TOSHIBA
Leading Innovation >>>

OWNER'S MANUAL
LCD Colour TV

32AV600E
32AV600T
32AV600Y
32AV601E
32AV601T
37AV600E
37AV600T
37AV600Y

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:

YC/J   VX1A00133600

Contents

Welcome to Toshiba

- Thank you for purchasing this Toshiba LCD Colour 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 E model: 220-240V, AC 50/60Hz, T model: 110-240V, AC 50/60Hz and Y model: 220-240V, AC 50Hz.

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

Check! Ex. 220-240V AC, 50/60Hz

WARNING ABOUT THREE-WIRE GROUNDING-TYPE PLUG: (Only for E models)

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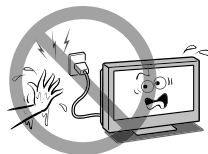
3) Never place the TV in an unstabilized location such as on a shaky table, incline or location subject to vibration.

- 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 television to a suitable support.

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

3
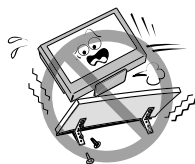
4) Never block or cover the slots and openings in the cabinet.
- Never place the TV so that it is facing upward or on its side.
- Never place the TV in a closet, bookcase or other similar area where the ventilation is poor.
- Never drape a newspaper, tablecloth or curtain on the TV.
- Never stand the TV on cloth or other material placed between the TV and supporting furniture.
- 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.
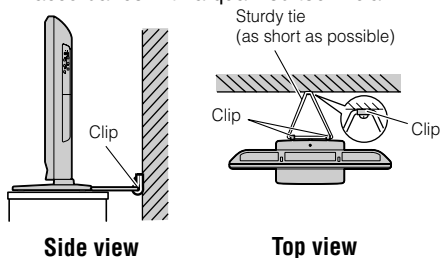This may cause a fire or an electric shock.

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 (☞ page 35).
- 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.

Sturdy tie
(as short as possible)

Clip

Clip

Clip

Side view   **Top view**

9) 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. 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.

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10)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) 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.

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 ⏻/❘ 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

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.
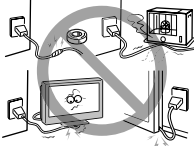
8) If there is thunder or lightning, never touch the aerial cable or other connected cables.
You may suffer an electric shock.

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 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.
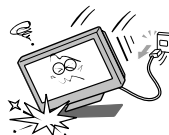
4) When the TV reaches the end of its useful life, ask a qualified service technician to properly dispose of the TV.
Note:
The lamp unit contains a small amount of mercury. Disposal of mercury may be regulated due to environmental considerations.
Dispose of the used lamp unit by the approved method for 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 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 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 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 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.
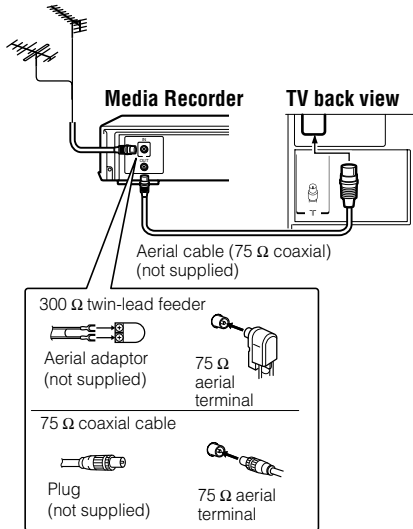
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Connecting an aerial

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.

VHF and/or
UHF aerial

Media Recorder   TV back view

Aerial cable (75 Ω coaxial)
(not supplied)

300 Ω twin-lead feeder

Aerial adaptor   75 Ω
(not supplied)   aerial
                        terminal

75 Ω coaxial cable

Plug   75 Ω aerial
(not supplied)   terminal

Exploring your new TV

Installing the remote control batteries

Remove the battery cover.
Insert two R06 (AA) batteries matching the –/+ polarities of the battery to the –/+ marks inside the battery compartment.
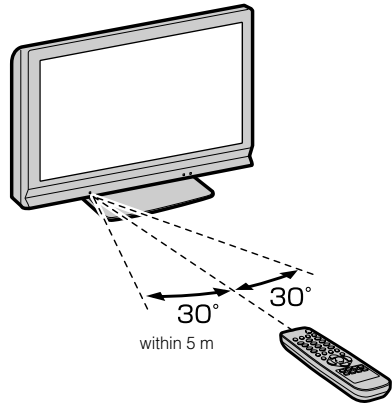

Cautions:
- *Dispose of batteries in a designated disposal area. Batteries must not be exposed to excessive heat such as sunshine, fire or the like.*
- *Attention should be drawn to the environmental aspects of battery disposal.*
- *Never mix battery types or combine used batteries with new ones.*

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.*
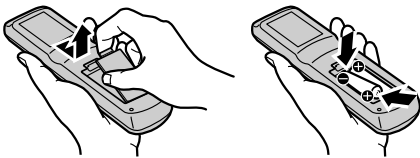
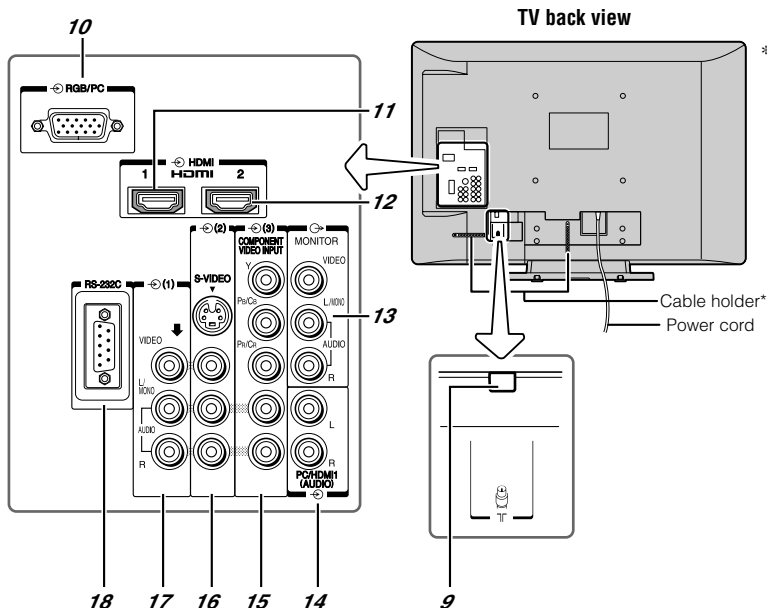### Effective range

30˚   30˚

within 5 m

TV front and side panel controls

• You can operate your TV using the buttons on the bottom of the 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 26-31).
• For the use of each control, see the pages in brackets.

TV front view   **Right side view**
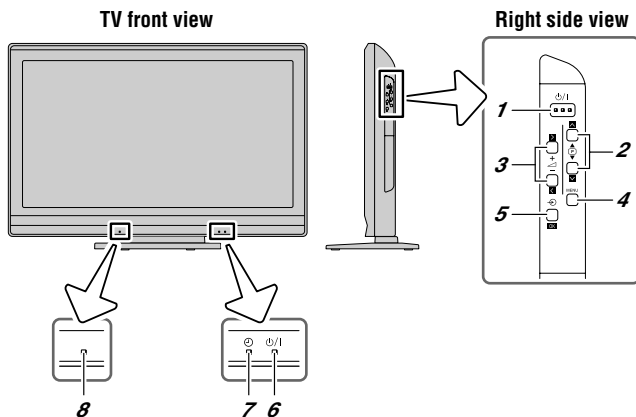
1   ⏻ **(Power on/Standby)** — Press to turn the TV on/ standby (☞ page 12).

