

TOSHIBA

Leading Innovation >>>

OWNER'S MANUAL

LCD Color TV



HDMI

52Z3500A

52Z3500E

52Z3500T

57Z3500A

57Z3500E

57Z3500T

Owner's Record

You will find the model number and serial number on the back of the TV. Record these numbers in the spaces provided below. Refer to them whenever you call upon your TOSHIBA dealer regarding this product.

Model number:

Serial number:

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Introduction

Welcome to Toshiba

- Thank you for purchasing this Toshiba LCD Color Television. This manual will help you use the exciting features of your new TV.
- Instructions in this manual are based on using the remote control.
- You also can use the controls on the TV if they have the same name as those referred to on the remote control.
- Please read all safety and operating instructions in this manual carefully, and keep this manual for future reference.

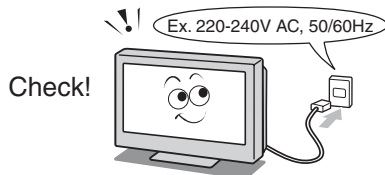
Important Safety Instructions

Be sure to observe the following instructions and precautions to ensure safe use of this TV.

Installation

- 1) **Always connect the power plug to an appropriate electrical outlet equipped with A model: 220-240V, AC 50Hz, E model: 220-240V, AC 50/60Hz and T model: 110-240V, AC 50/60Hz.**

Never use the TV outside the specified voltage range. It may cause a fire or an electric shock.



WARNING ABOUT THREE-WIRE GROUNDING-TYPE PLUG: (For E model only)

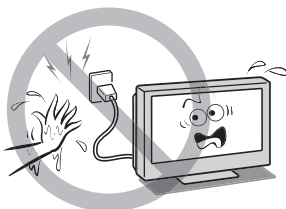
- This product shall be connected to a main socket outlet with a protective earthing connection.
- Never remove the earthing pin on the power plug. This system is equipped with a three pin earthing-type power plug. This plug will only fit an earthing-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace the wall outlet.
- Never defeat the purpose of the earthing plug.

About the fuse

In a three pin earthing-type, the fuse fitted in this plug is approved by ASTA or BSI to BS1362. It should only be replaced by a correctly rated and approved type and the fuse cover must be refitted.

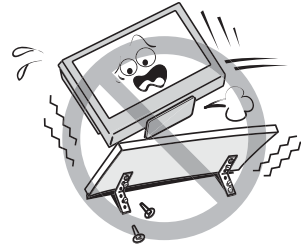
- 2) **Never insert or remove the power plug with wet hands.**

This may cause an electric shock.



- 3) **Never place the TV in an unstabilized location such as on a shaky table, incline or location subject to vibration.**

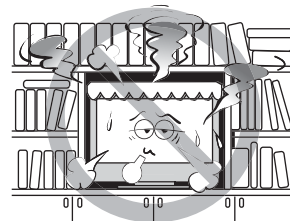
The TV may drop or fall off which may cause an injury or damage.



- 4) **Never block or cover the slots and openings in the cabinet.**

- Never place the TV so that it is facing upward or on its side.
- Never place the TV in a closet, bookcase or other similar area where the ventilation is poor.
- Never drape a newspaper, tablecloth or curtain on the TV.
- When installing the TV against a wall, always keep the TV at least 10 cm away from the wall.
- Never place the TV on a soft unstable surface, such as a carpet, or a cushion.

The inside of this TV will overheat if the ventilation holes are covered, blocked or sealed, which may result in a fire.



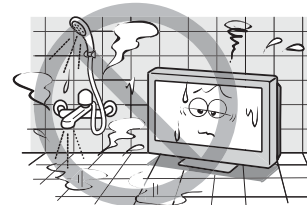
- 5) **Never place the TV near a heater or in direct sunlight.**

The surface of the cabinet or power cord may melt and result in a fire or an electric shock.



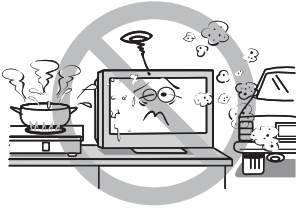
- 6) **Never place the TV in an area exposed to high humidity levels, such as in a bathroom or close to a humidifier.**

This may cause a fire or an electric shock.



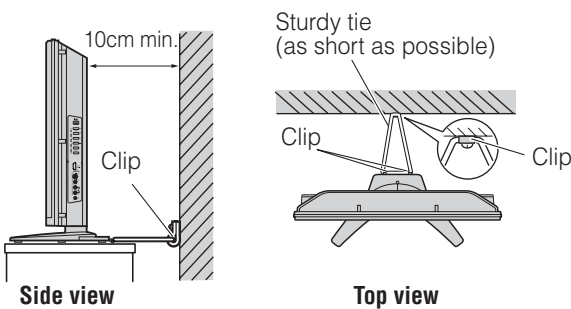
- 7) **Never place the TV next to a stove where it will be exposed to oil, smoke, or steam, or in a location where there is a large quantity of dust.**

This may cause a fire or an electric shock.



- 8) **Install the TV in a horizontal, stable location. Connect between two clips on the back of the TV and a wall, pillar, etc., with a sturdy tie and clip of supplied accessories (see page 36).**

- Use as short a tie as possible to ensure the TV is stable.
- If the TV is not installed securely, it may lean or fall over and cause an injury.
- To prevent injury, use the exclusive optional stand or wall-hanging bracket to install this TV on the floor or wall securely in accordance with a qualified technician.



- 9) **Precautions for moving the TV**

- When moving the TV, be sure to remove the plug from the wall outlet and disconnect the antenna cable and audio/video cables, any steady ties. A fire or an electric shock may result if the power cord is damaged.
- When carrying the TV, at least two people are needed. Be sure to carry it upright.
- Never carry the TV with the screen facing up or down.



- 10) **Precautions for installing on outdoor antenna**

An outside antenna system should not be located in the vicinity of overhead power lines, or other electric light or power circuits.

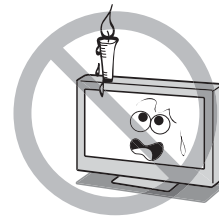
If the antenna falls down or drops, it may cause an injury or an electric shock.



Use

- 1) **Never place hot objects or open flame sources, such as lighted candles or nightlights, on or close to the TV.**

High temperatures can melt plastic and lead to fires.



- 2) **The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.**

When liquids are spilled or small items are dropped inside the TV, this may cause a fire or an electric shock. If small objects drop inside the TV, turn off the TV and remove the power plug from the outlet immediately and contact a service technician.



- 3) **Never insert objects (metal or paper) or pour water inside the TV through ventilation holes and other openings.**

These items may cause a fire or an electric shock. If these objects are inserted inside the TV, turn off the TV and remove the power plug from the outlet immediately and contact a service technician. Be especially careful that children do not insert objects in the TV.



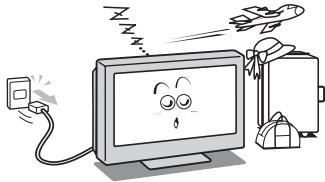
4) Never stand or climb on the TV.

Be especially careful in households with children to prevent them through climbing on top of the TV. It may move, fall over, break, become damaged or cause an injury.



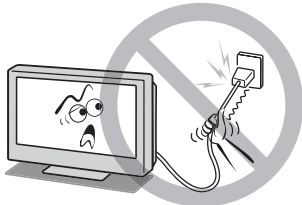
5) When the TV will not be used for a long period of time, such as during vacation or travel, remove the power plug from the wall outlet for safety.

- The TV is not completely disconnected from the power supply line, as minute current is consumed even when the O/I Power switch is turned off.
- The Mains plug or an appliance coupler is used as the disconnect device, therefore the disconnect device shall remain readily operable.



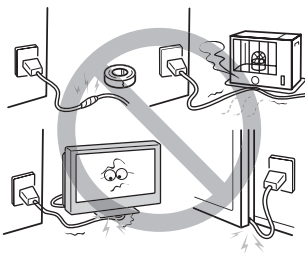
6) Never pull on the power cord when removing the plug from the wall outlet.

Always hold the plug firmly when removing it. If the power cord is yanked, the cord may become damaged and a fire or an electric shock may occur.



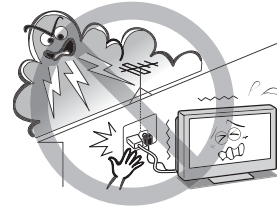
7) Never cut, break, modify, twist, bunch up or bent the cord or apply excessive force or tension to it.

Never place heavy objects on the cord or allow it to overheat as this may cause damage, a fire or an electric shock. Contact a service technician if the power cord is damaged.



8) If there is thunder or lightning, never touch the antenna cable or other connected cables.

You may suffer an electric shock.



Service

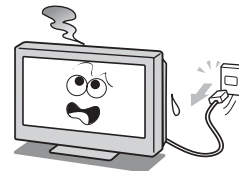
1) Never repair, modify or disassemble the TV by yourself.

It may cause a fire or an electric shock. Consult a service technician for inspection and repairs.



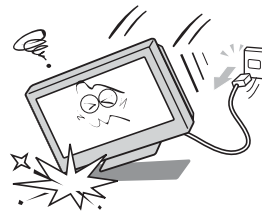
2) When a malfunction occurs, or if smoke or an unusual odor comes from the TV, turn off the TV and remove the power plug from the outlet immediately.

Make sure that the smoke or smell has stopped, then contact a service technician. If the TV is still used in this condition, it may cause a fire or an electric shock.



3) If the TV is dropped or the cabinet is broken, turn off the TV and remove the power plug from the outlet immediately.

If the TV is still power used in this condition, it may cause a fire or an electric shock. If the cabinet is broken, be careful when handling the TV to prevent an injury. Contact a service technician for inspection and repair.

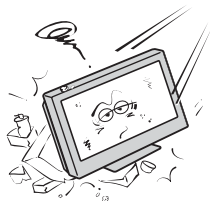


- 4) **When the TV reaches the end of its useful life, ask a qualified service technician to properly dispose of the TV.**

Note:

The lamp unit contains a small amount of mercury. Disposal of mercury may be regulated due to environmental considerations.

Dispose of the used lamp unit by the approved method for your area. For disposal or recycling information, please contact your local authorities.



Cleaning

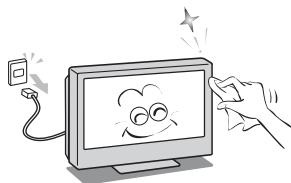
- 1) **Remove the power plug before cleaning.**

Never use solvents such as benzene or thinner to clean the TV.

- These solvents may distort the cabinet or damage its finish.
- If rubber or vinyl products remain in contact with the TV for a long time, a stain may result.

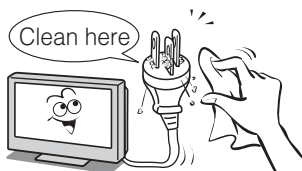
If the cabinet becomes dirty, clean it with a soft, dry cloth.

When cleaning the surface of the LCD display, wipe the panel surface gently with a soft, dry cloth.



- 2) **Periodically disconnect the power plug from the outlet and check it. If dust has collected on the power plug connectors, clean off the dust with a dry cloth.**

This dust may cause a fire due to reduced insulation on the plug.



Important information

- 1) **About LCD screen**

- If you have the LCD screen facing to the sun, the LCD screen will be damaged. Be aware of locating the TV in the place such as window side or outside of the room.
- Never press the LCD screen strongly or scratch it, and never put anything on it. These actions will damage the LCD screen.

- 2) **About cabinet and LCD screen**

Never spray volatile compounds such as insecticide on the cabinet and LCD screen.

This may cause a discoloration or damage the cabinet and LCD screen.

- 3) **Some pixels of the screen do not light up**

The LCD display panel is manufactured using an extremely high level of precision technology, however sometimes some pixels of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

- 4) **About Interference**

The LCD display may cause interference in image, sound, etc. of other electronic equipment that receives electromagnetic waves (e.g. AM radios and video equipment).

- 5) **About using under the low temperature places**

If you use the TV in the room of 0°C or less, the picture brightness may vary until the LCD monitor warms up. This is not a sign of a malfunction.

- 6) **About afterimage**

If a still picture is displayed, an afterimage may remain on the screen, however it will disappear. This is not a sign of malfunction.

Exemptions

- Toshiba is not liable for any damage caused by fires, natural disaster (such as thunder, earthquake, etc.), acts by third parties, accidents, owner's misuse, or uses in other improper conditions.
- Toshiba is not liable for incidental damages (such as profit loss or interruption in business, modification or erasure of record data, etc.) caused by use or inability to use of product.
- Toshiba is not liable for any damage caused by neglect of the instructions described in the owner's manual.
- Toshiba is not liable for any damage caused by misuse or malfunction through simultaneous use of this product and the connected equipment.

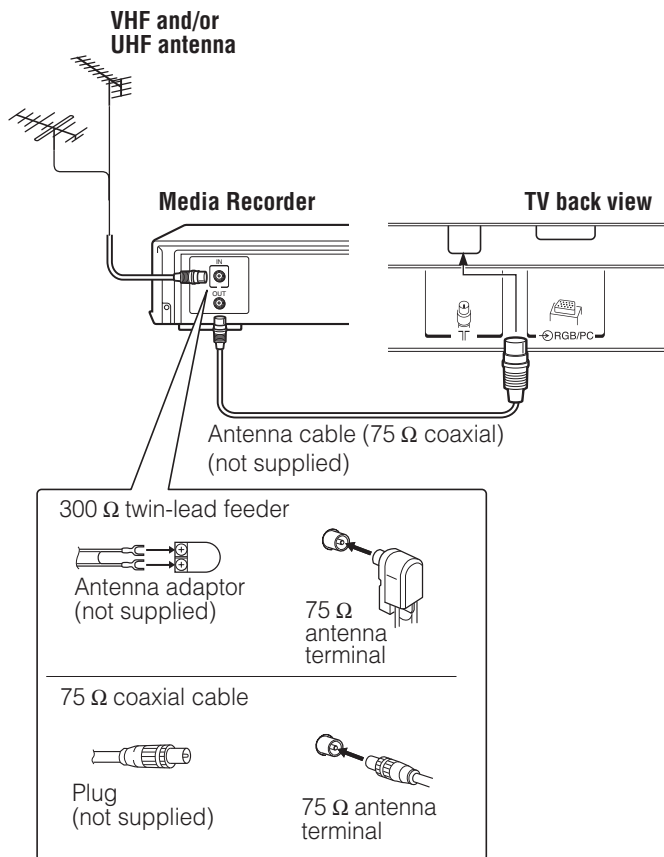
Connecting an antenna

Optimum reception of color requires a good signal and will generally mean that an outdoor antenna must be used.

