

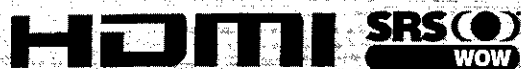
TOSHIBA



OWNER'S MANUAL

DLP™ Projection Television

with NICAM digital stereo sound



52JM9UA 52JM9UE 62JM9UA 62JM9UE

INTRODUCTION

GETTING STARTED

USING THE TV'S FEATURES

VIEWING TELETEXT

EQUIPMENT CONNECTIONS

REFERENCE

Dear Customer

Welcome to the high quality picture world created by TOSHIBA DLP™ Projection Television.
 This manual will help you use the TV's many exciting useful features.
 Before operating the TV, please read all the safety and operating instructions in this manual thoroughly, and keep the manual for future reference.

Customer'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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Features

Various Video/Audio terminals for external equipment connection

- Three sets of video/audio inputs are located on the rear and on the side panel
- Three S-video terminals on the rear and on the side panel
- One set of monitor output terminals
- One set of fixed/variable audio output terminals
- Two sets of COMPONENT VIDEO INPUT terminals (the signal format: 480i, 480p, 576i, 576p, 720p (50/60Hz) and 1080i (50/60Hz))
- One set of HDMI/DVI digital, high-definition multimedia interface
- One set of RGB/PC terminal

Digital Noise Reduction

Toshiba's advanced Digital Noise Reduction systems digitally reduce image noise and so improve picture quality.

"BRIDGE MEDIA" Function

The BRIDGE MEDIA function can be used to play back still picture or motion picture/sound memorized on "SD" Memory Cards, "Memory stick" cards or "SmartMedia" cards by a digital still camera.

NICAM (DK/BG/I) and German (BG) stereo/bilingual broadcasts receivable**TELETEXT/FASTTEXT-FAST/LIST modes****Selectable picture**

Allows one-touch selection of your favorite picture quality among three preset modes and one user-set mode.

SRS WOW surround sound system

SRS 3D and SRS TruBass (see page 26) features bring 3D surround and bass expansion effects to the TV's stereo sound.

OFF timer and ON timer

Turns off the TV automatically and will turn it back on at a preset time.

Auto-Power-Off

If a vacant channel is tuned or TV broadcasts for a day are finished, the TV will automatically turn off after about 15 minutes. However, if the Off-timer is operating, it takes precedence. The Auto-Power-Off feature does not operate in the video (see page 41) or Blue screen Off (see page 28) mode.

No-Signal-Mute

When the TV receives a signal from the antenna input (㊦) which does not contain a video signal, the sound will be muted. This No-Signal-Mute feature does not operate in the Blue screen Off (see page 28) mode.

Important Safety Instructions

See "Important notes about your DLP™ projection TV" on page 9.

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

Installation

Always connect the plug to an electrical outlet equipped with ~ 220 – 240V 50Hz.
 Do not use the TV outside the specified voltage range. It may cause a fire or an electric shock.

Check!

Never insert or remove the power plug with wet hands.
 This may cause electric shock.

Do not place the TV in an unstabilized location such as on a shaky table, incline or location subject to vibration.
 The TV may drop or fall down which may cause injury or damage.

The slots and openings in the cabinet must never be blocked or covered.

- Do not place the TV so that it is facing upwards, or on its side.
- Do not place the TV into a closet or bookshelf where the ventilation is poor.
- Do not spread a tablecloth or curtain on the TV.

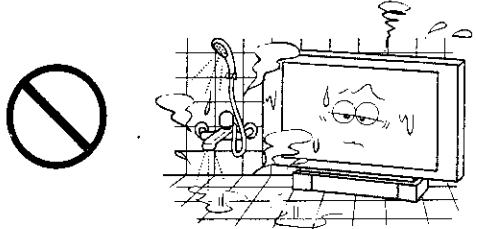
The inside of this TV will overheat if the ventilation holes are sealed, which may result in a fire.

Never place the TV near a heater.
 The surface of the cabinet or power cord may melt and result in fire or electric shock.

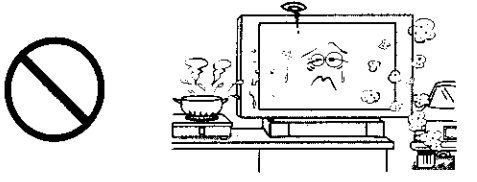
Do not place the TV in locations subject to direct sunlight.
 A fire may result when the inside temperature increases. You can also prevent direct illumination of the TV screen by using the curtains or blinds.

Installation (continued)

The TV shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the TV.
This may cause a fire or an electric shock.

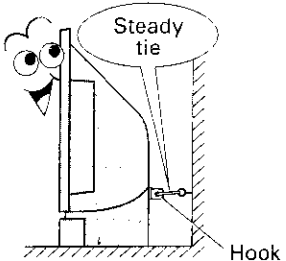


Do not place the TV next to a stove where it will be exposed to oil, smoke, or steam, or in a location where there is a large quantity of dust.
This may cause a fire or electric shock.

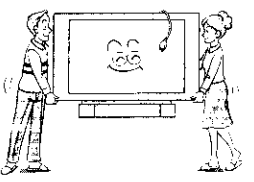


Install the TV in a horizontal, stable location. Install a steady tie to ensure that the TV is secure.
If the TV is not installed securely, it may lean or fall over and cause an injury.

NOTICE OF POSSIBLE TV STAND INSTABILITY
Use this TV with the TOSHIBA TV stand recommended in the "Specifications" section only.
Use with other stands may result in instability, causing possible injury or death.

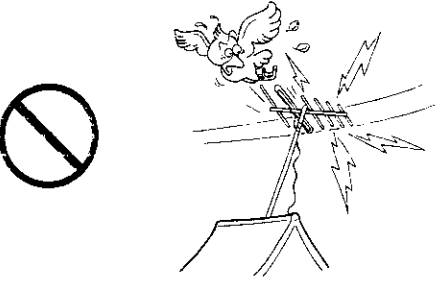


Precautions for moving the TV
To move this TV, always do it by two or more people because it is extremely heavy.
When moving the TV, be sure to remove the plug from the wall outlet and disconnect the antenna cable, audio/video cables, any steady ties.
Fire or electric shock may result if the power cord is damaged.



Be careful to prevent impact to the TV or damage to the screen.

Precautions for installing on outdoor antenna
An outside antenna system should not be located in the vicinity of overhead power lines, or other electric light or power circuits.
If the antenna falls down or drops, it may cause injury or electric shock accidents.

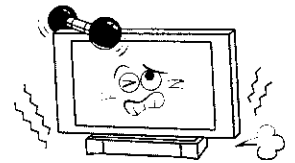


Important Safety Instructions (continued)

Use

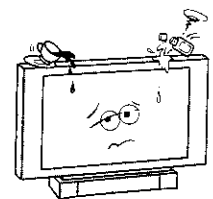
Do not place anything heavy on top of the TV.

This may cause the balance to become uneven, resulting in the TV falling over, dropping or causing an injury.



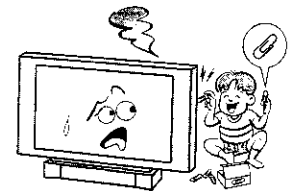
The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

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.



Do not insert objects (metal or paper) or pour water inside the TV from ventilation holes and other places.

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 small children do not insert objects in the TV.



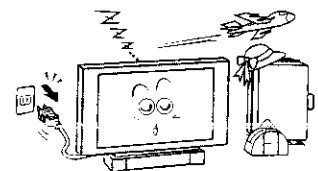
Do not stand or climb on the TV.

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



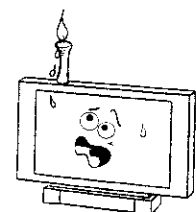
When the TV will not be used for a long period of time, such as during vacation or travel, remove the power plug from the wall outlet.

Fire may result if the insulation on the power cord is reduced by dust build up. TV is not completely disconnected from the power supply line, as minute current is consumed even when the Power button is turned off.



Do not place hot object or naked flame sources, such as lighted candles or nightlights on, or close to the TV.

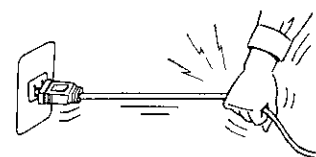
High temperature can melt plastic and lead to fires.



Use (continued)

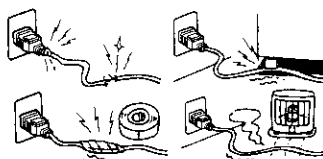
Do not pull on the power cord when removing the plug from the wall outlet.

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



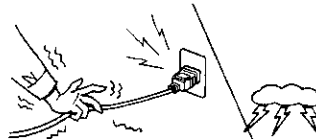
Do not cut, break, modify, twist, bunch up or bent the cord or apply excessive force or tension to it.

Do not place heavy objects on the cord or allow it to overheat as this may cause damage, fire or electric shock. Contact a service technician if the power cord is damaged.



If there is thunder or lightning, do not touch the antenna cable or other connected cable.

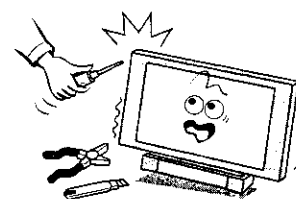
You may suffer an electric shock.



Service

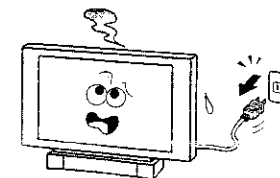
Do not repair, modify or disassemble the TV by yourself.

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.



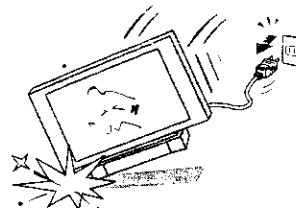
When a malfunction occurs, or if smoke or strange smells comes from the TV, remove the power plug from the outlet immediately.

Make sure that the smoke 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.



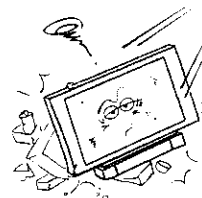
If the TV is dropped or the cabinet is damaged, remove the power plug from the outlet immediately.

If the TV is still power used in this condition, it may cause a fire or an electric shock. Contact a service technician for inspection.



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 and Care

Cleaning

Always unplug the TV before cleaning.

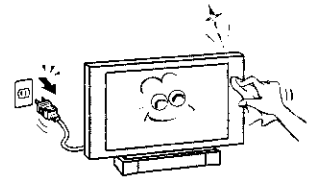
Do not use solvents such as benzene or thinner to clean the TV.

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

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

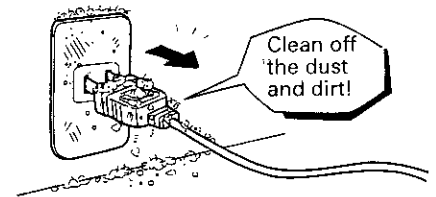
When cleaning the screen:

- Clean the screen with a soft, dry cloth.



When dust has collected on the power plug connectors, remove the plug from the outlet and clean off the dust.

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



Care

Moisture Condensation

If the room temperature suddenly rises (or if the TV is moved from a cool place to a hot place), condensation may occur on the lenses resulting in picture distortion or color fading. In such a case, simply wait a while (with the power on) and the condensation will evaporate.

About insecticide spray

Do not spray volatile compounds such as insecticide on the cabinet. This may cause a discoloration or damage of the cabinet.

Care (continued)**Important notes about your DLP™ projection TV**

WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE TV COVERS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

- 1) The light source for this TV is a projection lamp unit with a limited service life. When the lamp wears out, the picture may become dark or black, or the lamp may fail, at which time the lamp unit must be replaced.

The length of service life varies depending on product use and user settings. See "Selecting the Lamp mode" on page 23 for information on switching the lamp mode.

To replace the lamp unit

Please contact the nearest Toshiba Authorized Service Center or dealer:

- if the picture darkens and/or colors fade;
- if the screen (lamp) does not light (LED indication #6, page 48); or
- if you hear a loud noise and the picture goes black, which may indicate a lamp rupture (LED indication #6, page 48).

Only the replacement lamp unit model listed below can be used with this TV.

Using any other lamp may cause damage to the TV and/or lamp.

Model No.: TB25LPA (Stock No. 23402847)

- 2) Each time you turn on the TV, it may take several seconds to go from no picture to full picture brightness.
- 3) The display on this TV is manufactured using an extremely high level of precision technology; however, an occasional pixel (dot of light) may show constantly on the screen.
This is a structural property of micro-display projection TV technology, and is not a sign of malfunction. Such pixels are not visible when the picture is viewed from a normal viewing distance.
- 4) Depending on the media you are viewing, it is possible, although unlikely, that a limited number of viewers may see a "rainbow effect" on the screen, which can, in rare instances, result in eye fatigue. This is a rare occurrence related to technology of this type, and is not a sign of TV malfunction.
- 5) Always sit approximately 3-8 m away from the TV and as directly in front of it as possible. The picture quality may be affected by your viewing position and length of viewing time. If you sit too closely to the TV for too long, you may suffer from eye fatigue.
- 6) This TV contains several cooling fans to moderate the internal temperature. You may be able to hear the fans for several minutes after the TV is turned off. This is not a sign of TV malfunction.
- 7) The green and red LED lights on the control touchpad (on the lower right corner of the TV screen) indicate your TV's current status. If either light flashes, see "LED indications" on page 48 for details.
- 8) Review all safety and operating information in this owner's manual before you use your TV.

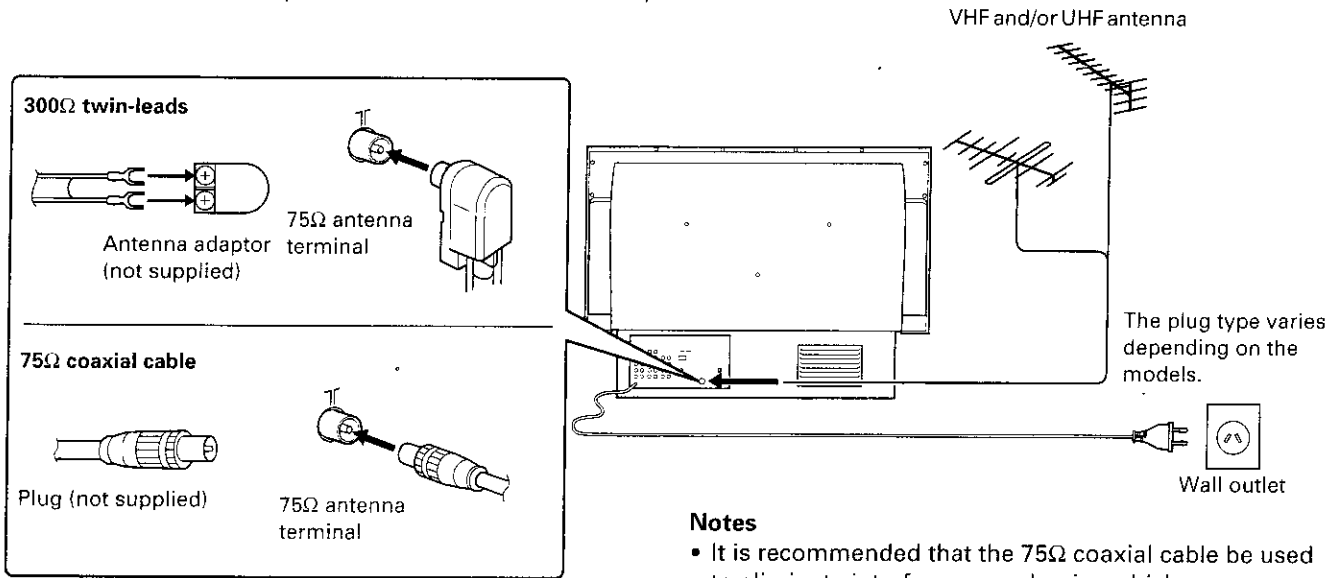
The DLP logo and DLP medallion are trademarks of Texas Instruments

Installation

INTRODUCTION

To connect an antenna

Optimum reception of color requires a good signal and will generally mean that an outdoor antenna must be used. The exact type and positioning of the antenna will depend upon your particular area. Your Toshiba dealer or service personnel can best advise you on which antenna to use in your area.



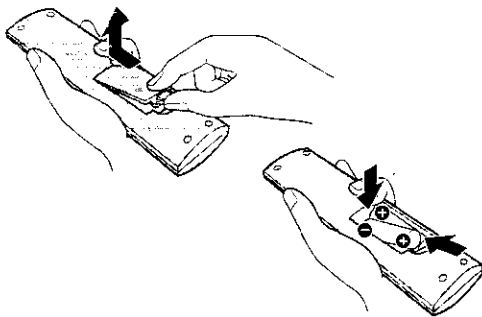
Caution:
Do not plug the power cord until you have finished connecting the antenna.

- Notes**
- It is recommended that the 75Ω coaxial cable be used to eliminate interference and noise which may occur due to radio wave conditions.
 - The antenna cable should not be bundled with the power cord and the like.

To prepare the remote control

Battery installation

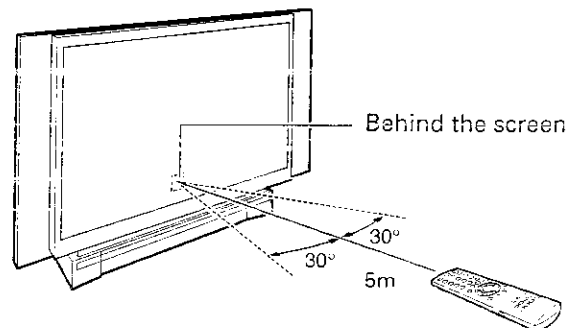
Remove the battery cover.
Insert two R03/AAA batteries matching the -/+ polarities of the battery to the -/+ marks inside the battery compartment.



- Caution:**
- Dispose of batteries in a designated disposal area. Do not throw batteries into a fire.
 - Do not mix battery types or combine used batteries with new ones.

Tips for best operation

Effective range



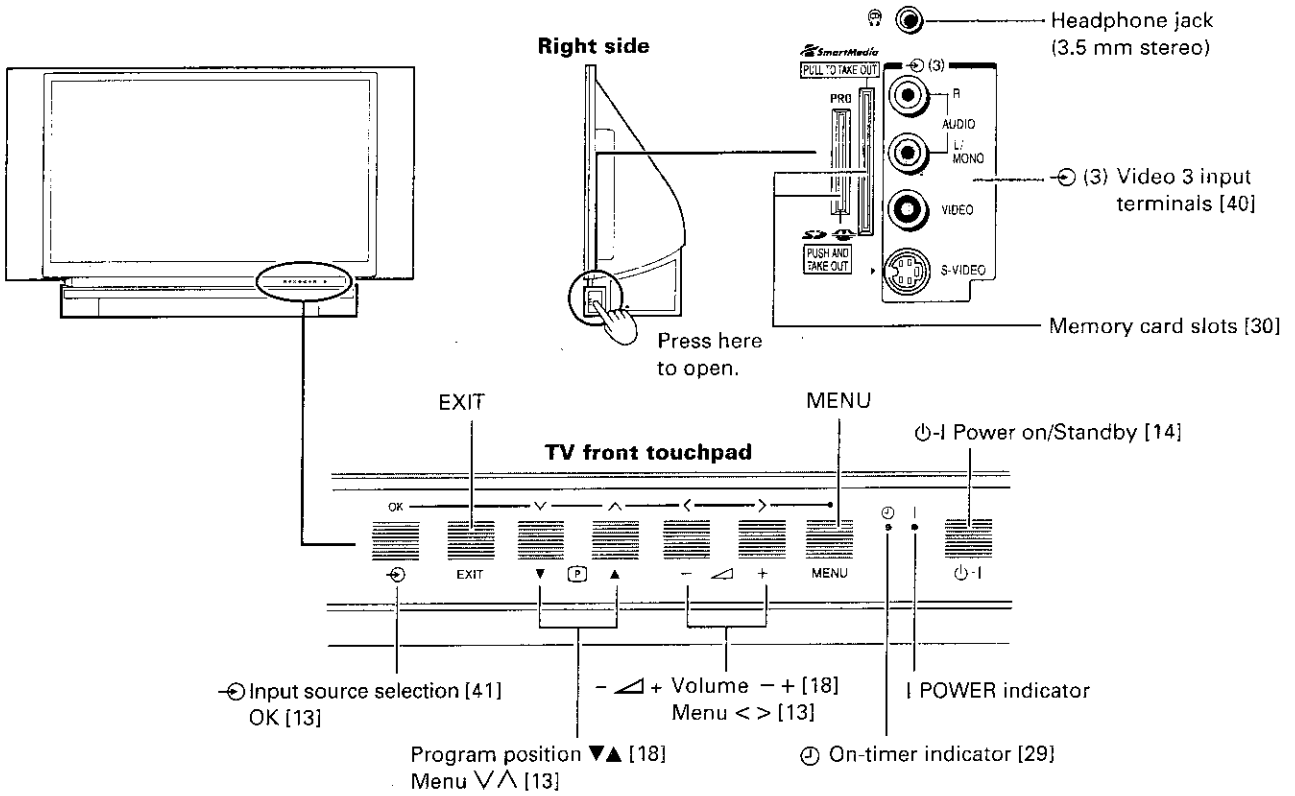
- Notes**
- If the remote control does not operate correctly, or if the operating range becomes reduced, replace both batteries with new ones.
 - When the remote control will not be used for a long period of time or when the batteries are worn out, remove the batteries to prevent leakage.
 - Do not drop, dampen or disassemble the remote control.

