

TOSHIBA
Leading Innovation >>>

OWNER'S MANUAL

LED TV

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

DOLBY DIGITAL

DIVX+™
HD

32P2300 Series

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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TD/J

VX1A00270000

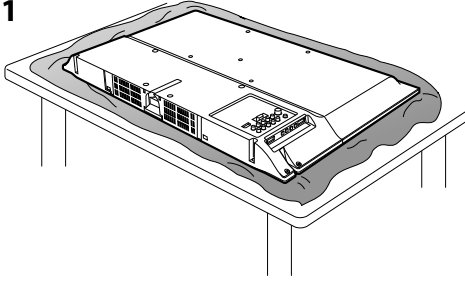
Pedestal stand Assembling

CAUTION: Before beginning pedestal assembly, carefully lay the front of the LCD Panel face down on a flat, cushioned surface such as a quilt or blanket. Leave the bottom of the unit protruding over the edge of the surface and assemble as indicated.

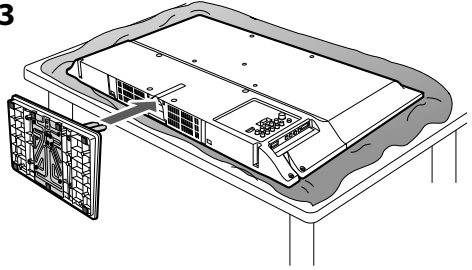
Note:

Extreme care should always be used when attaching the pedestal stand to avoid damage to the LCD panel.

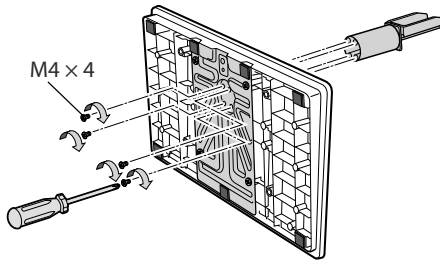
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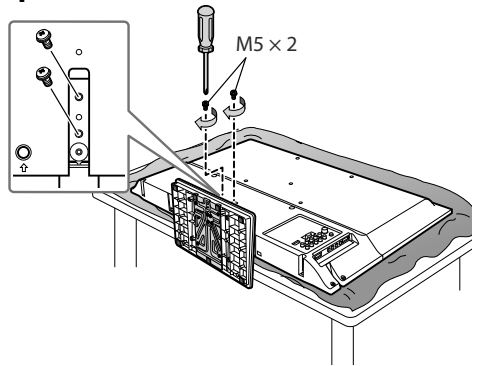
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2



4



Warning: Ensure the power cable is not pinched when attaching the pedestal stand as this could cause an electric shock.

Welcome to Toshiba

- Thank you for purchasing this Toshiba LED TV. 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.
- "LED TV" means LCD Panel with LED Backlight.

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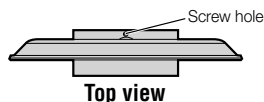
Important Safety Instructions

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

Installation

- 1) WARNING: To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions. Install the TV in a horizontal, stable location. Attach the TV to the stand with the mounting screw.**

- 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.



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

- Only use cabinets or stands recommended by the TV manufacturer.
- Only use furniture that can safely support the TV.
- Ensure that the TV is not hanging over the edge of the supporting furniture.
- Never place the TV on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the TV to a suitable support.
- Never stand the TV on cloth or other material placed between the TV and supporting furniture.

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

- 3) Never stand or climb on the TV.**

- Educate children about the dangers of climbing on furniture to reach the TV or its controls.

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.

- 4) Always connect the power plug to an appropriate electrical outlet equipped with 110-240 V, AC 50/60 Hz.**

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

About the fuse (only for E models)

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.

About the use

- Make sure to insert the plugs firmly, when plugging the AC power cord into the TV set end and wall outlet end.
- Make sure to hold the plug, when unplugging the AC power cord.
- Never use other cord except for supplied AC power cord, and never use the supplied power cord for any other purpose.

5) Never insert or remove the power plug with wet hands.

This may cause an electric shock.

6) 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.

7) 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.

8) 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.

9) 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.

10) Precautions for moving the TV

- When moving the TV, be sure to remove the plug from the wall outlet and disconnect the aerial cable and audio/video cables, any steady ties and mounting screw. 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.

11) Precautions for installing on outdoor aerial

An outside aerial system should not be located in the vicinity of overhead power lines, or other

electric light or power circuits.

If the aerial 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) 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  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.

5) 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.

6) 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.

7) If there is thunder or lightning, never touch the aerial 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 has power 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.

Cleaning

CAUTION: Avoid using chemicals (such as air refreshers, cleaning agents, etc.) on or near the TV pedestal. Studies indicate that plastics may weaken and crack over time from the combination effects of chemical agents and mechanical stress (such as weight of TV). Failure to follow these instructions could result in serious injury and/or permanent damage to TV and TV pedestal.

1) Remove the power plug before cleaning.

Never use solvents such as benzine 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 close to a window or outdoors.
- 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 discolouration 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 sign of 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 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.

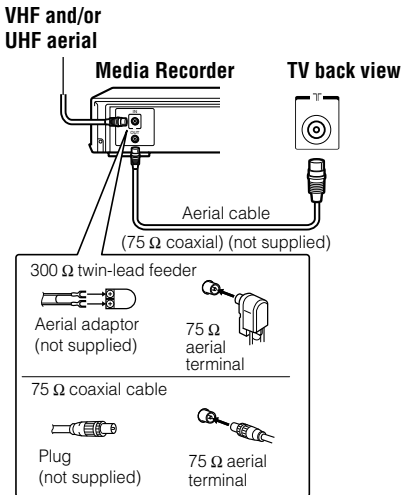
Connecting an aerial

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

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

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

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

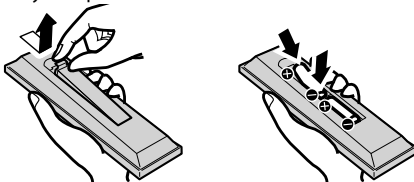


Exploring your new TV

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.



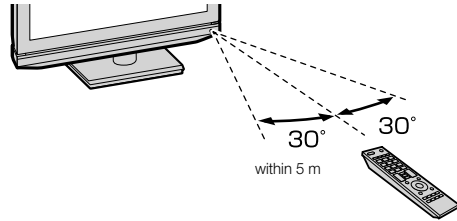
Cautions:

- Dispose of batteries in a designated disposal area. Batteries must not be exposed to excessive heat such as sunshine, fire or the like.
- 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.

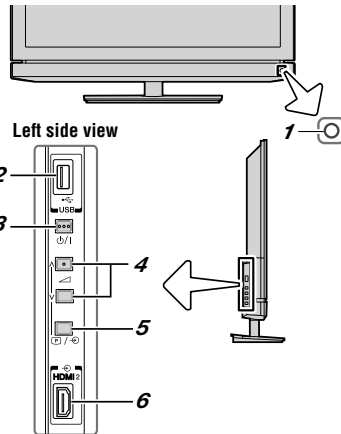
Effective range



TV panel controls

- You can operate your TV using the buttons on the side panel or the remote control. The back of the panel provide the terminal connections to connect other equipment to your TV.

