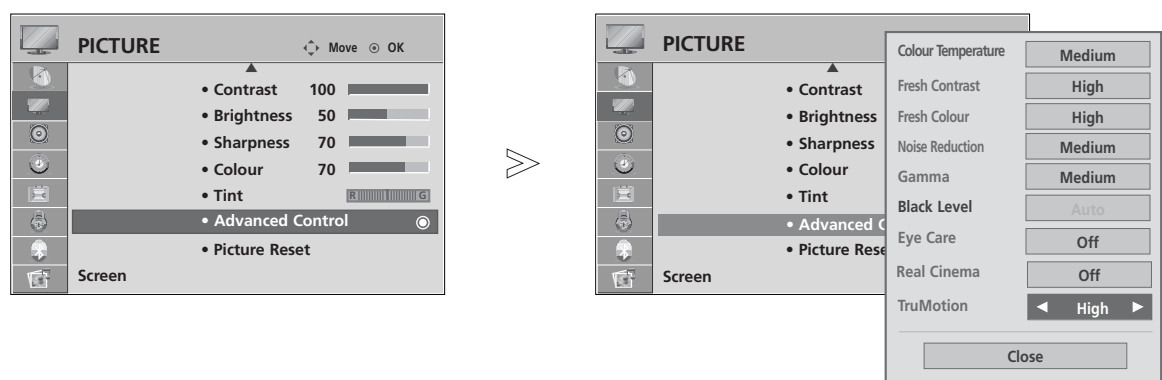


PICTURE CONTROL

ADVANCED - TRUMOTION (37/42/47/52LG70** Only)

It is used for the best picture quality without any motion blur or judder when you enter a quick image or Film Source.

This feature is disable in RGB-PC,HDMI-PC mode.



- 1 Select **PICTURE**.
- 2 Select **Advanced Control**.
- 3 Select **TruMotion**.
- 4 Select **Off**, **Low** or **High**.

- **High**
Provides smoother picture movement.
- **Low**
Provides smooth picture movement. Use this setting for standard use.
- **Off**
Use this setting when "High" and "Low" setting result in noise.

- If you enable "TruMotion", noise may appear on the screen.
- If this occurs, set "TruMotion" to "Off".

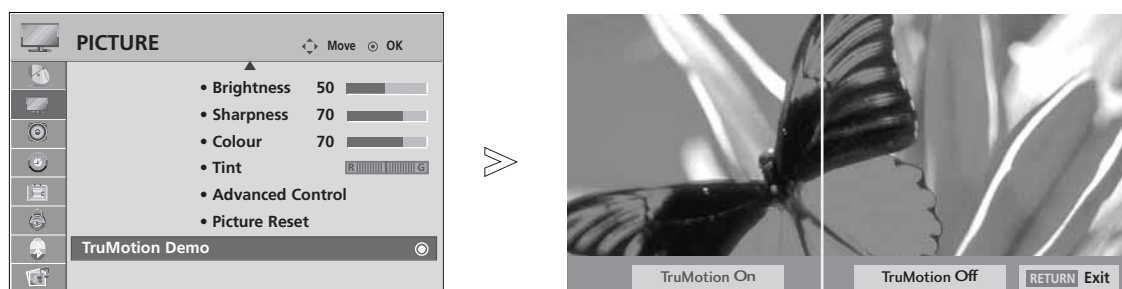
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

TRUMOTION DEMO (37/42/47/52LG70** Only)

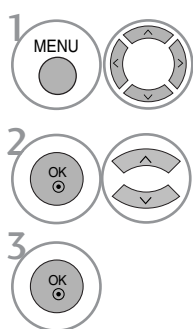
Use it to see the difference between TruMotion Demo on and TruMotion Demo off.

It's not available to use this function in RGB[PC], HDMI[PC] mode.

If you select TruMotion Demo during operating bluetooth headset, bluetooth headset is disconnected.



■ Image shown may differ from your TV.



Select **PICTURE**.

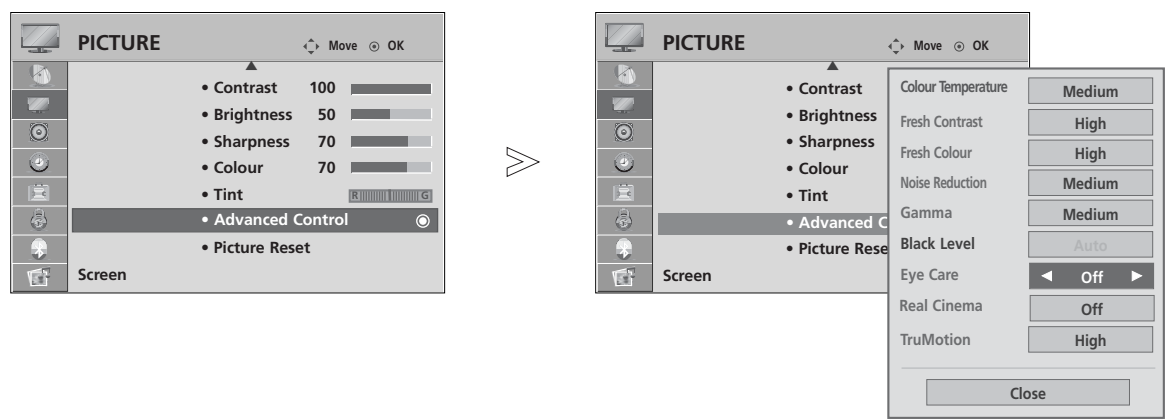
Select **TruMotion Demo**.

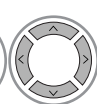
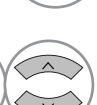
- Press the **RETURN** button to return to normal TV viewing.

PICTURE CONTROL

EYE CARE (LCD TV ONLY)

It helps you adjust brightness when the screen is too bright to prevent dazzling.

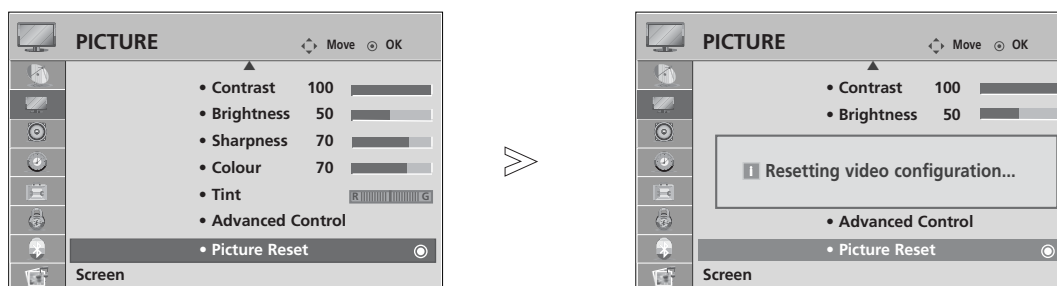


-   Select **PICTURE**.
-   Select **Advanced Control**.
-   Select **Eye Care**.
-   Select **On** or **Off**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

PICTURE RESET

Settings of the selected picture modes return to the default factory settings.



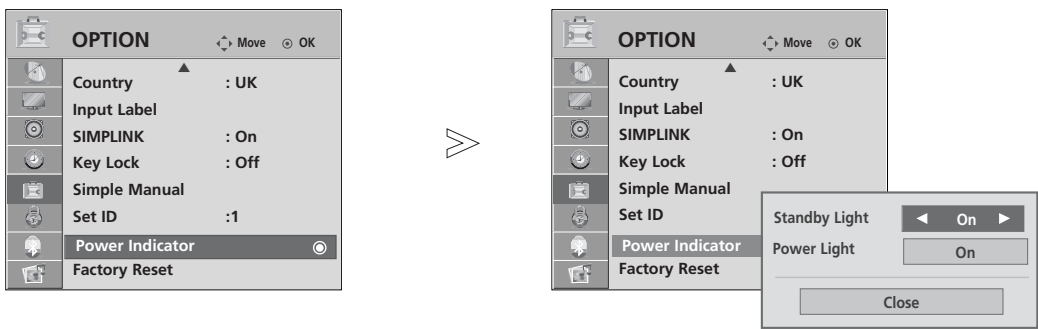
- 1   Select **PICTURE**.
- 2   Select **Picture Reset**.
- 3  Initialize the adjusted value.