2   ℗ ▲▼ **(Programme position)** — When no menu is on screen, these buttons select the programme position. (☞ page 13).
⌃ ⌄ **(MENU up/down)** — When a menu is on-screen, these buttons function as up/down menu navigation buttons (except for the input source selection) (☞ page 12).

3   ◁ + – **(Volume)** — When no menu is on-screen, these buttons adjust the volume level.
❭ ❬ **(MENU left/right)** — When a menu is on-screen, these buttons function as left/right menu navigation buttons or adjust settings (☞ page 12).

4   **MENU** — Press to access the menu system (☞ page 12).

5   ⊕ **(Input source selection)** — When no menu is on screen, this button selects the input source (☞ page 23).
OK — When a menu is on-screen, this button functions as the next menu navigation button (☞ page 12).

6   ⏻ **(Power LED)** — Power indicator (☞ page 12).

7   ⊙ **(Timer LED)** — Timer indicator (☞ page 22).

8   **(Remote sensor)** — Point the remote control toward this remote sensor (☞ page 8).
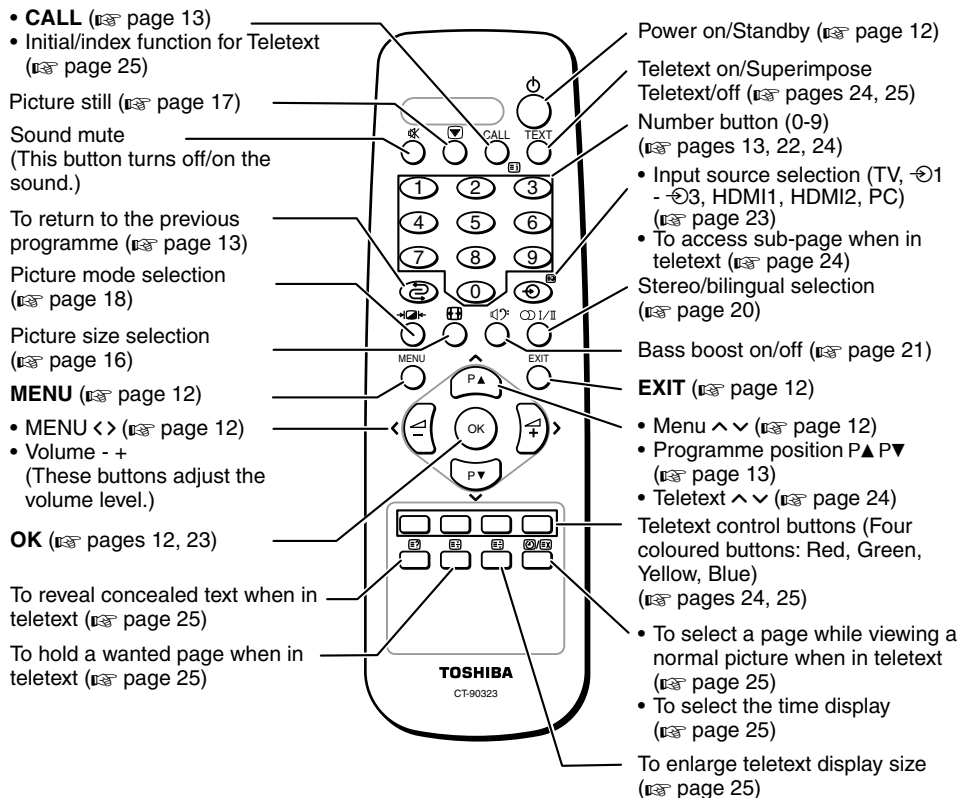
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TV back panel connections

TV back view

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

Cable holder*
Power cord

9 〒 **(Aerial input terminal)** — Analogue aerial signal input (☞ page 8).

10 ⊖ **RGB/PC (input terminal)** — For use when connecting a personal computer (PC) (☞ page 29).

11 ⊖ **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 27).

12 ⊖ **HDMI2 (input terminal)** — High-Definition Multimedia Interface input receives digital audio and uncompressed digital video from an HDMI device (☞ page 27).

13 ⊖ **MONITOR (output terminals)** — Standard (composite) video and standard (analogue) audio outputs (☞ page 26).

14 ⊖ **PC/HDMI1 (AUDIO) (input terminals)** — PC audio input terminals are shared with HDMI analogue audio input terminals, and their use can be configured in the **SETUP** menu (☞ page 27, 29).

15 ⊖ **(3) (Video 3 input terminals)** — High-definition component video and standard (analogue) stereo audio inputs (☞ page 26).

16 ⊖ **(2) (Video 2 input terminals)** — Optional S-video or standard video and standard audio inputs (☞ page 26).

17 ⊖ **(1) (Video 1 input terminals)** — Standard (composite) video and standard stereo audio inputs (☞ page 26).

18 **RS-232C terminal** — This terminal is for service use only. (Only 32AV601E/T model.)

Learning about the remote control

Location of controls

• **CALL** (☞ page 13)
• Initial/index function for Teletext
  (☞ page 25)

Picture still (☞ page 17)

Sound mute
(This button turns off/on the sound.)

To return to the previous programme (☞ page 13)

Picture mode selection
(☞ page 18)

Picture size selection
(☞ page 16)

MENU (☞ page 12)

• MENU ‹ › (☞ page 12)
• Volume - +
  (These buttons adjust the volume level.)

OK (☞ pages 12, 23)

To reveal concealed text when in teletext (☞ page 25)

To hold a wanted page when in teletext (☞ page 25)

Power on/Standby (☞ page 12)

Teletext on/Superimpose Teletext/off (☞ pages 24, 25)

Number button (0-9)
(☞ pages 13, 22, 24)

• Input source selection (TV, ⊕1 - ⊕3, HDMI1, HDMI2, PC)
  (☞ page 23)
• To access sub-page when in teletext (☞ page 24)

Stereo/bilingual selection
(☞ page 20)

Bass boost on/off (☞ page 21)

EXIT (☞ page 12)

• Menu ∧ ∨ (☞ page 12)
• Programme position P▲ P▼
  (☞ page 13)
• Teletext ∧ ∨ (☞ page 24)

Teletext control buttons (Four coloured buttons: Red, Green, Yellow, Blue)
(☞ pages 24, 25)

• To select a page while viewing a normal picture when in teletext
  (☞ page 25)
• To select the time display
  (☞ page 25)

To enlarge teletext display size
(☞ page 25)

TOSHIBA
CT-90323

11

Turning the TV on

Switching on the TV

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

1 Press ⏻ on the remote control or ⏻/❘ on the TV bottom of the panel, the ⏻/❘ power indicator lights in green.

Note:
If you watch black and white programmes when the colour system mode is set to Auto, 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 14 and 33).

Switching off the TV

1 Press ⏻ on the remote control or ⏻/❘ on the TV bottom of the 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.*
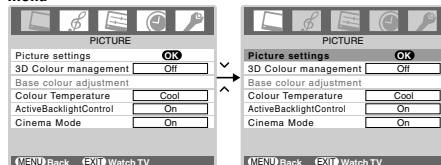
Learning about the menu system

We suggest you familiarize yourself with the display charts before using the menu system:
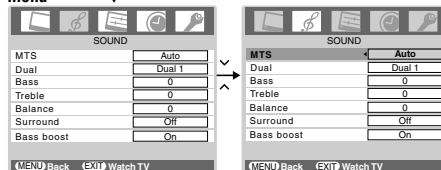- Press **MENU** to display menu, then press ‹ or › to select main menu headings.
- Press ⌄ or ⌃ to select an item.
- Press ‹ or › to select or adjust setting.
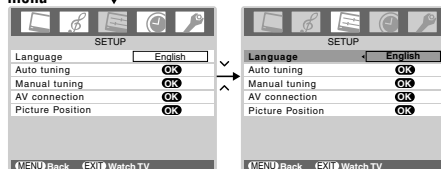- Press (OK) to display the next menu.