Location of Controls

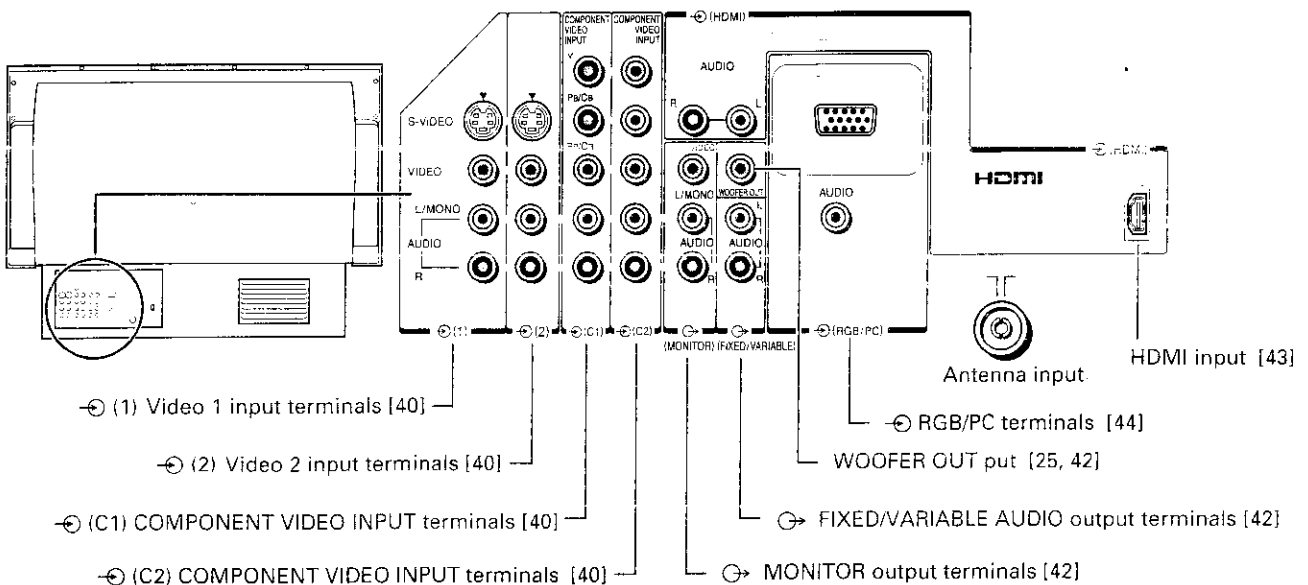
INTRODUCTION

- For the use of each control, refer to the page numbers in brackets.
- Model 52JM9UA is used in this manual for illustration purpose.

Front and side



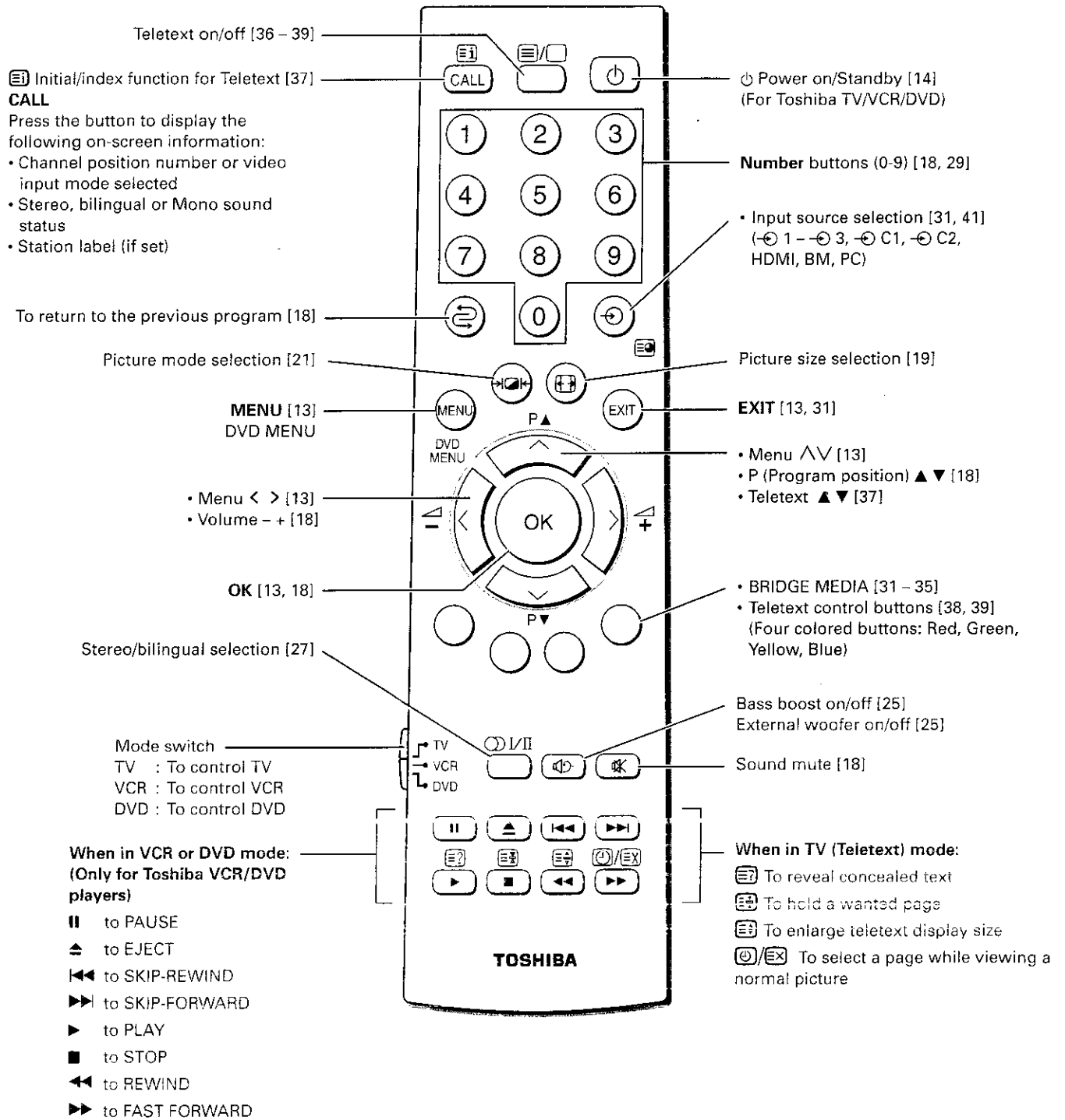
Back



Location of Controls (continued)

INTRODUCTION

Remote control

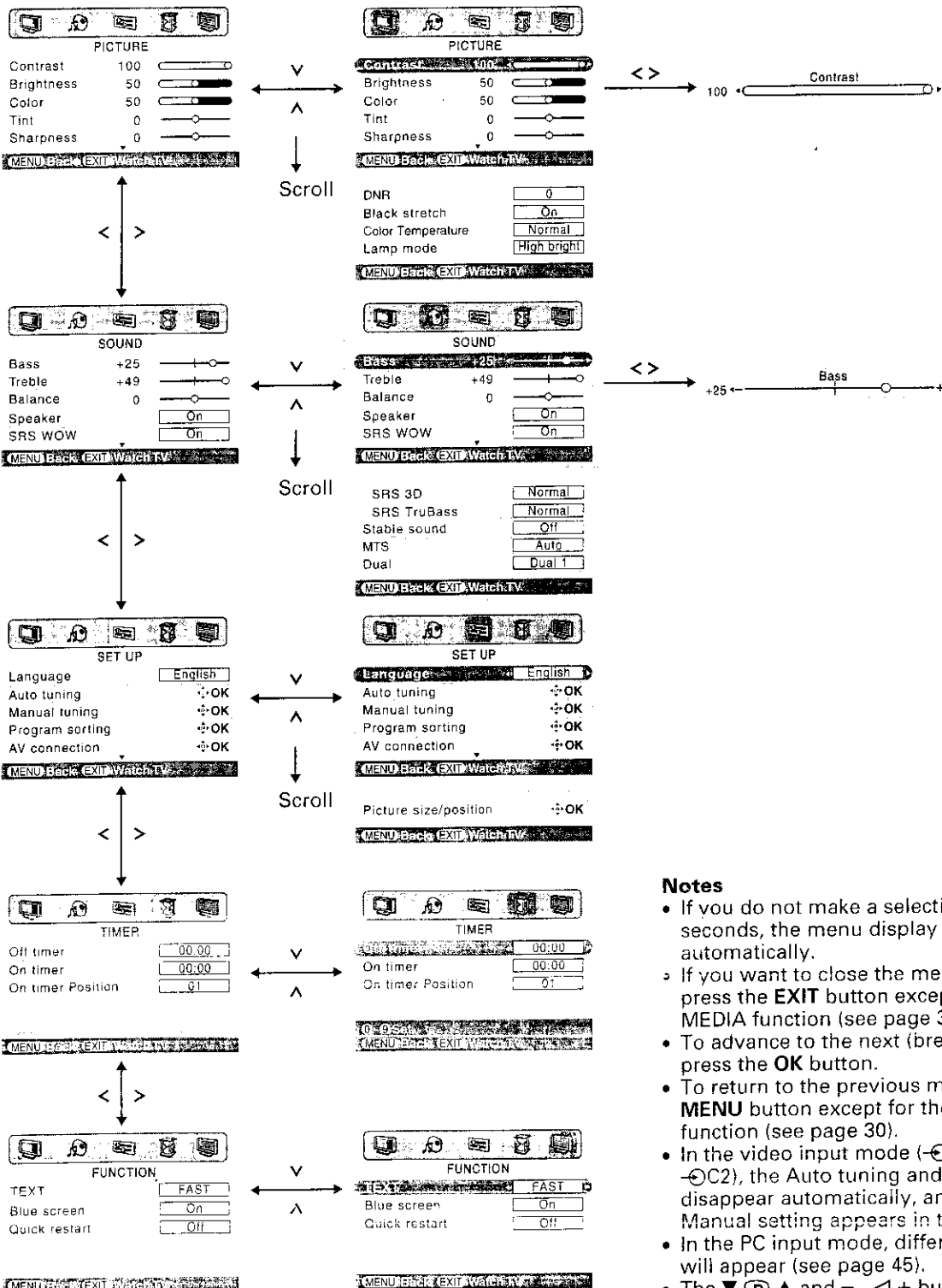


Menu Function

- Before watching the TV, please familiarize yourself the method to use the menu function of this TV.
- Instructions in this manual are based on using the remote control.

Press the **MENU** button to display menu, then press the < or > button to select menu.
 Press the ∇ or \blacktriangle button to select an item.
 Press the < or > button to select or adjust setting.

Menu display chart



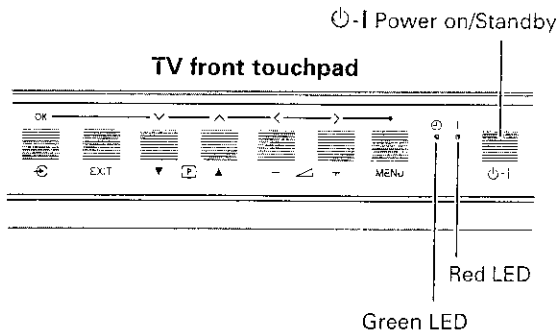
Notes

- If you do not make a selection within 60 seconds, the menu display disappears automatically.
- If you want to close the menu display instantly, press the **EXIT** button except for the BRIDGE MEDIA function (see page 30).
- To advance to the next (break down) menu, press the **OK** button.
- To return to the previous menu, press the **MENU** button except for the BRIDGE MEDIA function (see page 30).
- In the video input mode (\odot 1 - \odot 3, \odot C1, \odot C2), the Auto tuning and Manual tuning disappear automatically, and instead of them, Manual setting appears in the SET UP menu.
- In the PC input mode, different SET UP menu will appear (see page 45).
- The \blacktriangledown (P) \blacktriangle and \ominus \ominus \oplus buttons on the TV function as the menu \blacktriangle ∇ < > buttons when the menu display is on the screen.

Turning the TV On/ Changing the On-Screen Display Language

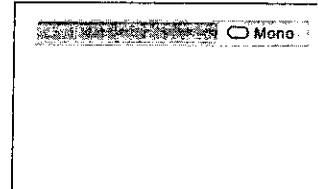
GETTING STARTED

To turn the TV on



After you plug in the TV power cord, make sure the red LED (on the TV front touchpad) is lit.

- 1 Press the Power on/Standby button on the remote control or the Power on/Standby touchpad on the TV front to turn on the TV.



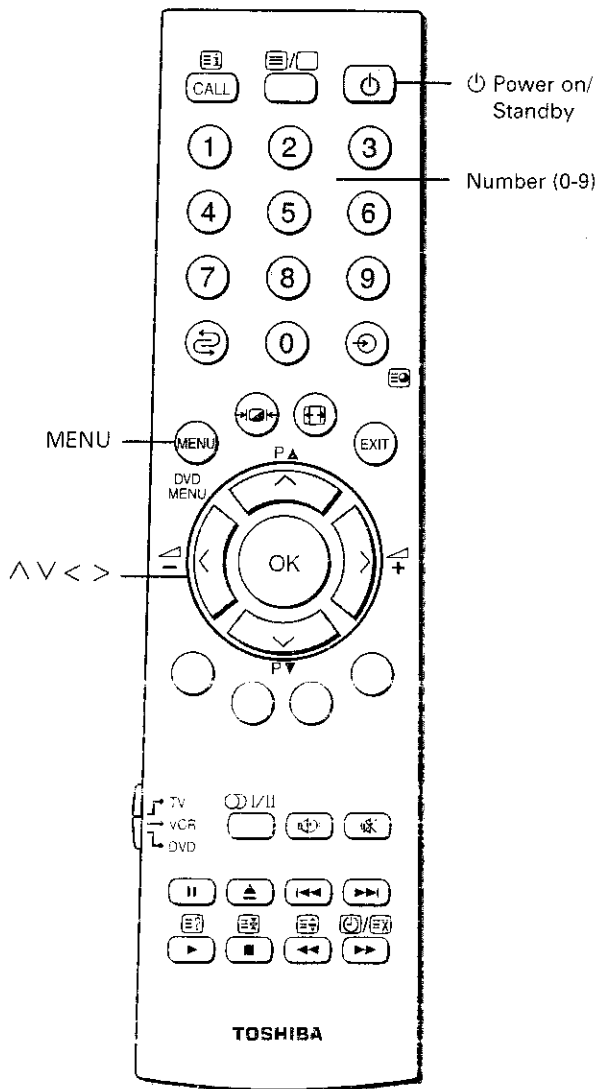
Notes

- You can also turn on the TV by pressing one of the **Number** buttons (0–9) instead of the Power on/Standby button. By pressing the number (one digit only) where the channel you want to watch is preset, you can turn on the TV and channel selection at the same time (for the channel programming, see page 15).
- After you turn on the TV, it takes a moment for the picture to appear.

- 2 To turn off the TV (standby mode), press the Power on/Standby or Power off button.

Note

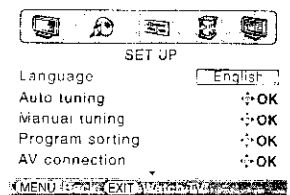
If the Quick restart function is in On (LPS mode), the green LED will blink for several minutes. This setting will affect the amount of time it takes for the picture to appear when you turn on the TV again (see page 28).



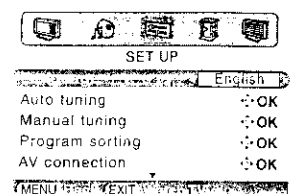
To select a language

Choose from seven different languages (English, Chinese (CS), Malay, Thai, Vietnamese, Russian and Arabic) for the on-screen displays.

- 1 Press the **MENU** button, then press the Left or Right button to display the SET UP menu.



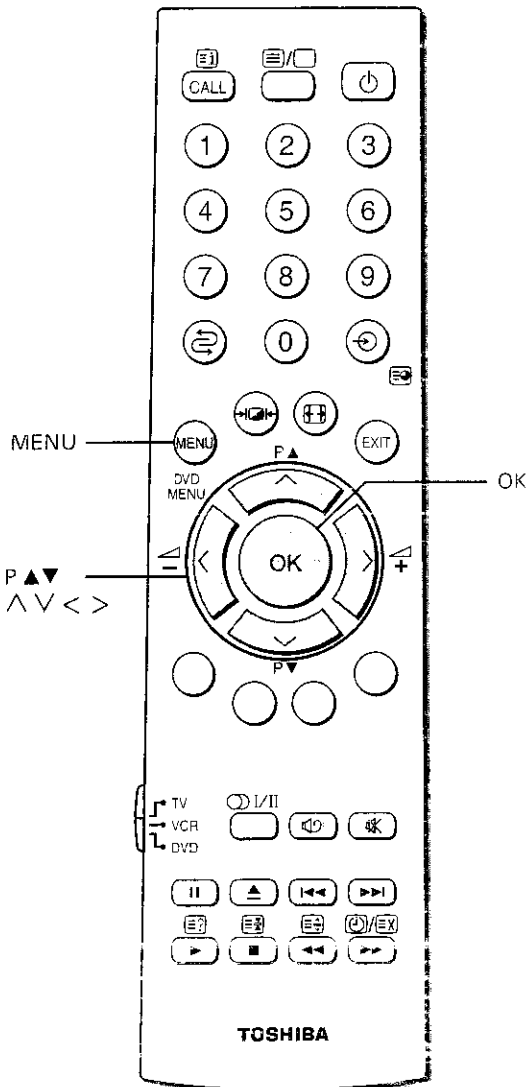
- 2 Press the Up or Down button to select Language, then press the Left or Right button to select the desired language.



Programming Channel Memory

- First, use the Auto tuning feature to preset all the active channels in your area automatically. Then, arrange the preset channels with the Manual tuning feature so that you can tune into only desired channels.
- Use the Channel search 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.

To preset channels (Auto tuning/Manual tuning)



Note

When you preset the program channel which sound of broadcast transmission system adopts "M" system, the sound system may not be tuned correctly if the radio waves transmit badly. At that time, preset the channel by Manual tuning. The countries such as Myanmar, Brazil, Chile, Colombia apply to this case. See page 51 for more details.

Auto tuning

1 Press the **MENU** button, then press the < or > button to display the SET UP menu.

Press the ∇ or \blacktriangle button to select Auto tuning.

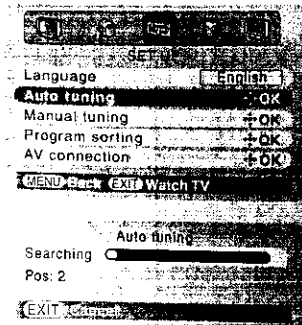
2 Press and hold the **OK** button for a several seconds to start the automatic search.

The search will begin for all available stations. Bullet will move along the line as the search progresses. **DO NOT PRESS ANY BUTTONS WHILE THE AUTOMATIC SEARCH IS IN PROGRESS.**

If you make a mistake, simply repeat steps 1-2 to start again from the beginning.