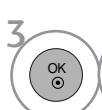
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

PICTURE CONTROL

POWER INDICATOR (LCD TV ONLY)

It helps you adjust the brightness of moving LED and sound when power is turned on.



-   Select **OPTION**.
-   Select **Power Indicator**.
-   Select **Standby Light** or **Power Light**.
-  Select your desired Source.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

IMAGE STICKING MINIMIZATION (ISM) METHOD (PLASMA TV ONLY)

A frozen or still picture from a PC/Video game displayed on the screen for prolonged periods will result in a ghost image remaining even when you change the image. Avoid allowing a fixed image to remain on the screen for prolonged periods.

White Wash

White wash removes permanent images from the screen.

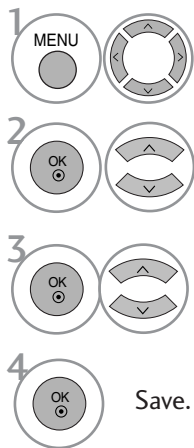
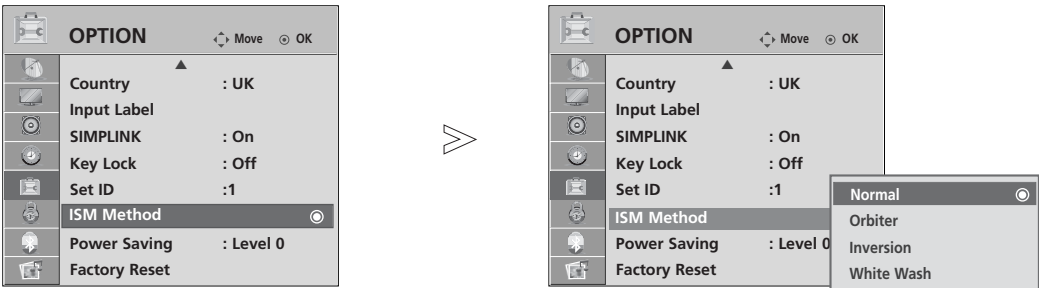
Note: An excessive permanent image may be impossible to clear entirely with White Wash.

Orbiter

Orbiter may help prevent ghost images. However, it is best not to allow any fixed image to remain on the screen. To avoid a permanent image on the screen, the screen will move every 2 minutes.

Inversion

This function inverts the panel colour of the screen. The panel colour is automatically inverted every 30 minutes.



Select **OPTION**.

Select **ISM Method**.

Select **Normal, Orbiter, Inversion or White Wash**.

Save.

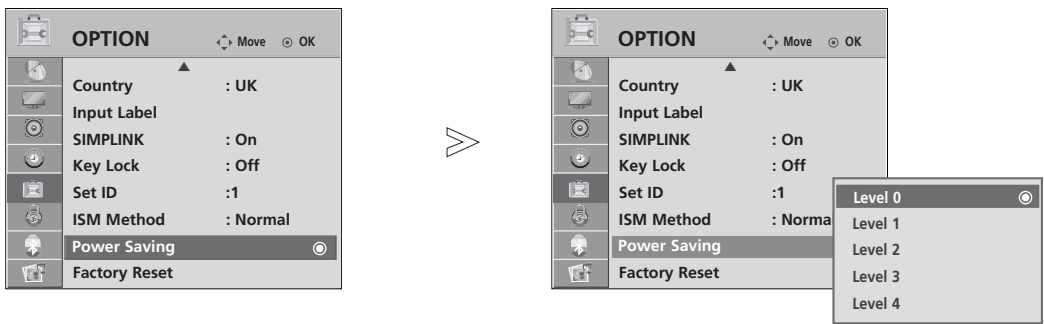
• If you do not need this function, set **Normal**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

PICTURE CONTROL

POWER SAVING PICTURE MODE (PLASMA TV ONLY)

This function allows you to reduce the power consumption of the TV.



1. Select **OPTION**.
2. Select **Power Saving**.
3. Select **Level 0, Level 1, Level 2, Level 3 or Level 4**.
4. Save.

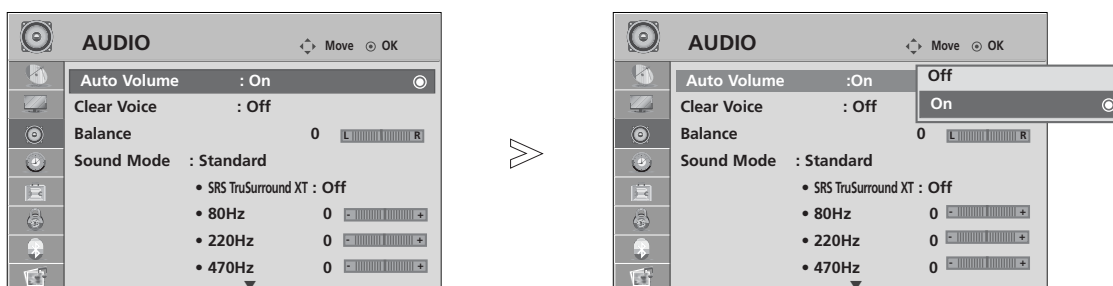
- Level 0 is the brightest.
- You can also adjust **Power Saving** in the **Q. Menu**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

SOUND & LANGUAGE CONTROL

AUTO VOLUME LEVELER

AVL automatically remains on the same level of volume if you change programmes



- 1   Select **AUDIO**.
- 2   Select **Auto Volume**.
- 3   Select **On** or **Off**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

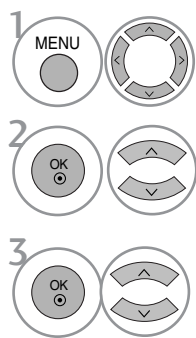
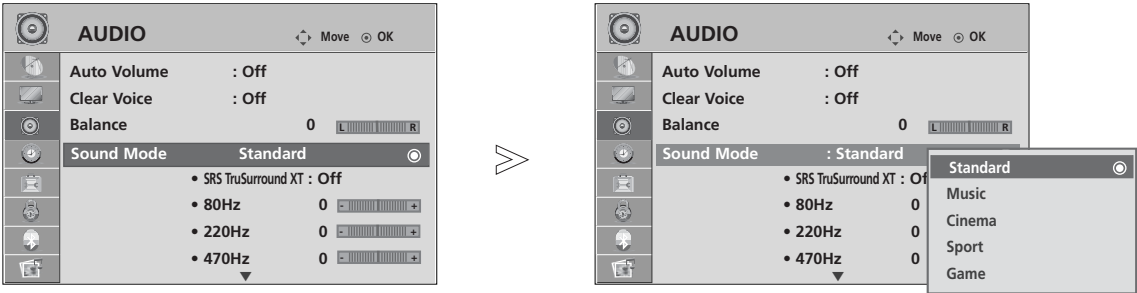
SOUND & LANGUAGE CONTROL

PRESET SOUND SETTINGS-SOUND MODE

You can select your preferred sound setting; Standard, Music, Cinema, Sport or Game and you can also adjust the frequency of the equalizer.

Sound Mode lets you enjoy the best sound without any Special adjustment as the TV sets the appropriate sound options based on the programme content.

Standard, Music, Cinema, Sport and Game are preset for optimum sound quality at the factory.



Select **AUDIO**.

Select **Sound Mode**.

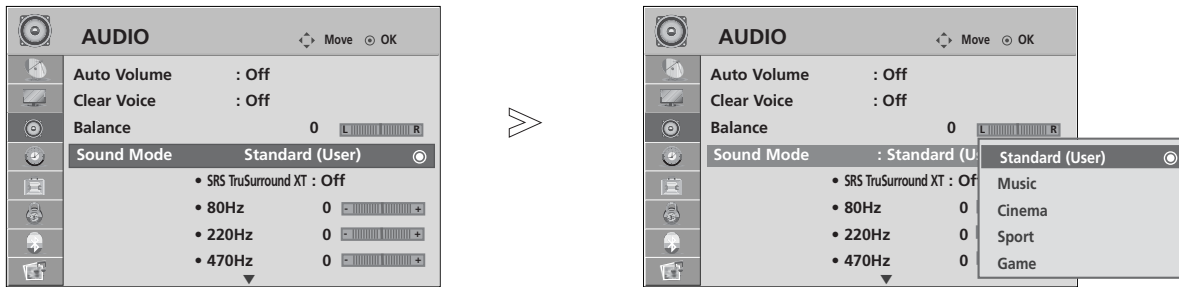
Select **Standard, Music, Cinema, Sport or Game**.