Displaying the menu chart

PICTURE menu

PICTURE	
Picture settings	OK
3D Colour management	Off
Base colour adjustment	
Colour Temperature	Cool
ActiveBacklightControl	On
Cinema Mode	On

MENU Back   EXIT Watch TV

PICTURE	
Picture settings	OK
3D Colour management	Off
Base colour adjustment	
Colour Temperature	Cool
ActiveBacklightControl	On
Cinema Mode	On

MENU Back   EXIT Watch TV

SOUND menu ‹ ⇅ ›

SOUND	
MTS	Auto
Dual	Dual 1
Bass	0
Treble	0
Balance	0
Surround	Off
Bass boost	On

MENU Back   EXIT Watch TV

SOUND	
MTS	‹ Auto ›
Dual	Dual 1
Bass	0
Treble	0
Balance	0
Surround	Off
Bass boost	On

MENU Back   EXIT Watch TV

SETUP menu ‹ ⇅ ›

SETUP	
Language	English
Auto tuning	OK
Manual tuning	OK
AV connection	OK
Picture Position	OK

MENU Back   EXIT Watch TV

SETUP	
Language	‹ English ›
Auto tuning	OK
Manual tuning	OK
AV connection	OK
Picture Position	OK

MENU Back   EXIT Watch TV

TIMER menu ‹ ⇅ ›

TIMER	
Sleep Timer	0:00
On Timer	00:00
On Timer Position	0

MENU Back   EXIT Watch TV

TIMER	
Sleep Timer	‹ 0:00 ›
On Timer	00:00
On Timer Position	0

MENU Back   EXIT Watch TV

FUNCTION menu ‹ ⇅ ›

FUNCTION	
Teletext	Auto
Teletext language	1
Auto format	On
4:3 stretch	Off
Blue screen	On
Side panel	1

MENU Back   EXIT Watch TV

FUNCTION	
Teletext	‹ Auto ›
Teletext language	1
Auto format	On
4:3 stretch	Off
Blue screen	On
Side panel	1

MENU Back   EXIT Watch TV

Notes:
- *In the video input mode (⊷1 - ⊷2), **Auto tuning** and **Manual tuning** are not available. Instead, **Manual setting** appears in the **SETUP** menu (☞ page 23).*
- *If you connect external equipment via component video source to external input, **Colour system** selection in the **Manual setting** menu is not available.*
- *If you do not make a selection for a while, the menu display disappears automatically.*
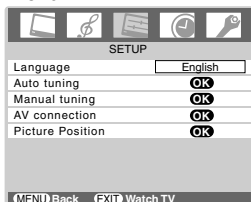
• *If you want to close the menu display instantly, press **EXIT**.*
• *To return to the previous menu, press **MENU**.*
• *The ∧/∨ function as the Programme position **P▲**/**P▼** when there is no menu display on the screen.*
• *The ‹/› function as the Volume ⊿+/⊿– when there is no menu display on the screen.*
• *In the PC input mode, **PC Settings** appears in the **SETUP** menu (☞ page 30).*
• *In the 480i or 576i input signals mode, you can select the **Cinema Mode** in the **PICTURE** menu (☞ page 19).*
• *When you use the colour management function (☞ page 19), you can select the **Base colour adjustment** in the **PICTURE** menu.*

Watching TV programmes

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 **SETUP** menu.

SETUP

Language	English
Auto tuning	**OK**
Manual tuning	**OK**
AV connection	**OK**
Picture Position	**OK**

(MENU) Back **(EXIT) Watch TV**

2 Press ∨ or ∧ to select **Language**.

3 Press ‹ or › to select the desired language.

Changing the programme position

1 Enter the desired programme position number using the **Number** buttons on the remote control.
For programme positions below 10, use 0 and the required number e.g., for programme position 1.

```
1     MNOP        ⊂⊃ Mono
```
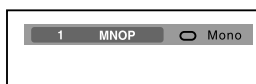
2 You can also change the programme position by using **P▲** or **P▼**.
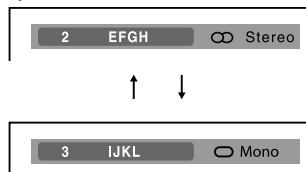The programme position will be displayed on the screen with the Mono/Stereo/Dual audio status.

Note:
The programme position selection change between different format channels takes several seconds.

Switching between two programme positions

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

1 Select the first programme position you want to view.

2 Select the second programme position with the **Number** buttons (0-9).

3 Press ⊜. The previous channel will be displayed.

```
2     EFGH        ⊂⊃ Stereo
```

↑   ↓

```
3     IJKL        ⊂⊃ Mono
```

Each time you press ⊜, the TV will switch back and forth between the two programme positions.

Displaying the on-screen information

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

```
4  ⌁ ABCD        ⊂⊃ Stereo
```
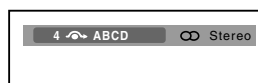
The information will disappear in 6 seconds.
• Programme position or external input mode selected
• Programme skip on/off information
• Label (if set)
• Mono/Stereo/Dual audio status

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

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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 **SETUP** menu, press ∨ or ∧ to select **Auto tuning**.

2 Press ⊛ to start the automatic search. The search will begin for all available stations.

> **Auto tuning**
> Searching
> POS: 02
> **EXIT Stop**
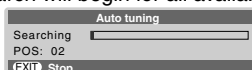
The slide bar will move along the line as the search progresses.
If you make a mistake, simply repeat steps 1-2 to start again from the beginning.

3 When the automatic search is completed, the TV will automatically return to the first programme position.

4 Press **P▲** or **P▼** to view the programmed position.

Note:
*When you preset the programme 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 33 for more details.

Manually setting channels in the channel memory

1 From the **SETUP** menu, press ∨ or ∧ to select **Manual tuning**.

2 Press ⊛ to display the **Manual tuning** menu. Press ∨ or ∧ to select the programme position you want to arrange.

> **Manual tuning**
> | Prog. | Label | |
> |---|---|---|
> | 1 | | ▶ |
> | 2 | | |
> | 3 | | |
> | 4 | | |
> | 5 | | |
> | 6 | | |
>
> **OK Select** **Sort**
> **MENU Back** **EXIT Watch TV**
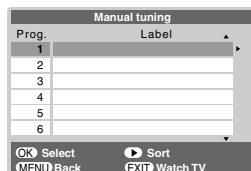
3 Press ⊛ to display the breakdown menu. Press ❮ or ❯ to select an item, then press ∨ or ∧ to select the item as shown below.

> **Manual tuning**
> Programme
> B/C A ⏦ ℚ 0 ▯▯▯▯▯▯▯
> **OK Store**
> **MENU Back** **EXIT Watch TV**
>
> A   C   E   G
>   B   D   F
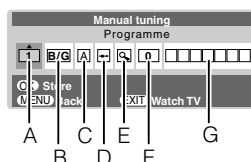
A. Programme position selection
B. Sound system (☞ page 33)
C. Colour system (☞ page 33)

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 33).

D. Programme position skip selection
Press ∨ or ∧ to turn the programme position skip option on "↝" or off "↠". The programme position will then be skipped when you select channels with **P▲** or **P▼**.
The "↝" mark will appear beside a programme position number when you use the **Number** button on the remote control.