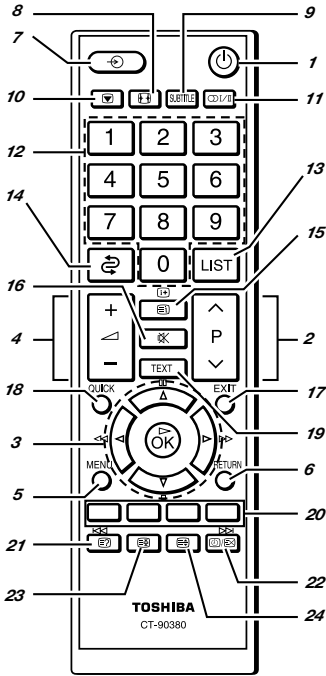
TV front view



- 1 **⏻ (power LED)** — Power indicator.
- 2 **USB (input terminals)** — Insert your USB storage device (photo, movie and music).
- 3 **⏻ (power on/standby)** — Press to turn the TV on/ standby.
- 4 **◀ + (volume)** — These buttons adjust the volume level.
^ v (mode up/down) — When on-screen information is displayed, a programme position can be selected. In external input mode, an input source can be selected.
- 5 **⏻ / ⏻ (on-screen information or input source)** — This button switches to the on-screen information or the input source selection.

- 6 **HDMI 2 (input terminal)** — High-Definition Multimedia Interface input receives digital audio and uncompressed digital video from an HDMI device.

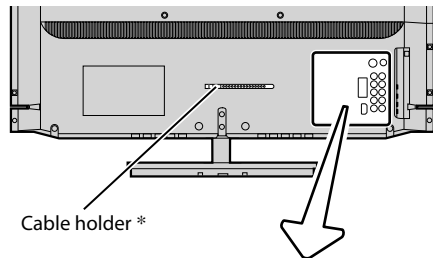
Learning about the remote control



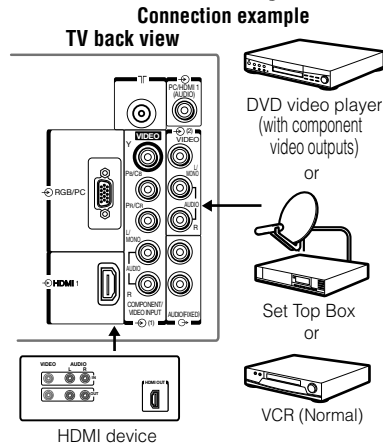
- 1 **Power on/standby** — Press to turn the TV on/standby.
- 2 **Programme position** — These buttons select the programme position.
- 3 **MENU up/down** — When a menu is on-screen, these buttons function as up/down menu navigation buttons.
When using the movie / music file (II ■)
- 3 **MENU left/right** — When a menu is on-screen, these buttons function as left/right menu navigation buttons or adjust settings.
When using the movie / music file (◀▶▶▶)
- 3 **OK** — To confirm your selection.
When using the movie / music file (▶)
- 4 **Volume** — These buttons adjust the volume level.
- 5 On-screen Menus
- 6 To return to the previous menu
- 7 Input source selection
- 8 Picture Size
- 9 TEXT Subtitle pages if available

- 10 Picture still
- 11 Stereo/Bilingual selection
- 12 Number buttons (0-9)
- 13 To display the Channel List
- 14 To return to the previous programme
- 15 To display on-screen information Initial/Index function for Teletext
- 16 This button turns the sound off/on
- 17 To exit menu
- 18 To access the Quick Menu
- 19 Teletext on/Superimpose Teletext/off
- 20 Teletext control buttons (Four coloured buttons: Red, Green, Yellow, Blue)
- 21 To reveal concealed text
When using the movie / music file (◀▶).
- 22 To select a page while viewing a normal picture
To select the time display
When using the movie / music file (▶▶).
- 23 To hold a wanted page
- 24 To enlarge the teletext display size

TV back panel connections



Cable holder *

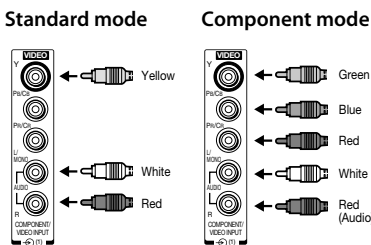


- Cable holder *
- * You can use the cable holder to hold the aerial cable, video and audio cables etc.
Never grasp the holder when moving the TV.

- **HDMI 1 (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 (Connect HDMI, DVI or PC etc.).
- **PC/HDMI 1 (AUDIO) (input terminal)** — PC audio input terminal is shared with HDMI analogue audio input terminal, and their use can be configured in **AV Connection** menu of the **PREFERENCES** menu (Connect PC or DVI etc.).
- **(aerial input terminal)** — Analogue aerial signal input.
- **(1) COMPONENT / VIDEO INPUT (input terminals)** — High-definition component video and standard (analogue) stereo audio inputs, or standard (composite) video and standard stereo audio inputs.
- **(2) (video 2 input terminal)** — Standard video and standard stereo audio input.
- **RGB/PC (input terminal)** — For use when connecting a personal computer (PC) (Connect PC etc.).
- **AUDIO (output terminals)** — Standard audio outputs.

Notes:

- Before connecting any external equipment, turn off all main power switches.
- The unauthorized recording of TV programmes, DVDs, video tapes and other materials may infringe upon the provisions of copyright law.
- **COMPONENT / VIDEO INPUT terminals**



Connecting HDMI or DVI devices

- When turning on your electronic components, turn on the TV first, and then the HDMI and DVI device.
- When turning off your electronic components, turn off the HDMI and 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 and Dolby Digital on 32/44.1/48 kHz. If there is no sound when using HDMI, use the analogue audio cables to connect the TV and the HDMI device, and select **Analogue** in **HDMI 1 Audio** of the **AV Connection** menu (page 13).

- 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 HDMI or DVI devices

The HDMI input on your TV receives digital audio and uncompressed digital video from an HDMI and uncompressed digital video from a DVI device. This input is designed to accept HDCP programme material in digital from CEA-861-D compliant consumer electronic devices (such as a set top box and DVD player with HDMI and DVI output). The HDMI input is designed for best performance with 1080i (50/60 Hz) and 1080p (24/50/60 Hz) high-definition video signals, but will also accept and display 480i, 480p, 576i, 576p, and 720p (50/60 Hz) and VGA (VESA 640 x 480 @ 60/72/75 Hz) signals.

- HDMI: High-Definition Multimedia Interface
- HDCP: High-bandwidth Digital Content Protection
- CEA-861-D 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.
- Acceptable PC signal format:

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.

If you connect this unit to your PC, the compressed image is displayed in S-XGA mode, therefore the picture quality may deteriorate and characters may not be read.

- S-VGA: VESA 800 X 600 @ 56/60/72/75 Hz
- XGA: VESA 1024 X 768 @ 60/70/75 Hz
- W-XGA: VESA 1280 X 768 @ 60/75 Hz
- W-XGA: VESA 1360 X 768 @ 60 Hz
- S-XGA: VESA 1280 X 1024 @ 60 Hz

Connecting a computer

The following signals can be display:

- VGA: VESA 640 x 480 @ 60/72/75 Hz
- S-VGA: VESA 800 x 600 @ 56/60/72/75 Hz
- XGA: VESA 1024 x 768 @ 60/70/75 Hz
- W-XGA: VESA 1280 x 768 @ 60/75 Hz
- W-XGA: 1280 x 800 @ 60/75 Hz
- W-XGA: VESA 1360 x 768 @ 60 Hz
- W-XGA+: 1440 x 900 @ 60 Hz
- S-XGA: VESA 1280 x 1024 @ 60 Hz
- 1920 x 1080p @ 60 Hz (Horizontal Frequency: 67.5 kHz (H), Pixel Clock Frequency: 148.5 MHz)

Notes:

- Some PC models cannot be connected to this TV.
- If connecting a certain PC model that signal is particular, the PC signal 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 in the upper, lower, right or left side 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 Settings** 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	DDC Data
5	NC	13	H-sync
6	Ground	14	V-sync
7	Ground	15	DDC Clock
8	Ground		

- Most of the picture/sound controls and functions are available. However features not available will be greyed out.