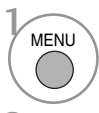
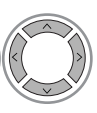
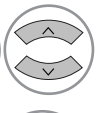
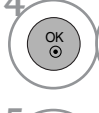
• You can also adjust **Sound Mode** in the **Q. Menu**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

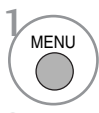
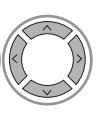
SOUND SETTING ADJUSTMENT -USER MODE

Adjusting the audio equalizer.



- 1   Select **AUDIO**.
- 2   Select **Sound Mode**.
- 3   Select **Standard, Music, Cinema, Sport or Game**.
- 4   Select a frequency band.
- 5   Set the desired sound level.

SRS TRUSURROUND XT

- 1   Select **AUDIO**.
- 2   Select **SRS TruSurround XT**.
- 3   Select **On** or **Off**.

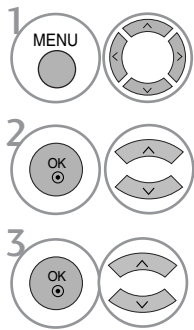
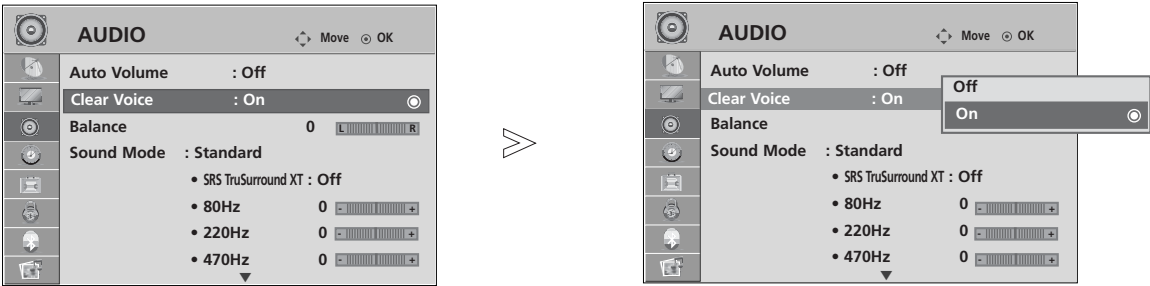
SRS TruSurround XT Select this option to sound realistic.

- ▶  is a trademark of SRS Labs, Inc.
- ▶ TruSurround XT technology is incorporated under license from SRS Labs, Inc.

SOUND & LANGUAGE CONTROL

CLEAR VOICE

By differentiating the human sound range from others, it helps users listen to human voices better.



Select **AUDIO**.

Select **Clear Voice**.

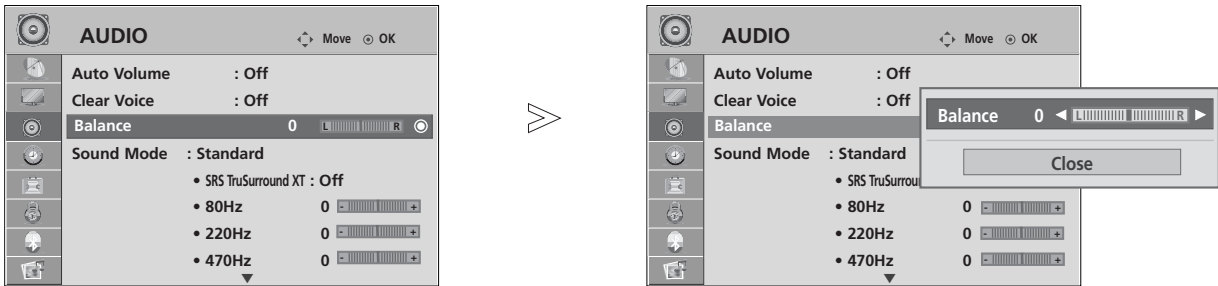
Select **On** or **Off**.

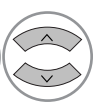
• If you select “On” for **Clear Voice**, **SRS TruSurround XT** feature will not work.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

BALANCE

You can adjust the sound balance of the speakers to preferred levels.



- 1   Select **AUDIO**.
- 2   Select **Balance**.
- 3   Make desired adjustment.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

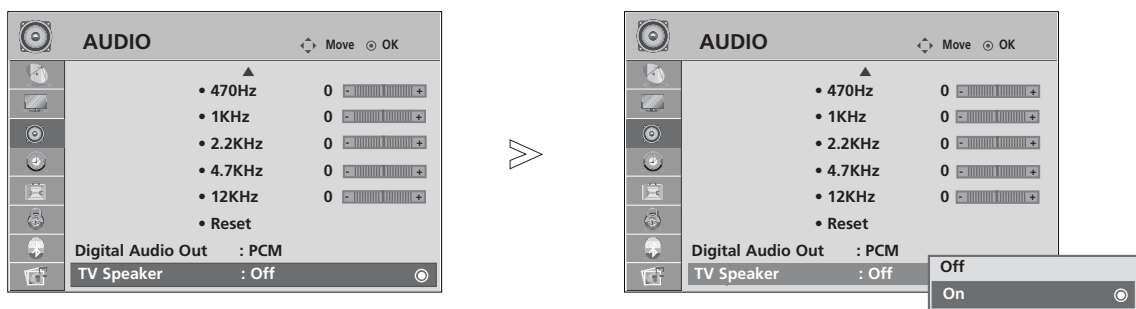
SOUND & LANGUAGE CONTROL

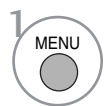
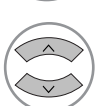
TV SPEAKERS ON/ OFF SETUP

You can adjust the TV internal speaker status.

In **AV1**, **AV2**, **AV3**, **COMPONENT**, **RGB** and **HDMI1** with HDMI to DVI cable, the TV speaker can be operational even when there is no video signal.

If you wish to use an external Hi-Fi system, turn off the TV internal speakers.



-   Select **AUDIO**.
-   Select **TV Speaker**.
-   Select **On** or **Off**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

SELECTING DIGITAL AUDIO OUT

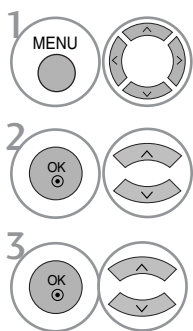
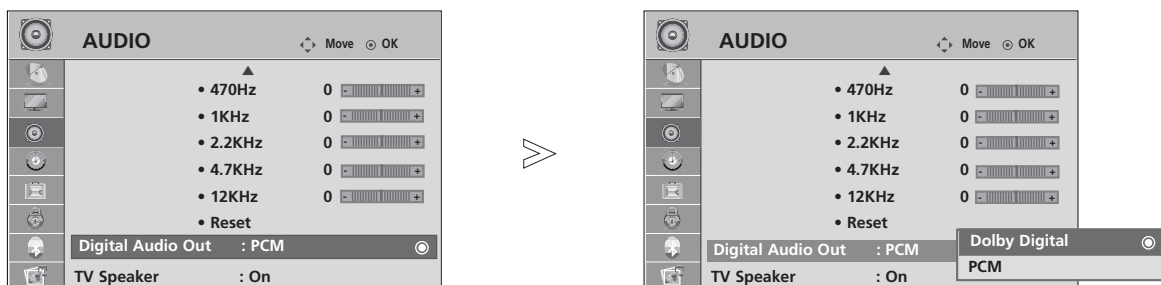
This function allows you to select your preferred Digital Audio Output.

The TV can only output DOLBY Digital if a channel is broadcast with Dolby Digital audio.

When Dolby digital is available, selecting Dolby Digital in the Digital Audio Out menu will set SPDIF output to Dolby Digital

If Dolby Digital is selected in the digital audio out menu when dolby digital is not available, SPDIF output will be PCM.

Even if both Dolby Digital and Audio language have been set in a channel which broadcast Dolby Digital Audio, only Dolby Digital will be played.



Select **AUDIO**.

Select **Digital Audio Out**.

Select **Dolby Digital** or **PCM**.



Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

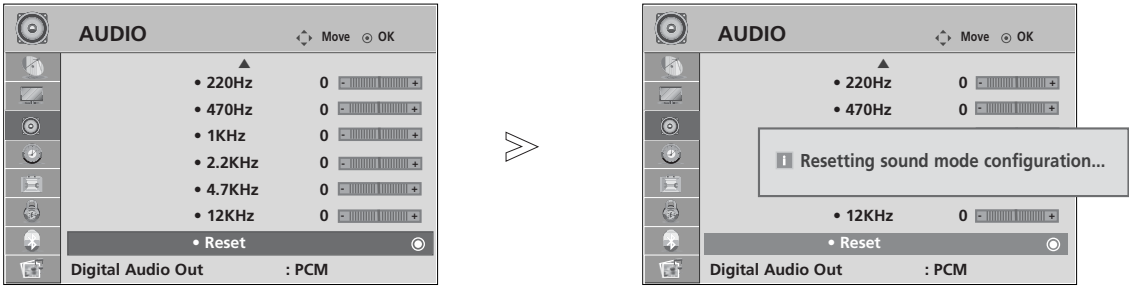
- There is a possibility that when HDMI mode, some DVD players do not make SPDIF sound. At that time, set the output of the digital audio of the DVD player to PCM.

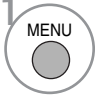
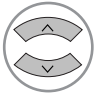
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

SOUND & LANGUAGE CONTROL

AUDIO RESET

Settings of the selected Sound Mode return to the default factory settings.



1.   Select **AUDIO**.
2.   Select **Reset**.
3.  Initialize the adjusted value.

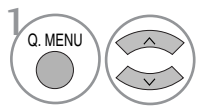
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

I/II

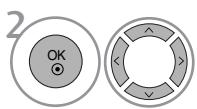
Stereo/Dual Reception (In Analogue Mode Only)

When a programme is selected, the sound information for the station appears with the programme number and station name.

- 1



Select **Audio**.
- 2



Select the sound output.

Broadcast	On Screen Display
Mono	MONO
Stereo	STEREO
Dual	DUAL I, DUAL II, DUAL I+II

■ Mono sound selection

If the stereo signal is weak in stereo reception, you can switch to mono. In mono reception, the clarity of sound is improved.

■ Language selection for dual language broadcast

If a programme can be received in two languages (dual language), you can switch to DUAL I, DUAL II or DUAL I+II.

- DUAL I

Sends the primary broadcast language to the loudspeakers.
- DUAL II

Sends the secondary broadcast language to the loudspeakers.
- DUAL I+II

Sends a separate language to each loudspeaker.

SOUND & LANGUAGE CONTROL

NICAM Reception (In Analogue Mode Only)

If the TV is equipped with a receiver for NICAM reception, high quality NICAM (Near Instantaneous Companding Audio Multiplex) digital sound can be received.

Sound output can be selected according to the type of broadcast received.

-
- 1 When **NICAM mono** is received, you can select **NICAM MONO** or **FM MONO**.
 - 2 When **NICAM stereo** is received, you can select **NICAM STEREO** or **FM MONO**.
If the stereo signal is weak, switch to **FM MONO**.
 - 3 When **NICAM dual** is received, you can select **NICAM DUAL I**, **NICAM DUAL II** or **NICAM DUAL I+II** or **FM MONO**.
-

Speaker Sound Output Selection

In AV, Component, RGB and HDMI mode, you can select output sound for the left and right loudspeakers.

Select the sound output.

L+R: Audio signal from audio L input is sent to the left loudspeaker and audio signal from audio R input is sent to the right loudspeaker.

L+L: Audio signal from audio L input is sent to left and right loudspeakers.

R+R: Audio signal from audio R input is sent to left and right loudspeakers.

ON-SCREEN MENU LANGUAGE / COUNTRY SELECTION

The installation guide menu appears on the TV screen when it is switched on for the first time.

1   Select your desired language.

2   Select your country.

* If you want to change Language/ Country selection

1   Select **OPTION**.

2   Select **Menu Language** or **Country**.

3   Select your desired language or country.

4  Save.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

! NOTE

- ▶ If you do not finish the set-up **Installation Guide** by pressing **RETURN** or if you time out on the OSD (On Screen Display) the installation menu will continuously appear until the set up is completed whenever the TV is switched on
- ▶ If you select the wrong local country, teletext may not appear correctly on the screen and some problems may occur during teletext operation.
- ▶ The CI (Common Interface) function may not be applied based on country broadcasting circumstances.
- ▶ DTV mode control buttons may not function based on country broadcasting circumstances.
- ▶ In country that Digital broadcasting regulation isn't fixed, some DTV function may not work depending on digital broadcasting circumstances.
- ▶ The Country Setting "UK" should only be activated in UK.

SOUND & LANGUAGE CONTROL

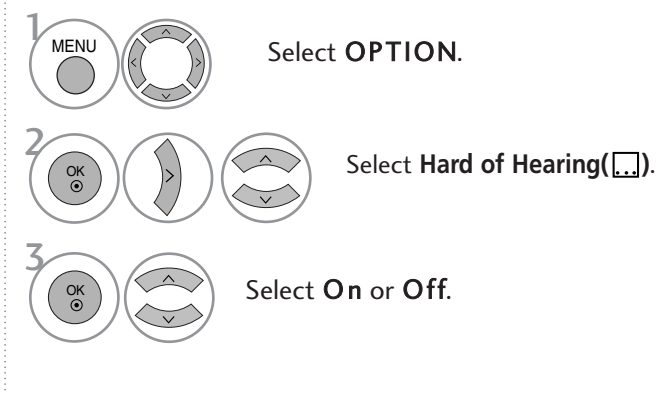
LANGUAGE SELECTION (IN DIGITAL MODE ONLY)

The Audio function allows selection of a preferred language.

If audio data in a selected language is not broadcast, the default language audio will be played.

Use the Subtitle function when two or more subtitle languages are broadcast. If subtitle data in a selected language is not broadcast, the default language subtitle will be displayed.

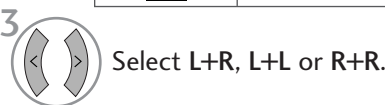
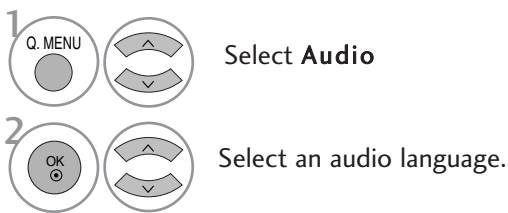
When the languages you selected as the primary for Audio Language and Subtitle Language are not supported, you can select language in secondary category.



• Press the **RETURN** button to move to the previous menu screen.

< Audio Language Selection >

- ▶ When two or more audio languages are broadcast, you can select the audio language.



Audio Language OSD Information

Display	Status
N.A	Not Available
MPEG	MPEG Audio
Dolby	Dolby Digital Audio
Visual	Audio for "Visual Impaired"
Hearing	Audio for "Hearing Impaired"

< Subtitle Language Selection >

- ▶ When two or more subtitle languages are broadcast, you can select the subtitle language with the **SUBTITLE** button on the remote control.
- ▶ Press the **^** **v** button to select a subtitle language.

Subtitle Language OSD Information

Display	Status
N.A	Not Available
Teletext	Teletext Subtitle
Hard of Hearing	Subtitle for "Hard of Hearing"

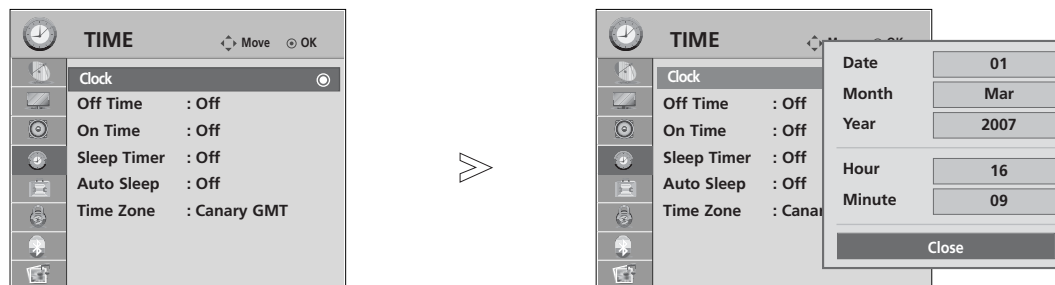
- The audio/subtitles can be displayed in a simpler form with 1 to 3 characters broadcast by the service provider.
- When you select supplementary Audio (Audio for "Visual/Hearing Impaired") the TV may output a part of the Main audio.