3 When the automatic search is complete, the TV will automatically return to the first program position.

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



Manual tuning

1 Press the **MENU** button, then press the < or > button to display the SET UP menu.

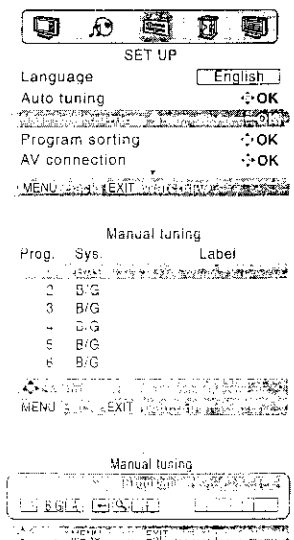
Press the ∇ or \blacktriangle button to select Manual tuning.

2 Press the **OK** button to display the Manual tuning menu.

Press the ∇ or \blacktriangle button to select the program position you want to arrange.

3 Press the **OK** button to display the breakdown menu.

Press the < or > button to select an item, then press the ∇ or \blacktriangle button to select the item as shown on the next page.



(Continued on next page)

GETTING STARTED

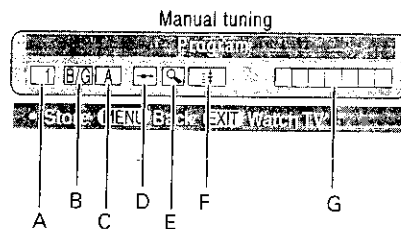
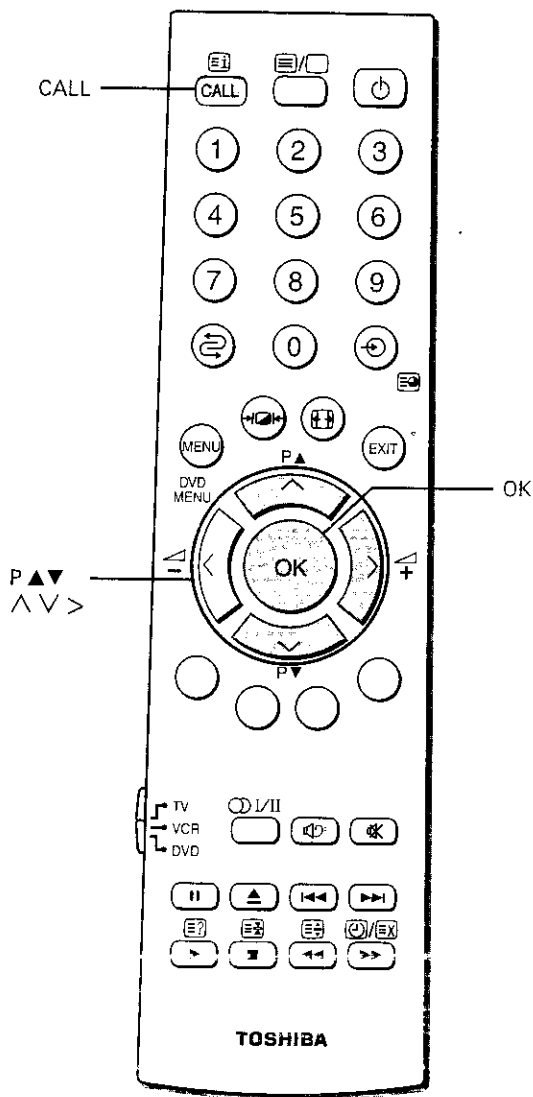
Programming Channel Memory (continued)

DO NOT PRESS ANY OTHER BUTTONS WHILE THE SET IS TUNING.

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

To preset channels (Manual tuning)

GETTING STARTED



- A. Program position selection
- B. Sound system (see page 51)
- C. Color system (see page 51)
A: Automatic, P: PAL, S: SECAM, N4: NTSC4.43 (MHz), N3: NTSC3.58 (MHz)
If the color of a certain channel is abnormal, the automatic color system selection (A) may have malfunctioned, or the sound system selection is wrong. In such a case, select another color and/or sound system (see page 51).
- D. Program position skip selection
Press the \wedge or \vee button to turn the program position skip option on " \curvearrowright " or off " \curvearrowleft ".
The program position will then be skipped when you select channels with the \blacktriangle or \blacktriangledown button.
" \curvearrowright " mark will appear beside a program position number when you use the number button on the remote control.
- E. Channel search operation
Press the \wedge button to search up the band or the \vee button to search down the band.
Press the \wedge or \vee button repeatedly until your desired channel is displayed.
When a station is found, it will be displayed.
- F. Auto Fine Tuning
Press the \wedge or \vee button to turn the Auto Fine Tuning option On " \ddagger " or Off "0".
The Auto Fine Tuning feature automatically corrects slight fluctuations when receiving signals.
Manual Fine Tuning
While the Auto Fine Tuning turn Off "0", press the \wedge or \vee button so that the better picture and sound are obtained.
- G. Label
Station labels appear with the program position display each time you turn on the TV, select a channel, or press the **CALL** button.

To change or create station labels:

- 1) Press the \wedge or \vee button repeatedly to select a character for the first space, then press the $\>$ button.

A-Z → (→) → * → + → , → - → . → / → 0 → 9 → * →

*(blank space)

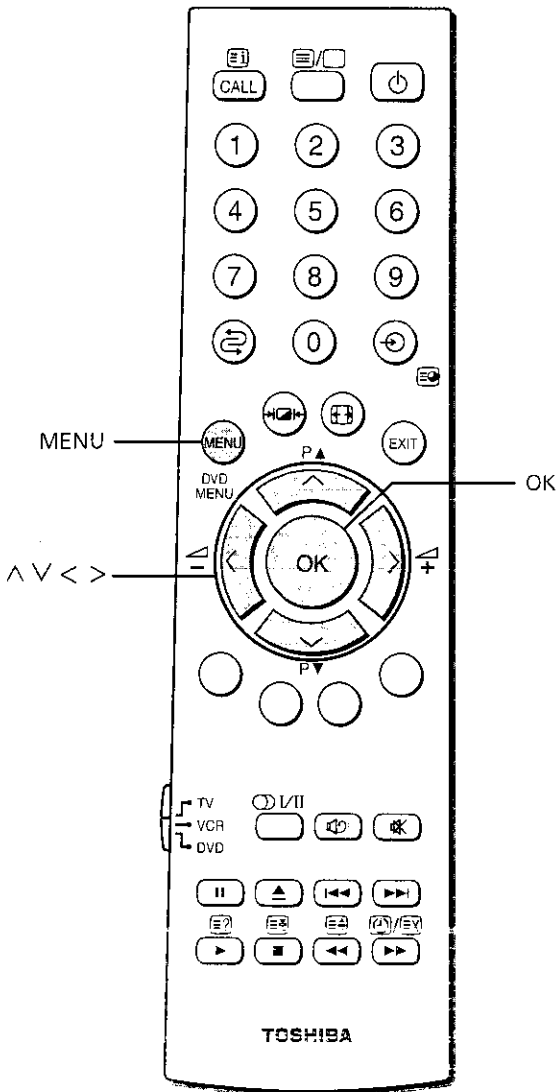
- 2) Repeat step 1) to enter the rest of the characters. If you would like a blank space in the label name, you must choose an empty space from the list of characters.

Press the **OK** button to store your settings.

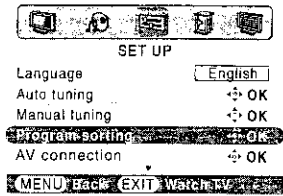
Program sorting

Program sorting

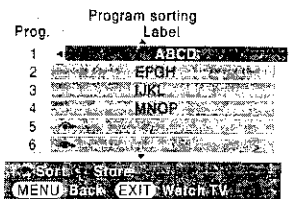
Ex.: To swap channel ABCD (Prog.1) for channel MNOP (Prog.4):



1 Press the **MENU** button, then press the < or > button to display the SET UP menu. Press the ^ or v button to select Program sorting.

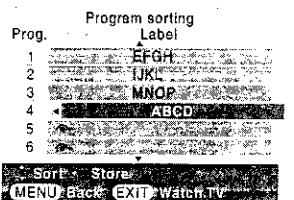


2 Press the **OK** button to display the Program sorting menu.

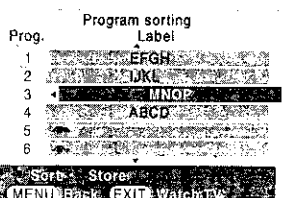


3 Press the ^ or v button to highlight the channel ABCD to be moved.

4 Press the > button to enter your choice.

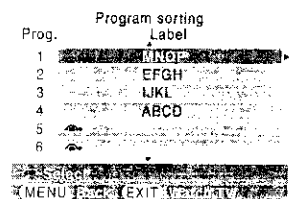


5 Press the v button repeatedly to highlight the new position "4", then press the < button.



6 Repeat steps from 3 to 5 to move the channel MNOP to the program position "1".

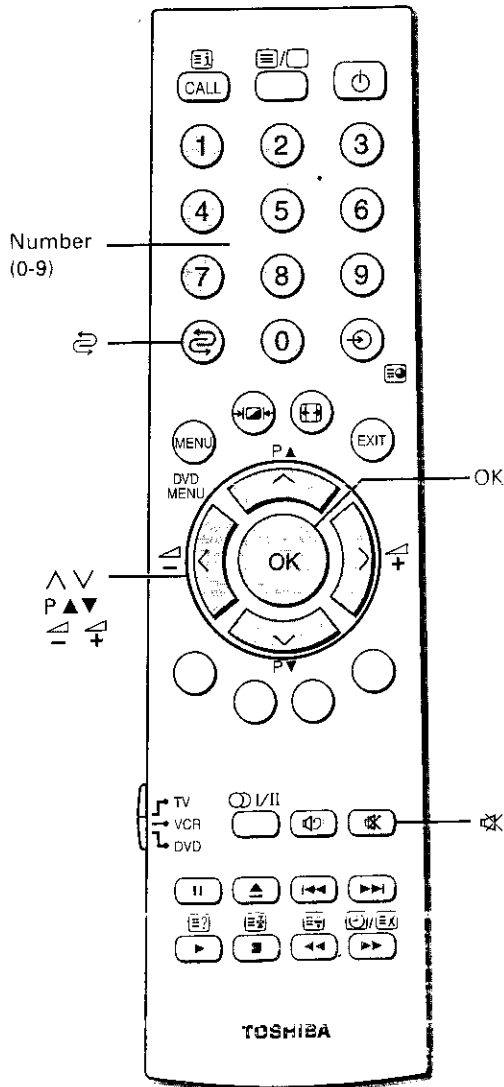
7 Confirm new sorting list.



Watching TV Programs

GETTING STARTED

To watch TV programs/ (mute) button



To select TV programs

Using the Number buttons

Enter the desired program position number by pressing the Number buttons on the remote control.



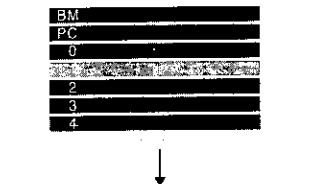
For program positions below 10, press 0 and the required Number buttons.


Using the P ▲ ▼ buttons

Press the P ▲ button to select higher position numbers; P ▼ button to select lower ones.

Using the OK button and ▲ ▼ buttons

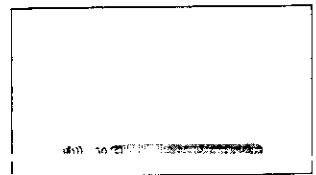
To select a specific channel position (or video input mode). Press the OK button. The position number list will appear. Repeatedly press the ▲ or ▼ button to scroll the position number list. Release the button to display the highlighted position number, then press the OK button.





To revert to the previous program position, press .


To adjust the volume

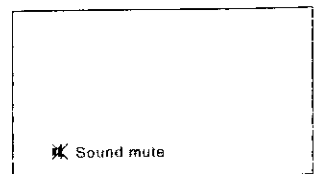
Adjust the sound volume with the ▲ - + buttons.



To mute the sound

Press the  button to temporarily turn off the sound. While the sound is off, the screen will display " Sound mute".

To restore the sound, press the  button again.

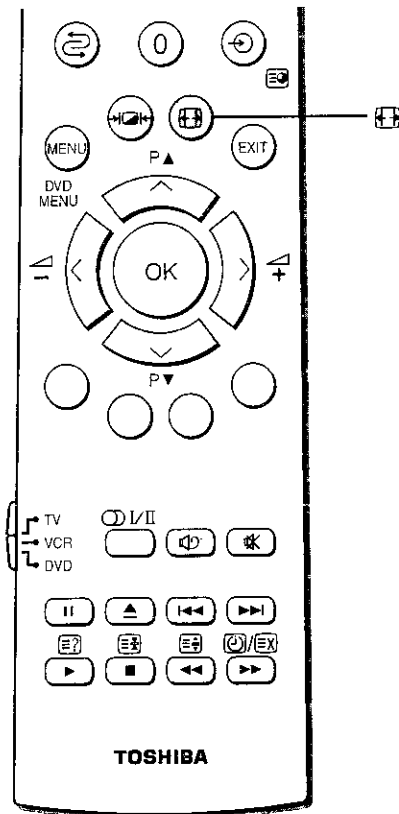



USING THE TV'S FEATURES

Viewing the Wide-Screen Picture Format

- This TV is capable of showing broadcasts in a number of formats. Depending on the type of broadcast being transmitted, you may select between Super live, Cinema, Subtitle, 14:9, Wide and 4:3.

To select the picture format



Press the  button repeatedly to view the options available.

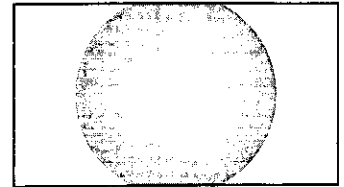
Super live

This setting will enlarge the image to fit the screen by stretching the image vertically and horizontally, holding the correct proportions at the center of the image.



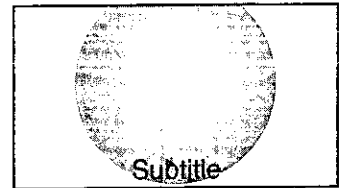
Cinema

When watching the '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.



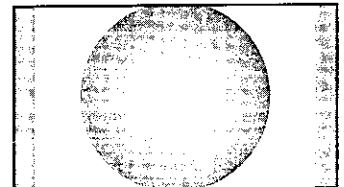
Subtitle

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



14:9

Use this setting when watching a 14:9 broadcast.



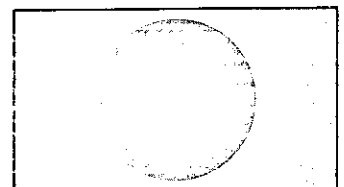
Wide

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



4:3

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



USING THE TV'S FEATURES

Notes

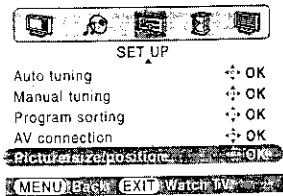
- Using the special functions to change the size of the displayed image (i.e., changing the height/width ratio) for the purpose of public display or commercial gain may infringe on copyright laws.
- The picture size selection is not available for 720p/1080i input signals.
- If you select the Cinema or Subtitle mode for conventional size programs, parts of the picture at the top and bottom of the screen may be hidden. You can adjust the Picture size/position (see page 20).
- When the BRIDGE MEDIA function (see page 30) is selected, the picture size selection is for the Wide and 4:3 only.

Adjusting the Picture Size/Position

To adjust the picture size/position

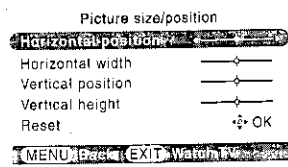
The picture size/position may be adjusted to suit personal preference and can be particularly useful for external input.

1 Press the **MENU** button, then press the < or > button to display the SET UP menu.



2 Press the ∇ or ▲ button repeatedly to select Picture size/position.

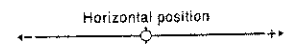
3 Press the **OK** button to display the Picture size/position menu.



The menu options will vary depending on the widescreen format you have previously chosen.

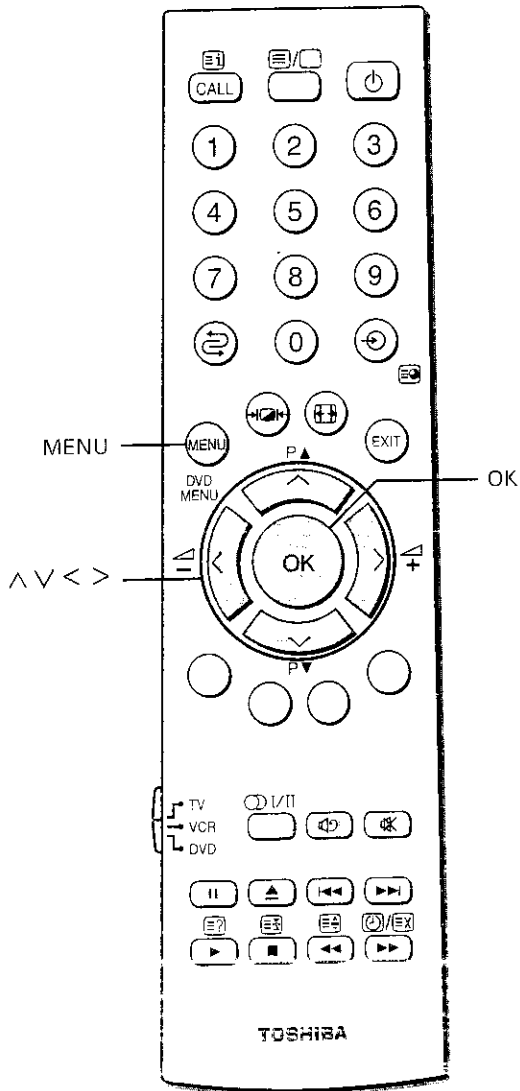
4 Press the ∇ or ▲ button to select an option you want to adjust.

5 Press the < or > button to adjust the settings as required.



To return to the original factory settings, select Reset in step 4 above, then press the **OK** button.

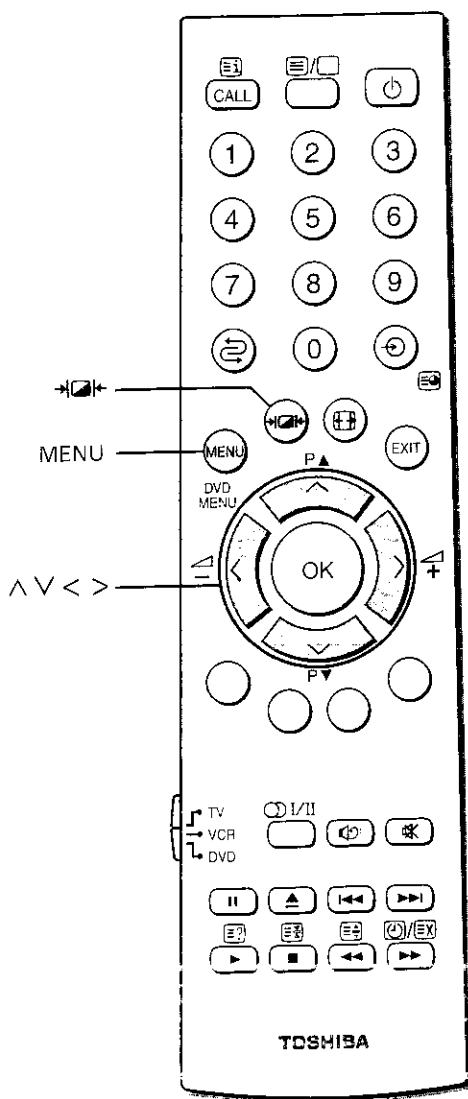
USING THE TV'S FEATURES



Note
The picture size/position adjustments are not available for 720p/1080i input signals.

Picture Controls

Selectable picture

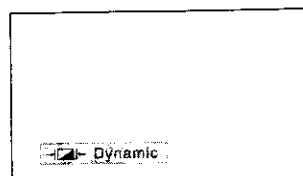


To select the picture mode

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

Press the button to select the desired picture quality.

Dynamic, Standard, Mild and Memory (user-set) can be selected cyclically.



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

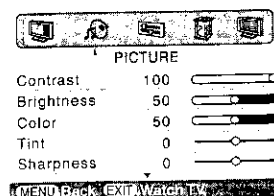
Note

While in the PC input mode (see page 41), the picture mode selection is not available.