Turning the TV on

Switching on the TV

Connect the power cord to a wall outlet, the $\phi/|$ power indicator lights in red (standby mode).

- 1 Press ϕ on the remote control or $\phi/|$ on the TV left side panel, the $\phi/|$ power indicator lights in green.

Note:

If you watch black and white programmes when the **Colour System** mode is set to "A" (Automatic), colour noise may appear on the screen. In this case select the appropriate **Colour System** (For the system of each country or region, refer to pages 10, 29).

Switching off the TV

- 1 Press ϕ on the remote control or $\phi/|$ on the TV left 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 off in 15 minutes based on **No Signal Power Down** settings (see page 16) if no signal is detected. 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.

Tuning the TV for the first time

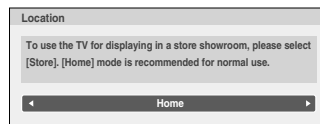
Before switching on the TV, put your decoder and media recorder to standby, if they are connected, and ensure that the aerial is connected. To setup the TV, use the buttons on the remote control as detailed on page 7.

- 1 Press the ϕ button. The **Quick Setup** screen will appear. This screen will appear the first time that the TV is switched on.



- 2 Press \triangleleft or \triangleright to select the menu language.

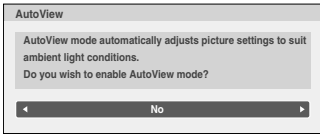
- 3 Press **OK**, to display the **Location** menu. Press \triangleleft or \triangleright to select **Store** or **Home**. For normal home use, select **Home**. You can select either **Home** or **Store** mode. **Home** is recommended for normal home use. Select **Store** when using a TV for displaying in a shop, etc.



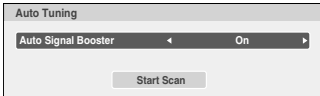
Store mode:

- A confirmation menu will appear.
- **AutoView** menu is not available.

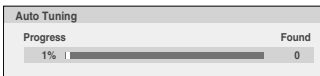
- 4 Press **OK** to display the **AutoView** menu (page 14). Press **<** or **>** to select **Yes** or **No**.



- 5 Press **OK** to display the **Auto Tuning** menu, and then **<** or **>** to select **On** or **Off**.

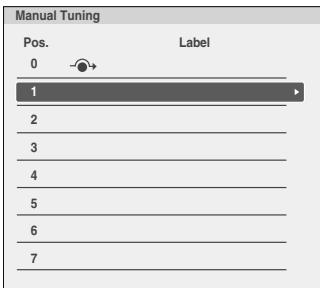


- 6 Select **Start Scan** and press **OK** to start the automatic search.

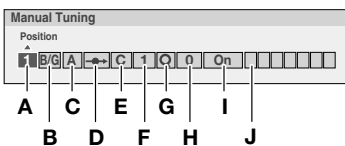


When the automatic search is completed, the TV will automatically appear the **Manual Tuning** menu.

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.



- 7 Press **∇** or **△** to select the programme position you want to arrange and press **OK** to display the breakdown menu. Press **<** or **>** to select an item, then press **∇** or **△** to select the item as shown below.



A. Position selection

B. System (Sound) (page 29)

C. Colour System (page 29)

A : Automatic (factory set), **P** : PAL,
S : SECAM, **N4** : NTSC 4.43 (MHz),
N3 : NTSC 3.58 (MHz)

If the colour of a certain channel is abnormal, the automatic colour system selection (A) may have malfunctioned, or sound system selection is wrong. In such a case, select another colour and/or sound system (page 29).

D. Position skip selection

Press **∇** or **△** to turn the position skip option on "↻" or off "→". The position will then be skipped when you select channels with **P^** or **Pv**. The "↻" mark will appear beside a position number when you use the Number button on the remote control.

E. Signal Class

The channel classification.

F. Channel

The channel number on which a station is being broadcast.

G. Channel search operation

Press **△** to search up the band or **∇** to search down the band.

Press **∇** or **△** repeatedly until your desired channel is displayed.

When a station is found, it will be displayed. NEVER PRESS ANY OTHER BUTTONS WHILE THE SET IS TUNING.

H. Manual Fine Tuning

Press **∇** or **△** until better picture and sound are obtained.

I. Signal Booster

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

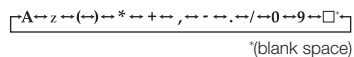
Press the **∇** or **△** to turn the **Signal Booster On** or **Off**.

J. Label

Station labels appear under the programme position display each time you turn on the TV, select a channel, or press **i+**.

To change or create station labels:

1) Press **∇** or **△** repeatedly to select a character for the first space, then press **<** or **>**.



(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.

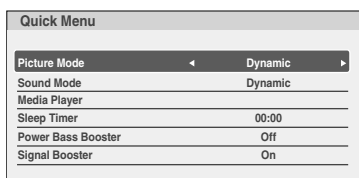
Press **OK** to store your settings.

Notes:

- The **Quick Setup, Location, Auto Tuning, Manual Tuning** menu can also be display at any time from the **SETUP** menu.
- When you preset the channel which sound of broadcast transmission system adopts "M" system (page 29), the sound system may not be tuned correctly if the radio waves transmit badly. At that time, preset the channel by **Manual Tuning**.

Using the Quick Menu

Press **QUICK** to display the **Quick Menu** and use ∇ or \triangle to select the option.



Note:

Quick Menu items are different depending on the current mode.

Quick menu item	Description
Picture Mode	page 14.
Sound Mode	page 15.
Media Player	page 19.
Sleep Timer	page 16.
Power Bass Booster	page 16.
Signal Booster	page 10.
Interval Time	page 20.
SOUND	page 15.
Repeat	pages 21, 23.
PICTURE	page 14.
Device Information	page 20.

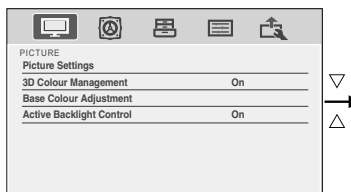
Learning about the menu system

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

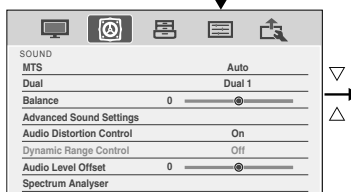
- Press **MENU** to display menu, then press \triangleleft or \triangleright to select main menu headings.
- Press ∇ or \triangle to select an item.
- Press \triangleleft or \triangleright to select or adjust setting.
- Press **OK** to display the next menu.
- Press **EXIT** to close the menu.
- Press **RETURN** to return the previous menu.

Displaying the menu chart

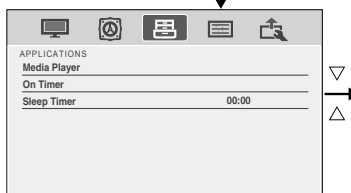
PICTURE



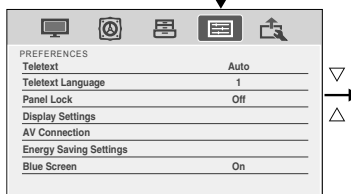
SOUND



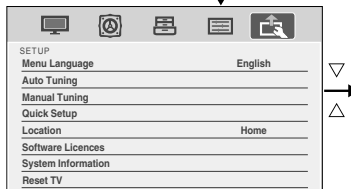
APPLICATIONS



PREFERENCES



SETUP



Watching TV programmes

Selecting the menu language

You can select a language for the on-screen display.

- Use the menu: **SETUP**
- Use the item: **Menu Language**

Changing the position

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

Note:

Changing positions between different format channels takes several seconds.

Switching between two positions

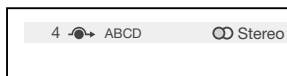
You can switch two positions without entering actual position number each time.

- 1 Select the first position you want to view.
- 2 Select the second 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 positions.