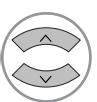
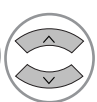
TIME SETTING

CLOCK SETUP

The clock is set automatically when receiving a digital signal. (You can set the clock manually only if the TV has no DTV signal.)

You must set the time correctly before using on/off timer function.



-   Select **TIME**.
-   Select **Clock**.
-   Select either the year, date, or time option.
-  Set the year, date, and time options.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

TIME SETTING

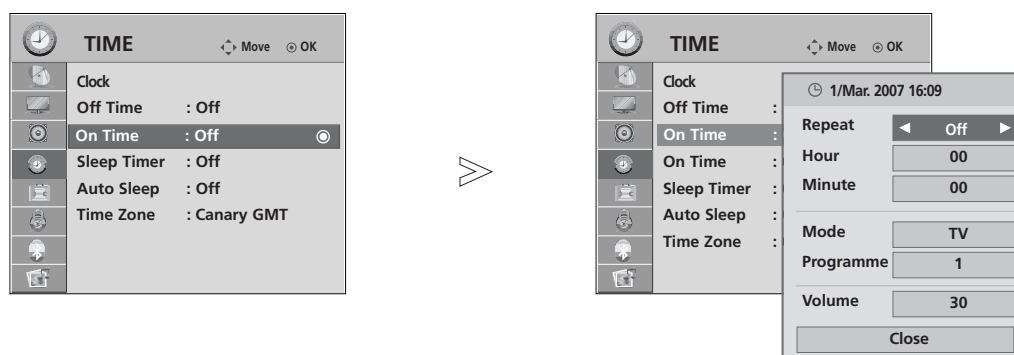
AUTO ON/OFF TIMER SETTING

The Off time function automatically switches the TV to standby at a preset time.

Two hours after the TV is switched on by the on time function it will automatically switch back to standby mode unless a button has been pressed.

The Off time function overrides the On timer function if both are set to the same time.

The TV must be in standby mode for the On timer to work.



- 1 Select **TIME**.
- 2 Select **Off Time** or **On Time**.
- 3 Select **Repeat**.
- 4 Select **Off, Once, Daily, Mon ~ Fri, Mon ~ Sat, Sat ~ Sun or Sun**.
- 5 Set the hour.
- 6 Set the minutes.

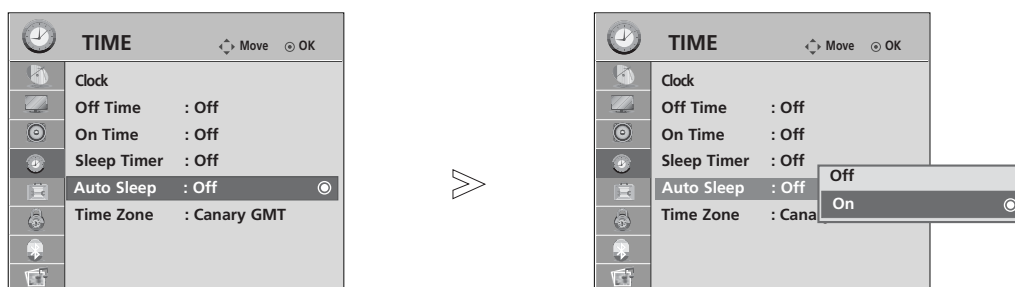
- To cancel **On/Off Time** function, select **Off**.
- For **On Time** function only

- 1 Select **Mode**.
- 2 Select **TV, DTV or Radio**.
- 3 Set the programme.
- 4 Adjust volume level at switch-on.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

AUTO SHUT-OFF SETTING

If the TV is switched on and there is no input signal, it will switch off automatically after 10 minutes.



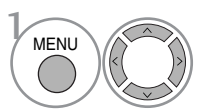
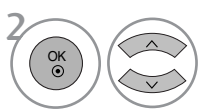
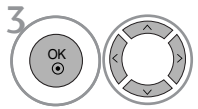
- 1   Select **TIME**.
- 2   Select **Auto Sleep**.
- 3   Select **Off** or **On**.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

TIME SETTING

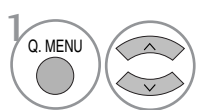
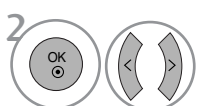
TIME ZONE SETUP

When you select a Time Zone city, the TV time is set by the time offset information based on Time Zone and GMT (Greenwich Mean Time) which is received with the broadcast signal and the time is set automatically by a digital signal.

- 1  Select **TIME**.
- 2  Select **Time Zone**.
- 3  Select your viewing area time zone.
- 4  Confirm it.

SLEEP TIMER SETTING

You do not have to remember to switch the TV off before you go to sleep.
The sleep timer automatically switches the TV to standby after the preset time has elapsed.

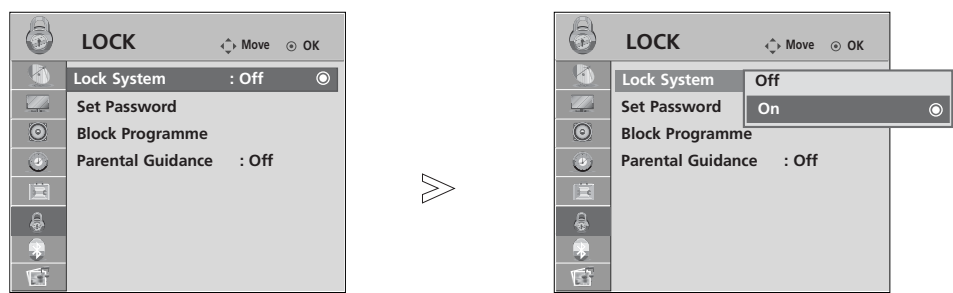
- 1  Select **Sleep Timer**.
- 2  Select **Off, 10, 20, 30, 60, 90, 120, 180 or 240 Min.**

- When you switch the TV off, the preset sleep timer is cancelled.
- You can also adjust **Sleep Timer** in the **TIME** menu.

PARENTAL CONTROL / RATINGS

SET PASSWORD & LOCK SYSTEM

Enter the password, press '0', '0', '0', '0' on the remote control handset.



1.   Select **LOCK**.
2.   Select **Lock System**.
3.   Select **On**.
4.    Set the password.
5.  Input a 4-digit password.
Be sure to remember this number!
Re-enter new password for confirm.

• If you forget your password, press '7', '7', '7', '7' on the remote control handset.

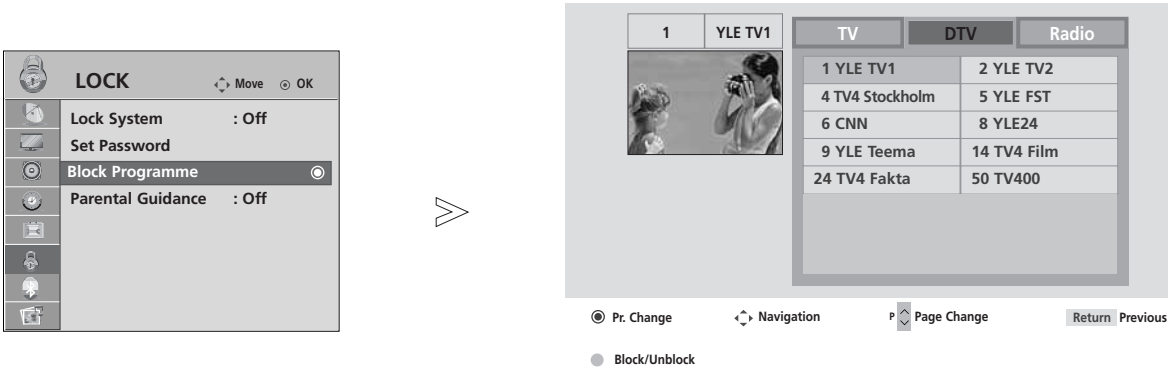
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

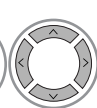
PARENTAL CONTROL / RATINGS

BLOCK PROGRAMME

Blocks any programmes that you do not want to watch or that you do not want your children to watch.

It is available to use this function in **Lock System "On"**.