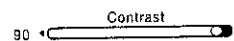
To adjust the picture quality

The adjusted level is stored in the picture Memory.

- 1 Press the **MENU** button, then press the **<** or **>** button to display the PICTURE menu.



- 2 Press the **∇** or **∧** button to select the item you want to adjust, then press the **<** or **>** button to adjust the level.



Item	Pressing	
	<	>
Contrast	weaker	stronger
Brightness	darker	lighter
Color	paler	deeper
Tint *	purplish	greenish
Sharpness	softer	sharper

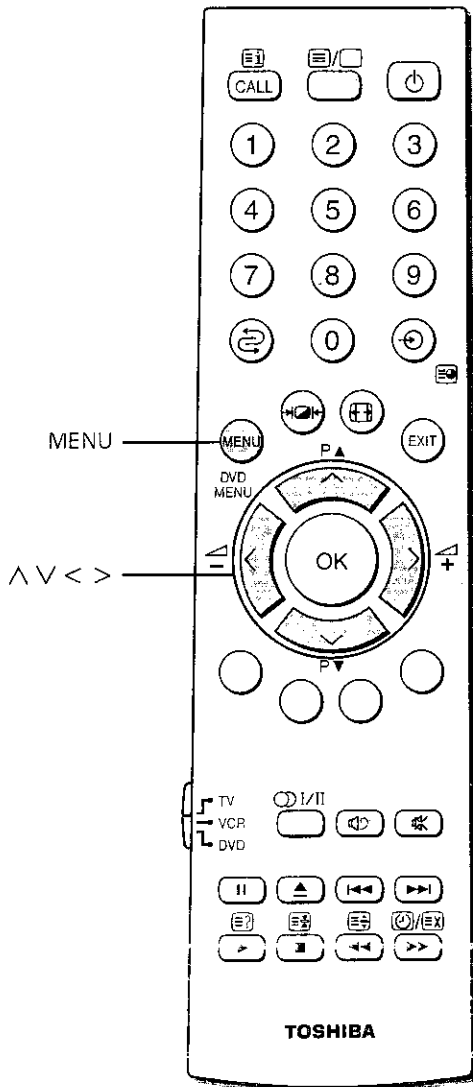
* for NTSC/480i/480p/720p (60Hz)/1080i (60Hz) system

USING THE TV'S FEATURES

Picture Controls (continued)

USING THE TV'S FEATURES

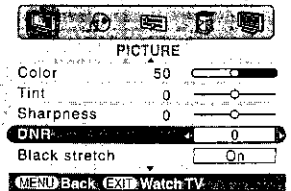
Digital Noise Reduction (DNR)/Black stretch



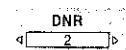
To select the Digital Noise Reduction

If the receiving signal is weak and the picture is blurry, the picture may be improved when using this function. You can select the picture quality among five modes (1-5).

- 1 Press the **MENU** button, then press the < or > button to display the PICTURE menu. Press the ∨ or ∧ button to select DNR.



- 2 Press the < or > button to adjust for the best result. The differences may not always be noticeable.



To turn off the Digital Noise Reduction

Select 0 in step 2 above.

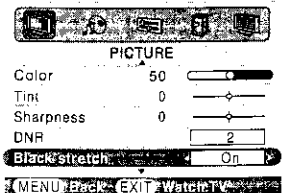
Note

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

To activate the Black stretch

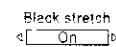
This corrects the contrast balance of the black area in the picture. The effect depends on the condition of the video signal.

- 1 Press the **MENU** button, then press the < or > button repeatedly to display the PICTURE menu.



- 2 Press the ∨ or ∧ button repeatedly to select Black stretch.

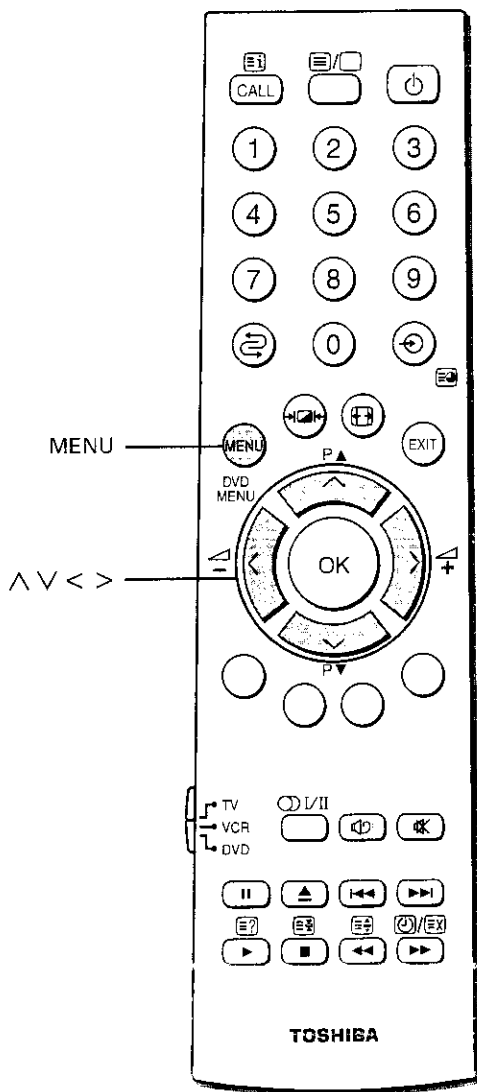
- 3 Press the < or > button to select On.



To turn off the Black stretch

Select Off in step 3 above.

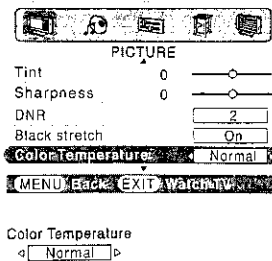
Color Temperature/Lamp mode



To adjust the Color temperature

You can change the tone of the picture by selecting from three preset color temperatures: Cool, Normal and Warm.

- 1** Press the **MENU** button, then press the < or > button to display the PICTURE menu.
- 2** Press the ∇ or \blacktriangle button repeatedly to select Color Temperature.
- 3** Press the < or > button to select the mode you prefer.



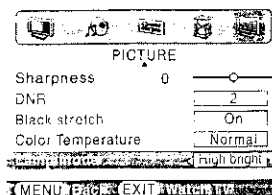
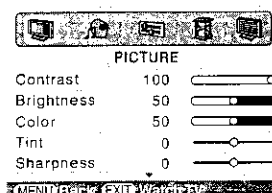
- Cool : Blueish
- Normal : Neutral
- Warm : Reddish

Selecting the Lamp mode

The Lamp mode has two options:

- The High bright mode is for use where additional screen brightness is required such as in a room where the lighting is bright.
- The Low power mode reduces wear on the projection lamp. This will prolong the life of the lamp and it is recommended that the lamp stays in this mode as much as possible.

- 1** Press the **MENU** button, then press the < or > button to display the PICTURE menu.
- 2** Press the ∇ or \blacktriangle button to select Lamp mode.
- 3** Press the < or > button to select High bright or Low power, whichever you prefer.

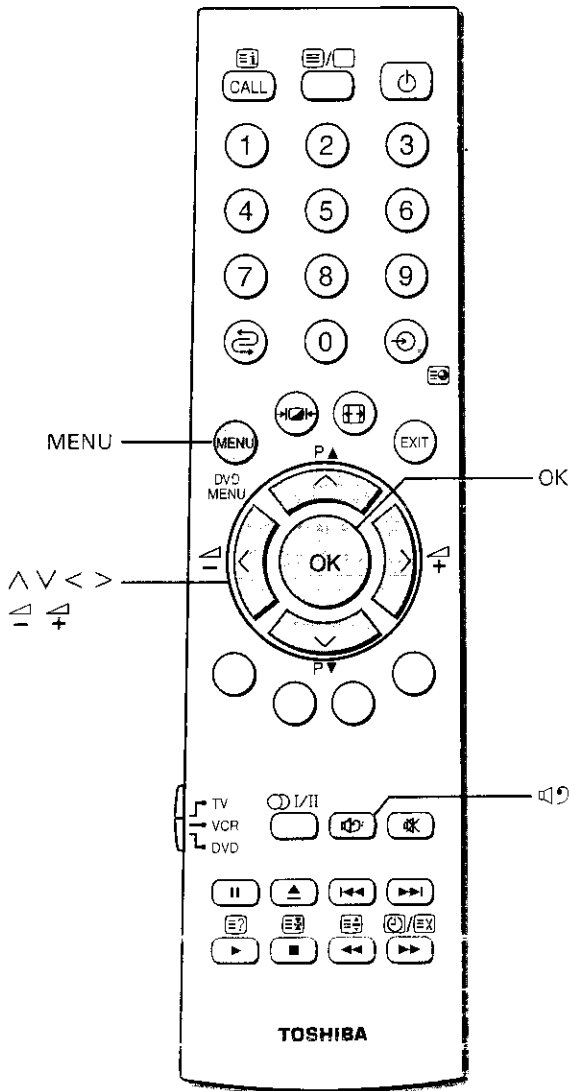


USING THE TV'S FEATURES

Sound Controls

USING THE TV'S FEATURES

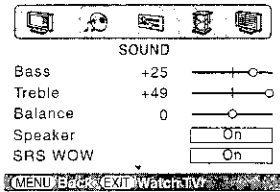
Sound quality adjustment/Speaker On/Off



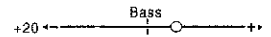
To adjust the sound quality

The adjusted level is stored in the sound Memory.

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



- 2 Press the ∇ or \blacktriangle button to select the item you want to adjust, then press the < or > button to adjust the level.

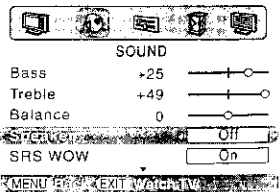


Item	Pressing	
	<	>
Bass	weaker	stronger
Treble	weaker	stronger
Balance	decreases the right channel	decreases the left channel

Turning off the built-in speakers

Use this feature to turn off the TV speakers when you connect an audio system to your TV (see page 42).

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



- 2 Press the ∇ or \blacktriangle button to select Speaker.

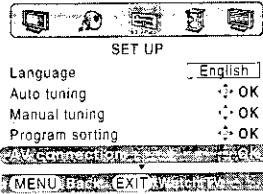
- 3 Press the < or > button to select Off.

To turn on the built-in speakers Select On in step 3 above.

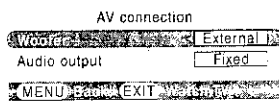
Woofers Int./Ext. mode/Bass boost/Woofers system/Variable audio output

To select the Woofers Int./Ext. mode

1 Press the **MENU** button, then press the **<** or **>** button to display the SET UP menu.



2 Press the **∨** or **∧** button to select AV connection, then press the **OK** button to display the AV connection menu.



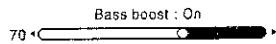
3 Press the **∨** or **∧** button to select Woofers, then press the **<** or **>** button to select Internal or External.

- Internal is to use the Bass boost.
- External is to use the external active woofer system.

To use the Bass boost

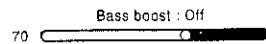
1 Select Woofers Internal mode as shown above.

2 Press the **🔊** button to display Bass boost level.



3 While the Bass boost display is on the screen, press the **∧** + or **∧** - button to adjust the bass boost level.

4 To turn off the Bass boost, press the **🔊** button to display Bass boost Off.

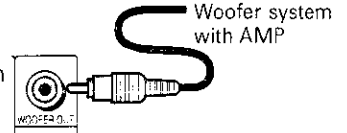


Note

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

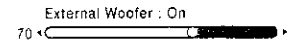
To use the external active woofer system

1 Connect the external woofer to the "WOOFER OUT" terminal located on the rear of the TV (see page 42).

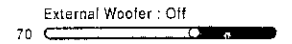


2 Select Woofers External mode from the AV connection menu.

3 Press the **🔊** button to display External Woofer level, then press the **∧** + or **∧** - button to adjust the woofer level.



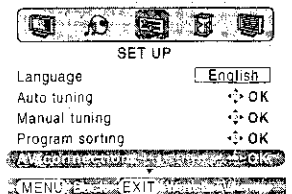
4 To turn off the external woofer, press the **🔊** button to display External Woofer Off.



To adjust the sound volume from AUDIO output terminals

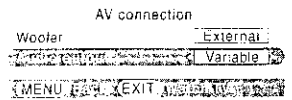
With the Audio out function "Variable", you can use the TV's remote control to adjust the sound volume of the external audio system connected (see page 42).

1 Press the **MENU** button, then press the **<** or **>** button to display the SET UP menu.



2 Press the **∨** or **∧** button to select AV connection, then press the **OK** button to display the AV connection menu.

3 Press the **∨** or **∧** button to select Audio output, then press the **<** or **>** button to select Variable.



Note

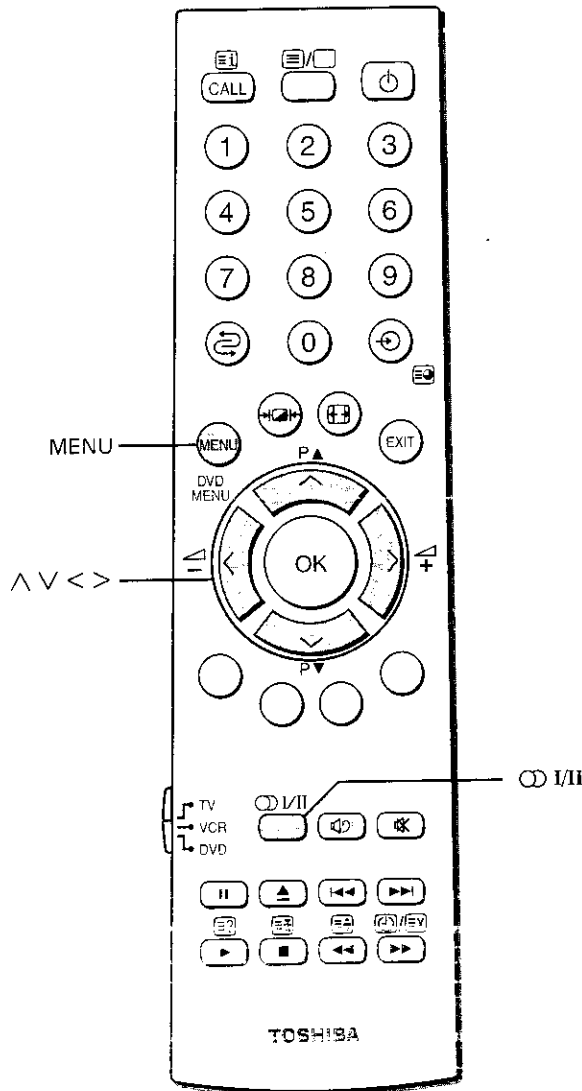
Make sure the volume control of your audio amplifier is set to a moderate listening level.

USING THE TV'S FEATURES

Sound Controls (continued)

USING THE TV'S FEATURES

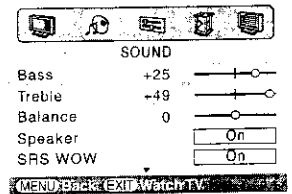
To use the SRS WOW surround sound and Stable sound functions



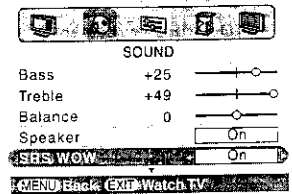
To turn on the SRS WOW surround

SRS WOW surround widens and deepens audio listening field to deliver exceptional sound from the TV's speakers. The function uses stereo signals from a TV broadcast or video input.

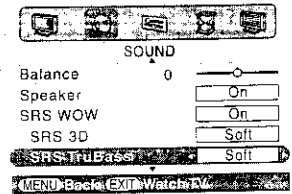
- 1 Press the **MENU** button, then press the < or > button to display the **SOUND** menu.



- 2 Press the **V** or **^** button to select **SRS WOW**, then press the < or > button to select **On**.



- 3 Press the **V** or **^** button to select "SRS 3D" or "SRS TruBass", then press the < or > button to select "Normal" or "Soft" for your personal preference.

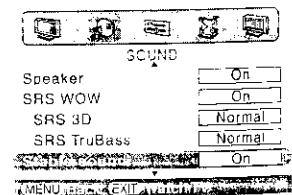


- SRS 3D : Surround effect
- SRS TruBass : Bass expansion effect

To turn on the stable sound

When the signal source is changed, the stable sound function limits the high volume level to prevent extreme changes in volume. For example, this will prevent the sudden increase in volume that often happens when a TV program switches to a commercial.


- 1 From the **SOUND** menu, press the **V** or **^** button to select **Stable sound**.



- 2 Press the < or > button to select **On**.

To turn off the stable sound
Select Off in step 2 above.

Notes

- If the broadcast is monaural, the SRS 3D effect does not work.
- WOW, SRS and  symbol are trademarks of SRS Labs, Inc.
- WOW technology is incorporated under license from SRS Labs, Inc.

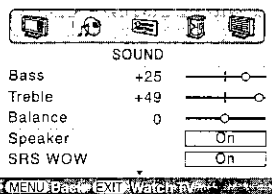
To select the MTS (Multi-channel TV Sound) mode and the stereo/bilingual mode

Setting the MTS mode

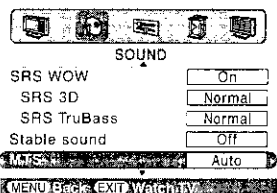
AUTO mode

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

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



- 2 Press the ∨ or ∧ button to select MTS, then press the < or > button to select Auto or Mono.



Mono mode

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

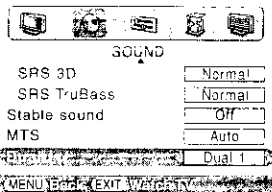
Note

If you experience noise with a particular program on whose channel reception is usually good, try setting MTS mode to Auto, then switch the /II button to Mono (monaural) (refer to the chart at right).

Selecting the Dual 1 or Dual 2 mode

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

- 1 Press the **MENU** button, then press the < or > button to display the **SOUND** menu.
- 2 Press the ∨ or ∧ button to select Dual, then press the < or > to select Dual 1 or Dual 2.

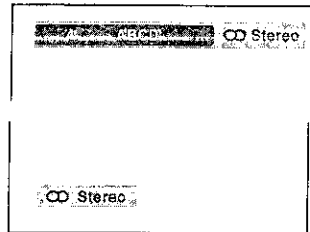


Notes

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

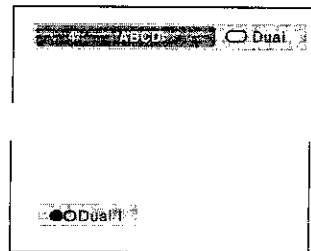
Stereo programs

- 1 When a stereo program is received, Stereo appears.
- 2 Press the /II button to select the stereo or monaural mode. Stereo and Mono appear cyclically on the screen.



Bilingual programs

- 1 When a bilingual program is received, Dual appears.
- 2 Press the /II button to select the sound to be heard. The sound differs according to the transmission system: NICAM or German stereo/bilingual broadcast. Dual 1, Dual 2 and Mono appear cyclically on the screen.



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	—

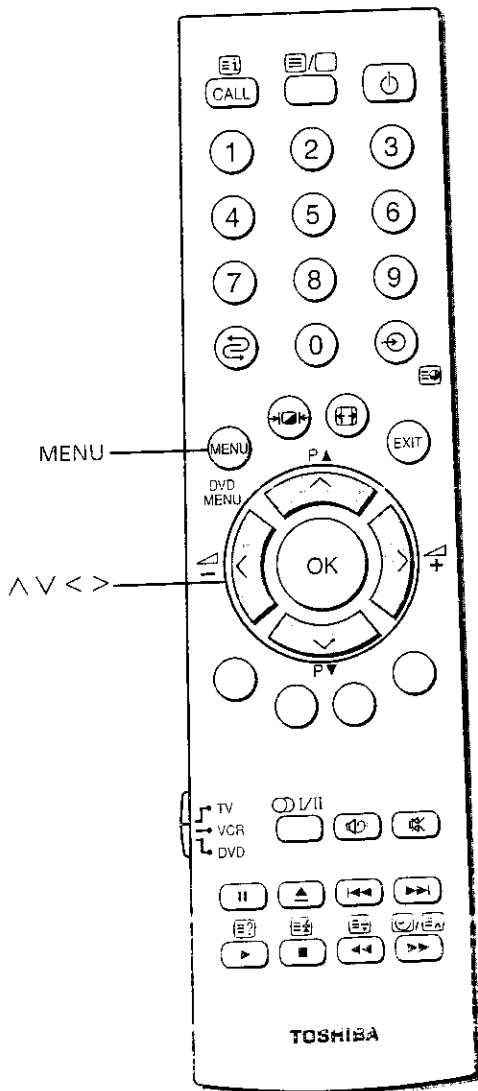
- These settings are not stored in the TV memory.