E. 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/satellite is found, it will be displayed.

NEVER PRESS ANY OTHER BUTTONS WHILE THE SET IS TUNING.
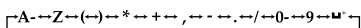
F. MFT (Manual Fine Tuning)

Press ⌄ or ⌃ so that the better picture and sound are obtained.

G. Label

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

To change or create station labels:

1) Press ⌄ or ⌃ repeatedly to select a character for the first space, then press ⌃ or ⌄.

  ┌→A-↔Z↔(↔)↔*↔+↔,↔-↔.↔/↔0-↔9↔ ↔*↔┐

  *(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 ⊙Ⓚ to store your settings.

Sorting programme position

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

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

1 From the **SETUP** menu, press ⌄ or ⌃ to select **Manual tuning** menu, then press ⊙Ⓚ.

2 Press ⌄ or ⌃ to select the channel **ABCD**, then press ⌄.

Manual tuning	
Prog.	Label ▲
1	**ABCD** ▶
2	EFGH
3	IJKL
4	MNOP
5	📡
6	📡 ▼

⊙Ⓚ Select   ▶ Sort
ⓂⒺⓃⓊ Back   ⒺⓍⒾⓉ Watch TV
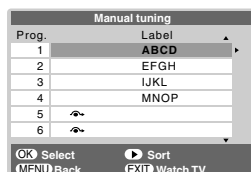
3 Press ⌄ to select the new position "**4**", then press ⌃.

Manual tuning	
Prog.	Label
1	EFGH
2	IJKL
3	MNOP ▲
4 ◀	ABCD
5	📡 ▼
6	📡

◀ Store
ⓂⒺⓃⓊ Back   ⒺⓍⒾⓉ Watch TV
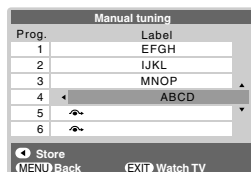
4 Press ⌃ to select the channel **MNOP**, then press ⌄.

5 Press ⌃ to select the new position "**1**", then press ⌃.

6 Confirm new **Manual tuning** menu.

Manual tuning	
Prog.	Label ▲
1	**MNOP** ▶
2	EFGH
3	IJKL
4	ABCD
5	📡
6	📡 ▼

⊙Ⓚ Select   ▶ Sort
ⓂⒺⓃⓊ Back   ⒺⓍⒾⓉ Watch TV
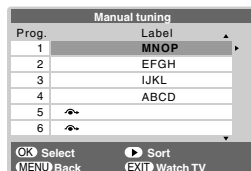
Using the TV's features

Picture adjustment

Selecting the picture size

1 Press ⬕, the picture size appears on the screen.

**2** Press ⬕ repeatedly to select required picture size directly.

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.
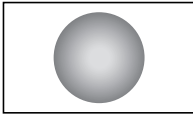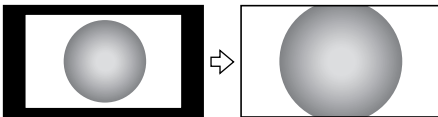

Super Live 2
When receiving "side panel format" signal, this setting will enlarge the image to fit the screen by stretching the image vertically and horizontally, holding the better proportions at the centre of the image. Also the black bars on the both sides of the screen will eliminate or reduce.
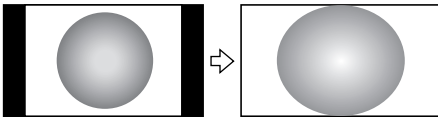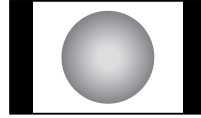

Cinema 2
When watching "all sides panel format" films/ video tapes, this setting will eliminate or reduce the black bars on all the sides of the screen by zooming in and selecting the image without distortion.
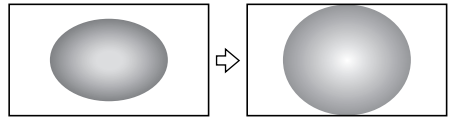

4:3
Use this setting to view a true 4:3 broadcast.

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 centre of the image.
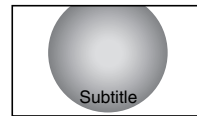

Cinema 1
When watching "letterbox format" films/video tapes, this setting will eliminate or reduce the black bars at the top and bottom of the screen by zooming in and selecting the image without distortion.
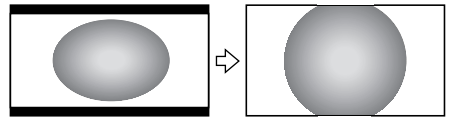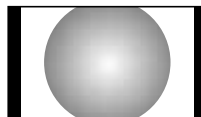

Subtitle
When subtitles are included on a letterbox format broadcast, this setting will raise the picture so that the most of text is displayed.
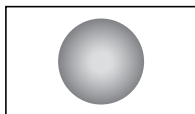

14:9
Use this setting when watching a 14:9 broadcast.

Native

Use this setting for PC connected via HDMI. When receiving video signal source via HDMI input, this setting will display the image correctly without distortion or picture clipping.
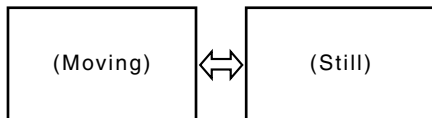
Notes:
- *In the aerial input signal mode, the picture size selections are **Wide**, **Super Live 2**, **Cinema 2, 4:3**, **Super Live 1**, **Cinema 1**, **Subtitle** and **14:9**.*
- *In the PC input mode (☞ page 23), the picture size selection is wide or 4:3 only.*
- *In the teletext mix mode (☞ page 25), the picture size selection is wide or 4:3 only.*
- *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** mode, 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.
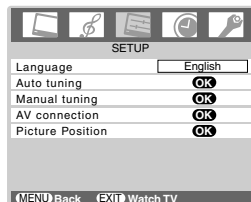
| (Moving) | ⇔ | (Still) |

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.*
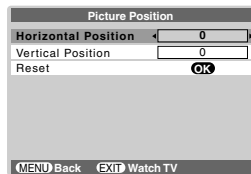- *In the PC input mode (☞ page 23), this function is not available.*

Adjusting the picture position

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

1 Press **MENU**, then press ‹ or › to display the **SETUP** menu.

		SETUP		
Language			English	
Auto tuning			**OK**	
Manual tuning			**OK**	
AV connection			**OK**	
Picture Position			**OK**	

MENU Back   EXIT Watch TV

2 Press ⌄ or ⌃ to select **Picture Position**.

3 Press (OK), then press ⌄ or ⌃ to select an item you want to adjust.

Picture Position	
Horizontal Position ◄	0 ►
Vertical Position	0
Reset	**OK**

MENU Back   EXIT Watch TV

4 Press ‹ or › to adjust the settings as required.

Horizontal Position	0
◄—	—+ ►

Notes:
- *When the picture size is in Wide or 4:3 mode, only the Horizontal Position can be adjusted.*
- *When the picture size is in PC mode, the picture position cannot be adjusted.*
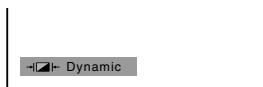
Resetting the picture position

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

1 From the **Picture Position** menu, press ⌄ or ⌃ to select **Reset**.

2 Press (OK).

Selecting the picture mode

You can select the picture quality instantly among three preset modes and one user-set mode.
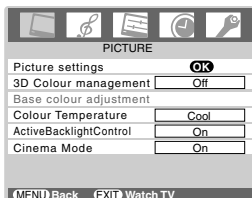
• Press →▨← to select the desired picture quality.

