** and press **OK**.

#### NOTE

By adding frequently visited websites to Favorites, you can browse them easily.

You can view the addresses of the websites you visited previously.

5 Select the item or folders to move to the desired URL address and press **OK**.

#### NOTE

You can press the **GREEN** button on the remote for thumbnail view of all your favorites.

6 You can now browse websites on your TV using the (▲/▼/◄/▶ arrow) buttons on the remote control or via using the Wireless QWERTY keyboard.

#### NOTE

Select **Mouse Emulation** by pressing the **GREEN** button on the remote control to navigate with a driverless wireless mouse (wireless mouse is not included).

Using the SmartTV features

# **Adding Favorites Websites**

- 1 Connect to the network.
- 2 Press the ePORTAL button on the remote control to access the ePORTAL page.

#### NOTE

Pressing the **INTERNET** button on the remote control will also launch the web browser.

- 3 Press the Navigation buttons to scroll to the **Internet** icon and press **OK**.
- 4 Follow "Using the web browser" on page 148 to display your desired website.
- 5 Press the Navigation buttons to scroll to **Favorites STAR** on the Browser Menu Bar and press **OK**.

#### NOTE

By adding frequently visited websites to Favorites, you can browse them easily.

You can view the addresses of the websites you visited previously.

6 Press OK on the remote control to save the desired website to your favorites.

#### NOTE

The desired website is highlighted and displayed on the top row with the + add icon.

The + add icon will change to a page icon after the website has been saved to favorites.

7 Press the **BACK** button on the remote to return to browsing your website.

## Launch the Internet and access a specific web page

- 1 Press the **INTERNET** button on the remote or select the Internet icon on the ePORTAL page.
- 2 Use the on-screen keyboard or the wireless QWERTY keyboard to type the URL address into the address bar.
- 3 Launching the web page is dependent on which input mode you are using:
  - ❖ If using the remote control, select the **OK** button on the address bar to view the page.

- If using the on-screen keyboard, press the **BLUE** button to view the page.
- ❖ If using the USB/QWERTY keyboard, press the **ENTER** button to view the page.

## ePORTAL Messages

You can create personal messages on your TV using the Messages feature.

# Launch the Messages feature

- 1 Select the Messages icon on the ePORTAL page.
- 2 Press the GREEN button on the remote to open a new message window.
- 3 Use the on-screen keyboard or the wireless QWERTY keyboard to type your message into the message field.
- 4 Press the **OK** button to save your message.

#### ePORTAL Events

You can set events on your TV through the Events Calendar feature.

## Create an event

- 1 Select the Events icon on the ePORTAL page.
- 2 A calendar is displayed. Move to the Previous Month or Next Month by using the left and right jump buttons (<< >>) on the remote.
- 3 Highlight the desired date using the cursor keys, and press **OK**. A new Event window is displayed.
- 4 Use the on-screen keyboard or the wireless QWERTY keyboard to type in the event information.
- 5 If a recurring event, you can use the **Repeat** option to set the frequency of occurrence by using the Jump buttons (<<>>) on the remote
- 6 Press the **GREEN** button to save the new event.

#### Delete an event

- 1 Move to the Previous Month or Next Month by using the left and right jump buttons on the remote. Highlight the desired date using the cursor keys.
- **2** Press the **RED** button to delete the event(s) for that date.

### Edit an event

- 1 Select the Event in the Event list. Press **OK**.
- 2 The Edit Event window is displayed. You can change the date, event information, and repeat options.

#### ePORTAL Favorite Sites

You can access your favorite ("bookmarked") Internet sites from the ePORTAL.

# Access your Internet favorites via the ePORTAL

- 1 Select the Favorite Sites icon on the ePORTAL page.
  - The bookmarked sites are displayed on the page along with the website name and URL address.
- 2 Select the bookmarked site and press the OK button.
  The web browser will launch and display the selected site.

## **Edit ePORTAL Favorites**

You can show, hide, and change the position of your favorite apps located on the bottom row of the ePORTAL page.

- Select the gear icon at the top right of the ePORTAL page to access the Preferences window, and select the Edit Favorites menu.
- 2 Select the Show/Hide menu option. In the new window, move the focus to the desired app and press OK to add a check (show) or remove a check (hide). Highlight Save and press OK to store your changes.
- 3 To change the order of the apps in the Favorites section, select the **Move** option from the **Edit Favorites** menu.
- 4 From the Move window, highlight the app you wish to move and press the **OK** button. The icon will switch to Move mode. Use the left/right cursor keys to move to the desired position.
- 5 Press **OK** again to confirm the new position. Highlight **Save** and press **OK** to save your changes.

### ePORTAL Preferences

Use ePORTAL Preferences to customize the look and feel of the ePORTAL.

From Preferences, you can:

- Adjust the background by selecting different colors
- Edit favorite Apps by moving and selecting which favorites to show or hide
- Adjust your Event Notification flag setting

To access the Preferences window, select the gear icon in the top right corner of the ePORTAL

### MediaGuide

## **Using MediaGuide**

The MediaGuide is an integrated service that provides access to both television programming and Internet content based on the Rovi<sup>TM</sup> system.

Before beginning your MediaGuide installation, please make sure your initial setup for channel tuning, IR blaster, and network settings is completed. For instructions on the initial setup please see "Initial Setup and Menu" on page 51. For the initial installation of the MediaGuide, please follow the on-screen instructions.

#### NOTE

The Rovi Corporation and/or its subsidiaries and related affiliates are not in any way liable for the accuracy or availability of the program schedule information or other data in the Rovi Guide system and cannot guarantee service availability in your area. In no event shall Rovi Corporation and/or its related affiliates be liable for any damages in connection with the accuracy or availability of the program schedule information or other data in the Rovi Guide system.

## MediaGuide setup

When you access MediaGuide for the first time from the **GUIDE** button on the remote control, a step-by-step installation wizard will appear. Follow the on-screen instructions in order to complete the setup and view your local TV listings.

If you see an error message saying that the MediaGuide was not able to connect to the network, you should check your network connections before trying again.

The step-by-step installation wizard will appear again after performing any of the following tasks:

- Changing the ANT/CABLE In setting
- Changing the Country setting
- Changing the Device Type or Input under the IR Blaster Setup menu
- Reset MediaGuide

## Operating the MediaGuide

- 1 Press **GUIDE** on the remote control or select the **MediaGuide** from the ePORTAL from the Apps screen.
- 2 The MediaGuide screen will be displayed with the defaulted setting; the first menu is set to ALL, the secondary menu is set to TV Listings, and the current channel is highlighted.
- 3 To navigate within the MediaGuide, press the  $(\triangle/\nabla/\blacktriangleleft/\triangleright$  arrow) buttons to select content and move within a menu and then press the **OK** button to select an item option.
  - Selecting a channel or TV listing will turn to live TV for the particular show.
  - ❖ If the show is not being aired at the time it has been selected, you will be directed to the Overview screen within the Overview screen to see upcoming shows. Select the **Watch** option to view it.
- 4 In the subsequent menus, use the (◄/▶ arrow) buttons to navigate between menu levels.
  - The sub-menus include My Profile; Movies, Settings, TV, Search, and TV Listings.

- Third party Internet services are not provided by Toshiba, may change or be discontinued at any time and may be subject to Internet service provider restrictions. Toshiba makes no warranties, representations, or assurances about the content, availability or functionality of third-party content or services. Use of third party Internet services may require the creation of a separate account through a computer with Internet access and/or payment of one-time and/or recurring charges and membership. Not all third party services may be available on or compatible with this product. In order to experience the full suggested capabilities of this product, fully-compatible devices may be required.
- Service Information may not be displayed or there may be little service information displayed depending on the area or the kind of broadcast.
- The MediaGuide can only be used when your TV is connected to the Internet.
- Starting and operation of this service may take several minutes.
- Software updates may be needed in order to use this service.
- During use of the MediaGuide, usage information will be notified to the Rovi server to ensure continued efficient operation of the guide.
- In order to experience the full suggested capabilities of this product, fully-compatible devices may be required. This feature is not available in Mexico, and certain features may not be available in all countries.