USING THE TV'S FEATURES

Using Other TV Features

USING THE TV'S FEATURES

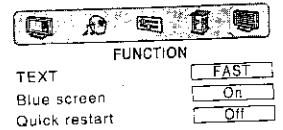
To use the Quick restart and the Blue screen functions



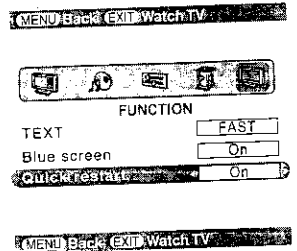
To set the Quick restart

With the Quick restart function set to On, the TV stays in Low Power Shutdown (LPS) mode for several minutes after the TV is turned off (see Note below). If the TV is turned on from Low Power Shutdown mode, the full picture appears immediately.

- 1 Press the **MENU** button, then press the < or > button until the **FUNCTION** menu appears.



- 2 Press the V or ^ button to highlight Quick restart, then press the < or > to select On or Off as you prefer.



Note

If Quick restart is set to Off and you turn off the TV, it can take several seconds for the picture to appear when you turn on the TV again.

If Quick restart is set to On and you turn off the TV, the following will occur for a few minutes:

- The screen (lamp) lights dimly.
- The fans continue to run.

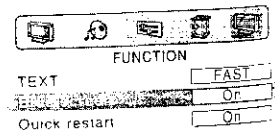
This is a function of the Quick restart Low Power Shutdown mode and is not a TV malfunction. If you do not prefer this, set the Quick restart feature to Off.

When the Quick restart is set to Off, if you repeatedly turn the TV on and off in a short period of time, the useful service life of the lamp may be shorter than the average useful service life.

To activate the 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 Press the **MENU** button, then press the < or > button to display the **FUNCTION** menu. Press the V or ^ button to select Blue screen.



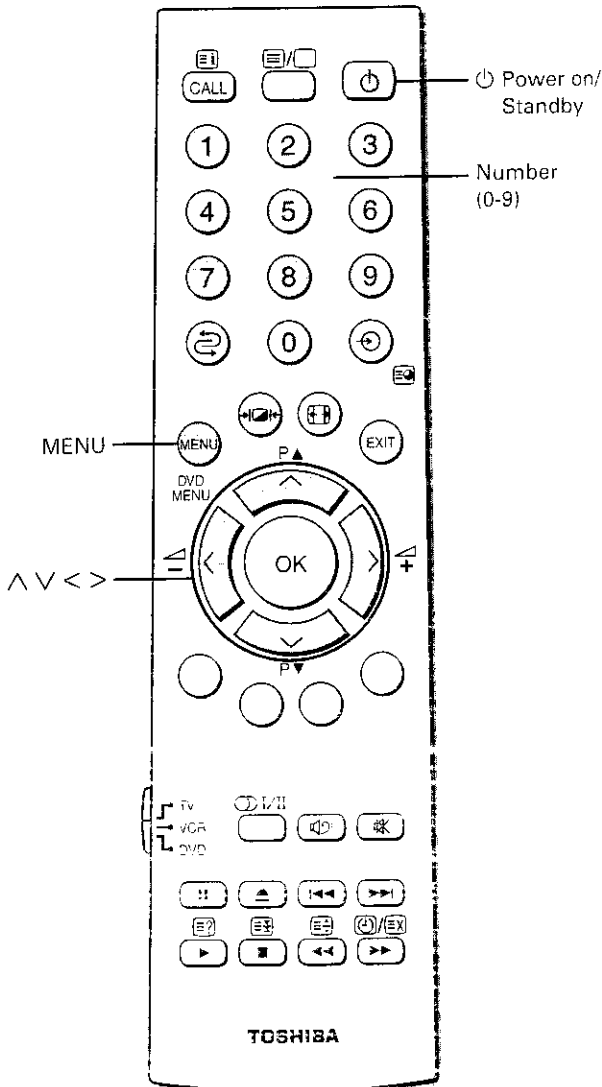
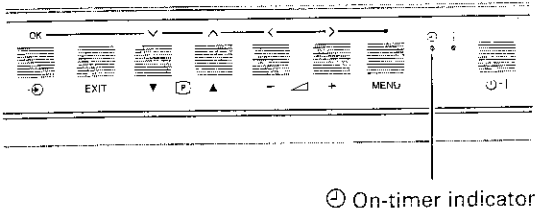
- 2 Press the < or > button to select On.

Note

If the Blue screen tends to miss-operate due to unstable signal strength or frequency, select Off in step 2.

To set the Off/On timer

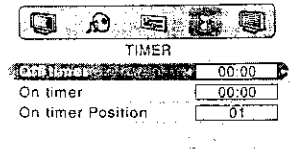
TV front touchpad



To turn off the TV automatically (Off timer)

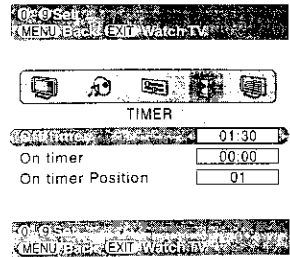
With the Off timer, the TV will automatically turn off (standby mode) at a preset time.

- 1 Press the **MENU** button, then press the < or > button to display the **TIMER** menu. Press the ∨ or ∧ button to select **Off timer**.



- 2 Press the **Number** buttons or < or > button to set the amount of time after which you want the TV to switch into the standby mode.

Ex. One hour and 30 minutes:
Press the 0, 1, 3 and 0 or < or >.
Once the preset time has elapsed, the TV will automatically turn off.



To cancel the Off timer

Press the ⏻ button twice (to turn off the TV once and turn it on again) or set the Off timer to 00:00 in step 2 above.

To turn on the TV automatically (On timer)

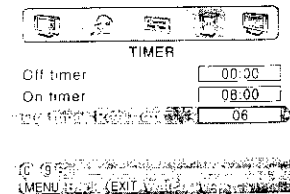
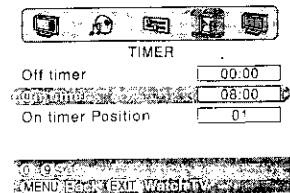
With the On timer, the TV will automatically turn on to a preset channel at a preset time.

- 1 Press the **MENU** button, then press the < or > button to display the **TIMER** menu. Press the ∨ or ∧ button to select to **On timer**. Press the **Number** buttons or < or > button to set the TV on time.

Ex. 8 hours:
Press the 0, 8, 0 and 0 or < or >.

- 2 Press the ∨ or ∧ button to select to **On timer Position**. Press the **Number** buttons or < or > button to set the position number.

Ex. Position number 6:
Press the 0 and 6 or < or >.



- 3 Press the ⏻ button to turn off the TV (standby mode). While the On timer is operating, the On-timer indicator (green) will light. At the preset time, the TV will turn on automatically.

To cancel the On timer

Set the On timer to 00:00 in step 1 above.

USING THE TV'S FEATURES

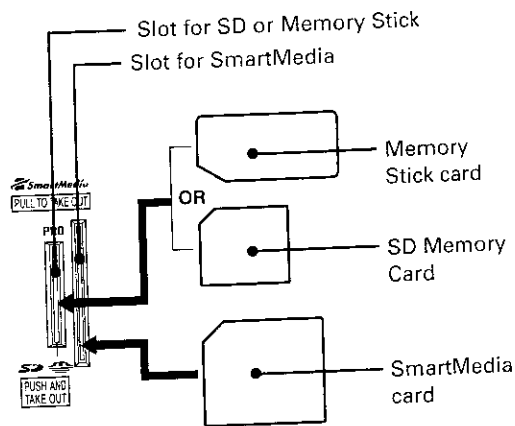
USING THE TV'S FEATURES

BRIDGE MEDIA Function

- The "BRIDGE MEDIA" function can be used to play back still or motion picture/sound memorized on "SD" Memory Cards, "Memory Stick" cards or "SmartMedia" cards by a digital still camera.
- The picture may not be reproduced properly depending on memory conditions.
If the picture cannot be displayed on the screen, you will see an "X" mark on the screen.
The edge of the picture may be hidden depending on the aspect ratio of the selected picture.
- If a full screen picture is displayed for more than 30 minutes, the screen saver will be activated (factory set).
(The motion picture appears on the screen) (see page 35).

To use the BRIDGE MEDIA

TV side panel



Inside the door



- Match the or marks on the cards to the marks inside the door.
- Match the mark on the card to the mark inside the door.

To remove the memory card

- Push the SD Memory Card or Memory Stick card.
- Pull out the SmartMedia card.

Memory Card Format

Memory Card Type		Capacity
SD Memory Card		8/16/32/64/128/256/512 MB
Memory Stick	Memory Stick	16/32/64/128 MB
	Memory Stick (Magic Gate/high speed data transmission)	16/32/64/128 MB
	Memory Stick (Magic Gate)	32/64/128 MB
	Memory Stick PRO	256/512 MB and 1GB
	Memory Stick (with memory select)	128 MB × 2
SmartMedia		8/16/32/64/128 MB

- About Memory Stick: Magic Gate and high speed data transmission are not available on this TV.


Still Picture Format

Item	Format
Memory Format	JPEG
File Format	Exif ver 2.2
Compatibility	DCF ver 1.0
Extension	JPG
Number of Pixels	H: 160 ≤ x ≤ 4096 V: 120 ≤ x ≤ 4096
Number of files	65535
Applicable maximum capacity	1GB

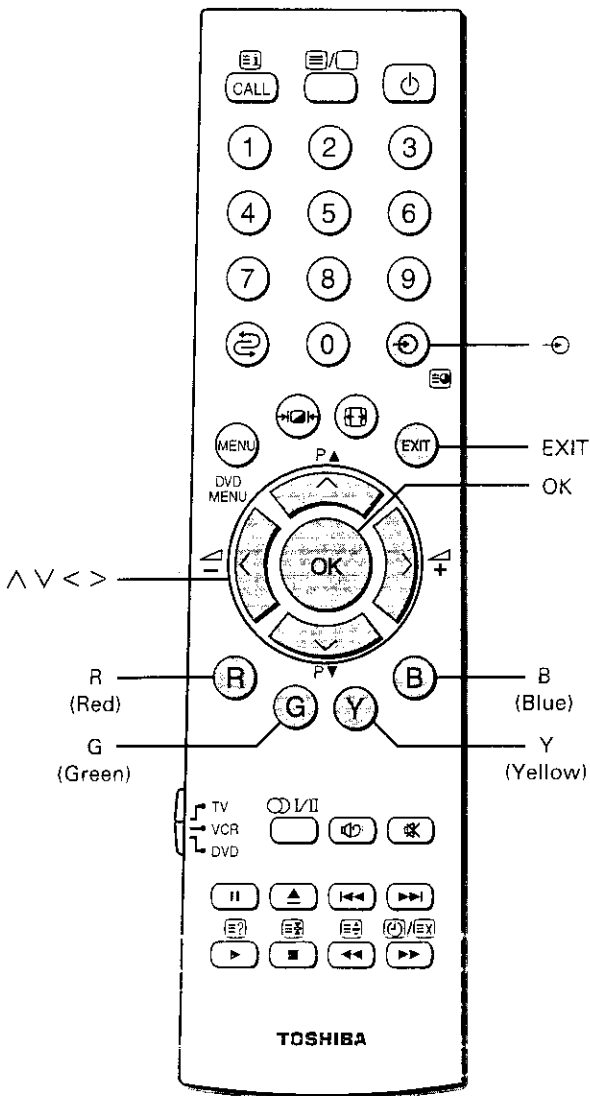
Motion Picture Format

item	Format
Memory Format	Motion JPEG/MPEG-1
File Format	AVI/MOV (QuickTime)/MPEG-1
Extension	avi/mov/mpg
Number of Pixels and Frames Rate	Motion JPEG
	MPEG-1
	VGA 640 × 480 (0 < x ≤ 10 fps)
	QVGA 320 × 240 (0 < x ≤ 15 fps)
	QQVGA 160 × 120 (0 < x ≤ 20 fps)
	CIF 352 × 288 (0 < x ≤ 8 fps)
Audio Format	PCM/MPEG-1 Audio
Audio Sampling Frequency	5 - 48 kHz

- is a trademark of Toshiba Corporation.
- is a trademark.
- is a trademark of Sony Corporation.


- Pictures on the memory card newly inserted will appear on the screen.
- If you use this function for a purpose other than your private viewing or listening, it may infringe copyright laws.
- You can also select BRIDGE MEDIA by pressing the  button (see page 41).
- While in the BRIDGE MEDIA mode, the Auto tuning, Manual tuning and Program sorting are not displayed in the SET UP menu.

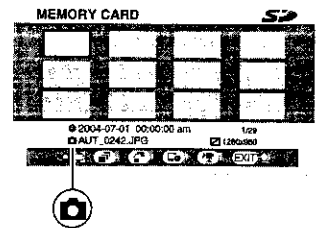
To use the BRIDGE MEDIA (still picture)



To select the full screen picture

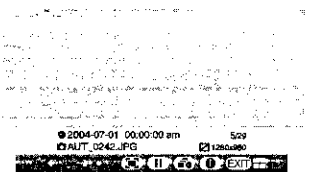
Insert the SD Memory Card or Memory Stick card or SmartMedia card into the slot.

- 1 The index menu appears on the screen, then press the ∇ , \wedge , \lt or \gt button to select the picture you want to see on the full screen. If the memory card contains still pictures, the  mark appears on the screen.



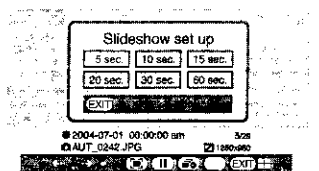
- To change to the MEMORY CARD menu, press the **EXIT** button.
- To change to the motion picture, press the **B** button. If there is no motion picture, you cannot change the mode.

- 2 Press the **OK** button. Press the ∇ or \wedge button to select another picture you want to see on the full screen.

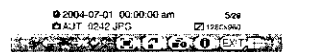


To use the Slide show


- 1 From the full screen picture, press the **R** button, then press the **Y** button to display the Slideshow set up.
- 2 Press the ∇ , \wedge , \lt or \gt button to select 5 sec., 10 sec., 15 sec., 20 sec., 30 sec., or 60 sec.
- 3 Press the **OK** button, the Slide show will start.



To stop the Slide show
Press the **R** or **G** button.



Notes

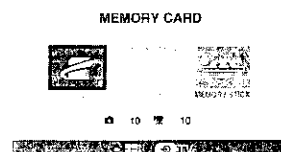
- To exit the BRIDGE MEDIA, press the  button.
- To return to the previous menu, press the **EXIT** button.

Notes

- If you select "Slide" mode in the index menu, the Slideshow set up times may differ from the times you set in step 2.
- The MEMORY CARD menu variation:

Ex. SD and SmartMedia

Ex. SmartMedia and Memory Stick



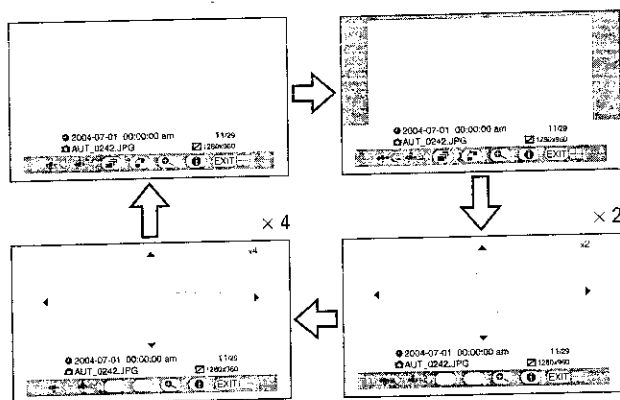
USING THE TV'S FEATURES

BRIDGE MEDIA Function (continued)

To use the BRIDGE MEDIA (still picture) (continued)

To use the zoom mode

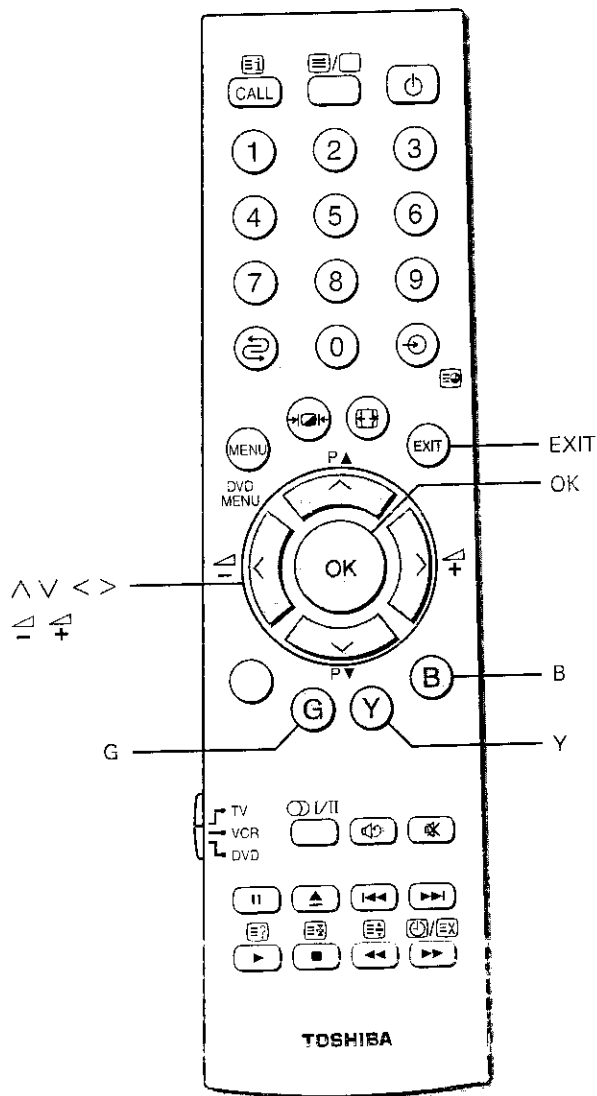
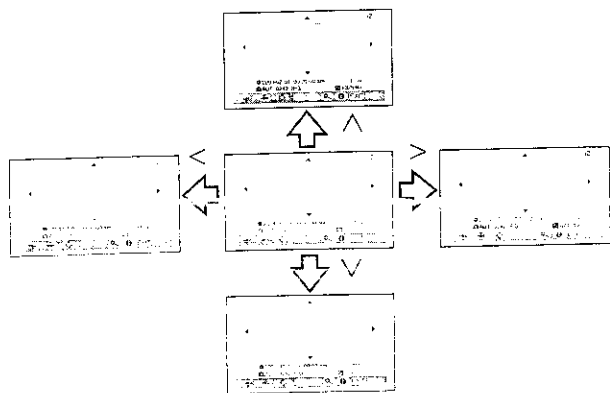
From the full screen picture, press the **Y** button to display the picture with a frame. Each time you press the **Y** button, the picture zooms as follows:



To select the picture position

When in the $\times 2$ zoom mode or $\times 4$ zoom mode, you can select the picture position. Press the **V**, **^**, **<** or **>** button to select the picture position.