The exact type and positioning of the antenna will depend upon your particular area.

Your Toshiba dealer or service personnel can best advise you on which antenna to use in your area.

Before connecting the antenna cable, turn off all main power switches.

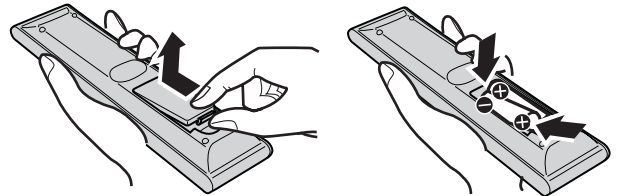


Exploring your new TV

Installing the remote control batteries

Remove the battery cover.

Insert two R03 (AAA) batteries matching the $-/+$ polarities of the battery to the $-/+$ marks inside the battery compartment.



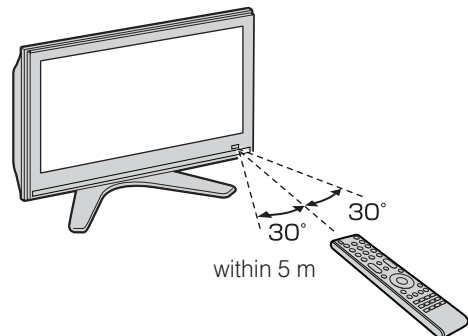
Cautions:

- Dispose of batteries in a designated disposal area. Never throw batteries into a fire.
- Attention should be drawn to the environmental aspects of battery disposal.
- Never mix battery types or combine used batteries with new ones.

Notes:

- If the remote control does not operate correctly, or if the operating range becomes reduced, replace both batteries with new ones.
- If the batteries are dead or if you will not use the remote control for a long time, remove the batteries to prevent battery acid from leaking into the battery compartment.

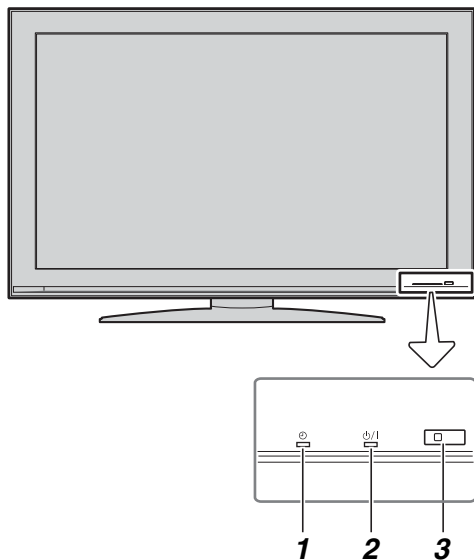
Effective range



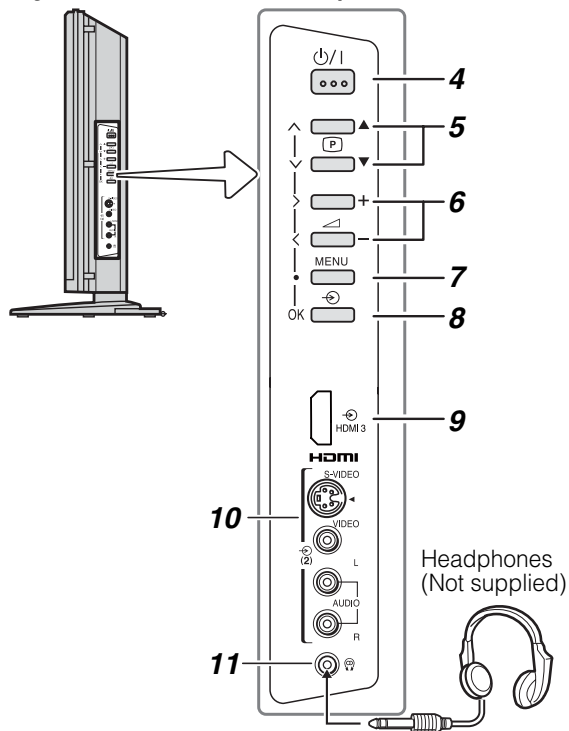
TV front and side panel controls

- You can operate your TV using the buttons on the side panel or the remote control. The back and side of the panel provide the terminal connections to connect other equipment to your TV (☞ “Connecting your TV” pages 28 - 32).
- For the use of each control, see the pages in brackets.

TV front view



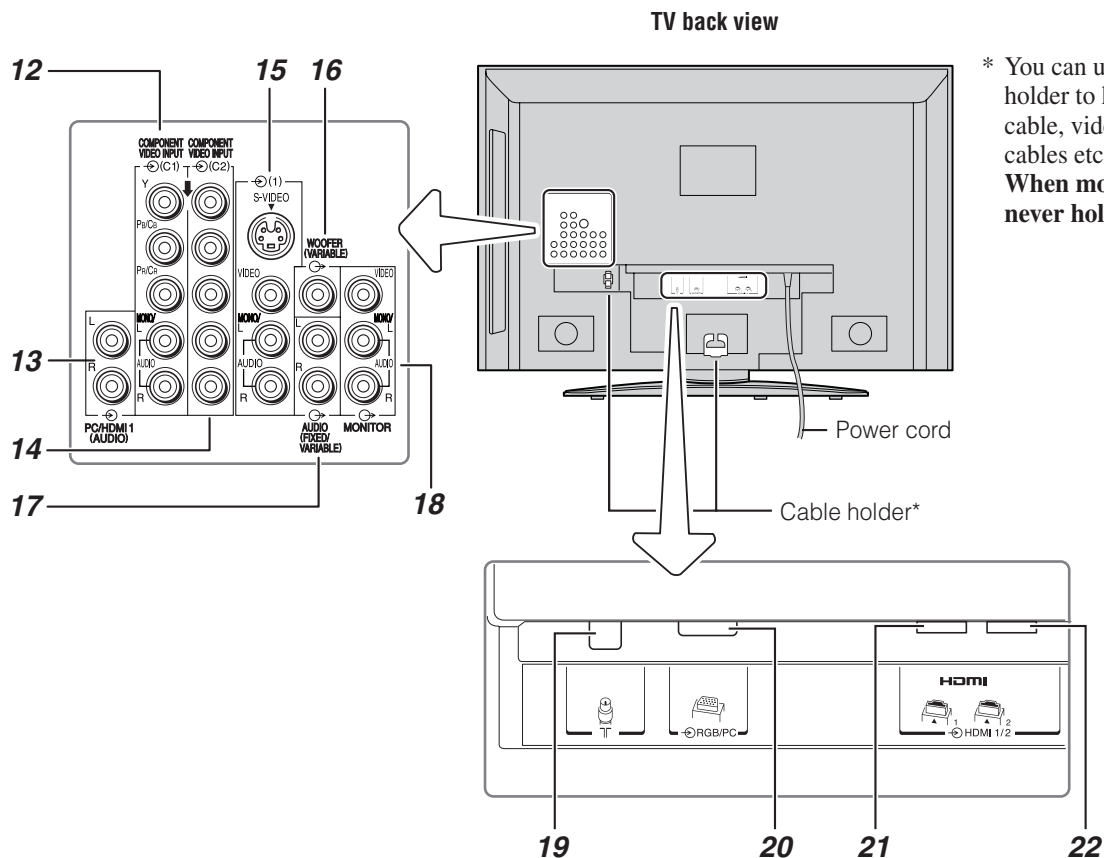
Right side view



- 1** (Timer LED) — Timer indicator (☞ page 20).
- 2** (Power LED) — Power indicator (☞ page 11).
- 3** (Remote sensor) — Point the remote control toward this remote sensor (☞ page 7).
- 4** (Power on/Standby) — Press to turn the TV on/standby (☞ page 11).
- 5** (Program position) — When no menu is on-screen, these buttons select the program position. (☞ page 13).
 (MENU up/down) — When a menu is on-screen, these buttons function as up/down menu navigation buttons (☞ page 11).
- 6** (Volume) — When no menu is on-screen, these buttons adjust the volume level (☞ page 10).
 (MENU left/right) — When a menu is on-screen, these buttons function as left/right menu navigation buttons or adjust settings (☞ page 11).

- 7** MENU — Press to access the menu system (☞ page 11).
- 8** (Input source selection) — When no menu is on-screen, this button selects the input source (☞ page 21).
 OK — When a menu is on-screen, this button functions as the next menu navigation button (☞ page 11, 21).
- 9** (HDMI3 input terminal) — High-Definition Multimedia Interface input receives digital audio and uncompressed digital video from an HDMI device (☞ page 29).
- 10** (2) (Video 2 input terminals) — Optional S-video or standard video and standard audio inputs (☞ page 28).
- 11** (Headphone jack) — For use with headphones (☞ page 27).

TV back panel connections



* You can use the cable holder to hold antenna cable, video and audio cables etc.
When moving the TV, never hold this holder.

- 12** **(C1) (COMPONENT VIDEO INPUT terminals)** — High-definition component video and standard audio inputs (🔗 page 28).
- 13** **PC/HDMI1 (AUDIO) (input terminals)** — PC audio input terminals are shared with HDMI1 analog audio input terminals, and their use can be configured in the **SET UP** menu. (🔗 page 29, 32).
- 14** **(C2) (COMPONENT VIDEO INPUT terminals)** — High-definition component video and standard audio inputs (🔗 page 28).
- 15** **(1) (Video 1 input terminals)** — Optional S-video or standard (composite) video and standard (analog) stereo audio inputs (🔗 page 28).
- 16** **WOOFER (VARIABLE) (output terminal)** — For use when connecting woofer system (variable) (🔗 page 28).
- 17** **AUDIO (FIXED/VARIABLE) (output terminals)** — Standard audio outputs (fixed/variable) (🔗 page 28).

- 18** **MONITOR (output terminals)** — Standard video and standard audio outputs (🔗 page 28).
- 19** **(Antenna input terminal)** — Analog antenna signal input (🔗 page 7).
- 20** **RGB/PC (input terminal)** — For use when connecting a personal computer (PC) (🔗 page 32).
- 21** **HDMI1 (input terminal)** — High-Definition Multimedia Interface input receives digital audio and uncompressed digital video from an HDMI device or uncompressed digital video from a DVI device (🔗 page 29).
- 22** **HDMI2 (input terminal)** — High-Definition Multimedia Interface input receives digital audio and uncompressed digital video from an HDMI device (🔗 page 29).

Learning about the remote control

Location of controls

To select device mode (T/R/D)*

* T: TV mode
R: REGZA-LINK mode
D: DVD mode

Number buttons (0-9)
(page 12, 20)(T/R/D)

To return to the previous program (T)
(page 12)

Volume - + (T/R/D)
(These buttons adjust the volume level.)

TOP MENU To access top Menu (R/D)

- Menu $\Delta \nabla \triangleleft \triangleright$ (T/R/D)(page 11)
- **OK** (T/R/D)(page 11, 21)
- **MENU** (T)
- DVD Menu (R/D)

• Teletext control buttons (T)(page 24)

• To work interactive service control on device (R)

Picture mode selection (T/R/D)
(page 15)

Picture size selection (T/R/D)
(page 14)

REGZE-LINK or DVD mode:
press \blacktriangle to EJECT
press \blacksquare to STOP
press \blacktriangleright to PLAY
press $\blacksquare \blacksquare \blacksquare$ to PAUSE/STEP
press $\blacktriangleleft \blacktriangleleft$ to SKIP REVERSE
press $\blacktriangleleft \blacktriangleleft$ to FAST REVERSE
press $\blacktriangleright \blacktriangleright$ to FAST FORWARD
press $\blacktriangleright \blacktriangleright$ to SKIP FORWARD

Power on/Standby (T/R/D)
(page 11)

- Input source selection (T)(page 21)
(TV, $\odot 1$, $\odot 2$, $\odot C1$, $\odot C2$, HDMI1, HDMI2, HDMI3, PC)
- To select line input (R/D)

Sound mute (T/R/D)
(This button turns off/on the sound)

- Program position $\wedge \vee$ (T/R)(page 12)
- Teletext $\wedge \vee$ (T)(page 24)
- Double-window on/off (T)(page 26)
- To display Contents menu (R)

• $\square \square \blacktriangle \blacktriangledown$ Double-window picture/sound selection (T)(page 26)

SET UP To access Setup menu (R/D)

- **EXIT** (T)(page 11)
- To return to previous Menu (R/D)
- **CALL** (T)(page 12)
- Initial/index function for Teletext (T)(page 25)
- **TEXT** Teletext on/text media window/off (T)(page 24)
- **AUDIO** Sound mode selection (R/D)

When in TV mode:

- Speaker Bass boost on/off (page 19)
- Speaker External Woofer on/off (page 20)
- $\odot 1/\odot 2$ Stereo/bilingual selection (page 18)
- TV Picture still (page 15)

Teletext function

- TV To reveal concealed text (page 25)
- TV To hold a wanted page (page 25)
- TV To enlarge teletext display size (page 25)
- TV To access sub-pages (page 24)
- \odot/TV
 - To select a page while viewing a normal picture (page 25)
 - To select the time display (page 25)

REGZA-LINK mode switch on the TV remote control allows the control of connected REGZA-LINK device being watched (page 22, 23).

Note:

These functions are dependent on the connected device. Not all the remote control buttons may be available. Please refer to the owner's manual for all the connected devices.

Turning the TV on

Switching on the TV

Connect the power cord to a wall outlet, the O/I power indicator lights in red (standby mode).

- 1 Press O on the remote control or O/I on the TV right side panel. The O/I power indicator lights in green.

Note:

If you watch black and white programs when the color system mode is set to Auto, color noise may appear on the screen. In this case select the appropriate Color system (For the system of each country or region, refer to pages 13 and 35).

Switching off the TV

- 1 Press O on the remote control or O/I on the TV right side panel to switch to the standby mode.

Notes:

- When the TV will not be used for a long period of time, such as during vacation or travel, remove the power plug from the wall outlet.
- The TV will automatically turn itself off after approximately 15 minutes if it is tuned to a vacant channel or a station that completes its broadcast for the day. This function does not work in external input or Blue screen Off mode. The TV will automatically turn itself off after approximately 2 hours if you do not operate the TV after turned on by on timer function.
- If power is cut off while you are viewing the TV, the Last Mode Memory function turns on the TV automatically when power is applied again. If power is going to be off for a long time and you are going to be away from your TV, unplug the power cord to prevent the TV from turning on in your absence.