# Selecting a listing

If you can select and open a TV program, movie, or celebrity, an Overview screen will appear with general information about the selected item. It also contains options such as watch, bookmark, or see a trailer. The detail screen has several on-screen buttons such as Overview and Summary. To open these options:

- 1 Press the  $(\triangle/\nabla/\langle \rangle)$  arrow) buttons to highlight the option.
- $\label{eq:continuous} 2 \quad \text{Press the } OK \text{ button to select the option.}$

# Viewing a detail screen

The detail screen contains menu options that display additional information such as biographies and reviews. The TV Listing/Movie Detail menus can contain information such as

Using the SmartTV features

History, Episodes - For TV series only, Overview, Summary, Review, Cast & Crew, and others.

Celebrity detail menus contain different items such as History, Overview, Biography, and Credits.

#### NOTE

The actual menus displayed on the detail screen vary depending on the service that you have configured for the MediaGuide and what types of information about the selected item are available to be displayed. There may be instances where data cannot be acquired from the server due to network problems. Obtaining accurate MediaGuide data depends on the timing of the updates by the guide data provider and your Internet connection.

# Searching in MediaGuide

You can use the Search menu, within the MediaGuide to find movies or program by name. You can search from the primary menu, or from within the TV or Movie menus.

To search using a keyword:

- 1 Select the Search option from one of the menus.
- 2 Type in a keyword using the search keypad.
- 3 Press the **OK** button to select the button.
- 4 When the title you want is in the suggestion list, press the right button to move to the list and then the Up or down button to highlight it.
- 5 Press the **OK** button on the search option screen for search results to select the item.
- 6 Press the **OK** button to open the detail screen for that item.

To search all of the connected media devices across your network as well as the TV programming, use the SearchAll feature in the ePORTAL, see "ePORTAL SearchAll" on page 142.

## Reset MediaGuide

To reset the MediaGuide, please follow these steps:

- 1 Press the **MENU** button on the remote control.
- 2 Select NETWORK>Smart Apps Setup>Reset MediaGuide.
- 3 Press the **OK** button.

A confirmation message will be displayed.

4 Select **Yes** and press the **OK** button.

The TV will turn off automatically.

You can also reset the MediaGuide from the MediaGuide from the setting menu.

#### NOTE

If the MediaGuide cannot launch or is not functioning correctly, reset the MediaGuide using the instructions above.

# ePORTAL MediaShare (Videos, Music, and Photos)

Use the Videos, Music, and Photos icons on the ePORTAL to quickly access video, music, and image files located on storage media or your home network.

There are two ways to play content.

The TV can control and play content on a MediaShare (Media Player). The Media Server is a device with server functions that stores media content for playback on a MediaShare (Media Player).

#### NOTE

- Do not insert/remove a USB device while in use.
- The MENU button is not available while using the MediaShare (Media Player) feature.

## MediaShare (Media Player) specifications

#### Devices:

- ♦ USB device: USB Mass Storage Class devices (MSC)
- Connected Media Server: Your computer (for example)

#### NOTE

- Connectivity is not guaranteed for all devices.
- Some functionality may be lost with a USB HUB connection.

## Supported file system:

FAT16 and FAT32

#### NOTE

You must obtain any required permission from copyright owners to download or use copyrighted content. Toshiba cannot and does not grant such permission.

# **Basic operation**

# Using MediaShare (Media Player) with a USB device

When Auto Start is enabled, you will be asked if you want to start the MediaShare (Media Player) when a USB device is inserted. If Auto Start is disabled (or if you want to connect to a media server on the network), you must manually start the MediaShare (Media Player) from the ePORTAL.

## To change the Auto Start setting

- 1 Press the MENU button. Select NETWORK, Media Player, Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to highlight **USB Auto Start**.
- 3 Press the (◀/▶ arrow) buttons to select **On** or **Off**.

#### **Auto Start**

- Insert a USB device into the USB terminal.
   A prompt appears.
- 2 Press the (◄/▶ arrow) buttons to select Yes, and then press the OK button.
- 3 Press the (▲/▼ arrow) buttons to select Video, Music, or Photos, and then press the OK button.
- 5 Press the (▲/▼ arrow) buttons to select the device.

#### NOTE

If Auto Start is set to Off, you can start the MediaShare (Media Player) manually.

## **Manual Start**

- 1 Insert a USB device into the USB terminal.
- 2 Press the ePORTAL button. Select the Video, Music, or Photos icon, and then press the OK button.
- 3 To change the device, press the  $(\triangle/\nabla/\blacktriangleleft/\triangleright$  arrow) buttons to select the **Device Name** button on the screen, and then press the **OK** button.
- 4 Press the (▲/▼ arrow) buttons to select the device.

#### To select a file in the list of contents

- 1 Press the  $(\triangle/\nabla/4/\triangleright$  arrow) buttons to select a file or folder.
- 2 Press the **OK** button to move to the next layer, or press the **BACK** button to return to the previous layer.

## To close the MediaShare (Media Player)

Press the EXIT button.

The TV will return to the last-viewed channel or video input.

# Using MediaShare (Media Player) with a Media Server

You need to configure a home network before using this feature, see "Setting up the Network" on page 131.

- 1 Press the **ePORTAL** button.
- 2 Select the Video, Music, or Photos icon, and then press the OK button.
- 3 To change the device press the (▲/▼/◄/▶ arrow) buttons to select the device name on the screen, and then press the **OK** button.
- 4 Press the (▲/▼ arrow) buttons to select the device.

## To select a file in the list of contents

- 1 Press the  $(\triangle/\nabla/\langle \rangle)$  arrow) buttons to select a file or folder.
- 2 Press the **OK** button to move to the next layer, or press the **BACK** button to return to the previous layer.

# To close the MediaShare (Media Player)

Press the EXIT button.

The TV will return to the last-viewed channel or video input.

# To display the device information

- Press the QUICK button to open the Quick menu in list mode or Multi View mode.
- 2 Press the (▲/▼ arrow) buttons to select **Device Information**.

## Viewing movie files

## **Basic Playback**

- Select a file, see "To select a file in the list of contents" on page 159.
- 2 Press the **OK** button or **PLAY** button to begin playback.

#### NOTE

Depending on the file size, it may take some time to start playback.

- 3 Press the **STOP** button to stop playback.
- 4 If playback finishes before **STOP** is pressed, the screen returns to the list.

#### NOTE

When the repeat mode is set to All, the next file will start playing automatically.

# To pause playback

- ❖ Press the PAUSE button during playback. You can move to the desired replay position by pressing the (◄/▶ arrow) buttons during PAUSE.
- ❖ To resume normal playback, press the **PLAY** button.

#### NOTE

The PAUSE button or operations during Pause may not be functional depending on content or media server.

## To locate a specific file

- Press the Skip Reverse or Skip Forward button repeatedly to access the desired file.
  - Playback starts from the beginning of the current file or previous file.
  - ( ): To locate subsequent files.

#### NOTE

These features may not be operable depending on the content or media server.

## To set the repeat mode

Press the QUICK button.

The current repeat setting appears.

- 2 Press the ( / arrow) buttons to select Off, All, or 1.
- 3 Press the **BACK** button. The setting is effective until the TV is turned off.

Mode:	Description:
Off	The content is played back only once
All	All content in the same folder are repeatedly played back
1	The same content is repeatedly played back

## To display the file status information

- 1 Press the INFO button during playback. The information will be displayed at the bottom of the screen.
- 2 Press the **INFO** button again to hide the information.

#### NOTE

The information may not correctly display depending on the content or media server.

## **File specifications:**

USB use:

**❖ File format:** MPEG2 PS. MPEG2 TS

Video: MPEG2, H.264

❖ Audio: MPEG1-Layer2/MPEG1-Layer3/Dolby® Digital (AC3)/LPCM, ACC

**♦ Maximum number of files:** 1000 per folder

Content on Connected Media Server:

❖ File format: MPEG2 PS, MPEG2 TS

Video: MPEG2(PS), H.264

 Audio: LPCM/MPEG1-Layer1/MPEG1-Layer2/ MPEG2-Layer2/Dolby Digital (AC3)/AAC

**❖** Maximum number of files: 1000 per folder

**♦ Maximum video resolution:** 1920 x 1080

Using the SmartTV features

#### NOTE

It may not be possible to use certain playback or display some files. In some cases certain files and servers may not support playback features, such as pause.