Displaying the on-screen information

- 1 Press **[+]** to display the following on-screen information.

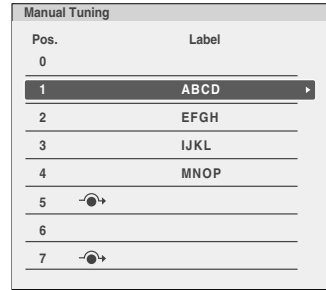


The information will disappear in several seconds. To erase the display instantly, press **[+]** again.

Sorting positions

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

- 1 From the **SETUP** menu, press **▽** or **△** to select **Manual Tuning** menu, and then press **OK**.
- 2 Press **▽** or **△** to select the channel **ABCD**, then press **▷**.



- 3 Press **▽** to select the new position "4", then press **◀**.
- 4 Press **△** to select the channel **MNOP**, then press **▷**.
- 5 Press **△** to select the new position "1", then press **◀**.
- 6 Confirm new **Manual Tuning** menu.

Selecting the video input source to view

- 1 Press **⊙** on the remote control until the video input mode list appears on the screen, then press **▽**, **△** or **⊙** to select appropriate input source (or touch **⊕** / **⊖** and **^** or **v** on the TV left side panel to select required input source directly).

- 2 Press **OK**.

TV (analogue aerial input),
VIDEO1 (⊖) (1), COMPONENT/VIDEO INPUT, standard or component video input),
VIDEO2 (⊕) (2), standard video input),
HDMI 1 (HDMI 1 input),
HDMI 2 (HDMI 2 input),
PC (⊙) RGB/PC, PC input)

Labeling external input sources

These input labels are shown in the input selector. You can label external inputs according to the devices you have connected to the TV.

- 1 From the **PREFERENCES** menu, press **▽** or **△** to select **AV Connection** and then press **OK**.
- 2 Press **▽** or **△** to select **Input Labelling** and then press **OK**.
- 3 Press **▽** or **△** to select the item you want to label and press **◀** or **▷** to select **-, Amplifier, Cable, DVD, Game, PC, Recorder, Satellite** or **VCR**, or press the **RED** button to turn on the skip.

Channel List

- 1 Press the **LIST** button.
The **Channel List** will appear.
- 2 Press ∇ or \triangle to select a channel, and press **OK** to watch.

Selecting the PC/HDMI 1 Audio mode

You can select PC audio or HDMI audio when using this function.

- Use the menus: **PREFERENCES** and **AV Connection**
- Use the item: **PC/HDMI 1 Audio**
- Use the modes: **PC** and **HDMI 1**

Setting the HDMI 1 Audio mode

You can select sound of an HDMI or DVI device connected to the HDMI 1 input terminals from three modes: **Auto**, **Digital** or **Analogue**.

- Use the menus: **PREFERENCES** and **AV Connection**
- Use the item: **HDMI 1 Audio**

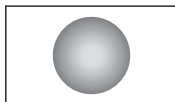
Picture adjustment

Selecting the Picture Size

- 1 Press $\left[\right]$ repeatedly to select the desired **Picture Size**.

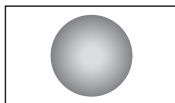
Native

This setting will display the image correctly without distortion or picture clipping.



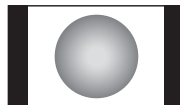
Wide

Use this setting when watching a wide-screen DVD, widescreen 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.



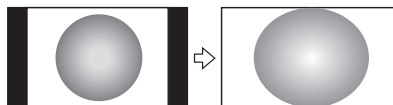
4:3

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



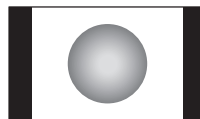
Super Live

This setting will enlarge a 4:3 image to fit the screen by stretching the image horizontally and vertically, holding better proportions at the centre of the image. Some distortion may occur.



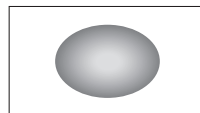
PC Normal

Use this setting for PC connected via HDMI or RGB/PC terminal when receiving PC signal format. This setting will display the image correctly without distortion or picture clipping.



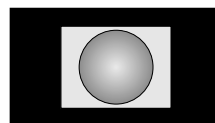
PC Wide

Use this setting for PC connected via HDMI or RGB/PC terminal when receiving PC signal format. This setting will display the image without picture clipping.



Dot by Dot

"Dot by Dot" is a non-scaling display. Depending on the input signal format, the picture is displayed with side panels and/or bars at the top and bottom (e.g. VGA input source).



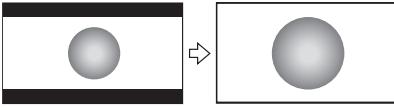
Normal

Sets the size to full screen without changing the aspect ratio when watching a movie stored on a USB device.



Zoom



Sets the size to full screen keeping the 21:9 circularity ratio when watching a movie stored on a USB device.

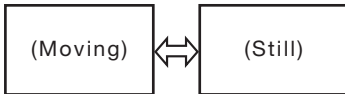


Notes:

- 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 programme, it can cause a difference in vision. Change to the correct aspect ratio picture size.
- When using the PC connected via HDMI or RGB/PC terminal, the moving image quality may be deteriorated.

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.



Note:

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.

Activating the Picture Mode

This TV offers the choice of personalising the picture style.

AutoView, Dynamic, Standard, Mild, Movie, Eco Mode, Cricket/Football, Game and **PC** are preset options and affect many features/settings within the TV.

- Use the menus: **PICTURE** and **Picture Settings**
- Use the item: **Picture Mode**

Notes:

- If using **Eco Mode** will be changed the dark screen, and you will be able to reduce power consumption. The **Backlight mode** is not available in the **Eco Mode**.
- **Game mode** is available in external input mode (other than aerial input). When you select **Game mode**, suitable widescreen formats will be selected.
- **PC mode** is available in RGB/PC input mode or HDMI input mode.

Activating the picture preferences

You can customise current **Picture Mode** settings as desired.

- Use the menus: **PICTURE** and **Picture Settings**
- Use the items: **Backlight, Contrast, Brightness, Colour, Tint** and **Sharpness**

Setting the Contrast Booster

Contrast Booster improves the contrast of the picture.

- Use the menus: **PICTURE** and **Picture Settings**
- Use the item: **Contrast Booster**
- Use the modes: **High, Off, Low** and **Middle**

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 TV 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 Video input mode is selected.
- When the input signal format is 480i, 576i or 1080i signals.
- Use the menus: **PICTURE** and **Picture Settings**
- Use the item: **Cinema Mode**

Note:

When a DVD movie with subtitle is playing back, this mode may not work correctly.

Adjusting the Colour Temperature

Colour Temperature increases the warmth or coolness of the picture by setting the red, green or blue tint.

- Use the menus: **PICTURE** and **Picture Settings**
- Use the items: **Colour Temperature, Red Level, Green Level** and **Blue Level**
- Use the modes: **Cool, Natural** and **Warm**

Resetting the Colour Temperature

- Use the menus: **PICTURE, Picture Settings** and **Colour Temperature**
- Use the item: **Reset** (select **Yes** and press **OK**)

Resetting the Picture Settings

- Use the menus: **PICTURE** and **Picture Settings**
- Use the item: **Reset** (select **Yes** and press **OK**)

Activating the Noise Reduction (NR)

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

- Use the menus: **PICTURE**, **Picture Settings** and **Noise Reduction**
- Use the items: **Auto Clean**, **MPEG NR** and **DNR**
- Use the modes: **Low**, **Middle**, **High** and **Off**

Adjusting the Colour Management

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

- Use the menus: **PICTURE**, **3D Colour Management (On)** and **Base Colour Adjustment**
- Use the items: **Hue**, **Saturation** and **Brightness**

Resetting the Base Colour Adjustment

- Use the menus: **PICTURE**, **3D Colour Management (On)** and **Base Colour Adjustment**
- Use the item: **Reset**

Using the Active Backlight Control

In order to improve screen visibility, the **Active Backlight Control** sets the screen brightness automatically during dark scenes.