Learning about the menu system

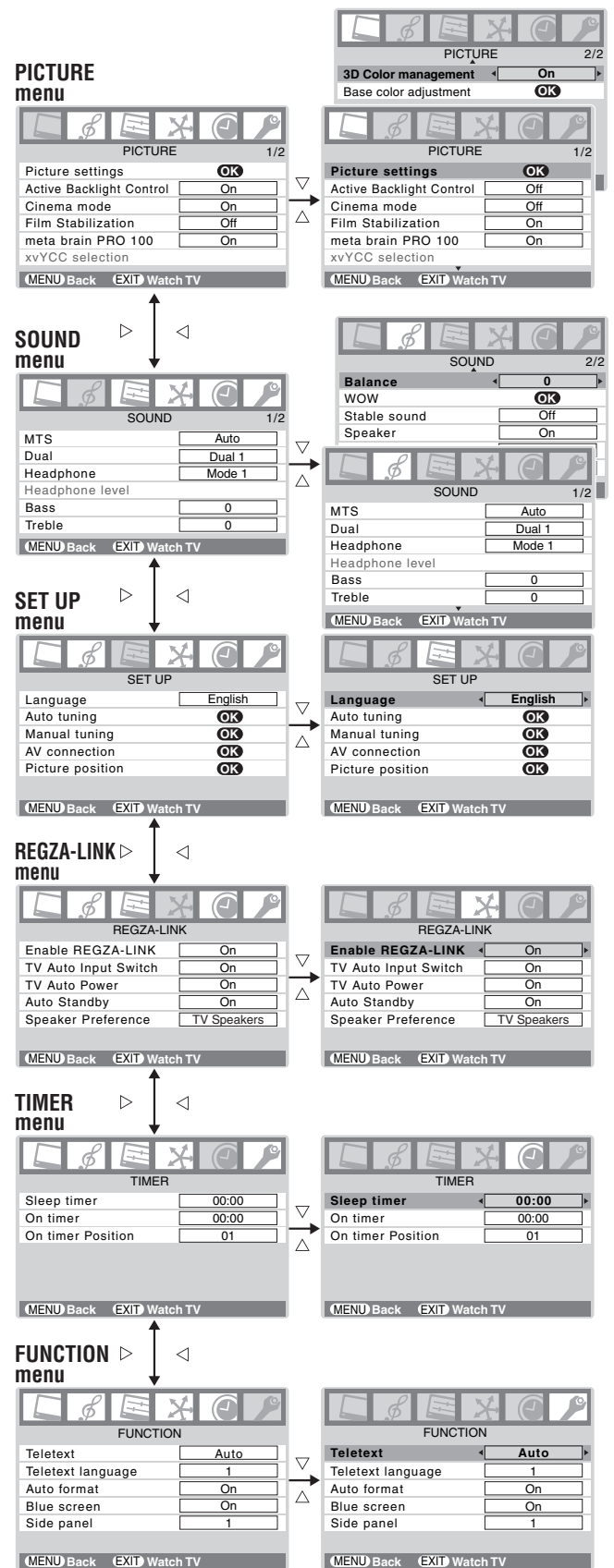
We suggest you familiarize yourself with the display charts before using the menu system:

- Press MENU to display menu, then press \leftarrow or \rightarrow to select main menu headings.
- Press ∇ or Δ to select an item.
- Press \leftarrow or \rightarrow to select or adjust setting.
- Press OK to display the next menu.
- Press EXIT , to close the menu display instantly.
- Press MENU , to return the previous menu.
- The menu display will disappear automatically, if you do not make a selection for a while.

Note:

Depending on the input signal, selecting function or settings, the items in the menu display may be different or unable to be selected. Please refer to individual functional explanation.

Displaying the menu chart

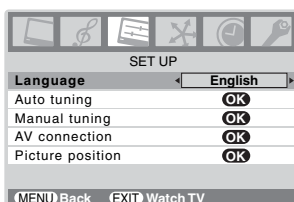


Watching TV programs

Selecting the menu language

Choose from 9 different languages (English, Chinese (CS), Malay, Thai, Vietnamese, Russian, Arabic, Persian or French) for the on-screen display.

- 1 Press **MENU**, then press **◀** or **▶** to display **SET UP** menu.
- 2 Press **▽** or **△** to select **Language**.
- 3 Press **◀** or **▶** to select the desired language.



Changing the program position

- 1 Enter the desired program position number using the **Number** buttons on the remote control. For program positions below 10, use 0 and the required number e.g., for program position 1.
- 2 You can also change the program position by using **P^** or **Pv**. The program position will be displayed on the screen with the Mono/Stereo/Dual audio status.

Note:

The program position selection change between different format channels takes several seconds.

Switching between two program positions

You can switch two program positions without entering actual position number each time.

- 1 Select the first program position you want to view.
- 2 Select the second program position with the **Number** buttons (0-9).
- 3 Press **↻**. The previous channel will be displayed.

Each time you press **↻**, the TV will switch back and forth between the two program positions.

Displaying the on-screen information

- 1 Press **CALL** to display the following on-screen information.



The information will disappear in 6 seconds.

- Program position or external input mode selected
- Program skip on/off information
- Label (if set)
- Mono/Stereo/Dual audio status

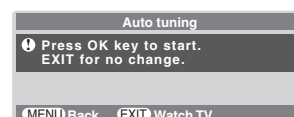
- 2 To erase the display instantly, press **CALL** again.

Programming channels into the TV's channel memory

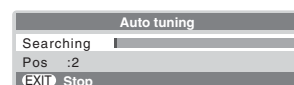
- First, use the Auto tuning function to preset all the active channels in your area automatically. Then, arrange the preset channels with the Manual tuning function so that you can tune into only desired channels.
- Use the Manual tuning operation if desired channels cannot be preset with the Auto tuning or if you would like to preset channels to specific position numbers one by one.

Programming channels automatically

- 1 From the **SET UP** menu, press **▽** or **△** to select **Auto tuning**.
- 2 Press **OK** to display the **Auto tuning** menu.



- 3 Press **OK** to start the automatic search. The search will begin for all available stations.



The slide bar will move along the line as the search progresses.

If you make a mistake, simply repeat steps 1-3 to start again from the beginning.

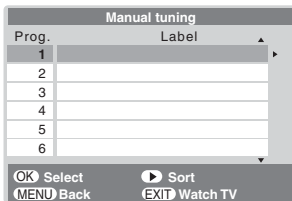
- 4 When the automatic search is completed, the TV will automatically return to the first program position.
- 5 Press **▽** or **△** to view the programmed position.

Note:

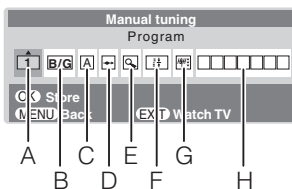
When you preset the program channel which sound of broadcast transmission system adopts "M" system, the sound system may not be tuned correctly if the radio waves transmit badly. At that time, preset the channel by **Manual tuning**. The countries such as Myanmar, Brazil, Chile, Colombia apply to this case. See page 35 for more details.

Manually setting channels in the channel memory

- From the **SET UP** menu, press ∇ or \triangle to select **Manual tuning**.
- Press **OK** to display the **Manual tuning** menu. Press ∇ or \triangle to select the program position you want to arrange.



- Press **OK** to display the breakdown menu. Press \triangleleft or \triangleright to select an item, then press ∇ or \triangle to select the item as shown below.



- A. Program position selection
- B. Sound system (see page 35)
- C. Color system (see page 35)
 - A : Automatic (factory set), P : PAL, S : SECAM
 - N4 : NTSC 4.43 (MHz), N3 : NTSC 3.58 (MHz)
 - If the color of a certain channel is abnormal, the automatic color system selection (A) may have malfunctioned, or sound system selection is wrong. In such a case, select another color and/or sound system (see page 35).
- D. Program position skip selection
 - Press ∇ or \triangle to turn the program position skip option on “ \curvearrowright ” or off “ \curvearrowleft ”.
 - The program position will then be skipped when you select channels with P \wedge or P \vee .
 - The “ \curvearrowright ” mark will appear beside a program position number when you use the **Number** button on the remote control.
- E. Channel search operation
 - Press \triangle to search up the band or ∇ to search down the band.
 - Press ∇ or \triangle repeatedly until your desired channel is displayed.
 - When a station/satellite is found, it will be displayed. NEVER PRESS ANY OTHER BUTTONS WHILE THE SET IS TUNING.
- F. Auto Fine Tuning
 - Press ∇ or \triangle to turn the Auto Fine Tuning option on “ \mathbb{F} ” or off “**0**”.
 - The Auto Fine Tuning function automatically corrects slight fluctuations when receiving signals.
 - Manual Fine Tuning**
 - While the Auto Fine Tuning turn off “**0**”, press ∇ or \triangle so that the better picture and sound are obtained.

- G. ANT ATT (Antenna attenuator)
 - Press ∇ or \triangle to turn the ANT ATT option on “ \mathbb{A} ” or off “ $\mathbb{0}$ ”, when visual interference occurs, set the ANT ATT to on.
- H. Label
 - Station labels appear under the program position display each time you turn on the TV, select a channel, or press **CALL**.

To change or create station labels:

- Press ∇ or \triangle repeatedly to select a character for the first space, then press \triangleright .

\rightarrow A \leftarrow Z \leftrightarrow (\leftrightarrow) \leftrightarrow * \leftrightarrow + \leftrightarrow , \leftrightarrow - \leftrightarrow , \leftrightarrow / \leftrightarrow 0 \leftrightarrow 9 \leftrightarrow 4* \leftarrow

*(blank space)

- Repeat step 1) to enter the rest of the characters. If you would like a blank space in the label name, you must choose a blank space from the list of characters.

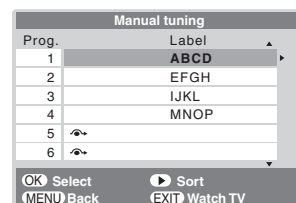
Press **OK** to store your settings.

Sorting program position

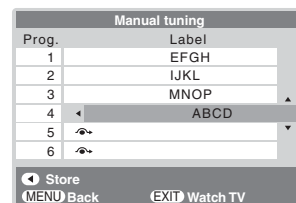
- The TV is capable of receiving a number of different channels depending upon where you live.
- Sorting program position is an easy way of storing each channel on the program position of your choice.

Ex.: To swap channel ABCD (Prog.1) for channel MNOP (Prog.4):

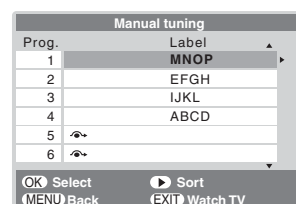
- From the **SET UP** menu, press ∇ or \triangle to select **Manual tuning** menu, then press **OK**.
- Press ∇ or \triangle to select the channel **ABCD**, then press \triangleright .



- Press ∇ to select the new position “**4**”, then press \triangleleft .



- Press \triangle to select the channel **MNOP**, then press \triangleright .
- Press \triangle to select the new position “**1**”, then press \triangleleft .
- Confirm new **Manual tuning** menu.



Picture adjustment

Selecting the picture size

- 1 Press **⏏** to display the picture size list, then press **▽** or **△** to select the appropriate picture size (or press **⏏** repeatedly to select required picture size directly).

Ex. HDMI 1080i input signal

Exact Scan
PC
Wide
Super Live 2
Cinema 2
4:3
Super Live 1
Cinema 1
Subtitle
14:9

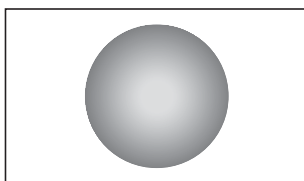
- 2 Press **Ⓞ**.

Note:

Depend on the input signals, selectable picture size may be different.

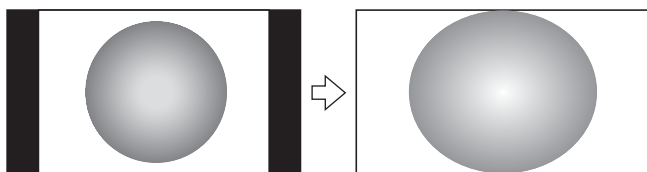
Wide

Use this setting when watching a wide-screen DVD, wide-screen video tape or a 16:9 broadcast (when available). Due to the range of wide-screen formats (16:9, 14:9, 20:9 etc.), you may see bars on the top and bottom of the screen.



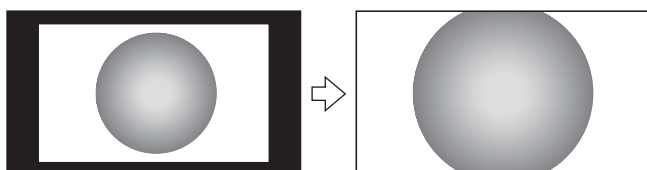
Super Live 2

When receiving "side panel format" signal, this setting will enlarge the image to fit the screen by stretching the image vertically and horizontally, holding the better proportions at the center of the image. Also the black bars on the both sides of the screen will eliminate or reduce.



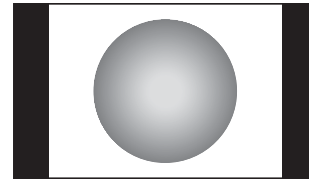
Cinema 2

When watching "all sides panel format" films/video tapes, this setting will eliminate or reduce the black bars on all the sides of the screen by zooming in and selecting the image without distortion.



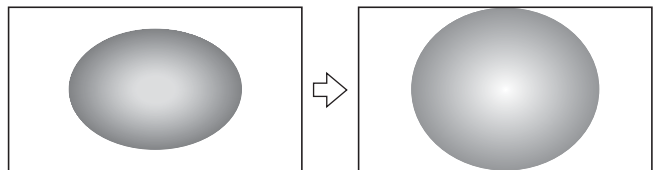
4:3

Use this setting to view a true 4:3 broadcast.



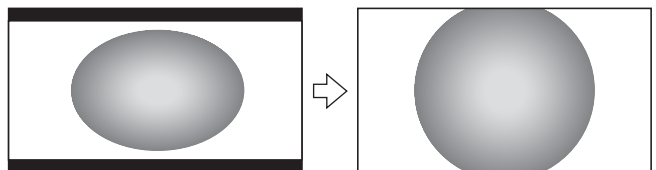
Super Live 1

When receiving "4:3 format" signal, this setting will enlarge the image to fit the screen by stretching the image vertically and horizontally, holding the better proportions at the center of the image.



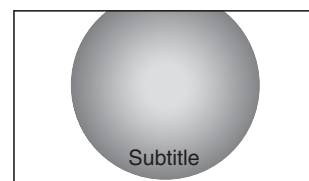
Cinema 1

When watching "letterbox format" films/video tapes, this setting will eliminate or reduce the black bars at the top and bottom of the screen by zooming in and selecting the image without distortion.