→▨← Dynamic

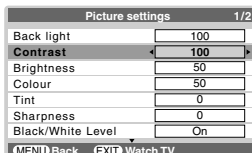| Mode	Picture quality
→▨← Dynamic	bright and dynamic picture
→▨← Standard	standard picture
→▨← Mild	soft picture
→▨← Memory	the picture quality you set

Note:
In the PC input mode (☞ page 23), this mode is not available.

Adjusting the basic picture quality

1 Press **MENU**, then press ‹ or › to display the **PICTURE** menu.

PICTURE
Picture settings   ◉K
3D Colour management   Off
Base colour adjustment
Colour Temperature   Cool
ActiveBacklightControl   On
Cinema Mode   On
(MENU) Back   (EXIT) Watch TV

2 Press ⌄ or ⌃ to select the **Picture settings** menu, then press (OK).

Picture settings   1/2
Back light   100
Contrast   100
Brightness   50
Colour   50
Tint   0
Sharpness   0
Black/White Level   On
(MENU) Back   (EXIT) Watch TV

3 Press ⌄ or ⌃ to select an item you want to adjust, then press ‹ or › to adjust the settings as required.

Contrast   100

Selection	‹	Pressing	›
Back light	darker		brighter
Contrast	lower		higher
Brightness	darker		brighter
Colour	paler		deeper
Tint	reddish		greenish
Sharpness	softer		sharper

Notes:
*In the PC input mode (☞ page 30), **Colour, Tint** and **Sharpness** modes are not available.*

Activating the black/white level

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

1 From the **Picture settings** menu, press ⌄ or ⌃ to select **Black/White Level**.

2 Press ‹ or › to select **On** or **Off**.

Black/White Level   ‹ **On** ›

Note:
In the PC input mode (☞ page 30), 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.

Picture settings   2/2
MPEG NR   ‹   **Middle**   ›
DNR   Middle
(MENU) Back   (EXIT) Watch TV

2 Press ‹ or › to select **Off**, **Low**, **Middle** or **High**.
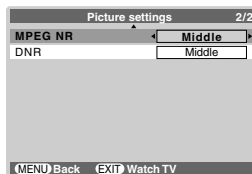
MPEG NR   ‹   **Middle**   ›

Note:
In the PC input mode (☞ page 30), 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 **Off, Low, Middle** or **High**.
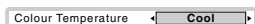
DNR ‹ **Middle** ›

Note:
This function is available for 480i and 576i signals.

Selecting the colour temperature

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

1 From the **PICTURE** menu, press ⌄ or ⌃ to select **Colour Temperature**.

2 Press ‹ or › to select mode you prefer.

Colour Temperature ‹ **Cool** ›

Cool : Lends a blue hue to the picture.
Natural : Neutral
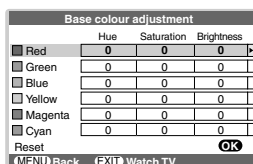**Warm** : Lends a red hue to the picture.

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**.
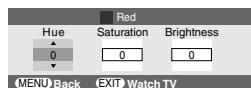
1 From the **PICTURE** menu, press ⌄ or ⌃ to select **3D Colour management**.

2 Press ‹ or ›, then press ‹ or › to select **On**.

3D Colour management ‹ **On** ›
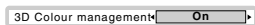
3 Press (OK), then press ⌄ or ⌃ to select **Base colour adjustment**.

4 Press (OK), then press ⌄ or ⌃ to select an item you want to adjust.

Base colour adjustment			
	Hue	Saturation	Brightness
■ Red	**0**	**0**	**0** ▶
■ Green	0	0	0
■ Blue	0	0	0
■ Yellow	0	0	0
■ Magenta	0	0	0
■ Cyan	0	0	0
Reset			**OK**
MENU Back	**EXIT** Watch TV		

5 Press ›, then press ‹ or › to select **Hue**, **Saturation** or **Brightness**.

Red		
Hue	Saturation	Brightness
0	0	0
MENU Back	**EXIT** Watch TV	

6 Press ⌄ or ⌃ to adjust the settings as required.

Notes:
• *If you select colour management **Off** mode, this mode is not available.*
• *In the PC input mode (☞ page 30), this mode is not available.*

Resetting the base colour adjustment

The Reset function adjusts the base colour adjustment to the factory settings.

1 From the **Base colour adjustment** menu, press ⌄ or ⌃ to select **Reset**.

2 Press (OK).

Using the active backlight control

In order to improve screen visibility, the active backlight control sets the screen brightness automatically during dark scenes.

1 From the **PICTURE** menu, press ⌄ or ⌃ to select **ActiveBacklightControl**.

2 Press ‹ or › to select **On** or **Off**.

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 and 576i signals.

1 From the **PICTURE** menu, press ⌄ or ⌃ to select **Cinema Mode**.

2 Press ‹ or › to select **On** or **Off**.

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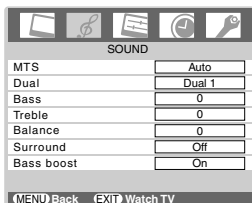
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Sound adjustment

Setting the MTS (Multi-channel TV Sound)

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

1 Press **MENU**, then press ‹ or › to display the **SOUND** menu.

SOUND	
MTS	Auto
Dual	Dual 1
Bass	0
Treble	0
Balance	0
Surround	Off
Bass boost	On

MENU Back EXIT Watch TV

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 programme, set the **MTS** mode to **Mono**.
Noise will be reduced and reception may improve.

Note:
*If you experience noise with a particular programme on whose channel reception is usually good, try setting MTS mode to **Auto**, then switch ⊙I/II to ⊖ 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.

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 programmes

1 When a stereo programme is received, ⊙ **Stereo** appears.

10	ABCD	⊙ Stereo

2 Press ⊙I/II to select the stereo/monaural mode. ⊙ **Stereo** and ⊖ **Mono** appear cyclically on the screen.

⊙ Stereo

Selecting the bilingual programmes

1 When a bilingual programme is received, ●○ **Dual** appears.

2 Press ⊙I/II to select the sound to be heard. The sound differs according to the transmission system: NICAM or German stereo/bilingual broadcast.

●○ Dual 1

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 From the **SOUND** menu, press ⌄ or ⌃ to select an item you want to adjust.

2 Press ‹ or › to adjust the settings as required.

Bass	0

Selection	‹ Pressing ›	
Bass	weaker	stronger
Treble	weaker	stronger
Balance	decreases the right channel	decreases the left channel

Selecting the surround sound

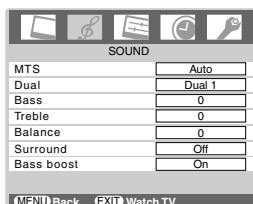**1** From the **SOUND** menu, press ⌄ or ⌃ to select **Surround**.

2 Press ‹ or › to select **On** or **Off**.

Note:
When Surround is set to ON, Balance control will not be available.

Using the bass boost

1 From the **SOUND** menu, press ⌄ or ⌃ to select **Bass boost**.

```
            SOUND
MTS              Auto
Dual             Dual 1
Bass             0
Treble           0
Balance          0
Surround         Off
Bass boost       On

(MENU) Back   (EXIT) Watch TV
```

2 Press ‹ or › to select **On** or **Off**.

Note:
The Bass boost effect is active only when the sound outputs from the speaker.

Using the bass boost (Using the remote control)

1 Press ◁♪ to display **Bass boost**.

Bass boost	On

2 To turn off the Bass boost, press ◁♪ to display **Bass boost Off**.
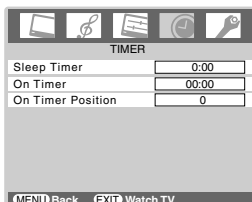
Bass boost	Off

Note:
The Bass boost effect is active only when the sound outputs from the speaker.