## Playing music files

#### Basic Playback:

1 Select a file, see "To select a file in the list of contents" on page 159. Press the **OK** or **PLAY** button to begin playback.

#### NOTE

Depending on the file size, it may take some time to start playback.

2 Press the **STOP** button to stop playback.

If playback finishes before the **STOP** button is pressed, the screen returns to the list.

### To pause playback:

- 1 Press the **PAUSE** button during playback.
- You can move to the desired replay position by pressing the (◄/▶ arrow) buttons during PAUSE.
- 3 To resume normal playback, press the **PLAY** button.

#### NOTE

The **PAUSE** button or operations during Pause may not be functional depending on content or media server. Certain processes may take some time to complete.

## To locate a specific file:

- Press the Skip Reverse or Skip Forward button repeatedly to access the desired file.
  - ( Playback starts from the beginning of the current file or previous file.
  - ❖ (►): To locate subsequent files.

#### NOTE

These features may not be operable depending on the content or media server.

### To set the repeat mode:

Press the QUICK button.

The current repeat setting appears.

- 2 Press the ( / arrow) buttons to select Off, All, or 1.
- 3 Press the **BACK** button. The setting is effective until the TV is turned off.

Mode:	Description:
Off	The content is played back only once
All	All content in the same folder are repeatedly played back
1	The same content is repeatedly played back

To display the file status information:

Press the **INFO** button during playback.
 The information appears at the bottom of the screen.

2 Press the **INFO** button again to hide the information.

#### NOTE

The information may not correctly display depending on the content or media server.

# File specifications:

USB use:

❖ File format: MP3, MP4 (AAC), LPCM

**♦ Sampling frequency:** 32 kHz, 44.1 kHz, 48 kHz

❖ Bit rate: From 32 to 320 kbps

**♦ Maximum number of files:** 1000 per folder

Content on Connected Media Server:

❖ File format: MP3, LPCM

**♦ Sampling frequency:** 32 kHz, 44.1 kHz, 48 kHz

**Bit rate:** From 32 to 320 kbps

**♦ Maximum number of files:** 1000 per folder

It may not be possible to use certain playback or display some files. In some cases certain files and servers may not support playback features, such as fast-forward.

## Viewing photo files

#### Multi View mode

This view mode allows you to search for photos in a grid format.

These pictures are displayed using thumbnail data in each image file.

1 Press the (▲/▼/◄/▶ arrow) buttons to move the highlight by one window.

If all of the photos will not fit in one screen, when pressing the ( $\triangle$  arrow) button at the top left thumbnail, the screen will scroll up one by one. Similarly, when pressing the ( $\blacktriangledown$  arrow) button at the bottom right thumbnail, the screen will scroll down one by one.

- When you select a folder, press the **OK** button to move to the next layer. Press the **BACK** button to move back to the previous layer.
- 3 Press the OK button to view the selected photo in Single View mode.

#### NOTE

- Displaying thumbnail data may take time.
- ❖ In order to use the ▲/▼ arrow to scroll the screen, there must be enough content to take up two screens.

# Single View mode

In this view mode, only files located in the selected directory are displayed. When moving from Multi View mode to Single View mode, the currently selected photo appears.

- 2 Press the  $(\blacktriangleleft/\triangleright$  arrow) buttons to view the next or previous file.

Single view mode is changed to Multi View mode when the **BACK** button is pressed.

## Slideshow mode

This view allows you to watch a slideshow of the photos. In this mode, only files located in the selected directory appear.

- 1 To switch to Slideshow mode, press the **OK** button while in Single View mode. To return to Single View mode, press the **OK** button again.
- 2 Press the ( // arrow) buttons to view the next or previous file.

## Mode settings

- 1 Press the **QUICK** button to open the Quick menu while in Single View mode or Slideshow mode.
- 2 Press the (▲/▼ arrow) buttons to select the item (Interval Time or Repeat).
- 3 Press the (◀/▶ arrow) buttons to adjust the setting.
- 4 Press the **BACK** button to return to Single View mode or Slideshow mode.

Mode:	Description:
Interval Time	Sets a time interval at which to view photos
Repeat	Displays photos in the same directory repeatedly (On/Off)

## Rotate the image

While viewing the image in Single View mode or Slideshow mode, press the ( $\triangle/\nabla$  arrow) buttons to rotate the image 90 degrees.

## Return to the thumbnail

Press the **BACK** button while in Single View mode or Slide Show mode.

## Display file status information

- 1 Press the **INFO** button. The information appears at the bottom of the screen.
- 2 Press the **INFO** button again to hide the information.

Search

#### NOTE

The information may not correctly display depending on the content or media server. Certain processes may take some time to complete.

## File specifications:

USB use:

- **❖ Data compatibility:** JPEG Exif ver 2.2
- File format: JPEG
- **♦** Maximum viewable resolution: 8192 x16384
- **❖ Maximum photo size:** 9MB
- **♦ Maximum number of files:** 2000 per folder

Content on Connected Media Server:

- **♦ Data compatibility:** JPEG EXIF Ver.1.x or later, JFIF 1.02a
- **❖** File format: JPEG
- **❖ Maximum photo resolution:** 4096 x 4096
- **❖** Maximum number of files: 2000 per folder

#### NOTE

If a photo resolution is larger than 1024 x 768, the photo will be resized by the server before being displayed.

## Search

To search for content.

- 1 Select the search.
- **2** Enter in keywords and the search will search for:
  - Videos: Title name
  - ❖ Music: Title name/Artist name/ Album name
  - Photos: Title name
  - USB: Videos/Music/Photos: File name

#### NOTE

Folders are not subject to the search function.

- 3 The retrieval result is displayed.
- 4 Select one of the search results.
- 5 The selected content will play.

The search retrieval stops when content is being played.

# **Network Device Setup**

In order to set the access the External Control Setup, Media Renderer Setup, or Device Name Setup, you must use the Network Device Setup menu.

## **External Control Setup**

- 1 Press the MENU button. Select NETWORK, Network Device Setup, and External Control Setup, and then press the OK button.
- 2 Select External Control Setup, and press the OK button.
- 3 Use the (▲/▼ arrow) buttons to select and set Enable Control to On or Off.

To access the Home Control Profile:

- 1 Press the MENU button. Select NETWORK, Network Device Setup, and External Control Setup, and then press the OK button.
- 2 Use the (◀/▶ arrow) buttons to select **Home Control Profile** and press the **OK** button.
  - The Home Control Profile window will appear.
- 3 Use the (▲/▼/◄/▶ arrow) buttons to navigate to the User Name or Password field. The keypad will appear so that you can enter in the user name and password. You can use the remote control keypad, the software keypad, or the USB/QWERTY keyboard to enter in the user name and password.
  - ❖ To use the remote control keypad, use the remote control up/down buttons to enter the name and password, and press the **BLUE** button.
  - ❖ To use the software keyboard, press the **GREEN** button. Use the number and letter buttons to enter in the user name and password, and press the **BLUE** button to submit.
  - ❖ To use the USB/QWERTY keyboard, use the number and letter buttons to enter in the user name and password, and press the **BLUE** button to submit.

Only the 0-9, dash (-), and capital A-Z characters may be used for the user name and password.

## Setting up the Media Renderer feature

The TV can be configured as a Media Renderer. When operating as a Media Renderer, the TV displays content provided by a Media Server. The selection of the media is done by the Media Controller. The TV can play photo, movie, or audio files when operating as a Media Renderer.

#### Installation

You can configure the Media Renderer settings individually, or use Installation mode to be prompted for each setting in order.

- 1 Press the MENU button. Select NETWORK, Network Device Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Media Renderer Setup**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select Installation, and then press the **OK** button.
- 4 Press the (▲/▼ arrow) buttons to select On, and then press the OK button. If you want to change the device name as a Media Renderer, highlight the Device Name field and press the OK button. The Software Keyboard screen appears.
- 5 Input the device name by using the Software Keyboard. To save your setting, press the **BLUE** button.
- 6 Select **Done**. Press the **OK** button.
- 7 If you want to limit access from unexpected Media Controllers, press the (◀/▶ arrow) buttons to select On. Press the OK button.
- 8 If you want to proceed with registration of Media Controllers, press the (◀/▶ arrow) buttons to select **Yes**. Press the **OK** button.
- 9 Press the (▲/▼ arrow) buttons to select the MAC address of the Media Controller you want to accept. Press the OK button. The box is selected. To clear the selection, press the OK button.
- 10 Press the right arrow button to select Done. Press the OK button.