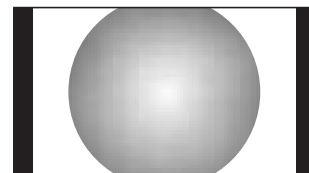
Subtitle

When subtitles are included on a letterbox format broadcast, this setting will raise the picture so that the most of text is displayed.



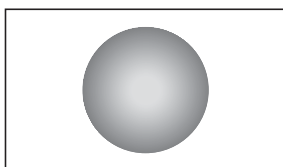
14:9

Use this setting when watching a 14:9 broadcast.



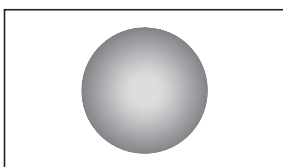
Exact Scan

When receiving 1080i or 1080p signal format, this setting will display the image correctly without distortion or picture clipping.



PC

Use this setting for PC via HDMI. When receiving 1080i, 1080p or 720p signal format of HDMI input, this setting will display the image correctly without distortion or picture clipping.



Notes:

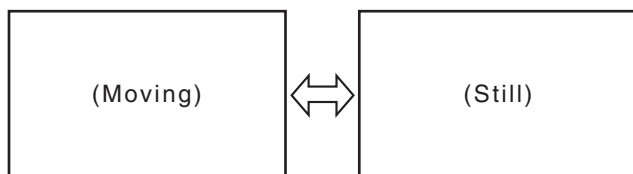
- Using the special functions to change the size of the displayed image (e.g. changing the height/width ratio) for the purpose of public display or commercial gain may infringe on copyright laws.
- If the aspect ratio of the selected format is different from the one of the TV transmission or video program, it can cause a difference in vision. Change to the correct aspect ratio picture size.
- In the PC input mode (page 21), the picture size selection is wide, normal or PC Media Window only.
- When using the PC input mode, the moving image quality may be deteriorated.
- When using **Exact Scan** you may observe a shift in picture position. This is due to the signal source and is not a defect of the TV.

Using the picture still

- Press to freeze the picture.

Even if an image is frozen on the TV screen, the pictures are running on the input source. Audio continues to be output as well.

To return to a moving picture, press again.



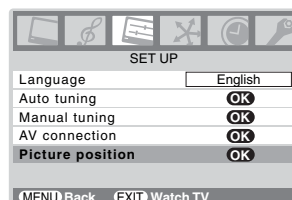
Notes:

- If you use this function except for the purpose of your private viewing and listening, it may infringe the copyright protected by the copyright laws.
- In the PC input mode (page 21), this function is not available.

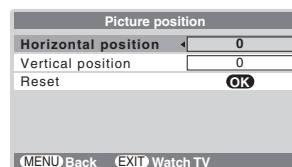
Adjusting the picture position

Adjustment to the position of the picture may be made to suit your viewing preferences.

- 1 Press , then press or to display the **SET UP** menu.
- 2 Press or to select **Picture position**.



- 3 Press , then press or to select an item you want to adjust.



- 4 Press or to adjust the settings as required.



Note:

When the picture format is in Wide or 4:3 mode, only the Horizontal position can be adjusted.

Resetting the picture position

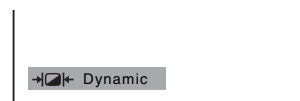
This function resets your picture position settings to the factory settings.

- 1 From the **Picture position** menu, press or to select **Reset**.
- 2 Press .

Selecting the picture mode

You can select the picture quality instantly among three preset modes and one user-set mode.

- Press to select the desired picture quality.



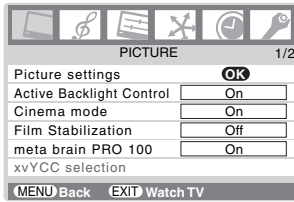
Mode	Picture quality
Dynamic	bright and dynamic picture
Standard	standard picture
Mild	soft picture
Memory	the picture quality you set

Note:

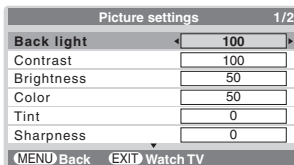
In the PC input mode (page 21), this mode is not available. If you select **Dynamic**, **Standard** or **Mild**, **3D Color management** automatically set to **Off**.

Adjusting the basic picture quality

- 1 Press **MENU**, then press **◀** or **▶** to display the **PICTURE** menu.



- 2 Press **▽** or **△** to select the **Picture settings** menu, then press **OK**.



- 3 Press **▽** or **△** to select an item you want to adjust, then press **◀** or **▶** to adjust the settings as required.



Selection	◀ Pressing	▶
Back light	darker	brighter
Contrast	lower	higher
Brightness	darker	brighter
Color	paler	deeper
Tint	reddish	greenish
Sharpness	softer	sharper

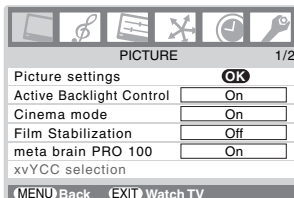
Notes:

- The **Tint** may only be adjusted on NTSC signal.
- In the PC input mode (page 21), **Color**, **Tint** and **Sharpness** modes are not available.

Activating the black stretch

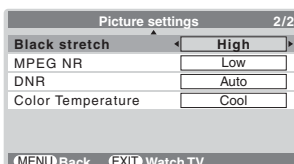
This function increases the strength of dark areas of the picture which improves definition.

- 1 Press **MENU**, then press **◀** or **▶** to display the **PICTURE** menu.



- 2 Press **▽** or **△** to select the **Picture settings** menu, then press **OK**.

- 3 Press **▽** or **△** to select **Black stretch** on the 2nd page.



- 4 Press **◀** or **▶** to select **High**, **Off**, **Low** or **Middle**.



Note:

In the PC input mode (page 21), and double-window mode (page 26) this mode is not available.

Activating the MPEG NR (Noise Reduction)

If the receiving signal of MPEG is a mosquito (grained) noise depending on the compression and conversion, the noise may be reduced when using this function.

- 1 From the **Picture settings** menu, press **▽** or **△** to select **MPEG NR** on the 2nd page.

- 2 Press **◀** or **▶** to select **Off**, **Low**, **Middle** or **High**.



Note:

In the PC input mode (page 21), and double-window mode (page 26) this mode is not available.

Activating the DNR (Digital Noise Reduction)

If the receiving signal is weak and the picture is blurry, the picture may be improved when using this function.

- 1 From the **Picture settings** menu, press **▽** or **△** to select **DNR** on the 2nd page.

- 2 Press **◀** or **▶** to select **Auto**, **Off**, **Low**, **Middle**, or **High**.



Note:

In the PC input mode (page 21), and double-window mode (page 26) this mode is not available.

Selecting the color temperature

You can change the tone of the picture by selecting from three preset color temperatures: **Cool**, **Natural** or **Warm**.

- 1 From the **Picture settings** menu, press **▽** or **△** to select **Color Temperature** on the 2nd page.

- 2 Press **◀** or **▶** to select mode you prefer.



Cool: Lends a blue hue to the picture.

Natural: Neutral

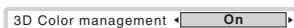
Warm: Lends a red hue to the picture.

Adjusting the color management

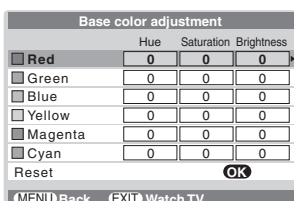
You can adjust the picture color quality by selecting from 6 base color adjustments : **Red, Green, Blue, Yellow, Magenta** or **Cyan**.

1 From the **PICTURE** menu, press ∇ or \triangle to select **3D Color management** on the 2nd page.

2 Press \triangleleft or \triangleright to select **On**.



3 Press ∇ or \triangle to select **Base color adjustment**, then press **OK**.



4 Press ∇ or \triangle to select an item you want to adjust, then press \triangleright .



5 Press \triangleleft or \triangleright to select **Hue, Saturation** or **Brightness**.

6 Press ∇ or \triangle to adjust the settings as required.

Notes:

- If you select **3D Color management Off** mode, **Base color adjustment** is not available.
- In the **PC input mode** (page 21), **teletext mode** (page 24) and **double-window mode** (page 26) this mode is not available.

Resetting the base color adjustment

The **Reset** function adjusts the base color adjustment to the factory settings.

1 From the **Base color adjustment** menu, press ∇ or \triangle to select **Reset**.

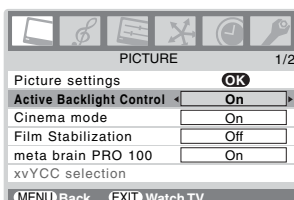
2 Press **OK**.

Using the active backlight control

In order to optimize screen visibility, the active backlight control sets the screen brightness automatically according to ambient light conditions.

1 From the **PICTURE** menu, press ∇ or \triangle to select **Active Backlight Control**.

2 Press \triangleleft or \triangleright to select **On** or **Off**.



Note:

In the **PC input mode** (page 21), **teletext mode** (page 24) and **double-window mode** (page 26) this mode is not available.

Using the cinema mode

A movie film's picture runs at 24 frames a second, whereas movie software such as DVD, etc., that you enjoy watching on television at home runs at 30 (NTSC) or 25 (PAL) frames a second. To convert this signal to reproduce a smooth motion and picture quality, select the **On** mode.

Effective signal and setup conditions:

- When the external video input mode is selected.
- When the input signal format is 480i, 576i and 1080i signals.

1 From the **PICTURE** menu, press ∇ or \triangle to select **Cinema mode**.

2 Press \triangleleft or \triangleright to select **On** or **Off**.

Notes:

- When a DVD movie with subtitle is playing back, this mode may not work correctly.
- In the **PC input mode** (page 21), and **double-window mode** (page 26) this mode is not available.

Using the meta brain PRO 100

This function improves the viewing quality of a motion picture.

1 From the **PICTURE** menu, press ∇ or \triangle to select **meta brain PRO 100**.

2 Press \triangleleft or \triangleright to select **On** or **Off**.

Notes:

- If on-screen noise occurs when activated, select the **Off** mode.
- In the **double-window mode** (page 26), this mode is not available.

Film Stabilization

With **Cinema mode** and **meta brain PRO 100** are set to **On**, the **Film Stabilization** feature allows the adjustment of motion smoothness.

1 From the **PICTURE** menu, press ∇ or \triangle to select **Film Stabilization**.

2 Press \triangleleft or \triangleright to select **Smooth, Standard** or **Off**.

Note:

In the **PC input mode** (page 21), **text media window mode** (page 24) and **double-window mode** (page 26), this mode is not available.

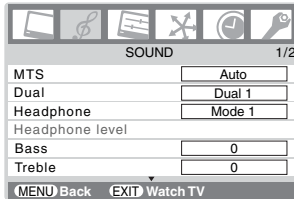
Sound adjustment

Setting the MTS (Multi-channel TV Sound)

Auto mode

The MTS Auto mode automatically recognize stereo/bilingual programs depending on the broadcast signal.

- 1 Press **(MENU)**, then press **<** or **>** to display the **SOUND** menu.



- 2 Press **∇** or **△** to select **MTS**, then press **<** or **>** to select **Auto** or **Mono**.

Mono mode

If you experience noise or poor reception of any stereo/bilingual program, set the **MTS** mode to **Mono**. Noise will be reduced and reception may improve.

Note:

If you experience noise with a particular program on whose channel reception is usually good, try setting MTS mode to **Auto**, then switch **(D/L/I)** to **○ Mono** (monaural) (page 18).

Selecting the dual 1 or dual 2 mode

You can hear only dual 1 or dual 2 sound selected, whenever bilingual programs are received.

- 1 Press **(MENU)**, then press **<** or **>** to display the **SOUND** menu.
- 2 Press **∇** or **△** to select **Dual**, then press **<** or **>** to select **Dual 1** or **Dual 2**.

Notes:

- When the MTS setting is in **Mono** mode, the **Dual** menu is not selectable.
- The **Dual** menu setting status remains even if the TV is turned off.

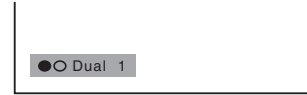
Selecting the stereo programs

- 1 When a stereo program is received, **∞ Stereo** appears.
- 2 Press **(D/L/I)** to select the stereo/monaural mode. **∞ Stereo** and **○ Mono** appear cyclically on the screen.



Selecting the bilingual programs

- 1 When a bilingual program is received, **●○ Dual** appears.
- 2 Press **(D/L/I)** to select the sound to be heard. The sound differs according to the transmission system: NICAM or German stereo/bilingual broadcast.



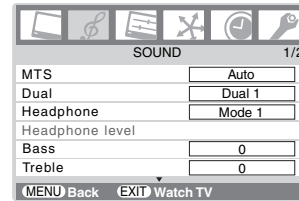
Display	Sound to be heard	
	NICAM	German stereo/bilingual broadcast
●○ Dual 1	Sub I sound	Main sound
●● Dual 2	Sub II sound	Sub sound
○ Mono	Main sound	—

Note:

These settings are not stored in the TV memory.

Adjusting the sound quality

- 1 Press **(MENU)**, then press **<** or **>** to display the **SOUND** menu.



- 2 Press **∇** or **△** to select an item you want to adjust, then press **<** or **>** to adjust the settings as required.



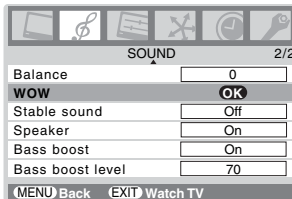
Selection	<	Pressing	>
Bass	weaker		stronger
Treble	weaker		stronger
Balance		decreases the right channel	decreases the left channel

Using the SRS WOW[®] surround sound

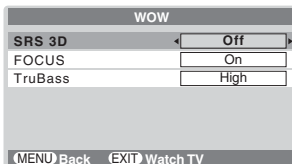
SRS WOW[®] is a special combination of SRS Labs audio technologies that creates a thrilling surround sound experience with deep, rich bass from stereo sound sources. Your TV's audio will sound fuller, richer and wider.

SRS WOW[®] consists of three features; SRS 3D[®], SRS FOCUS[®], and SRS TruBass[®], being turned on.

- 1 From the **SOUND** menu, press ∇ or \triangle to select **WOW** on the 2nd page, then press **OK**.



- 2 Press ∇ or \triangle to select an item you want to adjust, then press \triangleleft or \triangleright to adjust the settings as required.



SRS 3D: To turn the surround effect **On** or **Off**.

FOCUS: To turn the vocal emphasis effect **On** or **Off**.

TruBass: To select the desired bass expansion level (**Off**, **Low** or **High**).