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 **MENU**, then press ❮ or ❯ to display the **TIMER** menu.

```
                    TIMER
Sleep Timer                    0:00
On Timer                       00:00
On Timer Position              0

(MENU) Back    (EXIT) Watch TV
```

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.

On timer:
The timer display will set by 10 minutes, up to 12 hours and 50 minutes.

Sleep timer:
The time display will set by 10 minutes, up to 4 hours.

4 When setting the On timer, press ﹀ or ︿ to select the **On timer Position** and enter the programme position number you want to watch. Press **EXIT** to exit the menu. Set the Standby mode by pressing ⏻ on the remote control or ⏻/❙ on the TV.
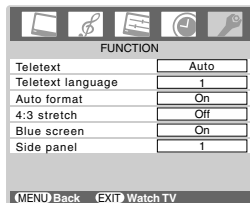Activation of the Timer is indicated by the green ☺ On timer indicator, on the front of the TV (☞ page 9).

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 delay time, the timer display will set by 30 minutes, up to 12 hours 30 minutes or Sleep delay time, the timer display will set by 30 minutes, up to 4 hours.*

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 **MENU**, then press ❮ or ❯ to display the **FUNCTION** menu.

```
                  FUNCTION
Teletext                    Auto
Teletext language           1
Auto format                 On
4:3 stretch                 Off
Blue screen                 On
Side panel                  1

(MENU) Back    (EXIT) Watch TV
```

2 Press ﹀ or ︿ to select **Auto format**, then press ❮ or ❯ to select **On** or **Off**.

Activating the 4:3 stretch

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

1 From the **FUNCTION** menu, press ﹀ or ︿ to select **4:3 stretch**.

2 Press ❮ or ❯ to select **On** or **Off**.

Note:
In HDMI signal format, this function is available.

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 ︿ to select **Blue screen**.

2 Press ❮ or ❯ to select **On** or **Off**.

Note:
In the PC input mode or teletext mode (☞ page 24), this function is not available.

Adjusting the brightness of side panel

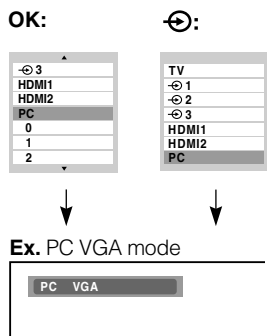You can adjust the brightness of side panel in 14:9 or 4:3, etc. mode.

1 From the **FUNCTION** menu, press ﹀ or ︿ to select **Side panel**.

2 Press ❮ or ❯ to adjust the settings as required.

```
Side panel        ◄    1    ►
```

Selecting the video input source to view

1 Press ⊕ or press (OK) on the remote control until the video input mode list appears on the screen, then press ∨, ∧ or ⊕ to select appropriate input source (or press ⊕ on the TV bottom of the panel to select required input source directly).
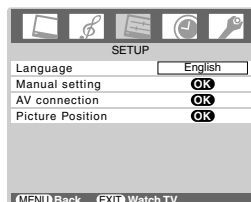
OK: **⊕:**

```
  ▲
⊕ 3          TV
HDMI1        ⊕ 1
HDMI2        ⊕ 2
PC           ⊕ 3
0            HDMI1
1            HDMI2
2            PC
  ▼
```

↓   ↓

Ex. PC VGA mode

```
PC    VGA
```

2 Press (OK).

⊕ 1 (⊕ (1), video 1 input),
⊕ 2 (⊕ (2), video 2 input) or ⊕ 2S (S-video input),
⊕ 3 (⊕ (3), component video input),
HDMI1 (⊕ HDMI1, HDMI or DVI input),
HDMI2 (⊕ HDMI2, HDMI input),
PC (⊕ RGB/PC, PC input)

Note:
When S-video input, the component video input, PC input mode or HDMI input mode is selected, the **MONITOR OUT** *output terminals (☞ page 26) output audio signal only.*

Setting the manual setting menu

1 Press **MENU**, then press ‹ or › to display the **SETUP** menu.

```
┌──┬──┬──┬──┬──┐
│  │  │  │  │  │
└──┴──┴──┴──┴──┘
       SETUP
Language           English
Manual setting      OK
AV connection       OK
Picture Position    OK


MENU Back   EXIT Watch TV
```

2 Press ∨ or ∧ to select **Manual setting**, then press (OK).

3 Press ‹ or › to select an item, then press ∨ or ∧ to select the item as shown below.

```
    Manual setting
   Colour system:Auto
        A

OK Store
MENU Back        EXIT Watch TV
```
          A
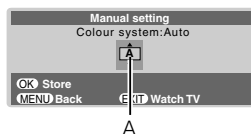
A. Colour system

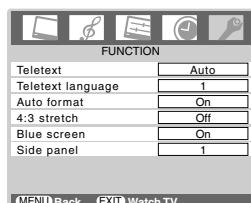Confirm that colour system is set to "**A**" (Auto). If not, select "**A**" with ∨ or ∧.

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 1-6 option enables the display of different language when using Teletext.

1 Press **MENU**, then press ‹ or › to display the **FUNCTION** menu.

```
┌──┬──┬──┬──┬──┐
│  │  │  │  │  │
└──┴──┴──┴──┴──┘
      FUNCTION
Teletext            Auto
Teletext language    1
Auto format          On
4:3 stretch          Off
Blue screen          On
Side panel           1

MENU Back   EXIT Watch TV
```

2 Press ⌄ or ⌃ to select **Teletext language**, then press ‹ or › to select the required language.

- **Language 1:** English, German, Dutch, Flemish, Russian, Byelorussian, Bulgarian, Ukranian, 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)
- **Language 5:** English, German, Dutch, Flemish, Hungarian, Swedish, Finnish, Danish, Italian, Spanish, Portuguese, Turkish, Greek
- **Language 6:** English, German, Dutch, Flemish, Russian, Bulgarian, Lettish, Lithuanian, Czech, Slovak, Estonian, Byelorussian

To select teletext mode:
Select a channel position with the desired teletext service.

1 From **FUNCTION** menu, press ⌄ or ⌃ to select **Teletext**.

2 Press ‹ or › to select **Auto** or **LIST** mode.

Note:
*When you are watching the teletext programme, **SETUP** menu and **FUNCTION** menu are not selectable.*

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.

Note:
If you press ⃖ while the picture mode is activated, this mode will be cancelled.
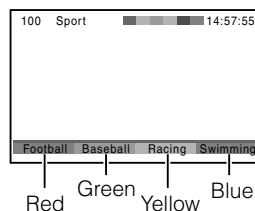
Sub-pages:
Once in this chosen page, if there are sub-pages they will automatically load into memory without changing the one you are reading. If there are many sub-pages, it will take a long time for them all to load and this will depend on the speed with which the broadcaster transmits them.
To access the sub-pages in memory, press ⃰, then use ⌄ and ⌃ to view them.

Using Auto mode

There are two Modes: **Auto** will display FASTEXT, if available. **LIST** will display your four favourite 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 ⌃, to go back to the previous page press ⌄. To change between **Auto** and **LIST**, see above.
- Press **TEXT** to access teletext.

```
 100   Sport   ▀▀▀▀▀▀▀   14:57:55




 Football  Baseball  Racing  Swimming
```
   Red   Green   Yellow   Blue

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.

```
100  TEXT  M00 ████  ████  14:58:55




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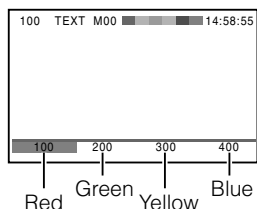
The four choices at the bottom of the screen are now number – **100**, **200**, **300** and **400**, which have been programmed into the TV's memory.

2 To view these pages, use the coloured prompt buttons.
e.g. press the Green button to view page 200.

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.