Ex. $\times 2$ zoom mode

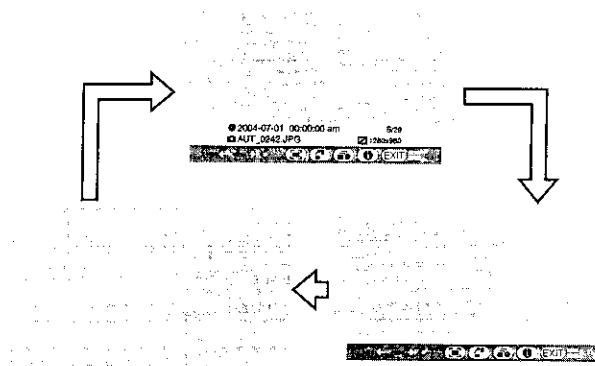


USING THE TV'S FEATURES

To use the BRIDGE MEDIA (motion picture)

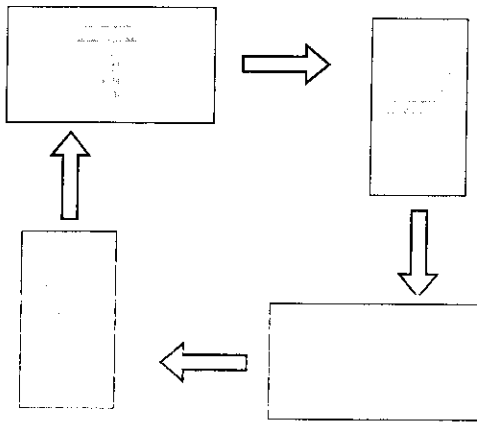
To select the information format

Each time you press the **B** button, the on-screen information will change as follows:



To select the rotation picture format


Each time you press the **G** button, the picture rotates clockwise by 90°:

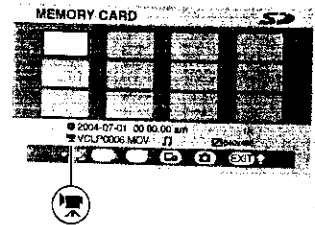


Note:
This function also operates in the index menu.

To select the full screen motion picture and audio

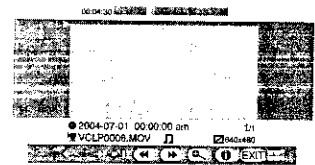
Insert the SD Memory Card or Memory Stick card or SmartMedia card into the slot.

- 1 The index menu appears on the screen, then press the ∇ , \wedge , \lt or \gt button to select the picture. If the memory card contains motion picture and audio, the  mark appears on the screen.




- To change to the MEMORY CARD menu, press the **EXIT** button.
- To change to the still picture, press the **B** button. If there is no still picture, you cannot change.

- 2 Press the **OK** button, the full screen motion picture with frame and audio starts. Press the ∇ or \wedge button to select another full screen motion picture you want to see on the screen.



Notes

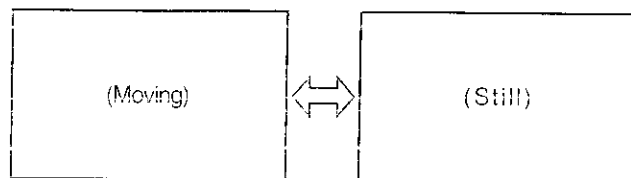
- Adjust the sound volume with the $\triangleleft +$ or $\triangleleft -$ buttons.
- The motion picture play back mark () is displayed for a several seconds.

To stop the full screen motion picture and audio

Press the **EXIT** button.

To freeze the picture and audio

Each time you press the **OK** button, the on-screen picture and audio will change as follows:



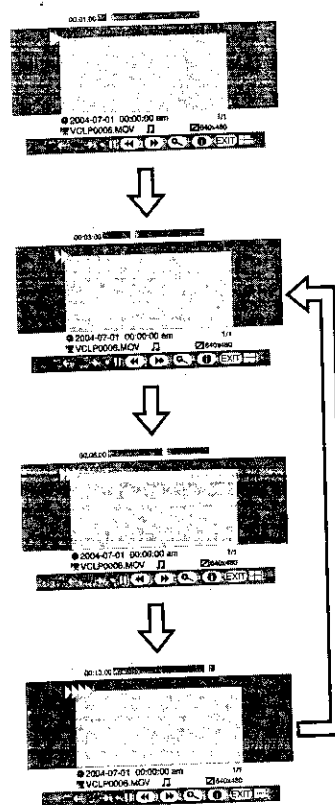
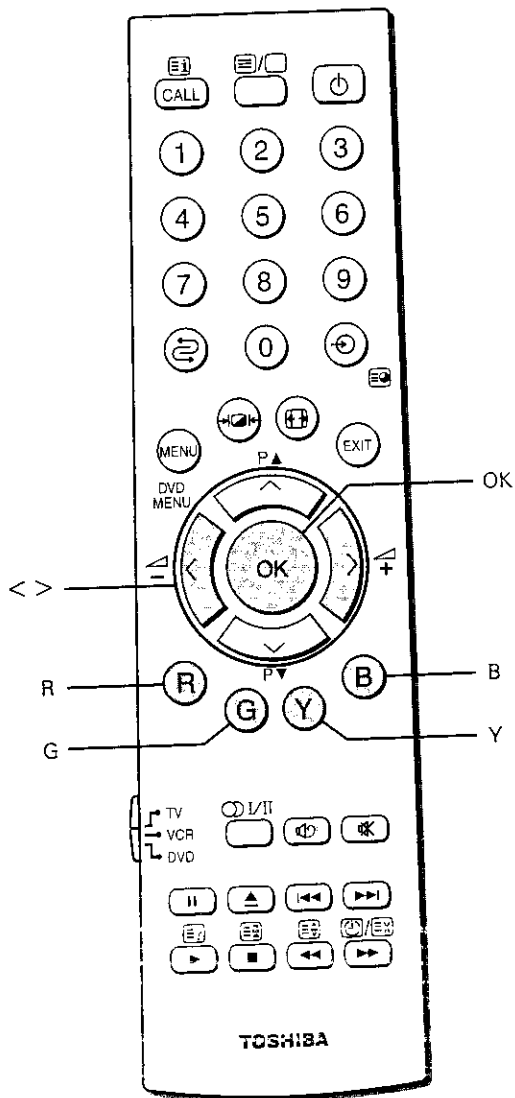
BRIDGE MEDIA Function (continued)

To use the BRIDGE MEDIA (motion picture) (continued)

To use the fast forward

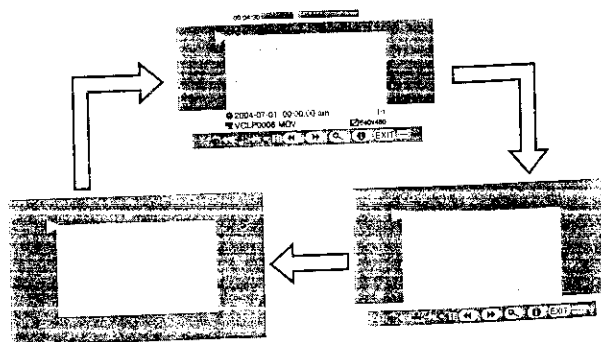
Each time you press the **G** button, the on-screen picture will change as follows:

USING THE TV'S FEATURES



To select the information format

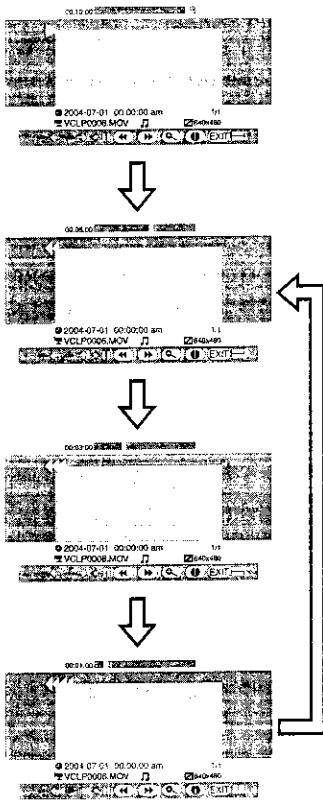
Each time you press the **B** button, the on-screen information will change as follows:



To use the BRIDGE MEDIA (motion picture) (continued)

To use the rewind

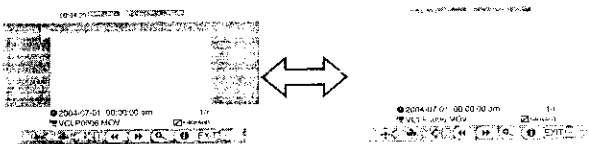
Each time you press the **R** button, the on-screen picture will change as follows:



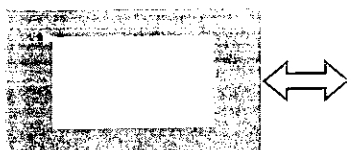
To turn off the frame

Each time you press the **Y** button, the on-screen frame will change as follows:

Ex. Normal



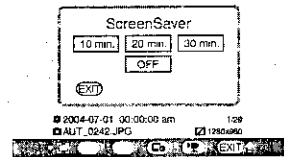
Ex. No information



To select the screen saver

The screen saver function activates by default. A moving picture will appear on the screen.

- From the index menu (still or motion picture), then press the **Y** button to display the ScreenSaver.



- Press the **<** or **>** button to select 10 min., 20 min., 30 min., or OFF. (30 min: factory set)
- Press the **OK** button to return to the index menu.

Note

While in the slide show or motion picture, the screen saver does not operate.

Alerts

- NO IMAGE**
No data to play back
- NO SD Memory Card**
No insert card
- NO SmartMedia**
No insert card
- NO MEMORY STICK**
No insert card
- NO FILE**
No recorded
- FILE ERROR**
Not accept BM format
- MEMORY STICK TYPE ERROR**
No accept Memory Stick
- FILE ERROR**
File broken or irregular file
- SD Memory Card ERROR**
BM broken or inverse
- SmartMedia ERROR**
BM broken or inverse
- MEMORY STICK ERROR**
BM broken or inverse
- FILE TYPE ERROR**
No accept file format

Note that the operation is not guaranteed for all these memory cards shown in the table. Toshiba recommend that you back up the data on the memory card before use. (The data of the memory card may be lost by misuse or malfunction of the TV. Toshiba assume no liability for losses incurred by data lost through the use of this TV.)

USING THE TV'S FEATURES

VIEWING TELETEXT

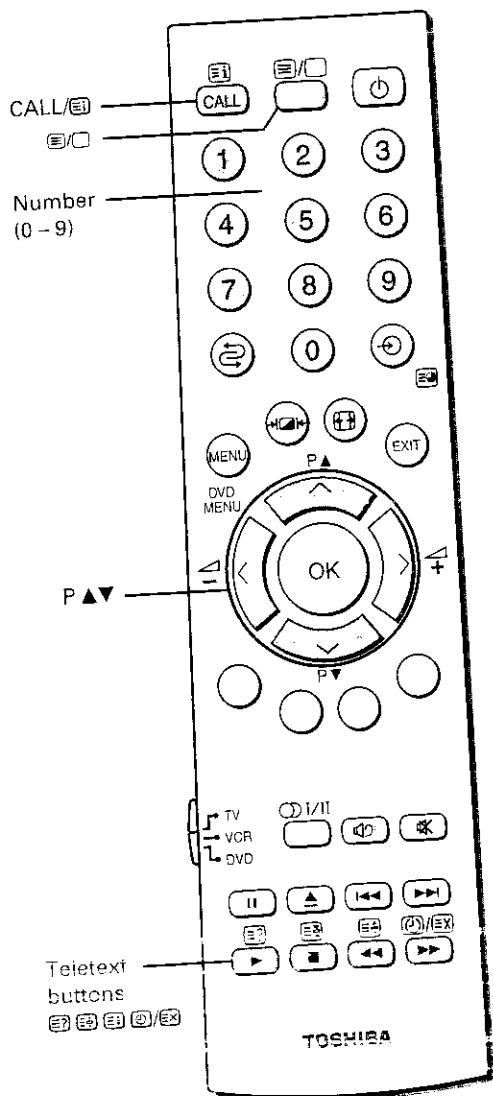
Teletext-Control Buttons

- The TV is capable of showing both normal text and the text information selected by FAST mode and LIST mode.
The Teletext buttons on the remote control have the same function for both text information types.

To view normal text

To display a page of text (☰/☐)

- 1 Select a desired TV station with the text service.
- 2 Press the ☰/☐ button.
The index page will appear.
- 3 Enter the 3-digit page number using the **Number** buttons (0 – 9).
Ex. Page 100: Press 1, 0 and 0.
- 4 Press the ☰/☐ button again to superimpose the teletext over a normal broadcast picture.
- 5 Press again to return to normal TV mode.



VIEWING
TELETEXT

To view normal text (continued)

To display an index/initial page (CALL/☐)

Press the **CALL/☐** button if no page number is displayed in the text mode. The index page (FAST mode) or the initial page (LIST mode) will appear.

To go to the previous or next page (P ▲▼)

Press the **P ▲** button to switch to the next page.
Press the **P ▼** button to switch to the previous page.

To stop a page of text (⏏)

When a page is divided into sub pages, it is convenient to hold a given page.

Press the **⏏** button to stop the page. "⏏" will appear in the top left of the screen. Press again to release the stop mode.

To enlarge the text display size (⏏)

Press the **⏏** button once to enlarge the top half of the page. Press again to enlarge the bottom half of the page, and again to return to the normal (full) size.

Note:

When you change a Text page after enlarging the text display size, or when a teletext page with sub code automatically changes, the top half of the page is always displayed first.

To see the bottom half of the page

- (1) Press the **⏏** button when the page is displayed in the full display.
- (2) Select "bottom" by pressing the **⏏** button repeatedly until the bottom half of the page is displayed.

Press the **⏏** button again to release the pause.

To select a page while viewing a TV picture (⏏/☐)

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

To display news flashes:

To view news flashes as they are broadcast, select the news flash page for the particular teletext service (see the index page of teletext service). The news flashes will be displayed as and when they are broadcast.
Press the **⏏/☐** button to cancel the display.

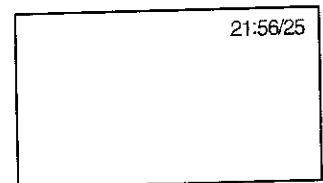
Note:

Press the **⏏/☐** button to cancel the news flash page before changing channels.

To display the time (⏏/☐) (with the Teletext service only)

To display the accurate time on the screen while watching a normal TV picture, press the **⏏/☐** button.

To erase the time display, press the buttons again.



To reveal concealed text (⏏)

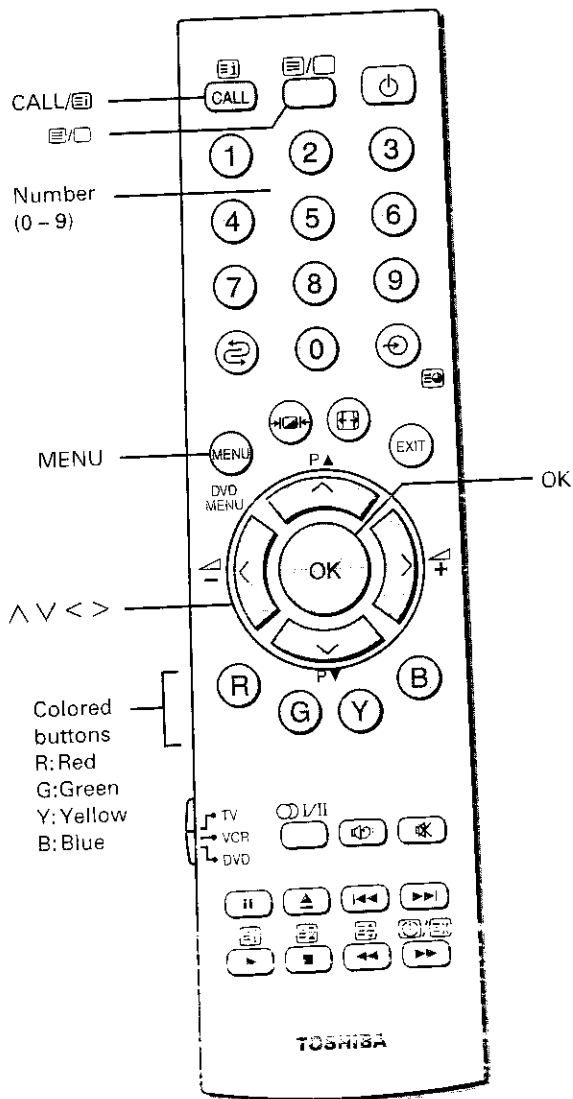
Some pages have sections that are concealed, such as the answers to quizzes and the punchlines of jokes. To see the concealed part, press the **⏏** button. Press again to conceal.

VIEWING TELETEXT

Teletext-FAST and LIST Modes

- **FAST mode**
FAST mode is a method of viewing Teletext pages by related subjects grouped by the broadcast studio. You can access any given topic shown on the screen simply by pressing the corresponding colored text select button on the remote control.

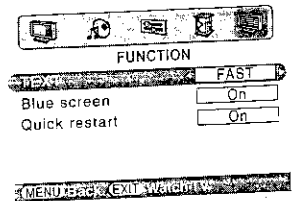
Using FAST mode



To select the FAST mode

When you select the FAST mode, four colored prompts appear at the bottom of the screen. The colors correspond to those of the text select buttons on the remote control. Press the corresponding colored button to go to the desired topic page instantly.

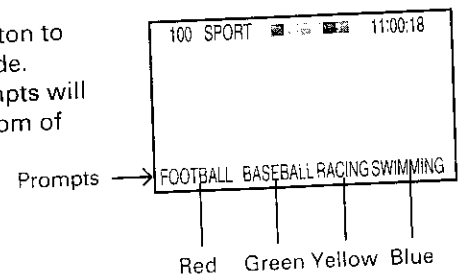
- 1 Select a TV channel with the desired FASTTEXT service.
- 2 Press the **MENU** button, then press the < or > button to display the **FUNCTION** menu. Press the v or ^ button to select **TEXT**.



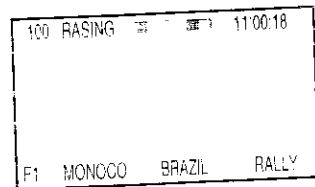
- 3 Press the < or > button to select **FAST** (Fasttext mode).

To view Fasttext

- 1 Press the ☐/☑ button to select the text mode. Four colored prompts will appear at the bottom of the screen.



- 2 Press the colored button which corresponds to your desired topic. The display will switch to the selected page.



- 3 Repeat step 2 to switch to the next topic you want to view.

To return to the normal TV mode
Press the ☐/☑ button twice.

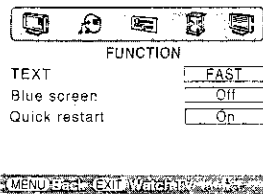
Press the **CALL/☰** button to display an index page.

- LIST mode
You can preset up to four of the most frequently used text pages to select these pages easily.

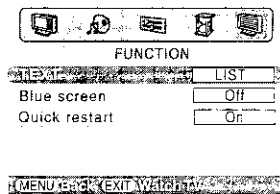
To preset and view the text pages in the LIST mode

To select the LIST mode

1 Press the **MENU** button, then press the < or > button to display the **FUNCTION** menu. Press the **V** or **^** button to select **TEXT**.



2 Press the < or > button to select **LIST** (LIST mode).

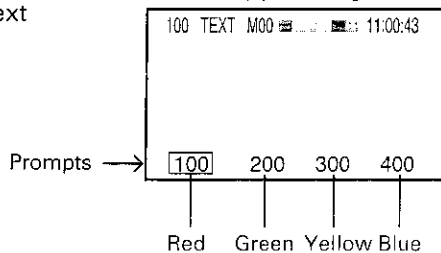


3 Select a TV channel with the normal text service.

To preset desired pages

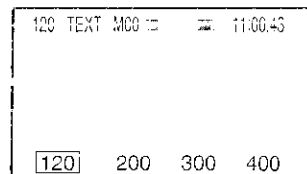
1 Press the **TEXT** button to select the text mode.

Ex. Factory presetting



2 Press the **R** button to select the red page.

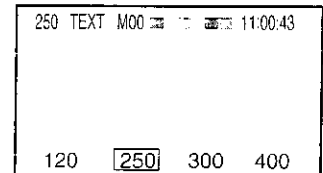
3 Press the **Number** buttons to enter the 3-digit page number that you want to preset the red page.
Ex. page 120 : Press 1, 2 and 0.



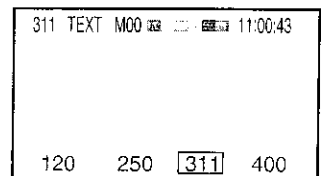
The preset page is displayed on the screen.