- 11 Press the (▲/▼ arrow) buttons to adjust to the desired volume. Press the **OK** button.
- 12 If you want to wake up the TV by using the Media Controller, press the (◄/▶ arrow) buttons to select Yes. Press the OK button.

## **Device Name setup**

The device name as a Media Renderer can be changed.

- 1 Press the MENU button. Select NETWORK, Network Device Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Device Name Setup**, and then press the **OK** button.
- 3 Select the **Device Name** field. Press the **OK** button. The Software Keyboard screen appears.
- 4 Input the device name by using the Software Keyboard. To save your setting, press the **BLUE** button.
- 5 Select **Done**. Press the **OK** button.

#### NOTE

The maximum number of characters allowed for the device name is 15. Only 0-9, A - Z can be used in the device name.

## **Media Controller setup**

You can limit which Media Controller can control this TV. If Access Control is enabled, only those Media Controllers with a check will be allowed to control the TV.

- 1 Press the MENU button. Select NETWORK, Network Device Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Media Renderer Setup**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to select **Media Controller Setup**. Press the **OK** button.
- 4 Press the (▲/▼ arrow) buttons to highlight Access Control. Press the (◄/▶ arrow) buttons to select On.
- 5 Press the (▲/▼ arrow) buttons to select **Media Controller**. Press the **OK** button.
- 6 Press the (▲/▼ arrow) buttons to select the MAC address of Media Controller you want to accept.

## Network Device Setup

- 7 Press the **OK** button. The box is selected. To clear the selection, press the **OK** button.
- 8 Press the right arrow button to select **Done**. Press the **OK** button.

#### NOTE

- You can select up to 8 Media Controllers.
- If you would not like to limit the Media Controllers for this TV, set Access Control to Off.
- Devices other than Media Controller may be displayed in the list.
- Confirm the MAC address of Media Controller and select it.

# Maximum volume setup

This feature allows you to set the maximum volume of the TV when it receives volume operation commands from a Media Controller.

- 1 Press the MENU button. Select NETWORK, Network Device Setup, and then press the OK button.
- 2 Press the (▲/▼ arrow) buttons to select **Media Renderer Setup**, and then press the **OK** button.
- 3 Press the (▲/▼ arrow) buttons to highlight Maximum Volume Setup.
- 4 Press the (◀/▶ arrow) buttons to adjust to the desired volume.

#### NOTE

The TV's remote control can set volume regardless of the value of Maximum Volume Setup

# **Chapter 9**

# **Apps Collaboration**

# **Using Apps on a Tablet or Smartphone**

Toshiba provides three apps for tablets and smartphones:

- ❖ Toshiba A/V Remote App
- Toshiba Send & Play App
- Toshiba MediaGuide App

These apps are available for compatible Toshiba equipment using compatible tablets and smartphones powered by Android<sup>TM</sup> or IOS. You can download these apps through the Google Play<sup>TM</sup> or the iTunes Store.

In order to use these apps, you must configure the settings through the Apps Control Profile.

## Apps Control Profile

#### NOTE

- Third party Internet services are not provided by Toshiba, may change or be discontinued at any time, and may be subject to Internet service provider restrictions. Toshiba makes no warranties, representations, or assurances about the content, availability, or functionality of third-party content or services. Use of third-party Internet services may require the creation of a separate account through a computer with Internet access and/or payment of one-time and/or recurring charges and membership. Not all third-party services may be available on or compatible with this product. In order to experience the full suggested capabilities of this product, fully-compatible devices may be required.
- The Toshiba A/V Remote App can only be used when your TV and your tablet or smartphone are connected to the Internet.
- The Toshiba Send & Play App can only be used when your TV and your tablet or smartphone are connected to the Internet.
- The Toshiba MediaGuide App can only be used when your TV and your tablet or smartphone are connected to the Internet.
- Starting and operation of this service may take several minutes.
- Software updates may be needed in order to use this service.
- In order to experience the full suggested capabilities of this product, fully-compatible devices may be required.
- Certain features may not be available in all countries.

# **Apps Control Profile**

To select the Apps Control Profile

- 1 Press the MENU button. Select NETWORK, Network Device Setup and press the OK button.
- 2 Use the (▲/▼ arrow) buttons to select Apps Control Profile and press the OK button.
  - The Apps Control Profile window will appear.
- 3 Use the (▲/▼ arrow) buttons to select **Device Registration Setup** and press the **OK** button.
  - The Device Registration Setup window will appear.
- 4 Use the (▲/▼ arrow) buttons to highlight the Companion Device ID.
- 5 Select the **Cancel**. **All**. or **Delete** buttons.

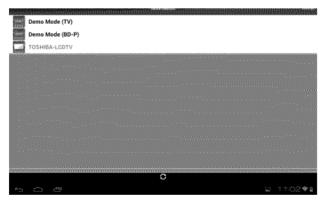
To enable the New Device Detection:

- 1 Press the MENU button. Select NETWORK, Network Device Setup and press the OK button to select.
- 2 Use the (◄/▶ arrow) buttons to select **Apps Control Profile** and press the **OK** button.
  - The Apps Control Profile window will appear.
- 3 Use the (▲/▼ arrow) buttons to select New Device Detection and press the OK button.
- 4 Use the (◀/▶ arrow) buttons to select **Enable** or **Disable**.
- 5 Press the **OK** button to submit.

# **Initial setup**

In order to use this application, your Android  $^{\rm TM}$  and/or IOS-compatible tablets or smartphones and compatible Toshiba equipment must be connected to the wireless LAN in your home. After downloading the Toshiba A/V Remote App, follow these steps:

- Read the disclaimer and select the **Agree** option.
   The Toshiba equipment's name will appear in the terminal window of the device powered by Android<sup>TM</sup>.
- 2 Select the desired Toshiba equipment from the list.



(Sample Illustration) Toshiba A/V Remote App—Device Select screen

3 Activate the selected device by entering a 4-digit PIN code in the pop-up window on the tablet or smartphone.

4 Press the **OK** button on the tablet or smartphone screen.



(Sample Illustration) Toshiba A/V Remote App—Input PIN code screen

# Toshiba A/V Remote App

The tablet and smartphone control apps provide multiple pages of options for maximum control. They include the codes needed to operate today's most popular home entertainment electronics.

With this app, you can control your Toshiba TV and other devices connected to it through IP, IR Blaster, or the HDMI CEC functions.

# **Toshiba Send & Play App**

The Toshiba Send & Play App allows you to share a URL from your tablet or your smartphone to your Smart TV.

#### NOTE

- Some web pages or URLs may not launch, depending on the TV status.
- Some web pages may not display correctly.

## Toshiba MediaGuide

The Toshiba MediaGuide App is a channel guide application for tablets and smartphones.

There are four screen modes which display detailed information such as TV Listings, TV Portal, Movies Portal, and Search. The screen modes can be changed using a left or right swipe of the switch bar at the top of the compatible device screen.

## TV listings

The TV listings are displayed in a grid format, which is easily controlled by swiping up, down, left, and right with your finger.

# Movies/TV portal screen

You can select from the Movie or the TV program Hotlist, their Portals, or the Reminders as desired.

## Search screen

You can search by keyword for TV programs, movies, or names of actors for detailed information.

#### **Detailed information**

You can browse program and celebrity information, such as celebrities associated with a program, photos associated with a program, airing information for a specific program, programs associated with a celebrity, or photos associated with a celebrity.

# **Chapter 10**

# **Troubleshooting**

# **General troubleshooting**

Before calling a service technician, review this chapter or visit the Toshiba technical support Web site at support.toshiba.com for possible causes/solutions for the problem you are experiencing.

Before you begin to troubleshoot any problem, first unplug the TV from the AC wall outlet, wait approximately one minute, and then plug the TV back into the AC wall outlet. If the problem still exists attempt to troubleshoot the problem.

#### Black box on screen.

The closed caption feature is set to one of the Text modes (**T1**, **T2**, **T3**, or **T4**). Set the closed caption feature to Off, see "Using closed captions" on page 87.