Notes:

- If the broadcast is monaural, the SRS 3D[®] effect does not work.
- WOW, SRS and \bullet symbol are trademarks of SRS Labs, Inc.
- WOW technology is incorporated under license from SRS Labs, Inc.
- The SRS WOW[®] effect is active only when the sound outputs from the speaker.
- This feature is not available through headphones.

Using the stable sound

The Stable sound function limits the highest volume level to prevent extreme changes in volume when the signal source changes (for example, to prevent the sudden increase in volume that often happens when a TV program switches to a commercial).

- 1 From the **SOUND** menu, press ∇ or \triangle to select **Stable sound** on the 2nd page.
- 2 Press \triangleleft or \triangleright to select **On** or **Off**.

Note:

The Stable sound effect is active only when the sound outputs from the speaker.

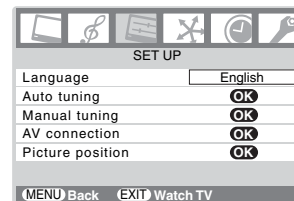
Activating the speaker

Use this function to turn the TV speakers off when you connect an audio system (page 28).

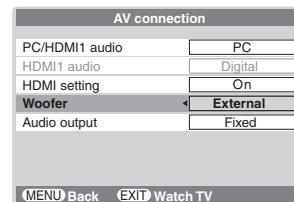
- 1 From the **SOUND** menu, press ∇ or \triangle to select **Speaker** on the 2nd page.
- 2 Press \triangleleft or \triangleright to select **On** or **Off**.

Selecting the woofer internal/external mode

- 1 Press **MENU**, then press \triangleleft or \triangleright to display the **SET UP** menu.



- 2 Press ∇ or \triangle to select **AV connection**, then press **OK** to display the **AV connection** menu.

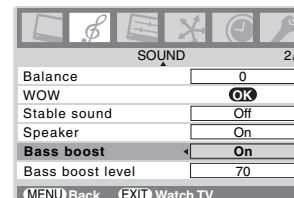


- 3 Press ∇ or \triangle to select **Woofer**, then press \triangleleft or \triangleright to select **Internal** or **External**.
 - **Internal** is to use the bass boost.
 - **External** is to use an external woofer system.


Using the bass boost


When you select **Internal Woofer** from the **AV connection** menu, you can set the bass boost level.

- 1 From the **SOUND** menu, press ∇ or \triangle to select **Bass boost** on the 2nd page.
- 2 Press \triangleleft or \triangleright to select **On**.






- 3 Press ∇ to select **Bass boost level**.
- 4 Press \triangleleft or \triangleright to adjust the Bass boost level.
- 5 To turn off the Bass boost, press ∇ or \triangle to display **Bass boost**, then press \triangleleft or \triangleright to select **Off**.

Alternatively, you may adjust the bass boost level directly using .

- 1 Press  to display **Bass boost** level.




- 2 While the **Bass boost** display is on the screen, press  or  to adjust the **Bass boost** level.
- 3 To turn off the **Bass boost**, press  to display Bass boost **Off**.















Note:





The Bass Boost effect is active only when the sound outputs from the speaker or an external woofer system.

Using an external woofer system


Connect an external woofer to the **WOOFER** output terminal located on the rear of the TV ( page 28).

- 1 Select the woofer **External** mode from the **AV connection** menu.
- 2 From the **SOUND** menu, press  or  to select **External Woofer** on the 2nd page.
- 3 Press  or  to select **On**.
- 4 Press  to select **External Woofer level**.
- 5 Press  or  to adjust the **External Woofer level**.
- 6 To turn off the **External Woofer**, press  or  to select **External Woofer**, then press  or  to select **Off**.





Alternatively, you may adjust the External Woofer level directly using .

- 1 Press  to display **External Woofer** level, then press  or  to adjust the External Woofer level.
- 2 To turn off the **External Woofer**, press  to display External Woofer **Off**.

Selecting the audio output

With the audio output function “Variable”, you can use the TV’s remote controller to adjust the sound volume of the external audio system connected ( page 28).

To select the sound volume from AUDIO output terminals:

- 1 From the **AV connection** menu, press  or  to select **Audio output**.
- 2 Press  or  to select **Variable** or **Fixed**.




Note:

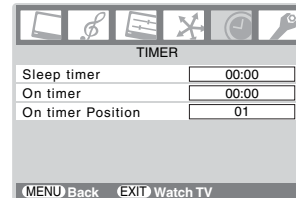
Make sure the volume control of your audio amplifier is set to a moderate listening level.










Other features settings

Selecting the timer menu



The Timer is especially useful if you want the TV to turn itself on or off after a selected period of time.

- 1 Press , then press  or  to display the **TIMER** menu.






- 2 Press  or  to select the required timer mode (**Sleep timer** (Turn off the TV) or **On timer**).
- 3 Press the **Number** buttons (0-9),  or  to set the On or Off delay time, e.g. on in 30 minutes and On timer Position 3 selected.
- 4 Press  to exit the menu. When setting the On timer, press  or  to select the **On timer Position** and enter the program position number you want to watch. Set the Standby mode by pressing  on the remote control. Activation of the Timer is indicated by the green “On-timer indicator”, on the front of the TV ( page 8).

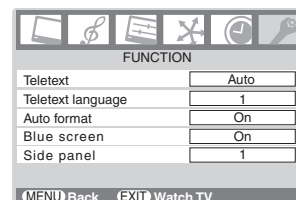
Notes:

- The TV will automatically turn itself off after approximately 2 hours if you do not operate the TV after turned on by on timer function.
- If you press and hold  or  to set the On or Off delay time, the timer display will set by 30 minutes, up to 12 hours 30 minutes.

Using the auto format

When the TV receives a true HDMI signal picture and the auto format is On, it will automatically be displayed in HDMI signal format, irrespective of the TV’s previous setting.

- 1 Press , then press  or  to display the **FUNCTION** menu.



- 2 Press  or  to select **Auto format**, then press  or  to select **On** or **Off**.

Activating blue screen

With the blue screen function **On**, the screen will automatically turn blue and the sound will be muted when no signal is being received.

- 1 From the **FUNCTION** menu, press ∇ or Δ to select **Blue screen**.
- 2 Press \triangleleft or \triangleright to select **On** or **Off**.

Note:

In the **PC** input mode (page 21), **teletext** mode (page 24) or **double-window** mode (page 26), this function is not available.

Adjusting the brightness of side panel

You can adjust the brightness of side panel in 14:9 or 4:3, etc. mode.

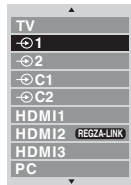
- 1 From the **FUNCTION** menu, press ∇ or Δ to select **Side panel**.
- 2 Press \triangleleft or \triangleright to adjust the settings as required.



Selecting the video input source to view

- 1 Press \odot or press OK on the remote control until the video input mode list appears on the screen, then press ∇ or Δ to select appropriate input source (or press \odot on the TV right side panel or \odot on the remote control repeatedly to select required input source directly).

Ex. \odot



Ex. PC VGA mode



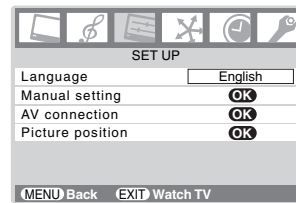
- 2 Press OK .
 - \odot 1 (\odot (1), video 1 input) or \odot 1S (S-video input)
 - \odot 2 (\odot (2), video 2 input) or \odot 2S (S-video input)
 - \odot C1 (\odot (C1), COMPONENT VIDEO INPUT),
 - \odot C2 (\odot (C2), COMPONENT VIDEO INPUT),
 - HDMI1 (\odot HDMI 1 input),
 - HDMI2 (\odot HDMI 2 input),
 - HDMI3 (\odot HDMI 3 input),
 - PC (\odot RGB/PC, PC input)

Notes:

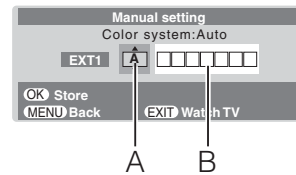
- When \odot C1, \odot C2, **PC** or **HDMI** input is selected, the **MONITOR** output terminals (page 28) output audio signal only.
- When external video input mode is selected, **Auto tuning** and **Manual tuning** in the **SET UP** menu are not available.
- When \odot 1, \odot 2, \odot C1, or \odot C2 is selected, **Manual setting** will appear in the **SET UP** menu.
- When **PC** is selected, **PC Setting** will appear in the **SET UP** menu.

Setting the manual setting menu

- 1 Press MENU , then press \triangleleft or \triangleright to display the **SET UP** menu.



- 2 Press ∇ or Δ to select **Manual setting**, then press OK .
- 3 Press \triangleleft or \triangleright to select an item, then press ∇ or Δ to select the item as shown below.



A. Color System

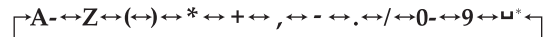
Confirm that color system is set to “**A**” (Auto). If not, select “**A**” with ∇ or Δ .

B. Video label

The video label allows you to label each input source for your TV.

To change or create video labels:

- 1) Press ∇ or Δ repeatedly to select a character for the first space, then press \triangleright .



*(blank space)

- 2) Repeat step 1) to enter the rest of the characters. If you would like a blank space in the label name, you must choose a blank space from the list of characters.
- 3) Press OK to store your settings.

Note:

When \odot C1 or \odot C2 is selected, **Color System** selection in the **Manual setting** is not available.

Using REGZA-LINK

This feature uses CEC (Consumer Electronics Controls) technology and allows the control of Toshiba REGZA-LINK compatible devices from the TV remote control via HDMI connection (☞ page 10).

Notes:

- Not all Toshiba products currently support REGZA-LINK.
- Please consult your local dealers for more information on the availability of the REGZA-LINK compatible device.

REGZA-LINK one touch play

When connected device is turn on REGZA-LINK will automatically detect the TV through the input selection. If the TV is in standby it will be turn on automatically. This feature is selected in the **REGZA-LINK** menu.

Note:

Even if the device is showing a menu the TV may automatically show the video input source on-screen display.

REGZA-LINK system standby

This feature automatically turns the connected device into standby when the TV goes into standby and conversely for the TV to switch into standby when connected device goes into standby.

REGZA-LINK system audio control

Using the Speaker Preference feature allows the TV remote control to adjust the volume or mute the sound of the speakers connected to the TV via an AV amplifier.

Ensure that the connected AV amplifier and REGZA-LINK device are selected in the input source selection and that the **Speaker Preference** is set to **Amplifier** in the **REGZA-LINK** setup menu.

Notes:

- When you turn on the AV amplifier, change its input source, or adjust the sound volume, the sound will be output from the AV amplifier's speakers even if the **TV Speakers** has been selected. Turn the TV to standby and on again to output the sound from the TV's speaker.
- The proper function may not work by operating AV Amplifier.

Note:

The above functions are dependent on the connected device and TV setting.

REGZA-LINK functions

When the **Enable REGZA-LINK** is set to **On**, it allows the following functions to be enabled by setting them to **On**.

• TV Auto Input Switch

If a connected HDMI device displays an OSD menu or starts playing video or audio, the TV will automatically switch to the appropriate HDMI input.

• TV Auto Power

If a REGZA-LINK device is turned on or off, the TV turns on or standby automatically.

• Auto Standby

If the TV is set to standby, the TV will send a message to turn off the selected REGZA-LINK device connected to the TV.

• Speaker Preference

From this item, you can set your audio output preference to the TV speakers or the AV amplifier speakers. When this item is set to **Amplifier**, the TV remote control can be used to adjust or mute the volume of the audio. This item will be grayed out unless a REGZA-LINK compatible AV amplifier is connected.

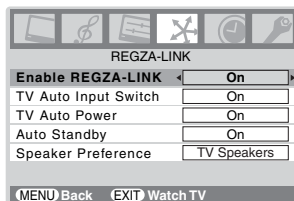
Notes:

- When you turn on the AV amplifier, change its input source, or adjust the sound volume, the sound will be output from the AV amplifier's speakers even if **TV Speakers** has been selected. Turn the TV to standby and on again to output the sound from the TV's speakers.
- The above functions are dependent on the connected device and TV setting.
- If you display double-window, you cannot choose **Speaker Preference** in the **REGZA-LINK** and **Speaker Preference** automatically set to **off**.
- If you display double-window, the sub input source list of the **REGZA-LINK** will not appear.
- When you activate the **TV Auto input switch** in the **REGZA-LINK**, the appropriate HDMI input will display on the window with speaker sound turns on.

(continued)

To set the REGZA-LINK

- 1 Press **Ⓜ** and **◀** or **▶** to select the **REGZA-LINK** menu.
- 2 Press **▽** or **△** to select **Enable REGZALINK**, then press **◀** or **▶** to select **On**.



Note:

If you set **Enable REGZA-LINK** to **Off**, the all other items will be grayed out.

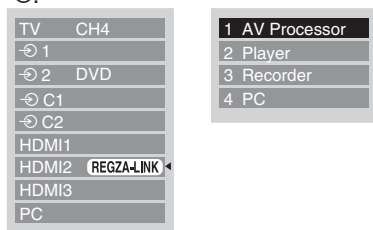
- 3 Press **▽** or **△** to select the REGZA-LINK set up item you want to use, and press **◀** or **▶** to select **On/Off** or the desired speakers mode.
 - TV Auto Input Switch: On/Off
 - TV Auto Power: On/Off
 - Auto Standby: On/Off
 - Speaker Preference: TV Speakers/Amplifier/Off (See details on the previous page.)

REGZA-LINK input source selection

When any devices using CEC technology has connected, REGZA-LINK icon shows on the video input mode list.

- 1 Press **Ⓜ** or **Ⓚ** on the remote control, and a list will appear on the screen showing modes and all stored external equipment.
- 2 Press **▽** to highlight the input source showing the REGZA-LINK logo.
- 3 Press **▶** and a sub input source list will appear showing all connected REGZA-LINK equipment.

Ⓜ:



- 4 Use **▽** or **△** to select appropriate input source, then press **Ⓚ**.

Notes:

- This function depend on the devices connected.
- When the TV is switched on, it will take a few minutes for the **REGZA-LINK** icon to appear in the list; when an HDMI cable is removed, it will take a few minutes for the icon to disappear.
- If the HDMI cable from connected device is changed or HDMI cable from connected device setting are changed, **Enable REGZA-LINK** in the **REGZA-LINK** menu may need to be reset **On**.

To control the REGZA-LINK device

First select the **HDMI** input source with the desired REGZA-LINK device connected, then switch the mode on the remote control to **REGZA-LINK** and press the available button on the remote control (Ⓜ page 10).

The TV features that can be controlled by the connected device remote control are:

Power standby, Volume, Program channel, Sound mute, Input selection, Number buttons, Previous program channel.