- Use the menu: **PICTURE**
- Use the item: **Active Backlight Control**

Sound adjustment

Setting the MTS (Multi-channel TV Sound)

Auto mode

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

Mono mode

If you experience noise or poor reception of any stereo/bilingual programme, set the **MTS** mode to **Mono**.

Noise will be reduced and reception may improve.

- Use the menu: **SOUND**
- Use the item: **MTS**

Note:

*If you experience noise with a particular programme on whose channel reception is usually good, try setting MTS mode to **Auto**, then press \odot / I/II to switch to \square **Mono** (monaural).*

Selecting the Dual 1 or Dual 2 mode

You can hear only **Dual 1** or **Dual 2** sound selected, whenever bilingual programmes are received.

- Use the menu: **SOUND**
- Use the item: **Dual**

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 programmes

When a stereo programme is received, \odot **Stereo** appears and press \odot / I/II .

- Use the modes: **Stereo** and **Mono**

Selecting the bilingual programmes

When a bilingual programme is received, $\bullet\circ$ **Dual** appears and press \odot / I/II .

Display	Sound to be heard	
	NICAM	German stereo/ bilingual broadcast
$\bullet\circ$ Dual 1	Sub I sound	Main sound
$\circ\bullet$ Dual 2	Sub II sound	Sub sound
\square Mono	Main sound	—

Note:

These settings are not stored in the TV memory.

Selecting the monaural programmes

If sound distortion, interruptions or silence arises in the low sound volume level, setting the \square **Mono 2** mode will mitigate the problem.

When a monaural programme is received, \square **Mono** appears and press \odot / I/II .

- Use the modes: **Mono 1** and **Mono 2**

Note:

*On some cases, the reception of stereo/bilingual broadcasts may not be possible after switching on the \square **Mono 2** mode.*

Adjusting the sound Balance

- Use the menu: **SOUND** and **Balance**
- Use the button: \triangleleft and \triangleright

Using the Sound Mode

Choose your preferred Sound Mode.

- Use the menu: **SOUND**, **Advanced Sound Settings**
- Use the item: **Sound Mode**
- Use the modes: **Dynamic**, **Natural** and **Clear Voice**

Adjusting the sound quality

You can adjust the basic sound quality.

- Use the menu: **SOUND, Advanced Sound Settings**
- Use the items: **Bass** and **Treble**
- Use the button: ◀ and ▶

Using the Power Bass Booster

Power Bass Booster helps to create rich bass.

- Use the menu: **SOUND, Advanced Sound Settings**
- Use the item: **Power Bass Booster**
- Use the modes: **Super, Normal** and **Off**

Resetting the Advanced Sound Settings

- Use the menus: **SOUND, Advanced Sound Settings** and **Reset**
- Use the item: **Reset** (select **Yes** and press **OK**)

Using the Dynamic Range Control

This feature allows control of compression for Dolby Digital.

- Use the menu: **SOUND**
- Use the item: **Dynamic Range Control**

Using the Audio Distortion Control

Prevents audio distortion.

- Use the menu: **SOUND**
- Use the item: **Audio Distortion Control**
- Use the modes: **On** and **Off**

Using the Audio Level Offset

Sometimes there can be large changes in volume when switching from an ATV channel or an external input. Using this feature reduces these volume differences.

- Use the menu: **SOUND**
- Use the item: **Audio Level Offset**
- Use the button: ◀ and ▶

Using the Spectrum Analyser

Shows sound in a visual format.

- Use the menus: **SOUND**
- Use the item: **Spectrum Analyser**

Note:

The **Spectrum Analyser** display turns off when any other procedure is performed.

Other features settings

Setting the On Timer and Sleep Timer

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

- Use the menu: **APPLICATIONS**
- Use the items: **On Timer** and **Sleep Timer**
- Use the button: **OK, Number** buttons (0-9), ◀ and ▶

Configure the following settings in **On Timer**:

Enable On Timer: Select **On** or **Off**.

Input: Select an input source.

Position: Select a channel.

Volume: Select a volume.

Time Until Power On: Set a time until the timer turns on.

After configuring the settings, select **Done** and press **OK**.

Press **EXIT** to exit the menu. Set the Standby mode by pressing ⏻ on the remote control.

Note:

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.

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.

- Use the menu: **PREFERENCES** and **Display Settings**
- Use the item: **Auto Format**

Activating Blue Screen

With the **Blue Screen** function **On**, the screen will automatically turn blue and the sound will be muted (except for external input) when no signal is being received.

- Use the menu: **PREFERENCES**
- Use the item: **Blue Screen**

Setting the Automatic Power Down

The TV will automatically turn itself off (standby) after approximately 4 hours, if you don't touch the control buttons on the remote control or on the TV control panel.

- Use the menu: **PREFERENCES** and **Energy Saving Settings**
- Use the item: **Automatic Power Down**

Setting the No Signal Power Down

The TV will automatically turn itself off after 15 minutes when no signal is detected. You can change the setting to **Off**.

Default setting is all **On**.

- Use the menu: **PREFERENCES** and **Energy Saving Settings**
- Use the item: **No Signal Power Down**

Notes:

- *Low signal strength of channel (no signal detection)*
- *Only Audio L/R is connected to external input to listen to music through the TV speakers.*
- *A warning message will appear 1 minute before turning off.*

Panel Lock

Panel Lock disables the buttons on the TV. All buttons on the remote control can still be used.

- Use the menu: **PREFERENCES**
- Use the item: **Panel Lock**

Note:

*When **Panel Lock** is On, a reminder will appear when the buttons on the TV are pressed. If the standby button is pressed, the TV will switch off and can only be brought out of standby by using the remote control.*

Activating the 4:3 Stretch

When **4:3 Stretch** is activated, this function will switch 4:3 format programmes into a full screen picture.

- Use the menu: **PREFERENCES** and **Display Settings**
- Use the item: **4:3 Stretch**

Note:

In HDMI signal format, this function is available.

Viewing the Software Licences

The licences for the software used in this TV are available for viewing on screen.

- Use the menu: **SETUP**
- Use the item: **Software Licences**
- Use the button: **OK**

A screen will appear displaying all of the licencing information required for the TV's software.

Viewing the System Information

This feature can be used to check the version of software currently installed.

- Use the menu: **SETUP**
- Use the item: **System Information**
- Use the button: **OK**

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**.

- Use the menu: **PREFERENCES**
- Use the item: **Teletext Language**

Language 1: English, German, Dutch, Flemish, Russian, 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.

- Use the menu: **PREFERENCES**
- Use the item: **Teletext**
- Use the modes: **Auto** and **List**

Teletext general information

TEXT button

Pressing **TEXT** once will bring up the teletext screen. Press again to superimpose the teletext over a normal broadcast picture. Press again to return to normal TV mode. You need to return to normal viewing if you wish to change channels.

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 colour** button.

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 ◀ or ▶ to view them.

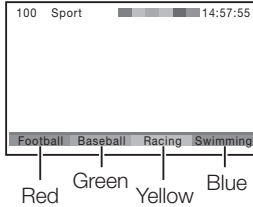
Using Subtitles

- 1 Press **SUBTITLE** on the remote control while the teletext screen is displayed to display subtitles. While the subtitles are displayed, press **SUBTITLE** again to change the setting.

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 coloured 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 **P<**. To change between **Auto** and **List**, see above.

- Press **TEXT** to access teletext.