## TV stops responding to controls.

If the TV stops responding to the buttons on the remote control or TV control panel and you cannot turn off the TV, press and hold POWER button on the TV control panel for several seconds to reset the TV. If the TV does not power off using this method, unplug the TV from the AC wall outlet and plug it back in.

If you cause a static discharge when touching the TV and the TV fails to function, simply unplug the TV from the AC outlet and plug it back in. The TV should return to normal operation.

## Other problems.

If your TV's problem is not addressed in this Troubleshooting chapter or the recommended solution has not worked, use the Reset Factory Defaults procedure, see "Resetting to Factory Defaults" on page 107.

#### TV will not turn on.

Ensure the power cord is plugged in properly, and then press the **POWER** button.

Replace the batteries in the remote control, see "Installing batteries" on page 46.

Try the control panel buttons on the TV.

## 3D problems.

Watch the TV at a proper viewing angle and distance, see "Safety Precautions for 3D glasses" on page 6.

If 3D images are not correct, the 3D format may be different. Change the 3D format in the Quick menu, see "Selecting 3D format from the Quick menu in 3D mode" on page 78.

The left and right sides of 3D images may be reversed. Switch the left and right, see "Switching left and right images" on page 85.

If 2D images are not correct, the 2D format may be different. Change the 2D format in the Quick menu, see "Selecting 2D format from the Quick menu in 2D mode" on page 79.

# Picture problems

## General picture problems.

Check the antenna/cable connections, see "Connecting Your TV" on page 27.

Press the **INPUT** button on the remote control or on the TV and select a valid video input source, see "Selecting the video input to view" on page 86. If no device is connected to an input on the TV, no picture appears when you select that particular input source. For device connection details, see "Connecting Your TV" on page 27.

Antenna reception may be poor. Use a highly directional outdoor antenna (if applicable).

The station may be having broadcast difficulties. Try another channel.

Adjust the picture quality, see "Using the advanced picture settings features" on page 117.

If Edge Enhancer does not achieve a sharper picture, change the Sharpness value to increase the sharpness level, see "Edge Enhancer" on page 117.

## Video Input Selection problems.

If the Input Selection window does not appear when you press the **INPUT** button on the remote control or the TV control panel, press the **INPUT** button a second time. The TV displays the next video input source and the Input Selection screen.

## Cannot view external signals or channel 3 or 4.

If you cannot view signals from external devices connected to VIDEO 1, VIDEO 2, ColorStream HD1, ColorStream HD2, HDMI 1, HDMI 2, HDMI 3, HDMI 4, PC, or from channel 3 or 4, ensure that the Input Lock is set to **Off**, see "Locking video inputs" on page 96.

## Poor display color or no color.

The station may be having broadcast difficulties. Try another channel.

Check the Input mode when you use Shared Inputs, see "Configuring shared inputs" on page 70.

Adjust the Tint and/or Color, see "ColorMaster<sup>TM</sup>" on page 121.

## Poor composite picture.

If the TV is connected to an external A/V device (e.g. DVD player, video game system, set-top box, etc.) try using a ColorStream or HDMI<sup>TM</sup> video connection instead.

## Picture and sound are out of sync.

As with all products that contain a digital display, this may occur in rare instances, when viewing certain content (e.g. television broadcasts, video games, DVDs). The cause may include, without limitation, video processing within the TV, video processing in an attached gaming system, and video processing or different compression rates used by broadcasters in their programming.

Try the following:

- ❖ If the TV is connected to an A/V receiver that has a programmable audio delay feature, use this feature to help synchronize the sound to the picture.
- If the problem occurs only on certain TV channels, inform your local broadcast, cable, or satellite provider.

- The settings of Side Shared Audio and Rear Shared Audio may be not correct. Check the connections, see "Connecting a digital audio system" on page 34.
- Turn off and unplug the TV from the AC wall outlet for a few seconds and plug it back in.

# Sound problems

Check the antenna/cable connections, see "Connecting a digital audio system" on page 34.

The station may be having broadcast difficulties. Try another channel.

The sound may be muted. Press the **VOL** (+ -) buttons.

If you connect a computer using either the PC IN terminal or an HDMI® terminal, make sure that the Rear Shared Audio setting is properly set, see "Connecting a digital audio system" on page 34.

# Remote control problems

Remove all obstructions between the remote control and the TV.

Replace the remote control's batteries, see "Installing batteries" on page 46.

Your TV's remote control may not operate certain features on your external device. Refer to the owner's manual for your other device to determine its available features. If your TV remote control does not operate a specific feature on another device, use the remote control that came with the device, see "Learning about the remote control" on page 49.

If the TV still does not act as expected, perform the Reset Factory Defaults procedure, see "Resetting to Factory Defaults" on page 107.

# **Channel tuning problems**

Ensure that the remote control is set to the correct device mode, see "Learning about the remote control" on page 49.

The Auto Tuning feature may have erased the channel from memory. To add the channel to the channel memory, see "Manual Tuning" on page 67.

The Lock feature may have blocked the channel. To unblock the channel, see "Unlocking programs" on page 95.

If you cannot tune digital channels, check the antenna configuration, see "Initial setup" on page 51. If the problem

persists, clear all channels from the channel list and reprogram channels into memory, see "Storing channels in memory (optional)" on page 66. For additional information, see "TV stops responding to controls." on page 176. If the problem persists, use the Reset Factory Defaults procedure, see "Resetting to Factory Defaults" on page 107.

### **Closed caption problems**

If the program or video you have selected is not closed captioned, no captions appear on the screen.

If text is not available, a black rectangle may appear. If this happens, turn off the closed caption feature, see "Using closed captions" on page 87.

A closed caption signal may not display correctly under the following circumstances:

- The recording is dubbed
- The signal reception is weak
- ❖ The signal reception is nonstandard

For additional information, see "Using closed captions" on page 87.

### Rating blocking (V-Chip) problems

#### Forgotten PIN code.

When the PIN code screen appears, press the **INFO** button 4 times within approximately 5 seconds. The old PIN code is cleared, see "Forgotten PIN code" on page 91.

The V-Chip feature is available for U.S. V-Chip systems only, see "Using parental controls" on page 91.

### **HDMI® CEC Control operation**

HDMI® CEC Control feature is available for Toshiba HDMI® CEC compatible devices.

#### HDMI® cables.

Ensure that HDMI® cables with the (HDMI) Logo are used.

### The HDMI® CEC operation is not working correctly.

When the connected HDMI® CEC device does not work correctly after you have changed the device's settings, turn off the TV and unplug the power cord. After approximately one minute, plug the power cord in and turn on the TV.

If several devices are connected, the HDMI® CEC Control feature may not operate properly.

Read the instruction manual of the connected HDMI® CEC device.

### **HDMI®** problems

#### HDMI® cables.

Ensure that HDMI® cables with the (HDMI®) Logo are used, see "Connecting an HDMI® or DVI device to the HDMI® input" on page 35.

#### **Network problems**

#### Cannot connect to the Internet.

Check the modem and its incoming cable/telephone connections, see "Connecting to a home network" on page 42.

Confirm your modem's operation.

Ensure your IP address is set up correctly.

#### No network connection.

If using a wired network connection, check to ensure that the LAN cables are connected properly, see "Connecting the TV to a home network with an Internet connection - wired" on page 43.

Ensure that the modem and router power cords are plugged in and the devices are operating properly.

Ensure that your IP address is set up correctly, see "IP Address Setup" on page 136.

Check to ensure proper operation of other network connected devices.

#### Network Setup fails (Auto).

Check to ensure that the LAN cables are connected properly, see "Connecting the TV to a home network with an Internet connection - wired" on page 43.

DHCP is not enabled on the router, or no router is present. Refer to your router's documentation for instructions on enabling DHCP. If your router does not support DHCP, you must manually set up the IP address

Internet service is not available. Check your cable/DSL modem or contact your ISP for Internet service issues.

#### Network Setup fails (Manual).

Ensure that the TV IP address is not the same as any other device on the network.

Example: IP address 192.168.0.100 and IP address 192.168.0.101 are different addresses on the same network.

Make sure the TV IP address is on the same subnet as the networked computer.