Note:

These functions are dependent on the connected device. Not all the remote control buttons may be available. Please refer to the owner's manual for all the connected devices.

Teletext

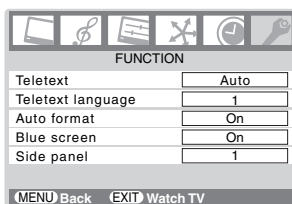
This TV has a multi-page teletext memory, which takes a few moments to load and it offers two ways of viewing Teletext **Auto** and **LIST** which are explained below.

Setting up the teletext mode

To select a language for teletext:

The language 1-4 option enables the display of different language when using Teletext.

- 1 Press **(MENU)**, then press **<** or **>** to display the **FUNCTION** menu.



- 2 Press **▽** or **△** to select **Teletext language**, then press **<** or **>** to select the required language.
 - **Language 1:** English, German, Dutch, Flemish, Russian, Byelorussian, Bulgarian, Ukrainian, Lettish, Lithuanian, Czech, Slovak, Estonian
 - **Language 2:** Polish, German, Dutch, Flemish, Estonian, Lettish, Lithuanian, French, Serbian, Croatian, Slovenian, Czech, Slovak, Rumanian
 - **Language 3:** English, French, Hebrew, Turkish, Arabic
 - **Language 4:** English, French, Hebrew, Turkish, Farsi (Iranian/Persian)

To select teletext mode:

Select a channel position with the desired teletext service.

- 1 Press **(MENU)**, then press **<** or **>** to display the **FUNCTION** menu.
- 2 Press **▽** or **△** to select **Teletext**, then press **<** or **>** to select **Auto** or **LIST** mode.

Note:

When you are watching the teletext program, **SET UP** menu and **FUNCTION** menu are not selectable.

Teletext general information

(TEXT) button:

Press **(TEXT)** once to view teletext. Press again the screen will split into two sections with the last channel viewed on the left and the text page on the right (text media window mode). Press again to return to normal TV mode. Program cannot be changed until teletext is cancelled.

When you first press **(TEXT)** to access the text service, the first page you see will be the initial page.

In **Auto** mode, this displays the main subjects available and their relevant page numbers.

In **LIST** mode, you will see the page numbers currently stored on the **each color** button.

Note:

If you press **(TEXT)** while the text media window mode is activated, this mode is not available on the teletext mode.

Sub-pages:

Once in this chosen page, if there are sub-pages they will automatically load into memory without changing the one you are reading. If there are many sub-pages, it will take a long time for them all to load and this will depend on the speed with which the broadcaster transmits them.

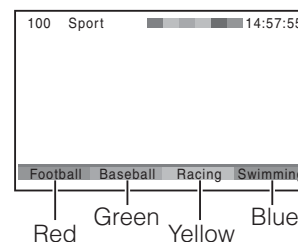
To access the sub-pages in memory, press **(EQ)**, then use **P^** and **Pv** to view them.

Using Auto mode

There are two Modes: **Auto** will display FASTEXT, if available. **LIST** will display your four favorite pages. In either mode, as an alternative to the colored buttons, you can access a page by entering a 3-digit number, using the **Number** buttons on the remote control, or to advance to the next page, press **P^**, to go back to the previous page press **Pv**.

To change between **Auto** and **LIST**, see above.

- Press **(TEXT)** to access teletext.



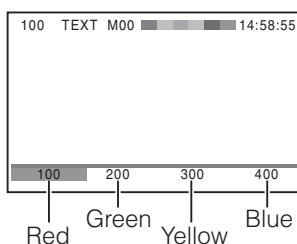
If FASTEXT is available, you will see 4 colored titles at the bottom of the TV screen. To access any given subject, simply press the relevant colored button on the remote control.

If FASTEXT is not available, you can access any page simply by entering a 3-digit page number or pressing the corresponding colored button.

For further information on your particular text system(s), see the broadcast teletext index page or consult your local Toshiba dealer.

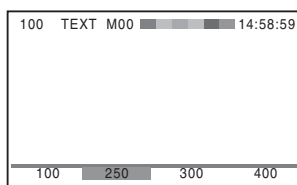
Using LIST mode

- 1 Press **TEXT** to access teletext.



The four choices at the bottom of the screen are now number – **100, 200, 300** and **400**, which have been programmed into the TV's memory.

- 2 To view these pages, use the colored prompt buttons. e.g. press the Green button to view page 200.
- 3 If you want to change these stored pages, press the colored button for the color you want to change. e.g. Press the Green button and enter the 3-digit number.



This number will change in the top left of the screen and in the colored highlight.

- 4 Press **OK** to store your choice. The bars at the bottom of the screen will flash white.
- 5 You may view other pages by simply entering the 3-digit page number – but NEVER press **OK** or you will lose the favorite already stored.

Teletext buttons on the remote control

Below is an introduction to the teletext buttons on your remote control and their functions.

TEXT To display a page of teletext:

Press **TEXT** to display teletext mode. Press again to the text media window mode. Press again to return to normal TV mode.

1 To display an index/initial page: In Auto-mode

Press **1** to access the index page. The one displayed is dependant on the broadcaster.

In LIST-mode

Press **1** to return to the 100 page or initial page.

? To reveal concealed text:

Some pages cover topics such as quizzes and jokes. To discover the solutions, press **?**.

2 To hold a wanted page:

This function is included as it is part of the broadcast teletext system but you will not need it as this TV allows you to control the display of sub-pages.

+ To enlarge the teletext display size:

Press **+** once to enlarge the top half of the page, press again to enlarge the bottom half of the page. Press again to revert to the normal size.

⏪/⏩ To select a page while viewing a normal picture:

When in teletext mode, if a page selection is made and then **⏪/⏩** is pressed, a normal picture will be displayed. The TV will indicate when the page is present by displaying the title bar of the text page at the top of the screen. Press **TEXT** to view the page.

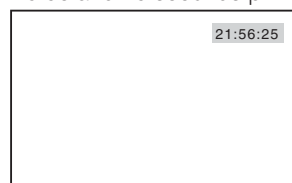
Note:

*It will not be possible to change program position while in Teletext mode, you will have to cancel the teletext first by pressing **TEXT** to return to a normal TV picture.*

To select the time display:

If you press **⏪/⏩** while watching a normal TV broadcast, you will see a time display from the broadcaster. It will remain on the screen for about 5 seconds.

9:56 and 25 seconds p.m.

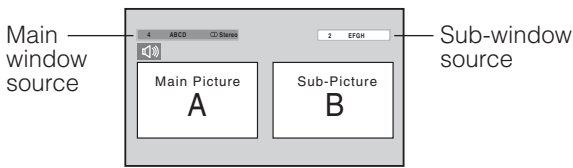


Using the double-window

- The double-window function allows you to split the screen into a Main and Sub window and watch two programs at the same time. You can display the TV program or the video input on the Main and Sub window.
- When you watch one channel simultaneously in the double-window mode, differences in image quality between the Main picture and Sub-picture occurs (except for HDMI mode).
- If a window displaying an HDMI input signal, the other window is unable to select any HDMI input again.

Displaying the double-window

- 1 Press to display the double-window.

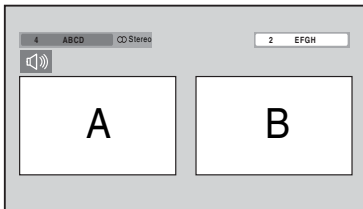


- 2 Select the TV program you want to watch.

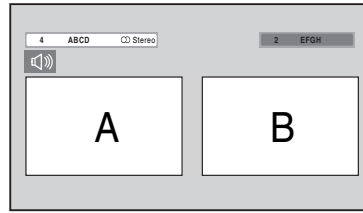
Notes:

- When you select the TV program of the Sub-window, the sound is monaural only.
- In the PC input mode (page 21) or teletext mode (page 24), this mode is not available.
- The still mode will be cancelled if it receives a different input signal when changing program position or video mode is selected, etc.
- If you display double-window, you cannot choose **Speaker Preference** in the **REGZA-LINK** and **Speaker Preference** automatically set to **off**.
- If you display double-window, the sub input source list of the **REGZA-LINK** will not appear.
- When you activate the **TV Auto input switch** in the **REGZA-LINK**, the appropriate HDMI input will display on the window with speaker sound turns on.

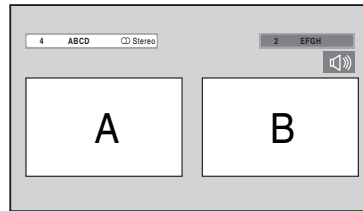
- 3 Press or to select a program position or video input source, or switch and adjust speaker sound for each window (A, B).



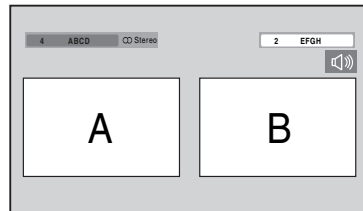
- : available for A
- : A
- Speaker sound: A
- - : available for A



- : available for B
- : B
- Speaker sound: A
- - : available for A



- : available for B
- : B
- Speaker sound: B
- - : available for B



- : available for A
- : A
- Speaker sound: B
- - : available for B

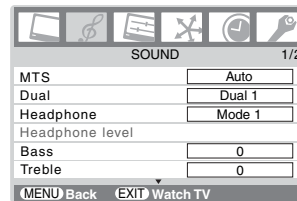
Selecting the headphone mode

You can select either **Mode 1** or **Mode 2**.

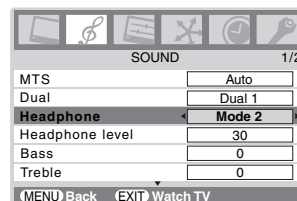
Mode 1: Linked with the selected window

Mode 2: Linked with another window

- 1 Press then press or to display the **SOUND** menu.



- 2 Press or to select **Headphone**, then press or to select **Mode 1** or **Mode 2**.



Adjusting the headphone volume (Mode 2)

When you use the double-window, you can select the Headphone level.

- 1 From the **SOUND** menu, press ∇ or \triangle to select **Headphone**.
Press \triangleleft or \triangleright to select **Mode 2**.
- 2 Press ∇ or \triangle to select **Headphone level**.
Press \triangleleft or \triangleright to adjust the Headphone volume.



Using a headphone

Connect a headphone to the headphone jack on the right side of the TV (see page 8).

When in a single window:

Headphone mode	Headphone	Speakers
Mode 1	Sound comes out (\triangleleft - + is available.)	No sound
Mode 2	Sound comes out (Headphone level menu is available.)	Sound comes out (\triangleleft - + is available.)

Headphone sound is the same as speaker sound.

When in double-window:

Headphone mode	Headphone	Speakers
Mode 1	A (or B) (\triangleleft - + is available.)	No sound
Mode 2	B (or A) (Headphone level menu is available.)	A (or B) (\triangleleft - + is available.)

A: Main window B: Sub-window

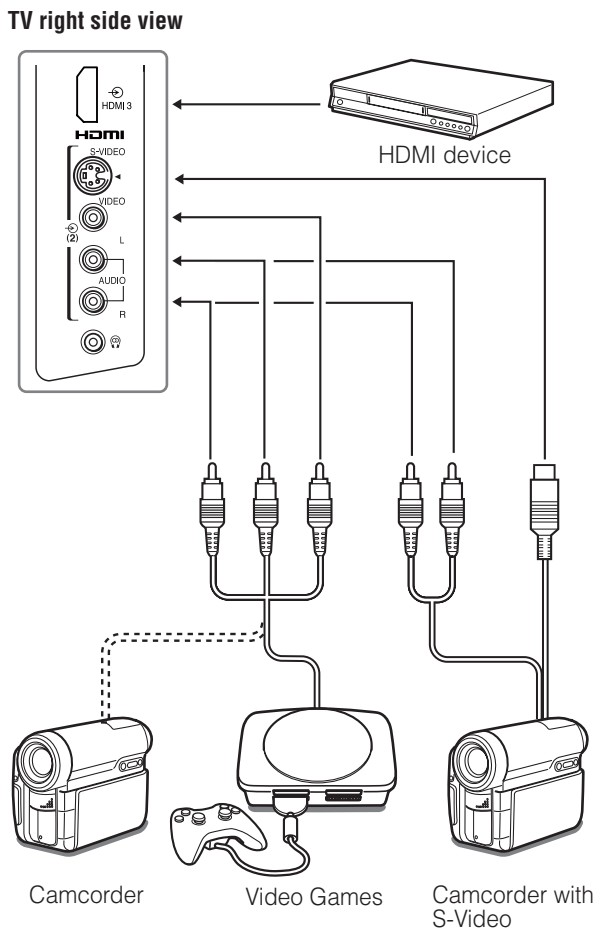
Connecting your TV

Side connections

You can connect a wide variety of auxiliary equipment via the terminals located on the right side of the panel $\text{Ⓜ}2$ and $\text{Ⓜ}HDMI3$

Please always refer to the owner's manual of the equipment to be connected for full details.

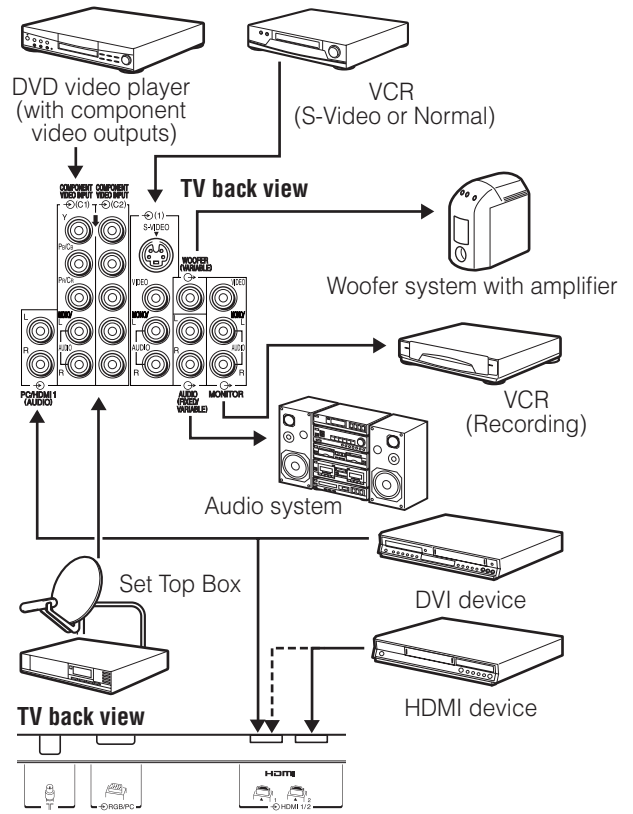
Connection example



- To select the side inputs, press and hold Ⓜ until the video input mode list appears on the screen, then press ∇ or Δ to select $\text{Ⓜ}2$ or $\text{Ⓜ}HDMI3$ (see page 21), then press Ⓜ .
- Before connecting any external equipment, turn off all main power switches.
- If you connect both of the **S-VIDEO** input terminal and **VIDEO** input terminal, the **S-VIDEO** signal will appear on the screen (display changes to $\text{Ⓜ}2S$).
- You can enjoy Video Games with this TV. However shooting games, where the player shoots at a target on the TV screen with a light gun, may not work because of the LCD Color TV properties.
- $\text{Ⓜ}HDMI3$ on the side panel and $\text{Ⓜ}HDMI1/2$ on the back can be connected to the REGZA-LINK compatible device to enjoy the REGZA-LINK features, see page 30.
- Please consult your local dealers for more information on the availability of the REGZA-LINK compatible device.