1.   Select **LOCK**.
2.   Select **Block Programme**.
3.  Enter the **Block Programme**.
4.   Select a programme to be locked.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

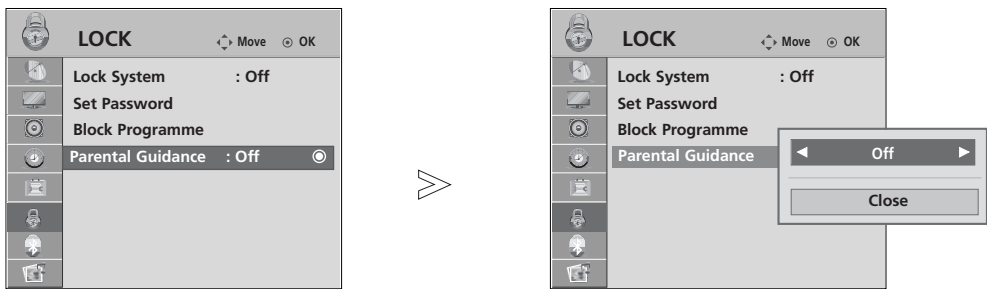
PARENTAL CONTROL

This function operates according to information from the broadcasting station. Therefore if the signal has incorrect information, this function does not operate.

A password is required to gain access to this menu.

This set is programmed to remember which option it was last set to even if you switch the set off.

Prevents children from watching certain adult's TV programmes, according to the ratings limit set.



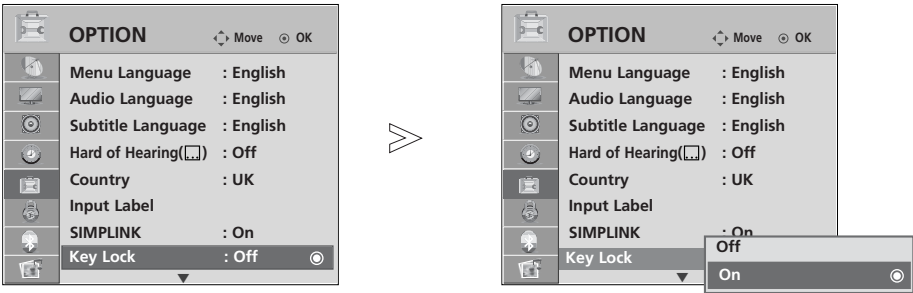
- 1   Select **LOCK**.
- 2   Select **Parental Guidance**.
- 3   Make appropriate adjustments.
- 4  Save.

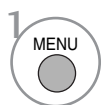
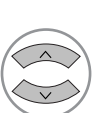
- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

PARENTAL CONTROL / RATINGS

KEY LOCK

The TV can be set so that the remote control is required to control it. This feature can be used to prevent unauthorized viewing.



- 1   Select **OPTION**.
- 2   Select **Key Lock**.
- 3   Select **On** or **Off**.
- 4  Save.

- In **Key Lock 'On'**, if the TV is turned off, press the **⏻ / I**, **INPUT**, **P ▲** or **▼** (or **P ^ v**) button on the TV or **POWER**, **INPUT**, **P ^ v** or **NUMBER** buttons on the remote control then the set will be turned on.
- With the **Key Lock On**, the display ' **Key Lock On**' appears on the screen if any button on the front panel is pressed while viewing the TV.

- Press the **MENU** button to return to normal TV viewing.
- Press the **RETURN** button to move to the previous menu screen.

TELETEXT

This feature is not available in all countries.

Teletext is a free service broadcast by most TV stations which gives up-to-the-minute information on news, weather, television programmes, share prices and many other topics.

The teletext decoder of this TV can support the SIMPLE, TOP and FASTEXT systems. SIMPLE (standard teletext) consists of a number of pages which are selected by directly entering the corresponding page number. TOP and FASTEXT are more modern methods allowing quick and easy selection of teletext information.

SWITCH ON/OFF

Press the **TEXT** button to switch to teletext. The initial page or last page viewed appears on the screen.

Two page numbers, TV station name, date and time are displayed on the screen headline. The first page number indicates your selection, while the second shows the current page displayed.

Press the **TEXT** button to switch off teletext. The previous mode reappears.

SIMPLE TEXT

■ Page selection

- 1 Enter the desired page number as a three digit number with the **NUMBER** buttons. If during selection you press a wrong number, you must complete the three digit number and then re-enter the correct page number.
- 2 The **P** $\wedge$ $\vee$ button can be used to select the preceding or following page.

TOP TEXT

The user guide displays four fields-red, green, yellow and blue at the bottom of the screen. The yellow field denotes the next group and the blue field indicates the next block.

■ Block / group / page selection

- 1 With the blue button you can progress from block to block.
- 2 Use the yellow button to proceed to the next group with automatic overflow to the next block.
- 3 With the green button you can proceed to the next existing page with automatic overflow to the next group. Alternatively the **P** $\wedge$ button can be used.
- 4 The red button returns to the previous selection. Alternatively the **P** $\vee$ button can be used.

■ Direct page selection

As with SIMPLE teletext mode, you can select a page by entering it as a three digit number using the **NUMBER** buttons in TOP mode.

TELETEXT

FASTEXT

The teletext pages are colour coded along the bottom of the screen and are selected by pressing the corresponding coloured button.

■ Page selection

- 1 Press the **T.OPT** button and then use $\wedge \vee$ button to select  menu. Display the index page.
- 2 You can select the pages which are colour coded along the bottom line with corresponding coloured buttons.
- 3 AS with SIMPLE teletext mode, you can select a page by entering its three digit page number with the NUMBER buttons in FASTEXT mode.
- 4 The **P** $\wedge \vee$ button can be used to select the preceding or following page.

SPECIAL TELETEXT FUNCTIONS

- Press the **T. OPT** button and then use $\wedge \vee$ button to select the **Text Option** menu.



■ REVEAL

Select this menu to display concealed information, such as solutions to riddles or puzzles.



■ UPDATE

Displays the TV picture on the screen while waiting for a new teletext page. The display will appear at the top left hand corner of the screen. When the updated page is available then display will change to the page number. Select this menu again to view the updated teletext page.



■ TIME

When viewing a TV programme, select this menu to display the time at the top right hand corner of the screen. In the teletext mode, press this button to select a sub page number. The sub page number is displayed at the bottom of the screen. To hold or change the sub page, press the RED/GREEN, $< >$ or NUMBER buttons.



■ HOLD

Stops the automatic page change which will occur if a teletext page consists of 2 or more sub pages. The number of sub pages and the sub page displayed is, usually, shown on the screen below the time. When this menu is selected the stop symbol is displayed at the top left-hand corner of the screen and the automatic page change is inactive.

DIGITAL TELETEXT

*This function works in UK only.

The TV gives you access to digital teletext which is greatly improved in various aspects such as text, graphics etc. This digital teletext can access special digital teletext services and specific services which broadcast digital teletext.

You should select off in the subtitle language menu to display teletext by pressing the **SUBTITLE** button.

TELETEXT WITHIN DIGITAL SERVICE

- 1 Press the numeric or **P** $\wedge$ $\vee$ button to select a digital service which broadcasts digital teletext.
To know which are digital teletext services, refer to the EPG service list.
- 2 Follow the indications on digital teletext and move onto the next step by pressing **TEXT**, **OK**, $\wedge$ $\vee$ $<$ $>$, **RED**, **GREEN**, **YELLOW**, **BLUE** or **NUMBER** buttons and etc..
- 3 To change digital teletext service, select a different service by the numeric or **P** $\wedge$ $\vee$ button.



TELETEXT IN DIGITAL SERVICE

- 1 Press the numeric or **P** $\wedge$ $\vee$ button to select a certain service which broadcasts digital teletext.
- 2 Press the **TEXT** or coloured button to switch on teletext.
- 3 Follow the indications on digital teletext and move onto the next step by pressing **OK**, $\wedge$ $\vee$ $<$ $>$, **RED**, **GREEN**, **YELLOW**, **BLUE** or **NUMBER** buttons and so on.
- 4 Press the **TEXT** or colour button to switch off digital teletext and return to TV viewing.

Some services may allow you to access text services by pressing the **RED** button.



APPENDIX

TROUBLESHOOTING

The TV does not operate properly.