- ❖ Example of proper setup: The computer has the IP address 192.168.0.100 with the Subnet mask 255.255.255.0, the TV has the IP address 192.168.0.101 with the Subnet mask 255.255.255.0; both are on the same subnet.
- ❖ Example of improper setup: The computer has the IP address 192.168.1.100 with the Subnet mask 255.255.255.0, the TV has the IP address 192.168.0.101 with the Subnet mask 255.255.253.0; they are on different subnets.

#### Unstable network connection.

When using a wired home network connection, unplug the LAN cables, and then reconnect them.

When using a wireless home network connection:

- Reboot the router:
  - 1 Remove AC power from the router and the television for approximately one minute.
  - 2 Reconnect AC power to the router.
  - 3 Reconnect AC power to the television and turn it On.
  - 4 After approximately two minutes, check connection stability.
- Connect with LAN cables, if possible, and check connection stability.
- Repeat the wireless network setup procedure and check connection stability.

#### The media server name is not displayed.

The LAN cables, if used, are not connected properly, see "Connecting the TV to a home network with an Internet connection - wired" on page 43.

The WLAN, if used, is not configured properly.

The network setup on the Server is incorrect. Make sure both the media server and TV are using the same network type (DHCP/manual) and have compatible network settings.

Too many devices are connected. You cannot connect more than 32 sharing devices at one time.

The media server is not turned On.

The "server" is not a media server device.

Check the firewall and streaming settings on the media server.

#### Wireless network problems

Check that the router/AP (Access point) power is On.

After starting wireless network setup, confirm that the network is configured properly by performing the network connection test, see "Network Connection Test" on page 139.

Check the router/AP's connection status.

If the router/AP does not support PBC or WPS, Easy Setup (PBC) will not work even if the push-button is pressed, see "Wireless Setup" on page 131.

If the available router/AP list is not displayed in Easy Setup (PBC) or Assisted Setup, the power of the router/AP may be Off. Check that it is On, and then try restarting the scan for available routers/APs, see "Easy Setup using PBC (Push button configuration)" on page 131.

Refer to the router/AP's instruction manual.

### MediaShare (Media Player) problems

Ensure that the devices (Display and Server) are connected correctly.

Incorrect functionality may occur when using a USB HUB connection.

Photo files that were processed and edited using the computer's application software may not be viewable.

When viewing content that supports two or more formats the display may select one format automatically.

Copyright protected content stored on the media server may not be playable on the display.

Content playback stability may be affected by heavy network traffic.

Content originally recorded on a computer may not play correctly. Set the media sharing of the media server to the correct settings, according to the media server instruction manual.

Confirm that the contents of either the media server or the USB storage device are in formats that are supported by this TV, see "MediaShare (Media Player) specifications" on page 157.

Depending on the media server, access may be limited by the MAC address. Set the server according to the media server's instruction manual. This TV's MAC Address can be confirmed in the Network Setup portion of the User Menu, see "MAC Address" on page 138.

#### For Connected MediaShare (Media Player)

Depending on the media server, it may take time to display the list.

#### Media Renderer

Depending the state of this TV, Media Controller may not be able to control a Media Renderer playback.

If Media Renderer playback starts regardless of the user's intention, check the access control of Media Renderer or set Media Renderer to Off.

If you use a wireless access point without encryption, there is the risk that your Media Renderer device could be controlled by an unknown Media Controller. You can protect your Media Renderer device by going to **NETWORK> Network Device Setup> Media Renderer Setup> Media Controller Setup** and limit the authorized Media Controller devices, see "Media Controller setup" on page 169.

#### **Light Indicator**

The Power light on the front of the TV indicates the TV's status, as described below.

#### Power On/Standby light

Green:

The TV is On and operating properly.

No light:

The power is Off or in Standby.

Green flashing:

- ❖ The system is booting. The screen appears after a short wait.
- ❖ The fan has stopped. Turn off the TV and unplug the power cord. After approximately one minute, plug the power cord in again and turn on the TV.

Red flashing:

Power On failure. Turn off the TV and unplug the power cord. After approximately one minute, plug the power cord in again and turn on the TV.

### If the problem persists after trying the solutions

In the U.S., visit TAIS Consumer Solutions on the web at support.toshiba.com or call 800-631-3811.

In Canada, locate the nearest Toshiba authorized service depot. Visit www.toshiba.ca; click "Home Entertainment," and then click "Support."

# **Appendix A**

# **Specifications**

#### NOTE

- This model complies with the specifications listed below.
- Designs and specifications are subject to change without notice.
- This model may not be compatible with features and/or specifications that may be added in the future.

### **Television system**

NTSC standard	
ATSC standard	8VSB
Digital Cable	64 QAM, 256 QAM; in-the-clear, unencrypted

#### **Channel coverage**

VHF	2 through 13	
UHF	14 through 69	
	Mid band (A-8 through A-1, A through I)	
Cable TV	Super band (J through W)	
	Hyper band (AA through ZZ, AAA, BBB)	
	Ultra band (65 through 94, 100 through 135)	

#### **Power source**

120 V AC, 60 Hz

#### **Power consumption**

42L6200U	0.8 A (maximum current)
42L0200C	0.3 W in Standby mode
47L6200U	0.9 A (maximum current)
47L02000	0.3 W in Standby mode
55L6200U	1.0 A (maximum current)
	0.3 W in Standby mode
47L7200U	1.2 A (maximum current)
+/L/2000	0.3 W in Standby mode
55L7200U	1.4 A (maximum current)
	0.3 W in Standby mode

### **Audio power**

42L6200U	10 W + 10 W
47L6200U	10 W + 10 W
55L6200U	10 W + 10 W
47L7200U	10 W + 10 W
55L7200U	10 W + 10 W

### Speaker type

42L6200U	Tweeter 8.2cm x 3.4cm (3 1/4 x 1 1/3 inch) x 2 pcs Woofer 3.9cm x 1.6cm (1/12 x 3/5 inch) x 2 pcs
151 (200Y)	Tweeter 8.2cm x 3.4cm (3 1/4 x 1 1/3 inch) x 2 pcs
47L6200U	Woofer 3.9cm x 1.6cm (1/12 x 3/5 inch) x 2 pcs
55L6200U	Tweeter 8.2cm x 3.4cm (3 1/4 x 1 1/3 inch) x 2 pcs
	Woofer 3.9cm x 1.6cm (1/12 x 3/5 inch) x 2 pcs
47L7200U	Tweeter 8.2cm x 3.4cm (3 1/4 x 1 1/3 inch) x 2 pcs
17272000	Woofer 3.9cm x 1.6cm (1/12 x 3/5 inch) x 2 pcs
55L7200U	Tweeter 8.2cm x 3.4cm (3 1/4 x 1 1/3 inch) x 2 pcs
33L12000	Woofer 3.9cm x 1.6cm (1/12 x 3/5 inch) x 2 pcs

### Video/audio terminals

### Video/audio input

Video	1 V (p-p), 75 ohm, negative sync.
Audio	200 mV (rms) (-20dBFS)

### $\textbf{ColorStream}^{\circledast}\,(\textbf{component video})\,\textbf{HD input}$

	Y: 1V (p-p), 75 ohm
Video	Pr: 0.7V (p-p), 75 ohm
	PB: 0.7V (p-p), 75 ohm
	Suggested formats: 1080i, 720p, 480p, 480i
Audio	200 mV (rms) 22 k ohm or greater

### **HDMI®** input

HDMI® compliant	
HDCP compliant	
Suggested formats	See table on page 191
HDMI® Audio	Dolby® Digital and 2-channel Linear-PCM; 32/44.1/48 kHz sampling frequency; 16/20/24 bits per sample

#### Digital audio output

Optical type

### **PC** input

15-Pin D-sub Analog RGB

#### Wireless connection

Standard	IEEE 802.11a/b/g/n/
Host Interface	USB 2.0 compatible
Frequency Range	5.15-5.35 GHz, 5.47-5.725 GHz, 5.725-5.850 GHz, 2.400–2.473 GHz
Security	WEP 64/128, TKIP, AES, WPA/WPA2-PSK, WPS, None

#### **Ethernet**

IEEE 802.3.

#### **USB**

Universal Serial Bus Specification, Revison 1.1. Universal Serial Bus Specification, Revison 2.0.