4 Press the **G** button to select the green page.

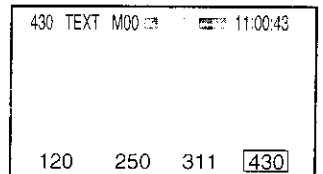
5 Enter the 3-digit page number you want to preset by using the **Number** buttons.



6 Repeat steps 4 and 5 to preset the other two pages using the **Y** and **B** buttons.



7 Press the **OK** button momentarily. The four colored prompts turn white momentarily and are stored in memory.



To display a desired page

Press the desired colored button according to the four colored prompts on the screen.

To display an initial page

Press the **CALL** button.

VIEWING TELETEXT

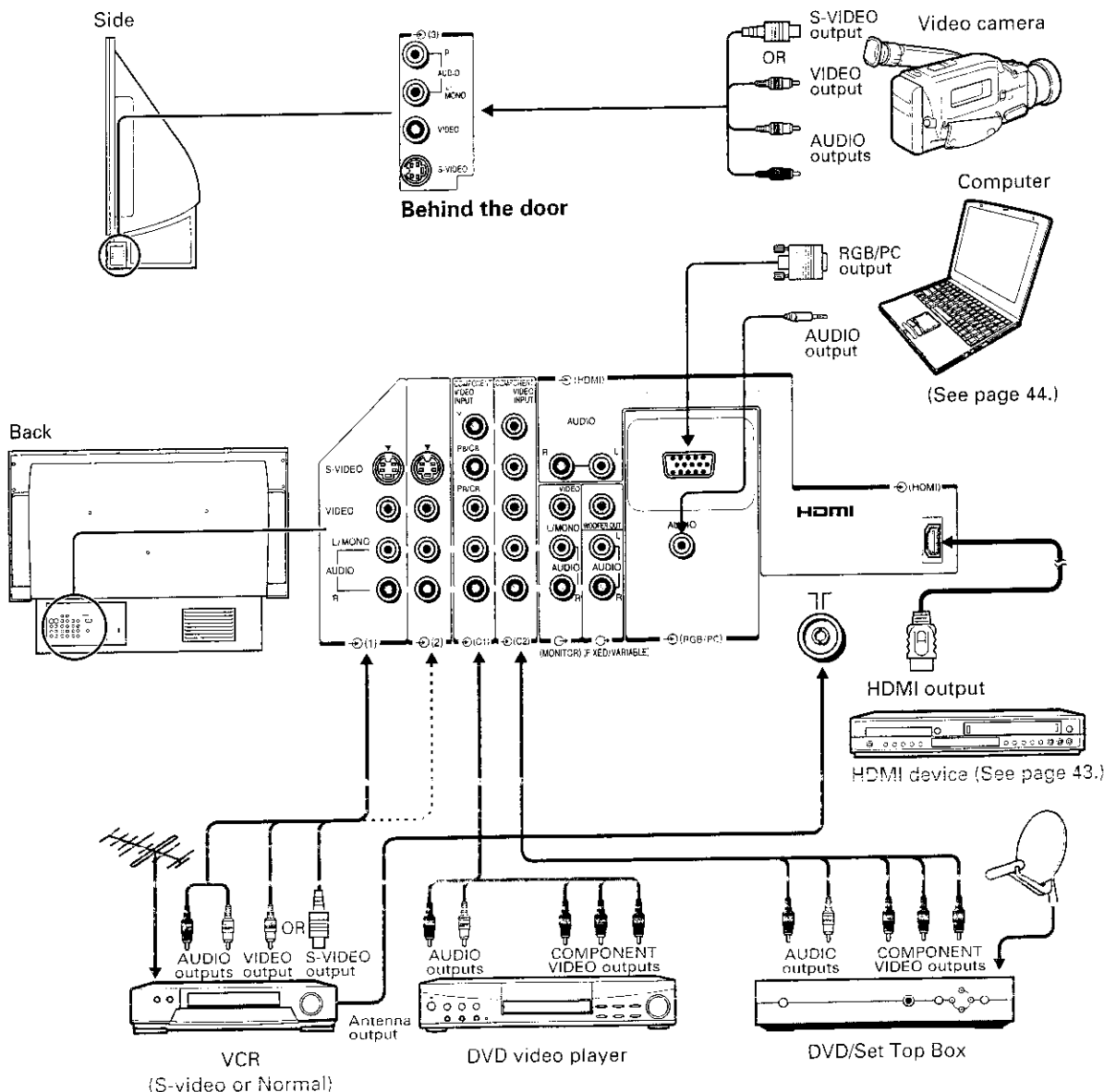
External Equipment Connections

CAUTION: Do not plug in any power cords until you have finished connecting all equipment.
 • Refer also to the owner's manual of the equipment to be connected.

To connect video/audio equipment (about input terminals)

When connecting video equipment to the TV:

- For good picture quality, use a standard yellow video cable.
- For better picture quality, if your equipment has an S-video output, use an S-video cable instead of a standard yellow video cable (You still must connect the standard red and white audio cables for full system connection, but do not connect the yellow video cable at the same time, or the picture performance will be unacceptable).
- For best picture quality, if your equipment has component video outputs, use component video cables instead of a standard video or S-video cable (You must connect the standard red and white audio cables for full system connection).

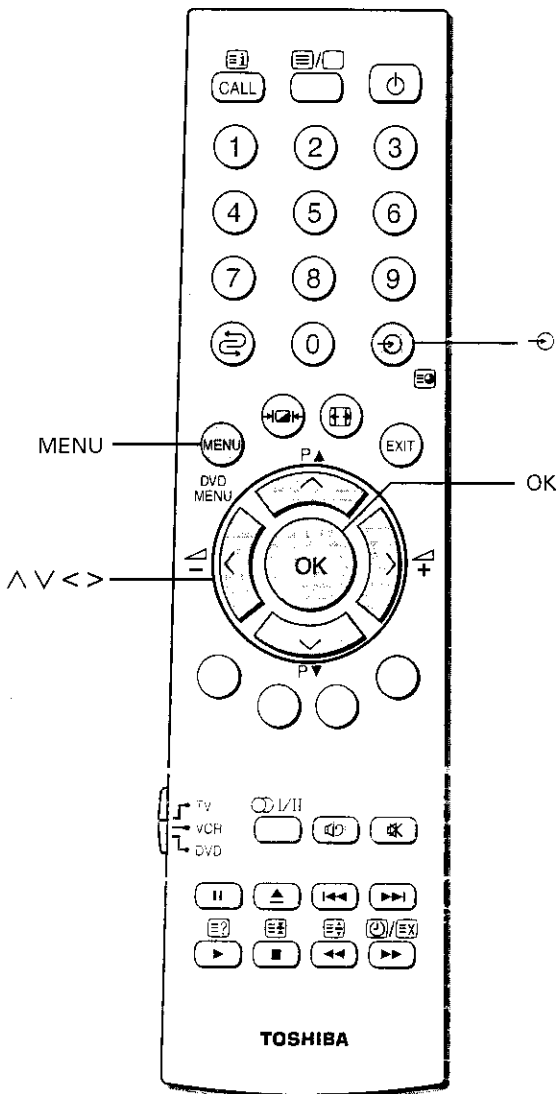
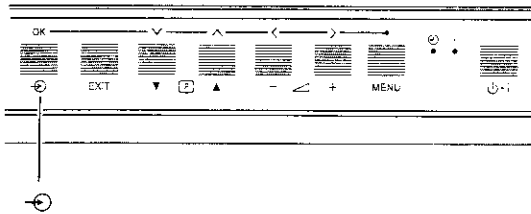


Notes

- If you connect a monaural audio equipment, connect the audio cable to the "L/MONO" terminal of the TV.
- Cables are not supplied with your TV.

To connect video/audio equipment (input source selection)

TV front touchpad



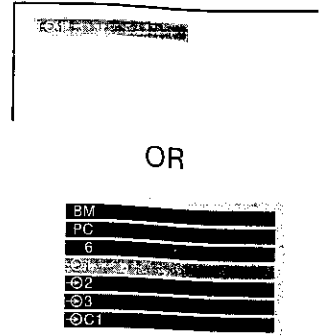
To select the video input source

Press the button on the TV or the remote control repeatedly until you see the appropriate input indicator on the screen;

- ① (-① (1), video 1 input),
- ② (-② (2), video 2 input),
- ③ (-③ (3), video 3 input),
- ①C1 (-① (C1), video C1 input),
- ①C2 (-① (C2), video C2 input),
- HDMI (-① HDMI, HDMI input),
- BM (BRIDGE MEDIA input),
- PC (-① RGB/PC, RGB/PC input)

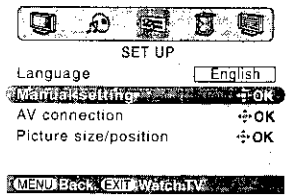
and the position number appear in sequence.

Otherwise, press and hold the button for about one second until the video input mode list appears on the screen, then press the \wedge or \vee button to highlight the desired input source. Press the OK button.

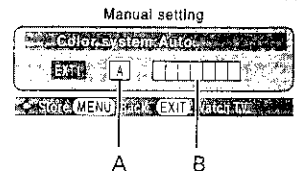


Manual setting in the video input mode

- 1** Select the video input source you want to set manually with the button.
- 2** Press the **MENU** button, then press the \lt or \gt button to display the SET UP menu. Press the \vee or \wedge button to select Manual setting.



- 3** Press the **OK** button to display the Manual setting menu.



- 4** Press the \lt or \gt button to select an item, then press the \wedge or \vee button to adjust the item as shown below.

A. Color System

Confirm that the color system is set to "A" (Auto). If not, select "A" with the \vee or \wedge button.

B. Video label

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

To change or create video labels:

- 1) Press the \vee or \wedge button repeatedly to select a character for the first space, then press the \gt button.

*(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 an empty space from the list of characters.

Press the **OK** button to store your settings.

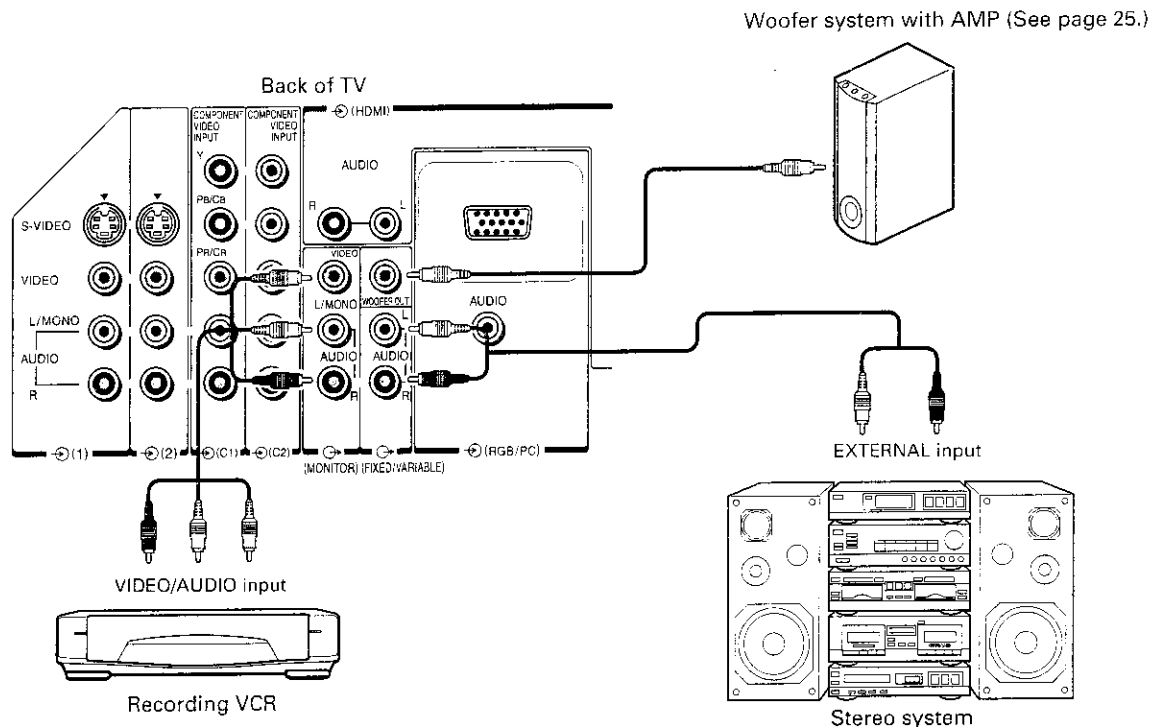
Note

You can also select the video input source using the **OK** button and the \wedge \vee buttons. See page 18 for details.

External Equipment Connections (continued)

To connect video/audio equipment (about output terminals)

You can connect a stereo system to the MONITOR and FIXED/VARIABLE AUDIO output terminals (phono type) on the TV to enjoy high-quality sound from the stereo system. The MONITOR output terminals output the video and audio signals being monitored on the TV. The audio signal output level is fixed.



Notes

- The unauthorized recording of television programs, video tapes and other materials may infringe upon the provisions of copyright laws.
- The input switch of the VCR is normally in the TV position. Change the switch of the recording VCR to the LINE or CAMERA position when using the video/audio inputs of the VCR as above. Some VCR's automatically switch when cables are plugged into the video/audio inputs.
- When the "C1", "C2", "BM" or "PC" mode is selected, the MONITOR terminals output audio signal only.
- The MONITOR terminals output the signals from the antenna, (1), (2), or (3) terminals when the appropriate input mode is selected.

To connect an HDMI™ or a DVI device to the HDMI input

The HDMI^[1] input on your TV receives digital audio and uncompressed digital video from an HDMI device or uncompressed digital video from a DVI^[2] device (such as a set-top box or DVD player with HDMI or DVI output). It is designed for the best performance with 1080i high-definition video signals but will also accept and display 480i, 480p 576i, 576p and 720p signals.

^[1] HDMI=High-Definition Multimedia Interface.
^[2] DVI=Digital Video Interface.

Note: To ensure that the HDMI or DVI device is reset properly, it is recommended that you follow these procedures:

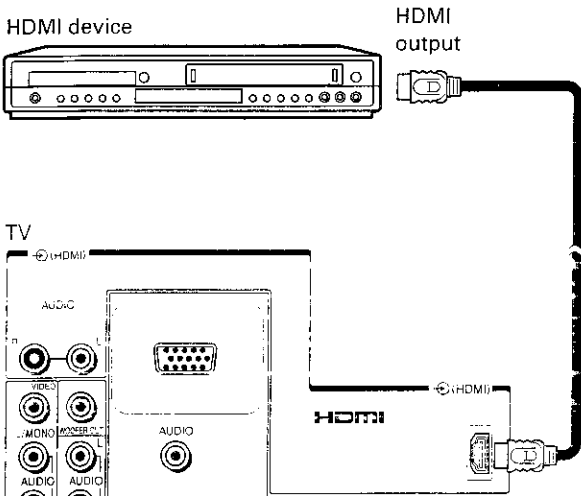
- When turning on your electronic components, **turn on the TV first**, and then the HDMI or DVI device.
- When turning off your electronic components, **turn off the HDMI or DVI device first**, and then the TV.

To connect an HDMI device, you will need:

- one HDMI cable (type A connector)

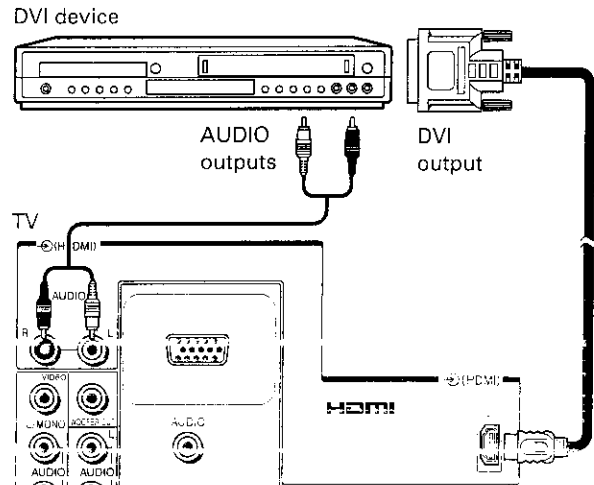
For proper operation, it is recommended that you use as short an HDMI cable as possible.

HDMI cable transfers both video and audio. Separate analog audio cables are not required (see illustration below). Some CDVs (video CDs) may not output digital audio signals. In that case, you may hear sound by connecting analog audio cables. However, if you connect analog audio cables with this connection, the HDMI terminal on the TV will not receive the HDMI digital audio signal and you will hear analog audio only.



To connect a DVI device, you will need:

- one HDMI-to-DVI adapter cable (HDMI type A connector)
For proper operation, it is recommended that you use as short an HDMI cable as possible.
- one pair of standard analog audio cables
An HDMI-to-DVI adapter cable transfers video only. Separate analog audio cables are required (see illustration below).



EQUIPMENT CONNECTIONS

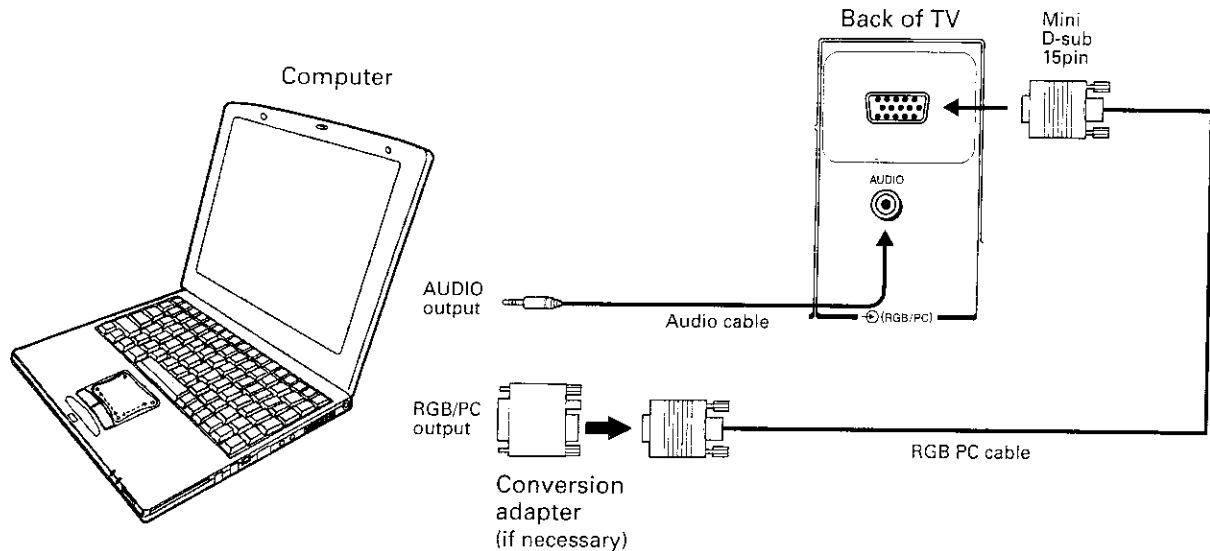
HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.