```
100  TEXT  M00 ████  ████  14:58:59




     100    250    300    400
```
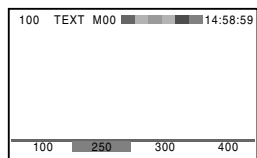
This number will change in the top left of the screen and in the coloured highlight.

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 favourite 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. Press again to superimpose the teletext over a normal broadcast picture (mix mode). Press again to return to normal TV mode.

⊟i To display an index/initial page:
In Auto-mode
Press ⊟i to access the index page. The one displayed is dependant on the broadcaster.
In LIST-mode
Press ⊟i 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.
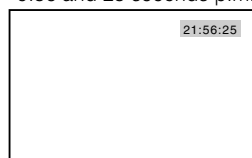
Note:
*It will not be possible to change programme position while in Teletext mode, you will have to cancel the teletext first by pressing **TEXT** to return to a normal TV picture.*

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.

```
                    21:56:25



```

Note:
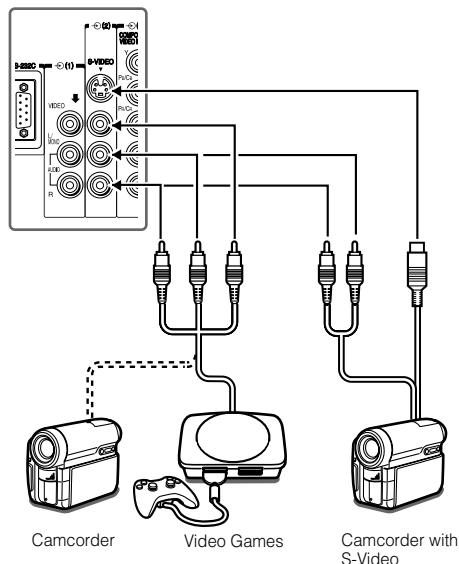*If you press ▼ while this mode is activated, this mode will be cancelled.*

Back connections

You can connect a wide variety of auxiliary equipment via the terminals located on the back of the panel ⇄ **(2)**.
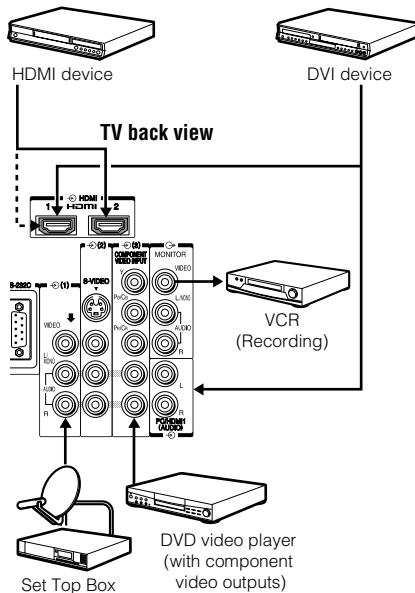Please always refer to the owner's manual of the equipment to be connected for full details.

Connection example

TV back view

Camcorder   Video Games   Camcorder with
                                        S-Video

• To select the side inputs, press ⇄ until the video input mode list appears on the screen, then press ∨ or ∧ to select ⇄**2** (☞ page 23), then press (OK).
• 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 ⇄ 2S).
• If you connect mono sound equipment to ⇄ **(2)**, connect the audio output of the equipment to the **L/MONO** jack on the TV.
• 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 Colour TV properties.

Connection example

HDMI device   DVI device

TV back view

VCR
(Recording)

DVD video player
(with component
video outputs)

Set Top Box

• 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.
• The **COMPONENT VIDEO INPUT** consists of three component video signals (**Y, P$_B$/C$_B$, P$_R$/ C$_R$**) and provides the good 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 and a DVI device

• 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 on 32/44.1/48 kHz and 16/20/24 bits. 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 audio** of the **AV connection** menu (☞ page 28).
- 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 and a DVI device
The HDMI input on your TV receives digital audio and uncompressed digital video from an HDMI device 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 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
- 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.
- E-EDID: Enhanced-Extended Display Identification
- Acceptable PC signal format:
  S-VGA: VESA 800 × 600 @ 60 Hz
  XGA: VESA 1024 × 768 @ 60 Hz
  W-XGA: VESA 1280 × 768 @ 60 Hz
  W-XGA: VESA 1360 × 768 @ 60 Hz
  S-XGA: VESA 1280 × 1024 @ 60 Hz
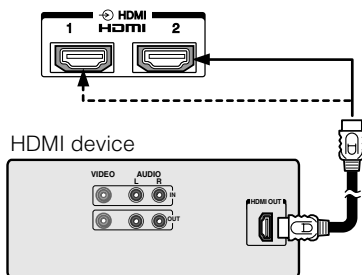- L-PCM: Linear-Pulse Code Modulation

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

Connecting an HDMI device

One HDMI cable (type A connector)

TV back view

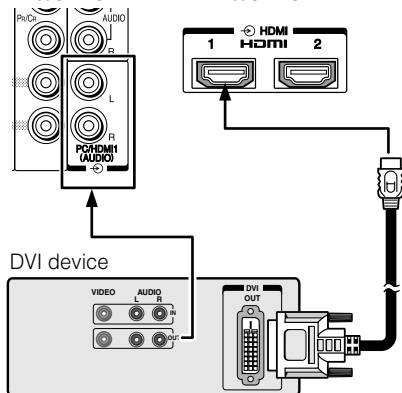For proper operation, it is recommended that you use a short HDMI cable.
HDMI cable transfers both video and audio.

Connecting a DVI device

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

TV back view   **TV back view**

HDMI (type A connector)-to-DVI adapter cable
For proper operation, the length of an HDMI-to-DVI adapter cable should not exceed 3m. The recommended length is 2m.
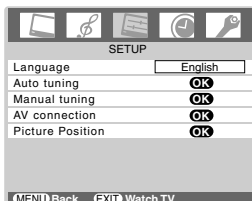
Standard analogue audio cables
An HDMI-to-DVI adapter cable transfers only video. Separate analogue audio cables are required.
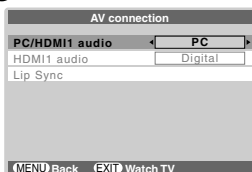
Selecting the PC/HDMI1 audio mode

You can select PC audio (☞ page 29) or HDMI1 audio when using this function.

1 Press **MENU**, then press ‹ or › to display the **SETUP** menu.

```
        SETUP
Language            English
Auto tuning           OK
Manual tuning         OK
AV connection         OK
Picture Position      OK


MENU Back    EXIT Watch TV
```

2 Press ⌄ or ⌃ to select **AV connection**, then press (OK) to display the **AV connection** menu.

```
        AV connection
PC/HDMI1 audio    ‹    PC    ›
HDMI1 audio           Digital
Lip Sync




MENU Back    EXIT Watch TV
```

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 HDMI1 input terminals (☞ page 27) from three modes:
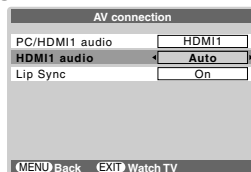**Auto**, **Digital** or **Analogue**.

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

1 Press **MENU**, then press ‹ or › to display the **SETUP** menu.

```
        SETUP
Language            English
Auto tuning           OK
Manual tuning         OK
AV connection         OK
Picture Position      OK



MENU Back    EXIT Watch TV
```

2 Press ⌄ or ⌃ to select **AV connection**, then press (OK) to display the **AV connection** menu.