#### Dimensions with table stand

42L6200U	Width	37.6" (954 mm)
	Height	25.0" (634 mm)
	Depth	8.4" (214 mm)
	Width	41.9" (1064 mm)
47L6200U	Height	27.4" (696 mm)
	Depth	9.1" (214 mm)
55L6200U	Width	48.6" (1234 mm)
	Height	31.3" (795 mm)
	Depth	11.3" (287 mm)
	Width	41.9" (1064 mm)
47L7200U	Height	27.4" (696 mm)
	Depth	9.3" (235 mm)
55L7200U	Width	48.6" (1234 mm)
	Height	31.3" (795mm)
	Depth	11.3" (288 mm)

#### Mass (weight)

42L6200U	30.9 lbs (14.0 kg)
47L6200U	37.5 lbs (17.0 kg)
55L6200U	51.8 lbs (23.5 kg)
47L7200U	39.7 lbs (18.0 kg)
55L7200U	57.3 lbs (26.0 kg)

#### **Operating conditions**

Temperature	32° - 95° F (0° - 35° C)
Humidity	20 - 80% (no moisture condensation)

### **Supplied accessories**

- ❖ Remote control with two size "AA" batteries
  - ❖ L7200U model number: CT-90395
  - ❖ L6200U model number: CT-90408
- Resource Guide
- Pedestal and hardware
- Warranty
- ♦ Wireless QWERTY keyboard (2x AAA batteries)
  - Available with some models. Not available in Mexico.
- IR blaster cable
- ❖ AV adapter cables
- Component adapter cable
- Four pairs of 3D glasses

#### NOTE

The USB QWERTY keyboard supplied with this TV is a standard U.S. layout keyboard. The accented characters for French and Spanish may not be available in certain cases.

# Acceptable signal formats for PC IN, HDMI®, and 3D PC IN signal formats

#### NOTE

- ❖ The PC IN on this TV only accepts signal formats which are compliant with VESA-DMT as in the table below. Since some PCs input signals are different from the resolution and frequency described in the table below, the following problems may occur: incorrect display, false format detection, picture position failure, blur, or judder. In these cases, set the monitor output format on your computer to conform to any of the signals in the table below.
- The signals whose vertical frequency is 56 Hz, 70 Hz, 72 Hz, or 75 Hz are converted to a 60 Hz signal.
- When you connect a computer to this TV, it is recommended that you set the refresh rate of your computer to 60 Hz.
- ❖ The PC IN on this TV does not accept the Sync on Green, Composite Sync, and Interlace signals.

Format	Resolution	V. Frequency	H. Frequency	Pixel Clock Frequency	VESA Standard (DMT)
VGA	640 x 480	59.940/60 Hz	31.469/31.500 kHz	25.175/25.200 MHz	TBD
		72.809 Hz	37.861 kHz	31.500 MHz	TBD
		75.000 Hz	37.500 kHz	31.500 MHz	TBD
SVGA	800 x 600	56.250 Hz	35.156 kHz	36.000 MHz	TBD
		60.317 Hz	37.879 kHz	40.000 MHz	TBD
		72.188 Hz	48.077 kHz	50.000 MHz	TBD
		75.000 Hz	46.875 kHz	49.500 MHz	TBD
XGA	1024 x 768	60.004 Hz	48.363 kHz	65.000 MHz	TBD
		70.069 Hz	56.476 kHz	75.000 MHz	TBD
		75.029 Hz	60.023 kHz	78.750 MHz	TBD

Format	Resolution	V. Frequency	H. Frequency	Pixel Clock Frequency	VESA Standard (DMT)
WXGA	1280 x 768	59.995 Hz	47.396 kHz	68.250 MHz	TBD
		59.870 Hz	47.776 kHz	79.500 MHz	TBD
		74.893 Hz	60.289 kHz	102.250 MHz	TBD
	1360 x 768	60.015 Hz	47.712 kHz	85.500 MHz	TBD
SXGA	1280 x 1024	60.020 Hz	63.981 kHz	108.000 MHz	TBD
		75.025 Hz	79.976 kHz	135.000 MHz	TBD

#### **HDMI®** signal formats

#### NOTE

- ❖ The HDMI® inputs on this TV only accept VGA, SVGA, XGA, WXGA, and SXGA signal formats which are compliant with VESA-DMT as in the table below. Since some computer, HDMI®, or DVI device input signals are different from the resolution and frequency described in the table below, the following problems may occur: incorrect display, false format detection, picture position failure, blur, or judder. In these cases, set the monitor output format on your computer, HDMI®, or DVI device to conform to any of the signals in the table below.
- The signals whose vertical frequency is 24 Hz, 56 Hz, 70 Hz, 72 Hz, or 75 Hz are converted to a 60 Hz signal.
- When you connect a computer to this TV, it is recommended that you set the refresh rate of your computer to 60 Hz.

Format	Resolution	V. Frequency	H. Frequency	Pixel Clock Frequency	VESA Standard (DMT)
VGA	640 x 480	59.940 Hz	31.469 kHz	25.175 MHz	TBD
		72.809 Hz	37.861 kHz	31.500 MHz	TBD
		75.000 Hz	37.500 kHz	31.500 MHz	TBD
SVGA	800 x 600	56.250 Hz	35.156 kHz	36.000 MHz	TBD
		60.317 Hz	37.879 kHz	40.000 MHz	TBD
		72.188 Hz	48.077 kHz	50.000 MHz	TBD
		75.000 Hz	46.875 kHz	49.500 MHz	TBD

Format	Resolution	V. Frequency	H. Frequency	Pixel Clock Frequency	VESA Standard (DMT)
XGA	1024 x 768	60.004 Hz	48.363 kHz	65.000 MHz	TBD
		70.069 Hz	56.476 kHz	75.000 MHz	TBD
		75.029 Hz	60.023 kHz	78.750 MHz	TBD
WXGA	1280 x 768	59.995 Hz	47.396 kHz	68.250 MHz	TBD
		59.870 Hz	47.776 kHz	79.500 MHz	TBD
		74.893 Hz	60.289 kHz	102.250 MHz	TBD
	1360 x 768	60.015 Hz	47.712 kHz	85.500 MHz	TBD
SXGA	1280 x 1024	60.020 Hz	63.981 kHz	108.000 MHz	TBD
		75.000 Hz	79.976 kHz	135.000 MHz	TBD
480i	720 x 480i	59.940/60 Hz	15.734/15.750 kHz	27.000/27.027 MHz	TBD
480p	720 x 480p	59.940/60 Hz	31.469/31.500 kHz	27.000/27.027 MHz	TBD
720p	1280 x 720p	59.940/60 Hz	44.955/45.000 kHz	74.176/74.250 MHz	TBD
1080i	1920 x 1080i	59.940/60 Hz	33.716/33.750 kHz	74.176/74.250 MHz	TBD
1080p	1920 x 1080p	23.976/24 Hz	26.973/27.000 kHz	74.176/74.250 MHz	TBD
		59.940/60 Hz	67.433/67.500 kHz	148.352/ 148.500 MHz	TBD

### 3D Signal formats\*

Resolution	Aspect ratio	V. Frequency	H. Frequency	Pixel Clock Frequency	3D Structure
1280 x 720p	16:9	23.98 Hz	17.98 kHz	59.341 MHz	Side by Side (half)
					Top and Bottom
		29.97 Hz	22.48 kHz	74.176 MHz	Side by Side (half)
					Top and Bottom
		59.940/60 Hz	90.0/89.91 kHz	148.352/148.500 MH:	z Frame Packing
			44 OFF /4F 000 Id I=	74.176.774.0E0.MU-	Side by Side (half)
			44.955/45.000 kHz	74.170/74.230 IVITZ	Top and Bottom
1920 x 1080i	16:9	59.940/60 Hz	33.716/33.750 kHz	74.176/74.250 MHz	Side by Side (half)
					Top and Bottom

Resolution	Aspect ratio	V. Frequency	H. Frequency	Pixel Clock Frequency	3D Structure
1920 x 1080p	16:9	23.976/24 Hz	54/53.94 kHz	148.352/148.500 MHz	Frame Packing
			26.973 kHz	74.176/74.250 MHz	Side by Side (half
					Top and Bottom
		,	67.5/67.43 kHz	148.352/148.500 MHz	Frame Packing
			33.716/33.75 kHz	74.176/74.250 MHz	Side by Side (half
					Top and Bottom
		59.940/60 Hz	67.433/67.500 kHz	148.352/148.500 MHz	Side by Side (hal
					Top and Bottom

<sup>\*</sup>Some content may not be supported depending on the input source format.