Back connections

Connection example



- Before connecting any external equipment, turn off all main power switches.
- The unauthorized recording of television programs, DVDs, video tapes and other materials may infringe upon the provisions of copyright law.
- If you connect both of the **S-VIDEO** input terminal and **VIDEO** input terminal, the **S-VIDEO** signal will appear on the screen (display changes to $\text{Ⓜ}1S$).
- The **COMPONENT VIDEO INPUT** consists of three component video signals (**Y**, **P_B/C_B**, **P_R/C_R**) and provides the best picture performance. These terminals can only be used with the component video compatible equipment e.g. DVD video player, etc.
- Additional equipment and cables shown are not supplied with this TV.

Connecting an HDMI or DVI device

- When turning on your electronic components, turn on the TV first, and then the HDMI or DVI device.
- When turning off your electronic components, turn off the HDMI or DVI device first, and then the TV.
- This TV may not be compatible with features and/or specifications that may be added in the future.
- This TV is only operable with L-PCM on 32/44.1/48 kHz and 16/20/24 bits. If there is no sound when using HDMI, use the analog audio cables to connect the TV and the HDMI device, and select **Analog** in **HDMI1 audio** of the **AV connection** menu (page 31).
- This TV is able to connect with HDMI devices. But it is possible that some HDMI devices may not operate properly with this TV.

Connecting an HDMI or DVI device

The HDMI input on your TV receives digital audio and uncompressed digital video from an HDMI device or uncompressed digital video from a DVI device.

This input is designed to accept HDCP program material in digital from EIA/CEA-861/861D compliant consumer electronic devices (such as a set top box or DVD player with HDMI or DVI output).

The HDMI input is designed for best performance with 1080i (50 Hz/60 Hz) and 1080p (50 Hz/ 60 Hz) high-definition video signals, but will also accept and display 480i, 480p, 576i, 576p, 720p (50 Hz/60 Hz) and VGA signals.

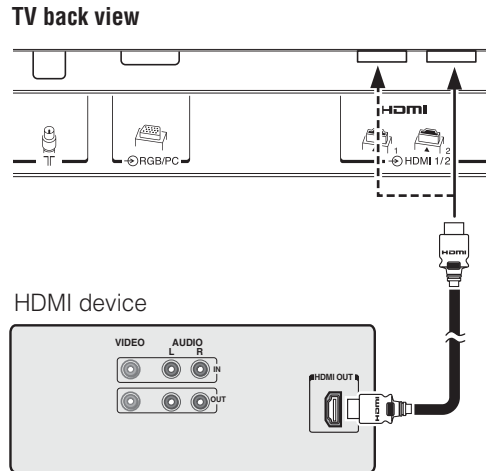
- HDMI: High-Definition Multimedia Interface
- DVI: Digital Video Interface
- HDCP: High-bandwidth Digital Content Protection
- EIA/CEA-861/861D compliance covers the transmission of uncompressed digital video with high-bandwidth digital content protection, which is being standardized for reception of high-definition video signals. Because this is an evolving technology, it is possible that some devices may not operate properly with the TV.
- VGA: VESA 640 × 480 @ 60 Hz
- L-PCM: Linear-Pulse Code Modulation

Note:

Some of legacy HDMI sources may not work properly with your latest HDMI TV, due to the adoption of a new standard. Please try to disconnect your HDMI cable first and then to set **Off** the following three options (**Lip Sync**, **Deep Color**, **xvYCC**). Your legacy HDMI source should operate properly with your TV. (page 31).

Connecting an HDMI device

One HDMI cable (type A connector)



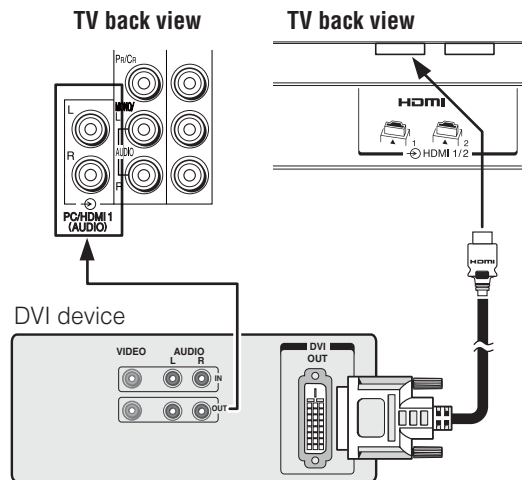
For proper operation, it is recommended that you use a short HDMI cable.

HDMI cable transfers both video and audio.

The HDMI3 terminal is located at the side of the TV.

Connecting a DVI device

One HDMI (type A connector)-to-DVI adapter cable and audio cables



HDMI (type A connector)-to-DVI adapter cable

The recommended HDMI-to-DVI adapter cable length is 2m.

Standard analog audio cables

An HDMI-to-DVI adapter cable transfers only video.

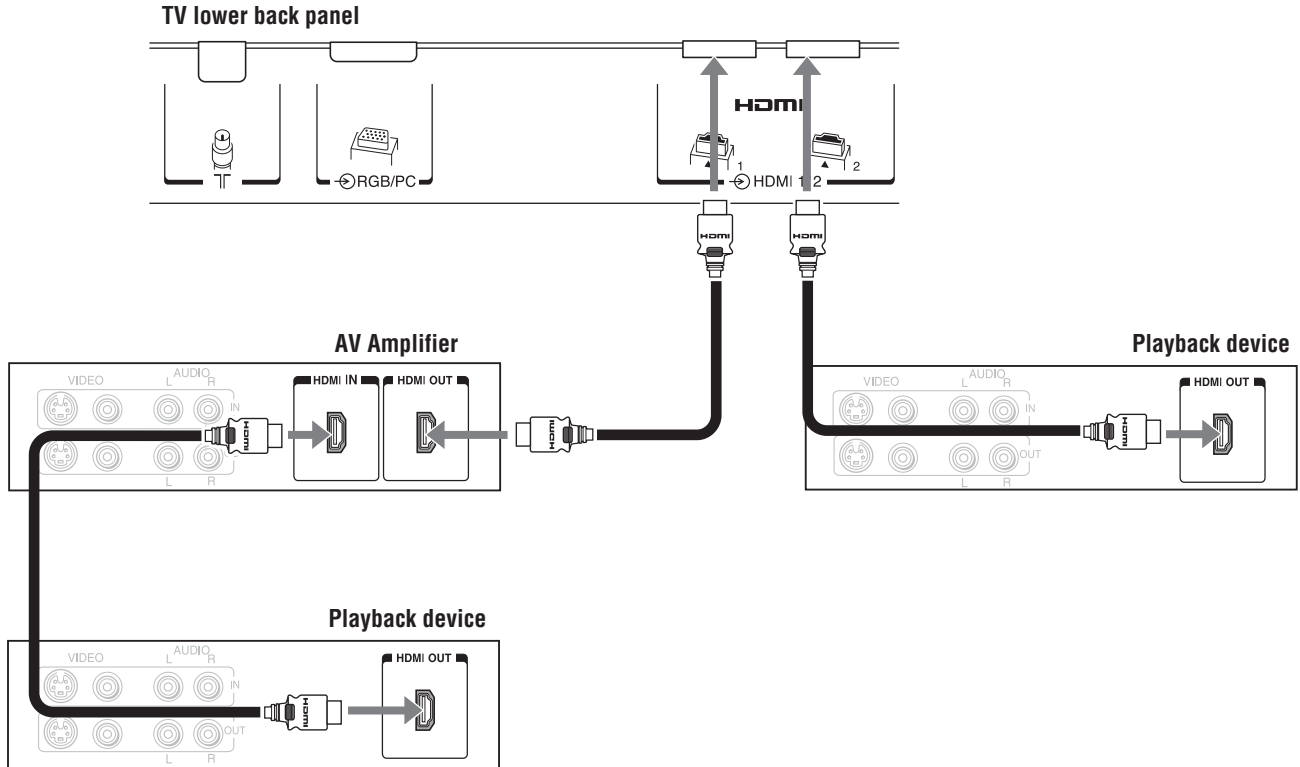
Separate analog audio cables are required.

Note:

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.

REGZA-LINK connection

You can control the basic functions of connected audio/video devices using the TV's remote control if you connect a REGZA-LINK compatible audio receiver or playback device. For an explanation of setup and operations, see pages 22 – 23.



Before controlling the device(s):

- After completing the above connections, set the **REGZA-LINK** menu as you desire (☛ page 23).
- The connected devices must also be set. For details, see the owner's manual for each device.
- The REGZA-LINK feature uses the CEC technology as regulated by the HDMI standard.
- The HDMI3 terminal is located at the side of the TV.

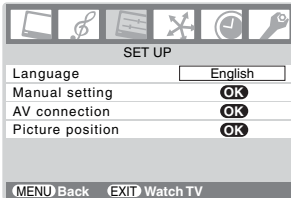
Notes:

- If several devices are connected, REGZA-LINK feature may not operate properly.
- For proper operation, it is recommended that you use HDMI cables with the HDMI Logo (**HDMI**).
- This feature is limited to models incorporating Toshiba's REGZA-LINK. However, Toshiba is not liable for those operations. Refer to the individual owner's manuals for compatibility information.

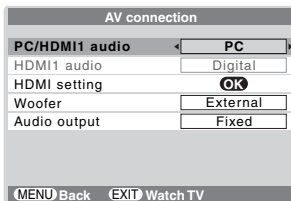
Selecting the PC/HDMI1 audio mode

You can select PC audio or HDMI audio when using this function (page 29).

- 1 Press **MENU**, then press **◀** or **▶** to display the **SET UP** menu.



- 2 Press **▽** or **△** to select **AV connection**, then press **OK** to display the **AV connection** menu.



- 3 Press **▽** or **△** to select **PC/HDMI1 audio**, then press **◀** or **▶** to select **PC** or **HDMI1**.

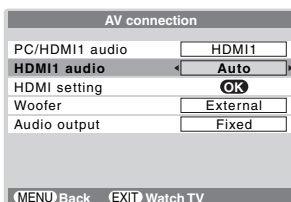
Setting the HDMI1 audio mode

You can select sound of an HDMI or DVI device connected to the HDMI input terminals (page 29) from three modes: **Auto**, **Digital** or **Analog**.

Note:

This function is available only when the PC/HDMI1 audio mode is set to **HDMI1**.

- 1 From the **AV connection** menu, press **▽** or **△** to select **HDMI1 audio**.

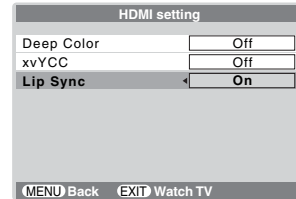


- 2 Press **◀** or **▶** to select **Auto**, **Digital** or **Analog**.

Using the HDMI setting

HDMI (Deep Color), if available from the DVD source, will subtly enhance the color. Some older DVD players may not display color correctly, if so switch the feature to Off. **Lip Sync** can synchronize the sound and picture.

- 1 From the **AV connection** menu, press **▽** or **△** to select **HDMI setting** and press **OK**.
- 2 Press **▽** and **△** to select an option, then **◀** or **▶** to adjust the settings.



- **Deep Color: On**

This feature allows to HDMI source to increase available colors bits within the boundaries defined by the RGB or YCbCr color space.

- **xvYCC: On**

This feature expands the acceptable color range (limits) in the HDMI signals, then allows sending wider color signals from HDMI source.

- **Lip Sync: On**

This option activates an auto audio/video display timing adjustment function that allows HDMI source devices to accurately perform synchronization automatically.

xvYCC selection

The color range xvYCC is an international standard and enables a wider color range than conventional video applications.

If the **xvYCC selection** is set to **Auto**, your TV will automatically detect image supported xvYCC.

When the **xvYCC** in the **HDMI setting** menu is set to **On**, it allows this function to be selectable.

- 1 From the **PICTURE** menu, press **▽** or **△** to select **xvYCC selection**.
- 2 Press **◀** or **▶** to select **On**, **Off** or **Auto**.

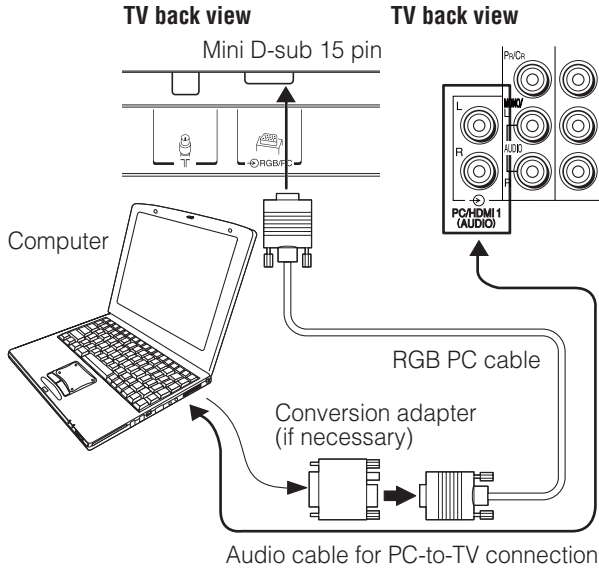
Notes:

- HDMI, the HDMI logo, High-Definition Multimedia Interface and Deep Color are trademarks or registered trademarks of HDMI Licensing, LLC.
- All above HDMI settings are available in the HDMI input mode and need proper HDMI source device. If HDMI source products does not support these features, the TV may not work properly by activating these features.
- If your HDMI connection is capable of 1080p and/or your TV is capable of refresh rates greater than 60 Hz or supports Deep Color™, you will need a Category 2 cable. Conventional HDMI/DVI cable may not work properly with this mode.

Connecting a computer

To connect a PC to the RGB/PC terminal on the TV:

An analog RGB (15 pin) computer cable can be connected.