External Equipment Connections (continued)

To connect a computer

When connecting computer equipment to the TV:

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



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

The following signals can be displayed:

- VGA: VESA 640 × 480 @ 60 Hz
- SVGA: VESA 800 × 600 @ 60 Hz
- XGA: VESA 1024 × 768 @ 60 Hz

Notes

- Some PC models cannot be connected to this TV.
- There is no need to use an adapter for computers with DOS/V compatible mini D-sub 15pin 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 a malfunction.
- 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 15pin connector


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		

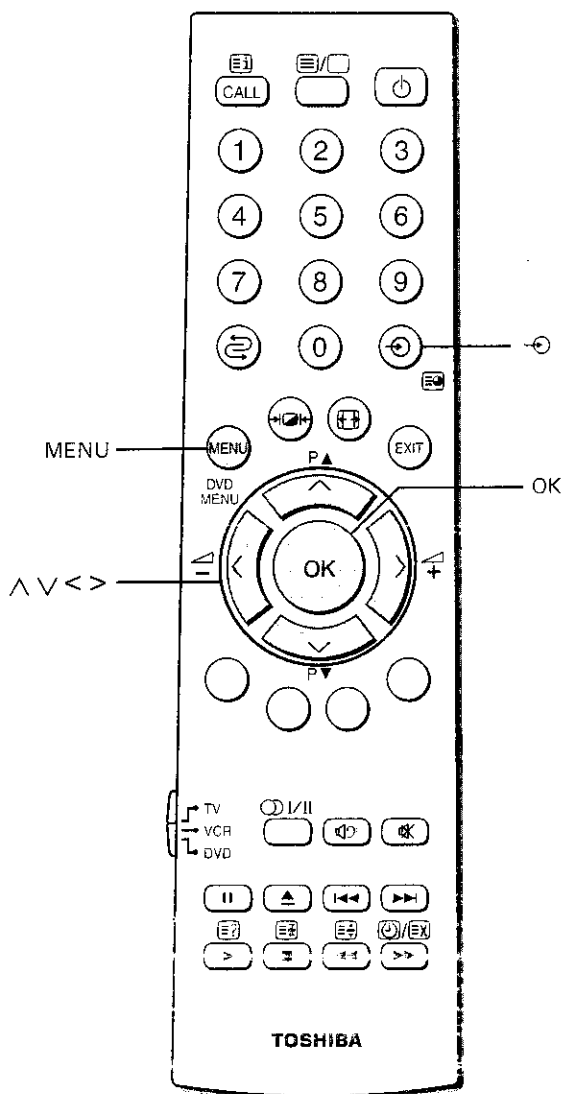
Pin assignment for RGB/PC terminal

PC Setting Function

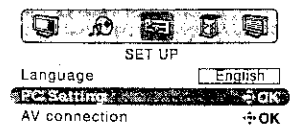
- While in the PC input mode, you cannot select the Color, Tint and DNR in the PICTURE menu.
- While in the PC input mode, the Manual setting (see page 41) is not displayed.

To adjust the picture size/position

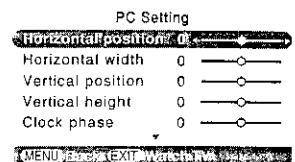
The picture size/position may be adjusted to suit personal preference.
First press the  button repeatedly to select the PC input mode.



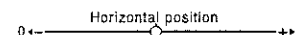
1 Press the **MENU** button, then press the < or > button to display the SET UP menu. Press the ∨ or ∧ button to select PC Setting.



2 Press the **OK** button to display the PC Setting menu, then press the ∨ or ∧ button to select an option.



3 Press the < or > button to adjust the settings.




- The following items can be adjusted:
- Horizontal position
 - Horizontal width
 - Vertical position
 - Vertical height

PC Setting Function (continued)

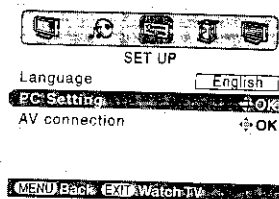
- If the clock phase, which synchronize the PC signal and TV display, is not optimized, the picture will blur. This function enables you to adjust clock phase and display a clear picture.
- If the sampling clock does not synchronize with the dot clock frequency of the PC, blurred picture detail will 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.
- The Reset function adjusts the PC Setting to the factory settings.

To adjust the Clock phase and Sampling clock/To reset

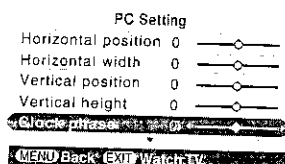
First press the  button repeatedly to select the PC input mode.

To adjust the Clock phase of the picture

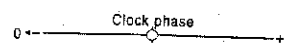
- 1 Press the **MENU** button, then press the < or > button to display the SET UP menu. Press the V or ^ button to select PC Setting.



- 2 Press the **OK** button, then press the V or ^ button to select Clock phase.

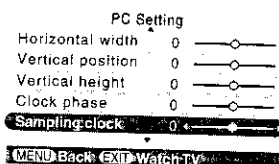


- 3 Press the < or > button to obtain a clear picture.

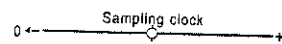


To adjust the Sampling clock

- 1 From the PC Setting menu, press the V or ^ button to select Sampling clock.

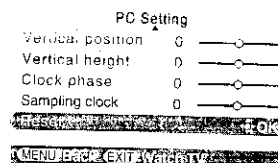


- 2 Press the < or > button to optimize the picture.



To reset the PC Setting

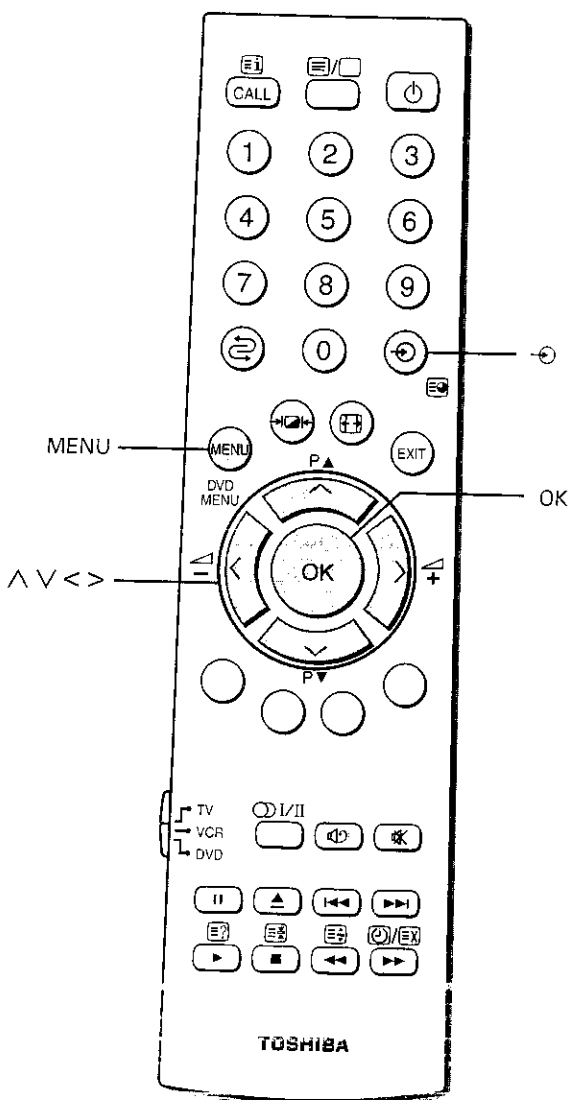
- 1 From the PC Setting menu, press the V or ^ button to select Reset.



- 2 Press the **OK** button.

Note:

The optimum points of the clock phase and sampling clock adjustments may be incomprehensible according to the input signals.



EQUIPMENT CONNECTIONS

Troubleshooting

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

Symptom	Solution
TV will not turn on	<ul style="list-style-type: none"> • Make sure the power cord is plugged in, and then press \odot or \odot-I. • The remote control batteries may be dead. Replace the batteries or try the front panel buttons. • The lamp unit may need to be replaced (page 9). Also see "LED indications" on page 48.
Picture problems	<ul style="list-style-type: none"> • Check the antenna connection. • Antenna reception may be poor. Use a highly directional outdoor antenna (if applicable). • The station may have broadcast difficulties. Try another channel. • Adjust the picture qualities (page 21). • If you are using a VCR, make sure the TV/VCR button on the remote control is set correctly (page 12).
Poor color or no color	<ul style="list-style-type: none"> • The station may have broadcast difficulties. Try another channel. • Adjust the Tint and/or Color (page 21).
No picture or too dark	<ul style="list-style-type: none"> • The lamp unit may need to be replaced (page 9).
Memory card problems	<ul style="list-style-type: none"> • Make sure you are using a supported or valid memory card format (page 30). • Make sure you have saved the picture files in the correct file format (page 30). • The card may be inserted improperly. Remove the card and reinsert it (page 30). • The memory card may be empty. • The memory card may be damaged.
Sound problems	<ul style="list-style-type: none"> • Check the antenna connection. • The station may have broadcast difficulties. Try another channel. • The sound may be muted. Press the \triangleleft - or \triangleleft + button. • Make sure the Speaker function in the SOUND menu is set correctly (page 24). • When using an external audio amplifier, if you connect the amplifier to the FIXED/VARIABLE AUDIO OUT jacks, the volume of the TV and amplifier must be set above 0 or you will not hear any sound (page 25).
Remote control problems	<ul style="list-style-type: none"> • Make sure the remote control is set to the correct device mode (page 12). • Remove all obstructions between the remote control and the TV. • The remote control batteries may be dead. Replace the batteries (page 10).

REFERENCE

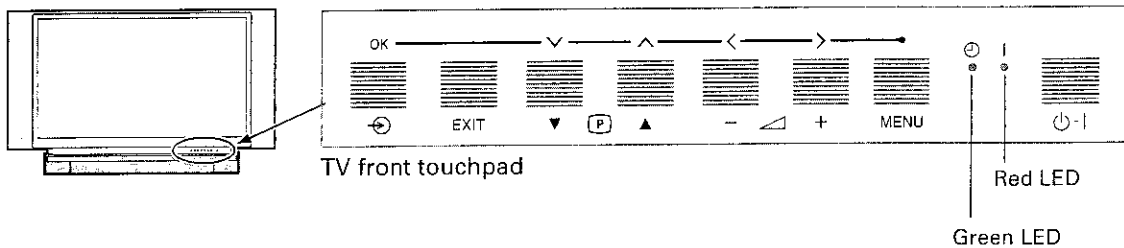
REFERENCE

Troubleshooting (continued)

LED indications

The green and red LED lights are on the TV front touchpad, to the left of the \odot -I. The green and red LED lights on the TV control touchpad (on the lower right corner of the TV screen) indicate the TV's current status, as follows:

- Red ON (solid) and Green OFF = TV power cord is plugged in (the TV is ON or OFF).
- Green ON (solid) and Red OFF = The On timer is operating.
- Green and Red ON (solid) = TV front touchpad is being pressed.
- Green blinking (see table below).



Priority	LED Indication	Condition	Solution
2	0.5 sec. ON 0.5 sec. OFF (repeat)	Abnormal operation (including cooling fan stop) The TV is in standby mode.	Unplug the power cord. Plug the power cord in again and turn ON the TV. If the problem persists, contact the nearest Toshiba Authorized Service Center or dealer.
3	1 sec. ON 1 sec. OFF (repeat)	Abnormal operation of BUS line The TV is in standby mode.	
7	0.2 sec. ON 0.2 sec. OFF 1 sec. OFF (repeat)	The Quick restart function is in On (LPS) mode and the TV is turned off (standby mode). See page 28 for details.	If you do not prefer this, set the Quick restart to Off.
8	0.2 sec. ON 0.2 sec. OFF } 2 times 1 sec. OFF (repeat)	The lamp is not working properly after the light automatic restart. The TV is in standby mode.	Unplug the power cord. Plug the power cord in again and turn ON the TV. If the problem persists, contact the nearest Toshiba Authorized Service Center or dealer.
1	0.2 sec. ON 0.2 sec. OFF } 3 times 1 sec. OFF (repeat)	The lamp unit door is not seated properly. The TV is in standby mode.	
6	0.2 sec. ON 0.2 sec. OFF } 4 times 1 sec. OFF (repeat)	The lamp is not working properly. The TV is in standby mode.	
5	0.2 sec. ON 0.2 sec. OFF } 5 times 1 sec. OFF (repeat)	The color wheel has stopped. The TV is in standby mode.	
4	0.2 sec. ON 0.2 sec. OFF } 6 times 1 sec. OFF (repeat)	An abnormal temperature increase has occurred. The TV is in standby mode.	Check to make sure all slots and openings in the TV cabinet are not covered, blocked, or dusty. Turn ON the TV again. If the problem persists, contact the nearest Toshiba Authorized Service Center or dealer

REFERENCE

REFERENCE

Lamp unit replacement

The light source for this TV is a projection lamp unit with a limited service life. When the lamp wears out, the picture may become dark or black, or the lamp may fail, at which time you must replace the lamp unit. The length of service life varies depending on product use and user settings. See "Selecting the Lamp mode" on page 23 for information on switching the lamp mode.

Replacing the lamp unit

WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE TV COVERS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

When to replace the lamp unit

If you try to replace the lamp unit by yourself, read these instructions carefully.

You should replace the lamp unit:

- if the picture darkens and/or colors fade;
- if the screen (lamp) does not light (LED indication #6, page 48); or
- if you hear a loud noise and the picture goes black, which may indicate a lamp rupture (LED indication #6, page 48).

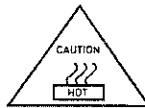
Only the replacement lamp unit model listed below can be used with this TV.

Using any other lamp may cause damage to the TV and/or lamp.

Model No.: TB25LPA (Stock No. 23402847)

Important information

- NEVER look directly at the lamp when lit as eye damage could result. ALWAYS turn off the TV by unplugging the power cord before opening the lamp unit door and DO NOT remove the back cover of the TV.



- **The temperature of the lamp immediately after use exceeds 200°C. Allow the lamp to cool for at least 1 hour before replacing it, touching it before it has cooled will result in severe burns.**

- When replacing the lamp unit ALWAYS wear gloves to reduce the risk of burns.
- The lamp unit door is provided with an interlock to reduce the risk of electric shock and excessive ultraviolet radiation.
- DO NOT attempt to replace the lamp unit without removing the lamp unit door completely, failure to do so could result in serious injury or death.
- If the lamp unit glass is accidentally touched or gets dirt on it, it can be gently wiped clean with a lint-free cleaning cloth such as a camera lens cloth or spectacles cloth. NEVER clean the lamp with any type of flammable or aerosol cleaning liquid. Most household cleaning agents contain chemicals that are flammable at high temperatures.
- The lamp unit contains 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.

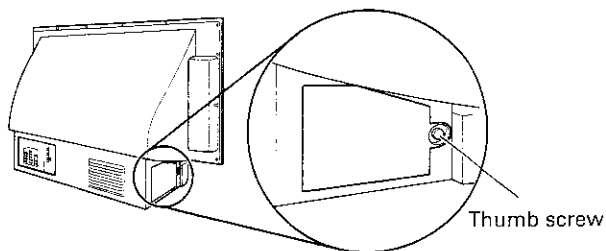
Lamp unit replacement (continued)

How to replace the lamp unit

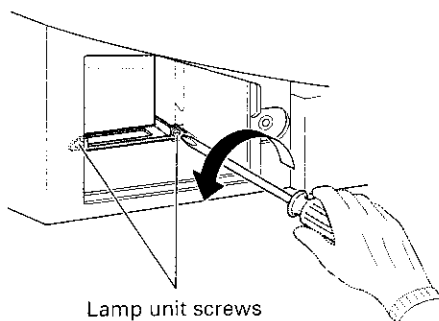
- 1** Turn off the TV and remove the power plug from the wall outlet.

Allow the lamp to cool for at least 1 hour before replacing it.

- 2** Undo the lamp unit door by loosening the thumb screw, then remove it by pulling the door outwards.

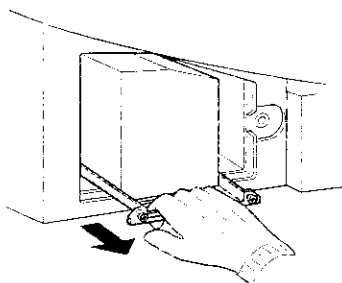


- 3** Using a manual Phillips hand screwdriver of suitable size, loosen the two screws on the bottom left and right of the lamp unit.



- 4** Using the lamp unit handle, gently pull the unit out of the TV and put to one side.

Remember to wear gloves when replacing the lamp unit.



- 5** Carefully insert the new lamp unit into the TV until it is fully seated.

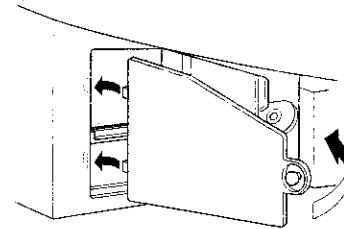
Note

Make sure that the lamp unit is not subjected to any knocks or bumps.

Never touch the lamp unit glass or allow it to get dirty. This may affect the picture quality and shorten the service life of the lamp.

- 6** Using the manual Phillips screwdriver tighten the two screws. Make sure that the screws are hand-tight only, do not use an electric screwdriver to avoid over-tightening.

- 7** Attach the lamp unit door by inserting the hooks on the left side of the door into the openings in the TV cabinet.



- 8** Attach the thumb screw and hand-tighten.

- 9** Plug in the power cord and turn on the TV. After the initial warm-up period (which may take several seconds for full picture brightness), the TV should now operate normally.

If there is no picture, the picture is very dark or the TV does not turn on, turn it back off and remove the power plug from the wall outlet. Repeat steps 1 to 7 to ensure that the lamp unit has been installed correctly.

Put the old lamp into the now empty lamp unit box and dispose of it according to local Government guidelines. Make sure it is out of reach of children and animals.

If you require further assistance, contact the nearest Toshiba Authorized Service Center or dealer.

REFERENCE

Broadcast Transmission Systems in Each Country or Region

Area	Country or Region	System	
		Color	Sound
Asia M. E.	Bahrain, Kuwait, Israel, Oman, Qatar, United Arab Emirates, Yemen, and other Middle Eastern countries. Indonesia, Malaysia, Singapore, Thailand, and other Southeast Asian countries.	PAL	B/G
	China	PAL	D/K
	China Hong Kong	PAL	I
	Iraq, Islamic Republic of Iran, Lebanon, Saudi Arabia	SECAM	B/G
	Russian Federation	SECAM	D/K
	Myanmar	NTSC	M
Oceania	Australia, New Zealand	PAL	B/G
Africa	Republic of South Africa	PAL	I
South America	Argentina, Paraguay, Uruguay	PAL	N
	Brazil	PAL	M
	Chile, Colombia	NTSC	M

Notes

- PAL, SECAM and NTSC3.58 (MHz) are different color signal broadcast transmission systems applicable to different countries or region. NTSC4.43 (MHz) is used in some VCRs to playback NTSC recorded video tapes through PAL television equipment.
- Refer to the Specifications table on the next page to find the receivable television systems for your TV.

Specifications

MODEL		52JM9UA, 52JM9UE			62JM9UA, 62JM9UE		
Rated voltage		~ 220 - 240 V, 50 Hz			~ 220 - 240 V, 50 Hz		
Power consumption (at ~ 220 V, 50 Hz)		195 W (0.8 watts at standby)					
Dimensions (Width x Depth x Height)		1,482 mm x 387 mm x 897.5 mm			1,703 mm x 469 mm x 1,044 mm		
Mass		40.4 kg			47.4 kg		
Screen size (diagonal)		Type 52 (1,321 mm)			Type 62 (1,575 mm)		
Television system (Antenna input)	Channel coverage	System	VHF	UHF	CATV (Channels)		
	Special RF signal	Color system	Sound system				
		PAL B/G (CCIR)	2 - 12	21 - 69	X ~ Z+2, S1 ~ S41		
		PAL I (UK)	—	21 - 69	—		
		PAL D/K (CHINA)	1 - 12	13 - 57	Z-1 ~ Z-38		
		SECAM B/G (CCIR)	2 - 12	21 - 69	X ~ Z+2, S1 ~ S41		
		SECAM D/K (OIRT)	1 - 12	21 - 69	X1 ~ X19		
		NTSC M (US)	2 - 13	14 - 69	A-6 ~ A-1, A ~ W, AA ~ ZZ, AAA, BBB		
		NTSC M (JAPAN)	1 - 12	13 - 62	M1 ~ M10, S1 ~ S41		
COMPONENT VIDEO INPUT suggested scan rates		480i, 480p, 576i, 576p, 720p (50/60Hz), 1080i (50/60Hz)					
HDMI INPUT		HDMI compliant (type A connector) HDCP* compliant E-EDID** compliant Suggested scan rates: 1080i, 480p, 480i, 576i, 576p, 720p HDMI Audio: 2-channel PCM; 32/44.1/48 kHz sampling frequency; 16/20/24 bits per sample					
Color system		PAL/SECAM/NTSC4.43/NTSC3.58					
Audio power		20 W + 20 W (10% THD)					
Accessories		<ul style="list-style-type: none"> • Remote control 1 • Battery (R03, AAA) 2 • Owner's manual 1 (This book) 					
Optional TV stand		ST5201 (for 52JM9UA, 52JM9UE) ST6201 (for 62JM9UA, 62JM9UE)					

Design and specifications are subject to change without notice.

* HDCP=High-bandwidth Digital Content Protection.

** E-EDID=Enhanced-Extended Display Identification

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.

REFERENCE