The remote control does not work

- Check to see if there is any object between the TV and the remote control causing an obstruction. Ensure you are pointing the remote control directly at the TV.
- Ensure that the batteries are installed with correct polarity (+ to +, - to -).
- Ensure that the correct remote operating mode is set : TV, STB etc.
- Install new batteries.

Power is suddenly turned off

- Is the sleep timer set?
- Check the power control settings. Has the Power supply been interrupted.
- Is Auto sleep activated on this station?

The video function does not work.

No picture & No sound

- Check whether the TV is switched on.
- Try another channel. The problem may be with the broadcast.
- Is the power cord inserted correctly into the mains?
- Check your antenna direction and/or location.
- Test the mains outlet by plugging another TV into the same outlet.

Picture appears slowly after switching on

- This is normal, the image is muted during the TV startup process. Please contact your service centre, if the picture has not appeared after five minutes.

No or poor colour or poor picture

- Adjust Colour in menu option.
- Allow a sufficient distance between the TV and the VCR.
- Try another channel. The problem may be with the broadcast.
- Are the video cables installed properly?
- Activate any function to restore the brightness of the picture.

Horizontal/vertical bars or picture shaking

- Check for local interference such as an electrical appliance or power tool.

Poor reception on some channels

- Station or cable channel experiencing problems, tune to another station.
- Station signal is weak, reposition the antenna to receive weaker stations.
- Check for sources of possible interference.

Lines or streaks in pictures

- Check antenna (Change the position of the antenna).

No picture when connecting HDMI

- Check HDMI cable over version 1.3.
If the HDMI cables don't support HDMI version 1.3, it can cause flickers or no screen display. In this case use the latest cables that support HDMI version 1.3.

The audio function does not work.

Picture OK & No sound	■ Press the  + or - button. ■ Sound muted? Press MUTE button. ■ Try another channel. The problem may be with the broadcast. ■ Are the audio cables installed properly?
No output from one of the speakers	■ Adjust Balance in menu option.
Unusual sound from inside the TV	■ A change in ambient humidity or temperature may result in an unusual noise when the TV is switched on or off and does not indicate a fault with the TV.
No sound when connecting HDMI or USB	■ Check HDMI cable over version 1.3. ■ Check USB cable over version 1.1.

*This feature is not available for all models.

There is a problem in PC mode. (Only PC mode applied)

The signal is out of range (Invalid format)	■ Adjust resolution, horizontal frequency, or vertical frequency. ■ Check the input source.
Vertical bar or stripe on background & Horizontal Noise & Incorrect position	■ Use Auto configure or adjust clock, phase, or H/V position. (Option)
Screen colour is unstable or single colour	■ Check the signal cable. ■ Reinstall the PC video card.

APPENDIX

MAINTENANCE

Early malfunctions can be prevented. Careful and regular cleaning can prolong the life of your new TV.

Caution: Be sure to switch the power off and unplug the power cord before you begin any cleaning.

Cleaning the Screen

- 1 A good way to keep the dust off your screen for a while is to wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it is almost dry, and then use it to wipe the screen.
- 2 Ensure there is no excess water on the screen. Allow any water or dampness to evaporate before switching on.

Cleaning the Cabinet

- To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth.
- Do not to use a wet cloth.

Extended Absence

CAUTION

- If you expect to leave your TV dormant for prolonged periods (such as a holiday), unplug the power cord to protect against possible damage from lightning or power surges.

PRODUCT SPECIFICATIONS

MODELS		32LG70**	37LG70**	42LG70**
		32LG7000-ZA	37LG7000-ZA	42LG7000-ZA
Dimensions (Width x Height x Depth)	with stand	797 x 597 x 227.3 mm 31.3 x 23.5 x 8.9 inches	918.6 x 684.8x 293.4mm 36.2x 26.9 x 11.6 inches	1026.2 x 734 x 293.4 mm 40.4 x 28.8 x 11.5 inches
	without stand	797x 558.6x 100.5mm 31.3 x 21.9 x 3.9 inches	918.6x 635.8x 111.7mm 36.2x 25 x 4.4 inches	1026.2 x 687.9 x 111.8 mm 40.4 x 27.0 x 4.4 inches
Weight	with stand	13.0kg / 28.7 lbs	18.5kg / 40.8 lbs	22.1kg / 48.7 lbs
	without stand	11.5kg / 25.4 lbs	15.8 kg / 34.8lbs	19.4 kg / 42.8lbs
Power requirement		AC100-240V~ 50/60Hz	AC100-240V~ 50/60Hz	AC100-240V~ 50/60Hz
Power Consumption		180W	180W	230W
MODELS		47LG70**	52LG70**	
		47LG7000-ZA	52LG7000-ZA	
Dimensions (Width x Height x Depth)	with stand	1140.4 x 820.1 x 342.9 mm 44.8 x 32.2 x 13.5 inches	1284.4 x 898.6 x 342.9 mm 50.5 x 35.3 x 13.5 inches	
	without stand	1140.4 x 764.8 x 129.0 mm 44.8 x 30.1 x 5.0 inches	1284.4 x 844.6 x 129.5 mm 50.5 x 33.2 x 5.1 inches	
Weight	with stand	29.8 kg / 65.7lbs	39.5 kg / 87.1 lbs	
	without stand	25.1 kg / 55.3 lbs	34.8kg / 76.7lbs	
Power requirement		AC100-240V~ 50/60Hz	AC100-240V~ 50/60Hz	
Power Consumption		300W	350W	
Television System		PAL/SECAM B/G/D/K, PAL I/II, SECAM L/L'		
Program Coverage		VHF: E2 ~ E12, UHF: E21 ~ E69, CATV: S1 ~ S20, HYPER: S21 ~ S47		
External Antenna Impedance		75 Ω		
Environment condition	Operating Temperature	0 ~ 40°C / 32 ~ 104°F		
	Operating Humidity	Less than 80%		
	Storage Temperature	-20 ~ 60°C / -4 ~ 140°F		
	Storage Humidity	Less than 85%		

■ The specifications shown above may be changed without prior notice for quality improvement.

APPENDIX

MODELS		50PG70** 50PG7000-ZB	60PG70** 60PG7000-ZB
Dimensions (Width x Height x Depth)	with stand	1235.6 x 849.3 x 364.1 mm 48.6 x 33.4 x 14.3 inches	1455 x 985 x 414 mm 57.3 x 38.8 x 16.3 inches
	without stand	1235.6 x 792.8 x 79.6 mm 48.6 x 31.2 x 3.1 inches	1455 x 924.8 x 84.1 mm 57.3 x 36.4 x 3.3 inches
Weight	with stand	45.65 kg / 100.6 lbs	62.4kg / 137.6 lbs
	without stand	41.7kg / 91.9lbs	54.9 kg / 121.0 lbs
Power requirement Power Consumption		AC100-240V~ 50/60Hz 520W	AC100-240V~ 50/60Hz 700W
Television System Program Coverage External Antenna Impedance		PAL/SECAM B/G/D/K, PAL I/II, SECAM L/L' VHF: E2 ~ E12, UHF: E21 ~ E69, CATV: S1 ~ S20, HYPER: S21 ~ S47 75 Ω	
Environment condition	Operating Temperature	0 ~ 40°C / 32 ~ 104°F	
	Operating Humidity	Less than 80%	
	Storage Temperature	-20 ~ 60°C / -4 ~ 140°F	
	Storage Humidity	Less than 85%	

■ The specifications shown above may be changed without prior notice for quality improvement.

PROGRAMMING THE REMOTE CONTROL

The remote control is a multi brand or universal remote. It can be programmed. to operate most remote controlled devices from other manufacturers.

Note that the remote control may not control all models from other brands.

Programming a code into a remote mode

- 1 Testing your remote control.
To find out whether your remote control can operate other components without programming, turn on a component such as a STB and press the corresponding mode button (such as a **STB**) on the remote control, while pointing at the component. Test the POWER and P $\wedge$ $\vee$ buttons to see if the component responds correctly. If the component does not operate correctly, the remote control requires programming to operate the device.
- 2 Switch on the component to be programmed, then press the corresponding mode button (such as **STB**) on the remote control. The remote control button of the desired device is illuminated.
- 3 Press the **MENU** and **MUTE** buttons simultaneously, the remote control is ready to be programmed with the code.
- 4 Enter a code number using the number buttons on the remote control. Programming code numbers for the corresponding component can be found on the following pages. If the code is correct, the device will turn off.
- 5 Press the **MENU** button to store the code.
- 6 Test the remote control functions to see if the component responds correctly. If not, repeat from step 2.