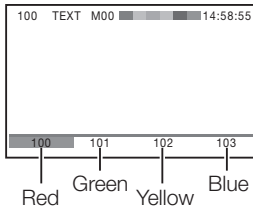


If FASTEXT is available, you will see 4 coloured titles at the base of the TV screen. To access any given subject, simply press the relevant coloured button on the remote control.

If FASTEXT is not available, you can access any page simply by entering a 3-digit page number or pressing the corresponding coloured 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**, **101**, **102** and **103**, which have been programmed into the TV's memory.

- 2 To view these pages, use the coloured prompt buttons.
e.g. press the **Green** button to view page 101.
- 3 If you want to change these stored pages, press the coloured button for the colour you want to change.
e.g. Press the **Green** button and enter the 3-digit number.
This number will change and blinking.

- 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.

To display a page of teletext:


Press **TEXT** to display teletext. Press again to superimpose the teletext over a normal broadcast picture. Press again to return to normal TV mode.

To display an index/initial page:


In Auto-mode

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

In List-mode

Press  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 .


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.

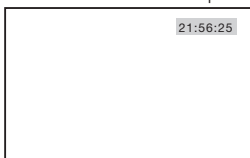
Note:

*It will not be possible to change programme 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 PC Settings

- First connect the PC and press until the video input mode list appears on the screen, then press or and **OK** in order to select the PC input mode (page 12).
- 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 position

- Use the menus: **PREFERENCES, Display Settings** and **PC Settings**
- Use the items: **Horizontal Position** and **Vertical Position**

Adjusting the Clock Phase of the picture

If the Clock Phase, which synchronize 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.

- Use the menus: **PREFERENCES, Display Settings** and **PC Settings**
- Use the item: **Clock Phase**

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.

- Use the menus: **PREFERENCES, Display Settings** and **PC Settings**
- Use the item: **Sampling Clock**

Resetting the PC Settings

The **Reset** function adjusts the **PC Settings** to the factory settings.

- Use the menus: **PREFERENCES, Display Settings** and **PC Settings**
- Use the item: **Reset** (select **Yes** and press **OK**)

Note:

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

Using the Media Player

This TV allows you to enjoy movie, music and photo files stored on a USB device connected to the USB port.

Terminology

The TV can control and play content from a USB device.

Notes:

- Do not insert/remove USB device while in use.
- MENU is not available during playback.

Media Player Specifications

Device

USB device

Interface version: USB2.0 HS

USB Mass Storage Class devices (MSC)

Notes:

- Connectivity is not guaranteed for all devices.
- Incorrect behaviour may occur with a USB hub connection.
- Turn off the TV before connecting a USB HDD devices.
- The **Auto Format** function is not available.
- The aspect ratio may not be correct in some cases.

File system: FAT16 and FAT32

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

Basic operation

Using Media Player

When **Auto Start** is enabled, you will be asked if you want to start the Media Player whenever a USB device is inserted. If **Auto Start** is disabled, you must manually start the Media Player from the menu.

To change the Auto Start setting:

- 1 From the **APPLICATIONS** menu, press or to select **Media Player** and press **OK**.
- 2 Press or to select **Setup** and press **OK**.
- 3 Press or to select **Auto Start** and press or to select **On** or **Off**.

Auto Start:

- 1 Insert USB device into the USB socket on the left side of the TV. A prompt will appear.
- 2 Press ◀ or ▶ to select **Yes** and press **OK**.
- 3 Press ▽ or △ to select **Photo**, **Movie** or **Music** and press **OK**.

Multi View will appear.

Note:

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

Manual Start:

- 1 Insert USB device into the USB socket on the left side of the TV.
- 2 From the **APPLICATIONS** menu, press ▽ or △ to select **Media Player** and press **OK**.
- 3 Press ▽ or △ to select **Photo**, **Movie** or **Music** and press **OK**.

Multi View will appear.

To select a file in the Multi View:

- 1 Press ▽, △, ◀ or ▶ to select a file or folder.
Select a file and press **OK** to start playback.
Select a folder and press **OK** to move to the next layer.
To return to the previous layer, press **RETURN**.

To display the device information:

- 1 Press **QUICK** to open the **Quick Menu**.
- 2 Press ▽ or △ to select **Device Information**.

To close the Media Player:

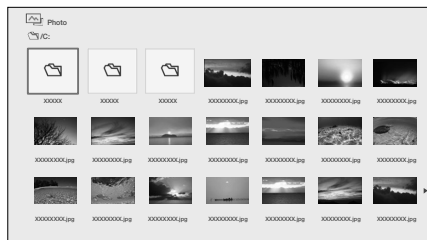
- 1 Press **EXIT**.

Viewing photo files

There are three types of viewing modes.

Multi View

This view allows you to search for photos in a grid format. The pictures are displayed using thumbnail data in each image file.



The initial highlighted position will be on the top left thumbnail in the Multi View.

- 1 Press ▽, △, ◀ or ▶ to select a photo or folder. **P▲ / P▼** buttons can be used to page up/down the **Multi View** when there are more photos than will fit onto one screen.
- 2 When you select a folder, press **OK** to move to the next layer. Press **RETURN** to move back to the previous layer.
- 3 Press **OK** to view the selected photo in Single View mode.

Single View

In this mode, only files located in the selected directory will be displayed. This view allows you to change the photo content manually. When moving from Multi View to Single View, the currently selected photo will be displayed.

- 1 Press ▶ to view the next photo. Press ◀ to view the previous photo.
- 2 Press △ to rotate the image 90° clockwise. Press ▽ to rotate the image 90° counterclockwise.

Slide Show

This view allows you to watch a slide show of your photos. In this mode, only files located in the selected directory will be played.

- 1 To start slideshow, press **OK** in the Single View mode.
- 2 Press ◀ or ▶ to view the previous/next photo.
- 3 Press **[i+]** to display file status information.

Note:

Pressing ▽ or △ while in the **Slide Show** mode will stop the slideshow and rotate the photo.

To set Interval Time setting:

- 1 Press **QUICK** to open the **Quick Menu**.
- 2 Press ▽ or △ to select **Interval Time**.
- 3 Press ◀ or ▶ to select **3sec**, **5sec**, **10sec**, **15sec**, **30sec**, **60sec**, or **90sec**.

To zoom in/out photos

During the Single View mode or Slide Show mode, the zoom function can be used.

RED button (Zoom in)

x1 → x2 → x4 → x8 zoom

GREEN button (Zoom out)

x8 → x4 → x2 → x1 zoom

RETURN button: Normal playback

▽ △ ◀ ▶ **buttons:** Vertical or Horizontal scrolling

Note:

Using the zoom function while in the **Slide Show** mode will stop the slideshow and zoom in the photo.

To close the Photo Viewer

- 1 Press **EXIT**.

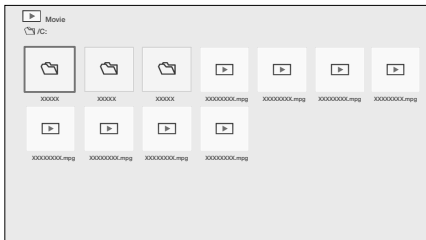
File Compatibility

See page 24

Viewing movie files

You can select movies from a **Multi View** of available files.

Multi View



- 1 Press ▽, △, ◀ or ▶ to select a file or folder. P[^] / P_v buttons can be used to page up/down the **Multi View** when there are more files than will fit onto one screen.
- 2 When you select a folder, press **OK** to move to the next layer. Press **RETURN** to move back to the previous layer.
- 3 With the desired file selected, press **OK** or ▶ (play) to start playback.
- 4 Press ■ to stop playback.

Note:

If playback finishes before ■ is pressed, the screen will return to the **Multi View**.