### Operating the TV with combination buttons

You can directly operate the TV power, input switch, picture size switch, and picture mode switch by pressing a combination button while holding down a color button.

Button Color	Combination Button	Behavior/Mode
	3D	Power Off
	POWER	Power On
	1	Input 1
	2	Input 2
	3	Input 3
	4	Input 4
RED	5	Input 5
	6	Input 6
	7	Input 7
	8	Input 8
	9	Input 9
	0	ANT/CABLE
	MUTE	Mute On

# **Specifications** *Operating the TV with combination buttons*

Button Color	Combination Button	Behavior/Mode
Annone	1	Native (picture size)
	2	4:3 (picture size)
	3	TheaterWide 1 (picture size)
	4	TheaterWide 2 (picture size)
GREEN	5	TheaterWide 3 (picture size)
	6	Full (picture size)
	7	Normal (picture size)
	8	Dot by Dot (picture size)
	MUTE	1/2 Mute On
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1	AutoView (picture mode)
	2	Dynamic (picture mode)
	3	Standard (picture mode)
	4	Movie (picture mode)
YELLOW	5	- (picture mode)
	6	Store (picture mode)
	7	Game (picture mode)
	8	PC (picture mode)
	MUTE	Mute Off
***************************************		

## Index

3D

Numerics	4/3 stretch
3D	using 114
2D from Quick menu 79 3D from Quick menu 78 3D lock 83 3D timer lock 83 adjusting 2D to 3D depth 84 auto start mode 81 button operation 76 change pin code 82 delete pin code 82 enable 3D timer 83 enter new pin code 81 forgotten pin code 82 functions 74 Native mode 80 selecting format 76 setting 3D pin code 81 start message 82 switch left right images 85 switching display mode 76 switching to 2D mode 79 switching to 3D mode 77 viewing images 72	A  advanced picture settings  Auto Brightness Sensor 120  Backlight Adjustment Pro 120  Base Color Adjustment 121  Color temperature 122  ColorMaster <sup>TM</sup> 121  DNR 119  DynaLight® 118  Dynamic Contrast 117  Edge Enhancer 117  MPEG NR 119  resetting to factory default 122  Static Gamma 118  using 117  audio  adjusting balance 125  adjusting range 126  Audyssey Dynamic Volume®  127  bass/treble 126

Dolby® Digital Dynamic Range	setting the audio 103
Control 126	to the TV's HDMI® 41
muting sound 125	using with the TV 102
optical audio output format 126	connecting
Auto Aspect	a computer 39
using 114	audio system 34
auto input	cable TV 30
features 70	camcorder 30
C	computer to TV's PC IN 39
cables	DVD player with ColorStream®
3.5mm to RCA Y-cable 29	31
analog RGB (15-pin) 29	DVI device to HDMI® input 35
coaxial (F-type) 27	HDMI® audio system 38
component video (red/green/blue)	HDMI® device to HDMI® input
28	35
Dual-wand IR blaster cable 29	IR devices 32
HDMI® 28	satellite receiver 31
LAN 29	to a computer (no Internet
optical audio 29	connection) 42
overview of cables 27	to a home network 42
standard A/V (red/white/yellow)	to a home network (no Internet
27	connection) 42
channel return 85	to a home network (wired Internet
channels	connection) 43
auto tuning 66	to a home network (wireless
labeling analog TV channels 69	Internet connection) 44
labeling video inputs 70	TV's HDMI® 41
locking specific channels 95	VCR 31
manual tuning 67	VCR and antenna 30
next programmed channel 85	control other devices
skipping 68	HDMI®-CEC Control 37
skipping oo skipping video inputs 68	control panel
specific channel 85	lock 97
storing in memory 66	controlling other devices
closed captions	TV remote 37
Analog CC mode 87	F
button 90	ePORTAL 142
Digital CC settings 89	add favorites 152
using 87	Apps 144
computer	create event 151
adjusting image 102	create messages 151
adjusting intage 102	create messages 151

delete event 151	using 129
editing favorite apps 152	1
events 151	icon
MediaShare 157	safety 20
modify favorites 152	initial settings
preferences 153	change 64
search 143	individual settings 65
select apps 144	navigate the menu 64
view favorites 152	quick setup 64
ePortal 142	
ePORTAL Internet 147	initial setup 51
access web page 150	main menu layout 62
adding favorites 150	menu navigation 61
browsing favorites 149	quick menu 63
expert picture settings	IR Blaster Out terminal
RGB Filter 123	using 32
setting 122	IR Blaster setup 55
Test Pattern 122	M
White Balance 123	Media Renderer
External Control Setup 167	device name setup 169
•	maximum volume setup 170
F	Media Controller setup 169
Factory Defaults	MediaGuide 153
reset 107	operating 154
favorites	setup 153
adding 150	MediaShare (Media Player)
browsing 149	basic operation 158
viewing 152	playing music files 162
features 21	specifications 157
Н	viewing movie files 160
HDMI®	viewing photo files 164
viewing signal information 102	Music Music
HDMI® CEC	access via ePORTAL 157
adjusting amplifier's audio 100	N
controlling playback devices 98	network
input source selection 100	advanced setup 136
other functions 101	connection test 139
HDMI® CEC Control	DNS setup 137
using 97	initial setup 58
HDMI® settings feature	setup 131
using 101	wireless setup 131
home network	-

Network Device Setup 167	unlocking programs 95
no signal power down	Q
set 106	quick setup
0	ANT/CABLE IN 66
overview	local time 65
installation 22	location 65
setup 22	menu language 65
use 22	
_	R
P	rating system 93
parental controls	downloading additional 92
blocking programs/movies by	S
rating (V-Chip) 91	safety
using 91	icons 20
Photos	scrolling the picture 113
access via ePORTAL 157	shared inputs
picture	configuring 70
adjusting 115	SmartTV
adjusting quality 115	using 142
picture mode	YouTube <sup>TM</sup> 146
selecting 115	SmartTV <sup>TM</sup>
picture settings	
locking 124	CinemaNow® 147
picture size	Netflix 144
4/3 111	VUDUTM 145
Dot by Dot 113	software keyboard
Full 111	using 139
Native 110	software licenses
Normal 113	show 141
selecting 109	software upgrade
TheaterWide 1 112	performing 140
TheaterWide 2 112	specifications
TheaterWide 3 112	3D Signal formats 193
pin code	acceptable signal formats 191
changing 91	audio power 187
deleting 91	channel coverage 186
entering new pin code 91	ColorStream® HD input 188
forgotten 91	Digital audio output 188
setting pin code 90	ethernet 189
power failure 108	HDMI® input 188
program ratings	HDMI® signal formats 192
displaying 95	mass (weight) 189
displaying 95	

operating conditions 189 PC IN signal formats 191 PC input 188 power consumption 187 power source 187 remote, combination buttons 194 speaker type 187 supplied accessories 190 TV system 186 USB 189 video/audio terminals 188	Rating blocking problems 180 remote control problems 179 sound problems 179 wireless network problems 183 TV connections front 23 side 23 TV panel connections back 24 TV panel controls front 23
wireless connection 188	left side 23
support information	side 23
show 107 SurfLock <sup>TM</sup>	TV remote control other devices 46
using 85	effective range 48
T	functionality 49
time limit	install batteries 46
set for games 96	TV status information
timer	show 106
sleep timer 105	V
turn on TV 104	Video
Toshiba A/V Remote App	access via ePORTAL 157
Initial setup 173	video input
Toshiba MediaGuide app	locking 96
movie/TV portal 175	selecting 86
search 175	W
TV listings 175	web browser 147
troubleshooting 176	access web page 150
channel tuning problems 179	adding favorites 150
closed caption problems 180	browsing favorites 149
contact Toshiba 185 HDMI® 181	
HDMI® CEC Control problems	
180	
light indicator 184	
light indicator functions 184	
MediaShare (Media Player)	
problems 183	
network problems 181	
picture problems 177	