Connect a PC cable from the computer to the **RGB/PC** terminal on the back of the TV.

The following signals can be displayed:

- VGA: VESA 640 × 480 @ 60/75 Hz
- SVGA: VESA 800 × 600 @ 60/75 Hz
- XGA: VESA 1024 × 768 @ 60/70/75 Hz
- W-XGA: VESA 1280 × 768 @ 60/75 Hz
- W-XGA: VESA 1360 × 768 @ 60 Hz
- S-XGA: VESA 1280 × 1024 @ 60/75 Hz

However, these signal formats are converted to match the number of pixels of the LCD panel.

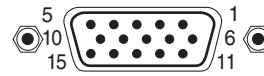
Therefore, the TV may not display small text properly.

Notes:

- Some PC models cannot be connected to this TV.
- Certain PC signal formats may not be detected correctly.
- There is no need to use an adapter for computers with DOS/V compatible mini D-sub 15 pin terminal.
- A bar may appear at the edges of the screen, or parts of the picture may be obscured depending on some signals. This is not the malfunction.
- If the edges of the picture are stretched, readjust the picture position adjustments in the **PC Setting** menu.
- Depending on the specification of the PC you are playing the DVD-Video on, and the DVD's title, some scenes may be skipped, or you may not be able to pause during multi-angle scenes.

Signal names for mini D-sub 15 pin connector

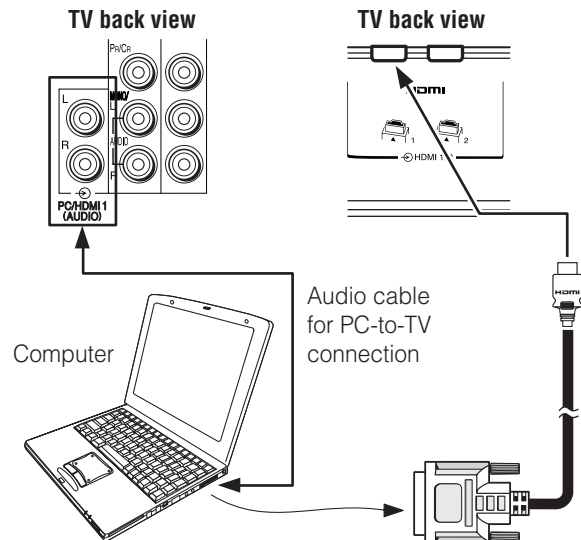
Pin assignment for RGB/PC terminal



Pin No.	Signal name	Pin No.	Signal name
1	R	9	NC
2	G	10	Ground
3	B	11	NC
4	NC (not connected)	12	NC
5	NC	13	H-sync
6	Ground	14	V-sync
7	Ground	15	NC
8	Ground		

To connect a PC to the HDMI terminal on the TV:

When connecting a PC to the HDMI terminal on the TV, use an HDMI-to DVI adapter cable and analog audio cables. If connecting a PC with an HDMI terminal, use an HDMI cable (type A connector). Separate analog cables are not necessary.



The HDMI input can accept and display VGA, 480i, 480p, 576i, 576p, 720p, 1080i, and 1080p signal formats.

Notes:

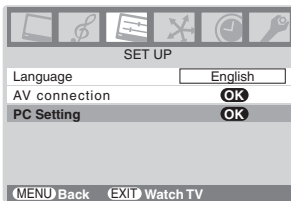
- The edges of the images may be hidden.
- If receiving a 720p, 1080i, or 1080p signal program, PC mode scales the video to display the entire picture within the borders of the screen (e.g. no overscanning) (page 14).

Using the PC setting

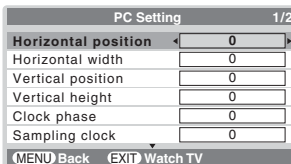
- In the PC input mode, you cannot select the **Color**, **Tint**, **Sharpness**, **Black stretch**, **MPEG NR** and **DNR** in the **Picture setting** menu, **3D color management**, **Active backlight control** and **Cinema mode** (see page 16, 17).
- In the PC input mode, the **Manual setting** (see page 21) is not displayed.
- First press \odot until the video input mode list appears on the screen, then press ∇ or \triangle and \odot in order to select the PC input mode (see page 21).
- This function may not be available for some signal or if no signal is received.
- The optimum points of the clock phase and sampling clock adjustments may be incomprehensible according to the input signals.

Adjusting the picture size/position

- 1 Press MENU , then press \triangleleft or \triangleright to display the **SET UP** menu.
- 2 Press ∇ or \triangle to select **PC Setting**.



- 3 Press \odot to display the **PC Setting** menu.



- 4 Press ∇ or \triangle to select an option you want to adjust. Press \triangleleft or \triangleright to adjust the settings as required.



Adjusting the clock phase of the picture

If the clock phase, which synchronizes the PC signal and LCD display, is not optimized, the picture will blur.

This function enables you to adjust clock phase and display a clear picture.

- 1 From the **PC Setting** menu, press ∇ or \triangle to select **Clock phase**.
- 2 Press \triangleleft or \triangleright to obtain a clear picture.



Adjusting the sampling clock

If the sampling clock does not match with the dot clock frequency of the PC, blurred picture detail will occur, or screen width will change, or drift patterns in vertical lines may be apparent.

This function enables you to adjust it and optimize the picture.

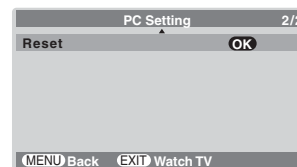
- 1 From the **PC Setting** menu, press ∇ or \triangle to select **Sampling clock**.
- 2 Press \triangleleft or \triangleright to optimize the picture.



Resetting the PC setting

The Reset function adjusts the PC Setting to the factory settings.

- 1 From the **PC Setting** menu, press ∇ or \triangle to select **Reset** on the 2nd page.



- 2 Press \odot .

PC Media Window

This feature displays another smaller window screen allowing a broadcast program to be viewed at the same time as a connected PC.

- 1 Press $\text{P}\wedge$ to display the picture size list, then press ∇ or \triangle to select the PC Media Window (or press $\text{P}\wedge$ repeatedly) and press \odot . The screen will show the picture from a connected PC and the last broadcast channel being viewed.
- 2 You can also change the program position by using $\text{P}\wedge$ or $\text{P}\vee$.

Note:



When a PC is connected using HDMI none of these functions will be available.

Troubleshooting

Before calling a service technician, please check the following table for a possible cause of the symptom and some solutions.

Symptom and solution




TV will not turn on

- Make sure the power cord is plugged in, then press  and .
- The remote control batteries may be dead. Replace the batteries.

No picture, no sound

- Check the antenna connections.

No sound, picture OK

- The sound may be muted. Press ,  or .
- The station may have broadcast difficulties. Try another channel.
- Check that the **Speaker** function in **SOUND** menu is properly set.

Poor sound, picture OK

- The station may have broadcast difficulties. Try another channel.

Poor picture, sound OK

- Check the antenna connections.
- The station may have broadcast difficulties. Try another channel.
- Adjust the **PICTURE** menu.

Poor reception of broadcast channels

- Check the antenna connections.
- The station may have broadcast difficulties. Try another channel.
- Make sure the Color system is properly set.

Teletext problems

- Check the antenna connections.
Good performance of text depends on a good strong broadcast signal.

Some pixels of the screen do not light up

- The LCD display panel is manufactured using an extremely high level of precision technology, however, sometimes some pixels of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

The brightness of the screen comes down, or flickers of the screen are caused, or some parts of the screen do not light up.

- When you just buy and start to use this TV, a flickering may be caused in the screen. In this case, switch off the TV, then switch on it again to cure the condition.
- The cold cathode fluorescent lamp used for the back light on this TV has longevity. When the brightness of the screen comes down, or the flickers of the screen are caused, or some parts of the screen do not light up, it may reach the end of its life. Contact a service technician.

The picture brightness varies when you display switch the TV on.

- If you switch the TV on at 0°C and under, wait until the warms up.

Multiple images

- The station may have broadcast difficulties. Try another channel.
- Antenna reception may be poor. Use a high directional outdoor antenna.
- Check if the direction of the antenna has changed.

Poor color or no color

- The station may have broadcast difficulties. Try another channel.
- Adjust the **Tint** and/or **Color** in the **PICTURE** menu.

The remote control does not operate


- Remove all obstructions between the remote control and the remote control sensor on the TV.
- The remote control batteries may be dead. Replace the batteries.
- Check that the TV /REGZA-LINK/DVD switch on the remote control is properly set.

No REGZA-LINK operation

- Depending on the connected REGZA-LINK compatible devices, not all the REGZA-LINK feature is available.
- Make sure the HDMI cables with HDMI logo are used.
- When the connected REGZA-LINK device does not work correctly after you have changed setting of the device, turn off your TV and unplug the power cord, then plug and turn on again.
- If several devices are connected, REGZA-LINK feature may not operate properly.
- Read the owner's manual furnished with the connected REGZA-LINK device.

HDMI problems

• For HDMI cables

Make sure the HDMI cables with the HDMI Logo () are used.

• For HDMI Deep Color™

You should need to use Category 2 cable to work properly. Normal HDMI cable or DVI cable may not work with this option.

• For Legacy HDMI source

Some of legacy HDMI sources may not work properly with latest HDMI TV products, due to new standard adoption. Please try to set Off the HDMI settings (**Lip Sync**, **Deep Color**, **xvYCC**). Your legacy HDMI source should operate properly with this TV products.

Broadcast system

Broadcast transmission systems of each country or region

Asia M.E.

Country or region	Color	Sound
Bahrain, Kuwait, Israel, Oman, Qatar, United Arab Emirates, Yemen, etc. Indonesia, Malaysia, Singapore, Thailand, etc.	PAL	B/G
China	PAL	D/K
China Hong Kong	PAL	I
Iraq, Islamic Republic of Iran, Lebanon, Saudi Arabia, etc.	SECAM	B/G
Russian Federation, etc.	SECAM	D/K
Myanmar, etc.	NTSC	M

Oceania

Country or region	Color	Sound
Australia, New Zealand, etc.	PAL	B/G

Africa

Country or region	Color	Sound
Republic of South Africa, etc.	PAL	I

South America

Country or region	Color	Sound
Argentina, Paraguay, Uruguay, etc.	PAL	N
Brazil	PAL	M
Chile, Colombia, etc.	NTSC	M

Note:

PAL, SECAM and NTSC 3.58 (MHz) are different color signal broadcast transmission systems applicable to different countries or region. NTSC 4.43 (MHz) is used in special VCRs to playback NTSC recorded video tapes through PAL television equipment.

Specifications

LCD color television

Model

52Z3500A, 52Z3500E, 52Z3500T,
57Z3500A, 57Z3500E, 57Z3500T

Power source

52/57Z3500A: 220V-240V, AC 50 Hz
52/57Z3500E: 220V-240V, AC 50/60 Hz
52/57Z3500T: 110V-240V, AC 50/60 Hz

Power consumption

52Z3500A/E/T: 338W, <1W (standby)
57Z3500A/E/T: 474W, <1W (standby)

Dimensions

52Z3500A/E/T: 1280 mm (W) 847 mm (H) 390 mm (D)
57Z3500A/E/T: 1365 mm (W) 896 mm (H) 390 mm (D)

Mass (Weight)

52Z3500A/E/T: 44.8 kg
57Z3500A/E/T: 57.9 kg

Television system (Antenna input)

Channel coverage:

PAL	B/G (CCIR)	VHF	2 - 12
		UHF	21 - 69
		CATV	X - Z+2, S1 - S41
PAL	I (UK)	VHF	-
		UHF	21 - 69
		CATV	-
PAL	D/K (CHINA)	VHF	1 - 12
		UHF	13 - 57
		CATV	Z1 - Z38
SECAM	B/G (CCIR)	VHF	2 - 12
		UHF	21 - 69
		CATV	X - Z+2, S1 - S41
SECAM	D/K (OIRT)	VHF	1 - 12
		UHF	21 - 69
		CATV	X1 - X19
NTSC	M (US)	VHF	2 - 13
		UHF	14 - 69
		CATV	A6 - A1, A - W, AA - ZZ, AAA, BBB
NTSC	M (JAPAN)	VHF	1 - 12
		UHF	13 - 62
		CATV	M1 - M10, S1 - S41

Special RF signal:

NTSC 4.43 color system 5.5/6.0/6.5 MHz sound system
PAL 60 Hz color system 5.5/6.0/6.5 MHz sound system

COMPONENT VIDEO INPUT terminals (the signal format)

480i, 480p, 576i, 576p, 720p (50/60 Hz), 1080i (50/60 Hz)
(These signal formats are converted to match the number of pixels of the LCD panel.)

Color system

PAL, SECAM, NTSC 3.58/4.43

Aspect ratio

16 : 9

Visible size (diagonal)

52Z3500A/E/T: 132.1 cm
57Z3500A/E/T: 144.8 cm

Number of pixels

1920 (H) dots × 1080 (V) dots

Audio power

10 W + 10 W (10% THD)

Speakers

Main 100 mm (Diameter) 2 pcs

Reference section

Input/Output terminals

⊖ (1)	Input 4 pin	S-video
	Phono jacks	A/V
⊖ (2)	Input (Side) 4 pin	S-video
	Phono jacks	A/V
⊖ (C1)	Input	
	Component video	Y, P _B /C _B , P _R /C _R
	Phono jacks	Audio L/Mono + R
⊖ (C2)	Input	
	Component video	Y, P _B /C _B , P _R /C _R
	Phono jacks	Audio L/Mono + R
↻ MONITOR	Output	
	Phono jacks	A/V
↻ AUDIO	Output	
	Audio L + R (Fixed/Variable)	
↻ WOOFER	Output	
	Phono jacks	Bass Line out (Variable)
⊖ RGB/PC	Input	
	Mini D-sub 15 pin	Analog RGB
⊖ PC/HDMI1 (AUDIO)	Input	
	Phono jacks	Audio L+R
⊖ HDMI1	Input (type A) 19 pin	A/V Digital
⊖ HDMI2	Input (type A) 19 pin	A/V Digital
⊖ HDMI3	Input (type A) (Side) 19 pin	A/V Digital
Headphone jack	3.5 mm (Diameter) stereo	

Operating condition

Temperature 0°C - 35°C

Humidity 20% - 80% (No moisture condensation)

Supplied accessories

Owner's manual (1), Remote control (1), Batteries (2),
Clip (1)



This is used to fix the TV to a wall, pillar, etc. (see page 4).

- Design and specifications are subject to change without notice.
- Never service or remodel the TV by yourself. It may expose you to a fire hazard or dangerous voltages.