During playback:

- Press || to pause.
PAUSE may not be available depending on the contents.
- To resume normal playback, press ▶ (play).
- To play in fast reverse or fast forward directions, press ◀◀ or ▶▶ during playback. Each time you press the ◀◀ or ▶▶, the playback speed will change.
- Press ▶▶ to skip to the beginning of the next chapter. Double-tap it to skip to the next content. Press ◀◀ to skip to the beginning of the current chapter. Double-tap it to return to the previous content.
If the content is not categorized into chapters, press ▶▶ to skip to the next content, or press ◀◀ to skip to the beginning of the current content. Press ◀◀ again to skip to the beginning of the previous content.
- Press (i+) to display the file status information (content number, movie title, progress time etc.).

Notes:

- The information may not be correctly displayed depending on the contents.
- During playback, you can adjust the **PICTURE** and **SOUND** menu functions from the **Quick Menu**.
- The playback speed (◀◀/▶▶) may not change depending on the contents.

To select subtitle and audio languages

- Press **SUBTITLE** repeatedly to select your preferred subtitle language.
- Press ○/|| repeatedly to select your preferred audio language.

Note:

This feature is not available depending on the contents.

Setting the repeat mode

- 1 Press **QUICK** to open the **Quick Menu**.
- 2 Press ▽ or △ to select **Repeat**.
- 3 Press ◀ or ▶ to select **Off**, **All** or **1**.

Mode	Description
Off	The file is played back only once.
All	Files in the same folder are repeatedly played back.
1	The same file is repeatedly played back.

- 4 Press **RETURN**.

Resume Play

You can resume playback from where it was last stopped.

Press **■** while playing the movie to memorize the stopped position.

On the Multi View screen, if you select a movie whose stopped position has been memorized, the message "Resume Play?" will appear. Select Yes to resume playback from the last stopped position.

Note:

If you play different content or exit **Media Player**, the memorized stopped position will be deleted.

To close the Movie Viewer

- 1 Press **EXIT**.

File Compatibility

See page 24.

To register your TV to a DivX® account:

This TV allows you to play back files purchased or rented from DivX® Video-On Demand (VOD) services. When you purchase or rent DivX® VOD files on the internet, you will be asked to enter a registration code.

- 1 From the **Media Player** menu, press **▽** or **△** to select **Setup** and press **OK**.
- 2 Press **▽** or **△** to select **DivX® VOD** and press **OK**.
- 3 Press **▽** or **△** to highlight **DivX® VOD Registration** and press **OK**.
- 4 The **DivX® VOD** window will appear and you will see the registration code. For details on registration, please visit the DivX® website at <http://vod.divx.com>.
- 5 Copy the activation file to a memory device and play it on the TV.

To deregister your device

- 1 In step 3 above, highlight **DivX® VOD Deregistration**, and then press **OK**.
- 2 A confirmation message will appear. Select **Yes** and press **OK**.
- 3 The **DivX® VOD** window will appear and you will see the deregistration code. For details on deregistration, please visit the DivX® website at <http://vod.divx.com>.

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX video.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

DivX Certified® to play DivX® and DivX Plus™ HD (H.264/MKV) video up to 1080p HD including premium content.

To playback DivX Plus HD content:

- To play in fast reverse or fast forward directions, press **◀◀** or **▶▶** during playback. Each time you press **◀◀** or **▶▶**, the playback speed will change.
- This TV generates original chapter point in 10% increments for 10 chapters in total, that are accessible by using the Number buttons on the remote control.

During playback, press **▶▶** to skip to the beginning of the next chapter. Double-tap it to skip to the next content. If **▶▶** is pressed at the last chapter, playback will skip to the beginning of the next content.

Press **◀◀** to skip to the beginning of the current chapter. Double-tap it to return to the previous content.

The Number button is used for direct jump. If the 3 button is pressed, playback will jump to the beginning of 4th chapter.

Even if the playback content has authored chapters, the Number button is used to jump directly to Auto Generated Chapter.

If the content has Authored Chapters, **◀◀** / **▶▶** are using for Authored Chapters.

Notes:

- When a rental file is played, **◀◀** or **▶▶** cannot be used to move between the files.
- The above operations cannot be performed depending on the content.
- The playback speed (**◀◀** / **▶▶**) may not change depending on the stream.

To playback DivX Plus HD content:

DivX Plus HD files may contain up to 100 titles.

You can change the title (It contains same video file) by pressing the **RED** button.

When the **RED** button is pressed, it will display the title change window at the bottom on the screen (same as Subtitle or Audio change window).

The title is changed cyclically each time the **RED** button is pressed. Playback will start from start time of selected title every press **RED** button.

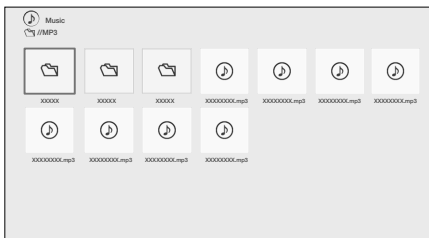
Note:

The above operations cannot be performed depending on the content.

Playing music files

You can listen to music from a **Multi View** of available files.

Multi View



- 1 Press ∇ , \triangle , \triangleleft or \triangleright to select a file or folder. **P** / **P** buttons can be used to page up/down the **Multi View** when there are more files than will fit onto one screen.
- 2 When you select a folder, press **OK** to move to the next layer. Press **RETURN** to move back to the previous layer.
- 3 With the desired file selected, press **OK** or **▶** (play) to start playback.
- 4 Press **■** to stop playback.

Notes:

- Depending on the file size, it may take some time for playback to begin.
- During playback, you can adjust the **SOUND** menu functions from the **Quick Menu**.

During playback:

- Press **II** to pause.
- To resume normal playback, press **▶** (play). PAUSE may not be available depending on the contents.
- To play in fast reverse or fast forward directions, press **◀◀** or **▶▶** during playback. Each time you press **◀◀** or **▶▶**, the playback speed will change.
- Press **▶▶** to skip to the next track. Press **◀◀** to skip to the beginning of the current track. Press **◀◀** again to skip to the beginning of the previous track.

To set the repeat mode:

- 1 Press **QUICK** to open the **Quick Menu**.
- 2 Press ∇ or \triangle to select **Repeat**.
- 3 Press \triangleleft or \triangleright to select **Off**, **All** or **1**.

Mode	Description
Off	Files in the same folder are played back once.
All	Files in the same folder are repeatedly played back.
1	The same file is repeatedly played back.

- 4 Press **RETURN**.

To display the file status information

- 1 Press **i+** during playback. The information will be displayed on the centre of the screen.
- 2 Press **i+** again to remove the information.

Note:

The information may not be correctly displayed depending on the contents.

Closing the Music Player:

- 1 Press **EXIT**.

File Compatibility

See page 27.