```
        AV connection
PC/HDMI1 audio        HDMI1
HDMI1 audio       ‹   Auto   ›
Lip Sync              On




MENU Back    EXIT Watch TV
```

3 Press ⌄ or ⌃ to select **HDMI1 audio**, then press ‹ or › to select **Auto**, **Digital** or **Analogue**.

Selecting the Lip Sync

Lip Sync can synchronize the sound and picture. This function is only available when Lip Sync equipment is connected via HDMI.

1 From the **AV connection** menu, press ⌄ or ⌃ to select **Lip Sync**.

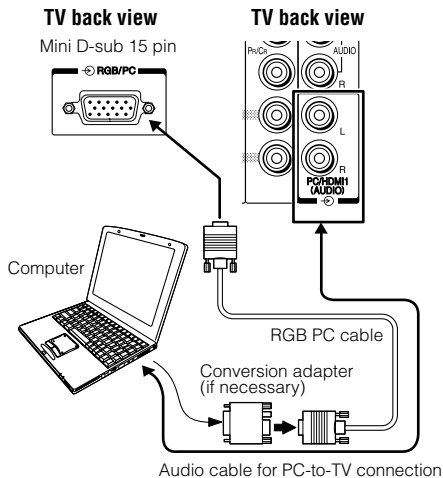**2** Press ‹ or › to select **On** or **Off**.

Note:
*Disconnect the HDMI cable before changing the **Lip Sync** setting. If the HDMI cable is connected, a message will appear.*

Connecting a computer

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

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

TV back view

Mini D-sub 15 pin

TV back view

Computer

RGB PC cable

Conversion adapter (if necessary)

Audio cable for PC-to-TV connection

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

The following signals can be displayed:

• Acceptable PC signal format:
  VGA: VESA 640 × 480 @ 60 Hz
  S-VGA: VESA 800 × 600 @ 60 Hz
  XGA: VESA 1024 × 768 @ 60 Hz
  W-XGA: VESA 1280 × 768 @ 60 Hz
  W-XGA: VESA 1360 × 768 @ 60 Hz
  S-XGA: VESA 1280 × 1024 @ 60 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.

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.

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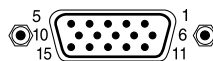
Pin No.	Signal name	Pin No.	Signal name
1	R	9	NC
2	G	10	Ground
3	B	11	NC
4	NC (not connected)	12	NC
5	NC	13	H-sync
6	Ground	14	V-sync
7	Ground	15	NC
8	Ground		

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 analogue audio cables.

If connecting a PC with an HDMI terminal, use an HDMI cable (type A connector). Separate analogue cables are not necessary.

TV back view **TV back view**

Audio cable for PC-to-TV connection

Computer
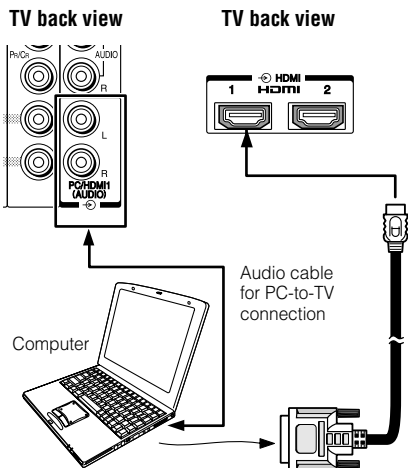
For acceptable signal format, see page 27.

Notes:
* *The edges of the images may be hidden.*
* *If receiving a 720p, 1080i or 1080p signal programme, PC mode scales the video to display the entire picture within the borders of the screen (e.g. no overscanning) (☞ page 17).*
* *If connecting a certain PC model that signal is particular, the PC signal may not be detected correctly.*

Using the PC setting

* In the PC input mode, you cannot select the **Colour**, **Tint**, **Sharpness**, **Black/White Level**, **MPEG NR** and **DNR** in the **Picture settings** menu, **3D Colour management**, **Base colour adjustment**, **ActiveBacklightControl** and **Cinema Mode** in the **PICTURE** menu (☞ page 18, 19).
* In the PC input mode, the **Manual setting** (☞ page 23) is not displayed.
* First press ⊕ until the video input mode list appears on the screen, then press ∨ or ∧ and ⊙ in order to select the PC input mode (☞ page 23).
* 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.
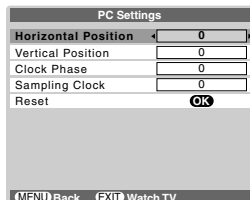
Adjusting the picture size/position

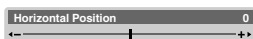**1** Press **MENU**, then press ‹ or › to display the **SETUP** menu.

2 Press ∨ or ∧ to select **PC Settings**.

3 Press ⊙ to display the **PC Settings** menu.

4 Press ⌄ or ⌃ to select an option you want to adjust. Press ‹ or › to adjust the settings as required.

| Horizontal Position | 0 |

Note:
When you set the Vertical Position, the screen may not be changed even if changing the cursor 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.

1 From the **PC Settings** menu, press ⌄ or ⌃ to select **Clock Phase**.

2 Press ‹ or › to obtain a clear picture.

| Clock Phase | 0 |

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 Settings** menu, press ⌄ or ⌃ to select **Sampling Clock**.

2 Press ‹ or › to optimize the picture.

| Sampling Clock | 0 |

Resetting the PC setting

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

1 From the **PC Settings** menu, press ⌄ or ⌃ to select **Reset**.

2 Press (OK).

Note:
When a PC is connected using HDMI none of these function 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 ⏻/❙ or ⏻.
- 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.

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.
- 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 them with new ones.

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	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	Colour	Sound
Australia, New Zealand, etc.	PAL	B/G

Africa

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

South America

Country or region	Colour	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 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 television equipment.

Specifications

LCD colour television

Model
32AV600E, 32AV600T, 32AV600Y,
32AV601E, 32AV601T, 37AV600E,
37AV600T, 37AV600Y

Power source
32/37AV600/601E: 220V-240V AC, 50/60Hz
32/37AV600/601T: 110V-240V AC, 50/60Hz
32/37AV600/601Y: 220V-240V AC, 50Hz

Power consumption
32AV600/601E/T/Y:
107 W, 0.5 W (standby)
37AV600E/T/Y:
144 W, 0.5 W (standby)

Dimensions
32AV600/601E/T/Y:
786 mm(W) 567 mm(H) 247 mm(D)
37AV600E/T/Y:
902 mm(W) 632 mm(H) 247 mm(D)

Mass (Weight)
32AV600/601E/T/Y: 13.0 kg
37AV600E/T/Y: 15.5 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)
32AV600/601E/T/Y: 80.0 cm
37AV600E/T/Y: 94.0 cm

Number of pixels
1366 (H) dots x 768 (V) dots

Audio power
10 W + 10 W

Speakers
Main 35 $\times$ 160 mm 2pcs.

Input/Output terminals

↔ (1)	Input	
	Phono jacks	Audio L/ Mono +R
↔ (2)	Input	
	4 pin	S-video
	Phono jacks	A/V
↔ (3)	Input	
	Component video	Y, P_B/C_B, P_R/C_R
	Phono jacks	Audio L/ Mono +R
↦ MONITOR	Output	
	Phono jacks	A/V
↔ RGB/PC	Input	
	Mini D-sub 15 pin Analogue RGB	
↔ PC/HDMI1	Input	
(AUDIO)	Phono jacks	Audio L + R
↔ HDMI1	Input (type A)	
	19 pin	A/V Digital
↔ HDMI2	Input (type A)	
	19 pin	A/V Digital
	v.1.3a with Lip Sync	

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.
(☞ 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.

TOSHIBA CORPORATION