Media Player Supported Formats

Media Player	Media Format	File Extention	Video/Audio codec	Note
Photo	JPEG	.jpg .jpeg	JPEG	Data compatibility: JPEG Exif ver 2.1 Maximum viewable resolution: <ul style="list-style-type: none"> • JPEG 65536 × 65536 (Base-line only) • PNG 65536 × 65536 • BMP 65536 × 65536 Maximum number of files: 4096 per folder *) Some files may not be played depending on file size.
	PNG	.png	PNG	
	BMP	.bmp	BMP	
Movie	AVI	.avi	Video) MPEG-1 MPEG-2 MPEG-4 part2 H.264 (MPEG-4 AVC) DivX Plus HD Xvid MJPEG Sorensen H.263 (FLV1) VC-1 (WMV9)	Maximum number of files: 4096 per folder Maximum viewable resolution: 1920x1080 *) Some files may not be played
			Audio) MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM ADPCM MPEG-2/4 LC AAC MPEG-4 HE-AAC WMA7/8/9 Std	
	MPEG-2 PS	.mpg .mpeg .dat	Video) MPEG-1 Video MPEG-2 Video	Audio) MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM MPEG-2/4 LC AAC MPEG-4 HE-AAC
			Video) MPEG-1 Video MPEG-2 Video H.264 (MPEG-4 AVC) VC-1 (WMV9)	
	MPEG-2 TS	.ts .trp .tp .m2ts	Video) MPEG-1 Video MPEG-2 Video H.264 (MPEG-4 AVC) VC-1 (WMV9)	Audio) MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM MPEG-2/4 LC AAC MPEG-2 HE-AAC MPEG-4 HE-AAC
			Video) MPEG-1 Video MPEG-2 Video H.264 (MPEG-4 AVC) VC-1 (WMV9)	

Media Player	Media Format	File Extention	Video/Audio codec	Note
Movie	MPEG-2 VOB	.vob	Video) MPEG-1 Video MPEG-2 Video	
			Audio) MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM	
	MOV	.mov	Video) H.264 (MPEG-4 AVC) MPEG-4 part2 DivX Plus HD MJPEG	
			Audio) MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM ADPCM MPEG-2/4 LC AAC MPEG-4 HE-AAC	
	MP4	.mp4 .m4v	Video) H.264 (MPEG-4 AVC) MPEG-4 part2 DivX Plus HD MJPEG	
			Audio) MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM ADPCM MPEG-2/4 LC AAC MPEG-4 HE-AAC	
	ASF	.asf .wmv .xvid	Video) MPEG-4 part2 DivX Plus HD Xvid VC-1 (WMV9)	
			Audio) L-PCM ADPCM WMA7/8/9 Std	
	DivX	.divx .div	Video) DivX Plus HD	
			Audio) MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) PCM ADPCM	
	Xvid	.xvid	Video) Xvid	
			Audio) MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) PCM ADPCM	

Media Player	Media Format	File Extention	Video/Audio codec	Note
Movie	MKV	.mkv .xdiv	Video) MPEG-1 Video MPEG-2 Video MPEG-4 part2 H.264 (MPEG-4 AVC) DivX Plus HD Xvid	
			Audio) MPEG-1/2 Layer2 MPEG-1/2 Layer3 Dolby Digital (AC-3) L-PCM ADPCM MPEG-2/4 LC AAC MPEG-4 HE-AAC WMA7/8/9 Std	
	RealMedia	.rm .rmvb	Video) RealVideo 8, 9, 10	
			Audio) Dolby Digital (AC-3) MPEG-2/4 LC AAC MPEG-2 HE-AAC MPEG-4 HE-AAC RA-COOK RA-Lossless	
	Flash Video (FLV1)	.flv	Video) Sorenson H.263 (FLV1) H.264 (MPEG-4 AVC)	
			Audio) MPEG-1/2 Layer3 L-PCM ADPCM MPEG-2/4 LC AAC MPEG-4 HE-AAC	
	Flash Video (F4V)	.f4v	Video) H.264 (MPEG-4 AVC)	
			Audio) MPEG-1/2 Layer3 MPEG-2/4 LC AAC	
	3GPP	.3gp	Video) Sorenson H.263 (FLV1) MPEG-4 part2 H.264 (MPEG-4 AVC)	
			Audio) MPEG-4 LC AAC MPEG-4 HE-AAC	
	DVD Video (ISO)	.iso	Video) MPEG-1 Video MPEG-2 Video	
			Audio) MPEG-1 Layer2 Dolby Digital (AC-3) L-PCM	


Media Player	Media Format	File Extention	Video/Audio codec	Note
Music	MP3	.mp3	MPEG-1/2 Layer3	Maximum number of files: 4096 per folder
	MP4	.mp4 .m4a	MPEG-2/4 LC AAC MPEG-2 HE-AAC MPEG-4 HE-AAC	
	WMA	.wma	WMA7/8/9/ Std	
	RealAudio	.ra .rm .rmvb	Dolby Digital (AC-3) MPEG-2/4 LC AAC MPEG-4 HE-AAC RA-COOK RA-Lossless	
	WAV	.wav	L-PCM ADPCM	
	MKA	.mka	MPEG-1/2 Layer-2 MPEG-1/2 Layer-3 Dolby Digital (AC-3) MPEG-2/4 LC AAC L-PCM ADPCM MPEG-1/2 Layer-1 MPEG-2.5 Layer-3 MPEG-2/4 HE-AAC WMA7/8/9 Std RA-COOK RA-Lossless	

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, and then press .
 - The remote control batteries may be dead. Replace the batteries.
-

No picture, no sound

- Check the aerial connections.
-

No sound, picture OK

- The sound may be muted. Press  +, – or .
 - The station may have broadcast difficulties. Try another channel.
-

Poor sound, picture OK

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

Poor picture, sound OK

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

Poor reception of broadcast channels

- Check the aerial connections.
 - The station may have broadcast difficulties. Try another channel.
 - Make sure the **Colour System** is properly set.
-

Teletext problems

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

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.
-

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 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.
 - Aerial reception may be poor. Use a high directional outdoor aerial.
 - Check if the direction of the aerial has changed.
-

Poor colour or no colour

- The station may have broadcast difficulties. Try another channel.
 - Adjust the **Tint** and/or **Colour** 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.
-

Broadcast system

Broadcast transmission systems of each country or region

Asia M.E.

Country or region	Colour	Sound
Bahrain, Kuwait, Israel, Oman, Qatar, United Arab Emirates, Yemen, etc. Indonesia, Malaysia, Singapore, Thailand, etc.	PAL	B/G
China, Vietnam	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, Republic of the Philippines, etc.	NTSC	M

Africa

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

Note:

PAL, SECAM and NTSC 3.58 (MHz) are different colour 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 TV equipment.

Specifications

LED TV

Model

32P2300 Series

Power source

110-240 V AC, 50/60 Hz

Power consumption

32": 55 W, 0.4 W

Dimensions

32": 734 (W) 543 (H) 180 (D) mm

Mass (Weight)

32": 5.0 kg

TV system (Aerial 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 colour system

5.5/6.0/6.5 MHz sound system

PAL 60 Hz colour 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.)

Colour System

PAL, SECAM, NTSC 3.58/4.43

Aspect ratio

16 : 9

Visible size (diagonal)

32": 80.0 cm

Number of pixels

32": 1366 (H) dots X 768 (V) dots

Audio power

10 W + 10 W

Speakers

32": Main 40 X 120 mm 2pcs.

Input / Output terminals

Ⓜ (1)	Input	
COMPONENT/ VIDEO INPUT	Standard video	V
	Component video	Y, PB/CB, PR/CR
	A/V	Audio L / Mono, R
Ⓜ (2)	Input	
	Phono jacks	A/V
➔ AUDIO (FIXED)	Output	Audio L / Mono, R
Ⓜ RGB/PC	Input	
	Mini D-sub 15 pin Analogue RGB	
Ⓜ PC/HDMI 1 (AUDIO)	Input	
	3.5 mm (Diameter) stereo	
Ⓜ HDMI 1-2	Input (type A)	
	19 pin	A/V Digital
	HDMI (Lip Sync)	
USB port	Media Player Interface version:	
	USB 2.0	
	USB class: Mass Storage	
	Support file system: FAT16 and FAT32	

Operating condition

Temperature	0°C - 35°C
Humidity	20% - 80% (No moisture condensation)

Supplied accessories

Owner's manual (1), Remote control (1), Batteries (2), Screw (1) (Ⓜ page 3), Pedestal stand (1), Screws (M5 X 2, M4 X 4) (stand type) (Ⓜ page 2)

- 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.

Following information is only for India:

The use of this symbol indicates that this product may not be treated as household waste.

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