APPENDIX

HDSTB

Brand	Codes	Brand	Codes	Brand	Codes
ALPHASTAR DSR	123	HOUSTON TRACKER	033 037 039 051	PROSAT	072
AMPLICA	050		057 104	RCA	066 106
BIRDVIEW	051 126 129	HUGHES	068	REALISTIC	043 074
CHANNEL MASTER	013 014 015 018	JANIEL	060 147	SAMSUNG	123
	036 055	JERROLD	061	SATELLITE SERVICE CO	028 035 047 057
CHAPARRAL	008 009 012 077	KATHREIN	108		085
CITOH	054	LEGEND	057	SCIENTIFIC ATLANTA	032 138
CURTIS MATHES	050 145	LG	001	SONY	103
DRAKE	005 006 007 010	LUTRON	132	STARCAST	041
	011 052 112 116	LUXOR	062 144	SUPER GUIDE	020 124 125
	141	MACOM	010 059 063 064	TEECOM	023 026 075 087
DX ANTENNA	024 046 056 076		065		088 090 107 130
ECHOSTAR	038 040 057 058	MEMOREX	057		137
	093 094 095 096	NEXTWAVE	028 124 125	TOSHIBA	002 127
	097 098 099 100	NORSAT	069 070	UNIDEN	016 025 042 043
	122	PACE SKY SATELLITE	143		044 045 048 049
ELECTRO HOME	089	PANASONIC	060 142		078 079 080 086
EUROPLUS	114	PANSAT	121		10 135 136
FUJITSU	017 021 022 027	PERSONAL CABLE	117	VIEWSTAR	115
	133 134	PHILIPS	071	WINEGARD	128 146
GENERAL INSTRUMENT	003 004 016 029	PICO	105	ZENITH	081 082 083 084
	031 059 101	PRESIDENT	019 102		091 120
HITACHI	139 140	PRIMESTAR	030 110 111		

IR CODES

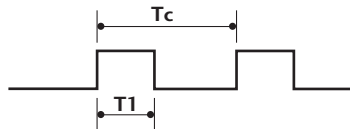
1. How to Connect

- Connect your wired remote control to the Remote Control port on the TV.

2. Remote Control IR Codes

■ Output waveform

Single pulse, modulated with 37.917KHz signal at 455KHz



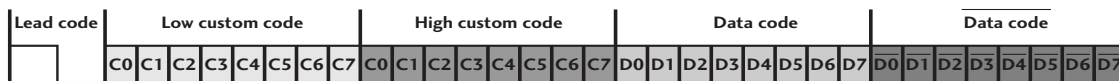
Carrier frequency

$$FCAR = 1/Tc = fOSC/12$$

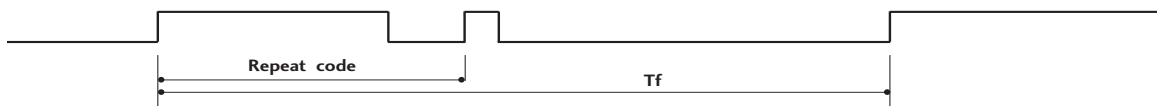
$$\text{Duty ratio} = T1/Tc = 1/3$$

■ Configuration of frame

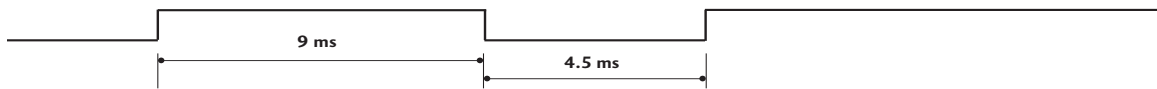
1st frame



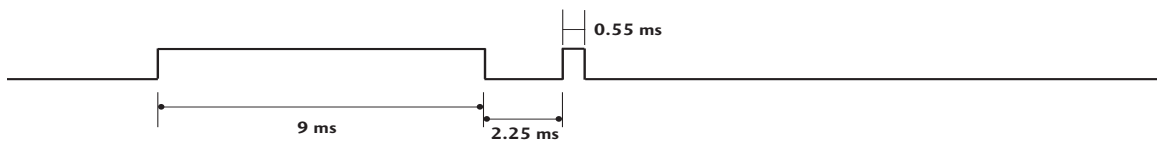
Repeat frame



■ Lead code

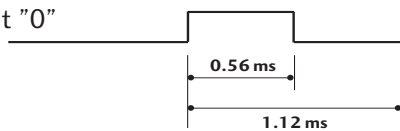


■ Repeat code

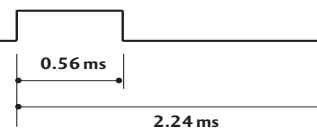


■ Bit description

Bit "0"

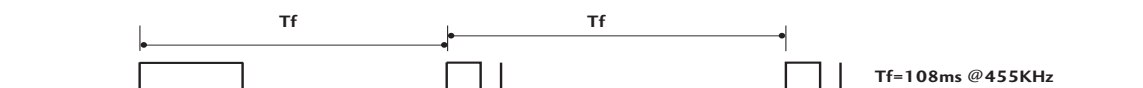


Bit "1"



■ Frame interval: Tf

The waveform is transmitted as long as a key is depressed.



APPENDIX

Code (Hexa)	Function	Note
08	POWER	R/C BUTTON (POWER ON/OFF)
0B	INPUT	R/C BUTTON
f0	TV/RADIO	R/C BUTTON
45	Q.MENU	R/C BUTTON
43	MENU	R/C BUTTON
AB	GUIDE	R/C BUTTON
07	Left (<)	R/C BUTTON
06	Right (>)	R/C BUTTON
40	Up (^)	R/C BUTTON
41	Down (v)	R/C BUTTON
44	OK (●)	R/C BUTTON
28	RETURN	R/C BUTTON
AA	INFO (i)	R/C BUTTON
30	AV MODE	R/C BUTTON
02	⏏ +	R/C BUTTON
03	⏏ -	R/C BUTTON
00	P ^	R/C BUTTON
01	P v	R/C BUTTON
1E	FAV	R/C BUTTON
09	MUTE	R/C BUTTON
10 ~ 19	Number Key 0~9	R/C BUTTON
53	LIST	R/C BUTTON
1A	Q.VIEW	R/C BUTTON
72	RED Key	R/C BUTTON
71	GREEN Key	R/C BUTTON
63	YELLOW Key	R/C BUTTON
61	BLUE Key	R/C BUTTON
20	TEXT	R/C BUTTON
21	T.Option	R/C BUTTON
39	SUBTITLE	R/C BUTTON
BD	● (Record)	R/C BUTTON
7E	SIMPLINK	R/C BUTTON

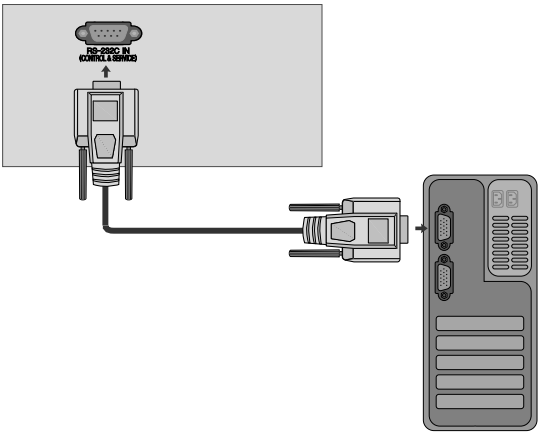
EXTERNAL CONTROL DEVICE SETUP

RS-232C Setup

Connect the RS-232C (serial port) input jack to an external control device (such as a computer or an A/V control system) to control the product's functions externally.

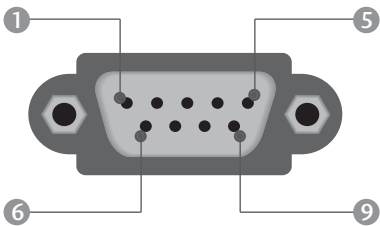
Connect the serial port of the control device to the RS-232C jack on the product back panel.

Note: RS-232C connection cables are not supplied with the product.



Type of Connector; D-Sub 9-Pin Male

No.	Pin Name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection



RS-232C Configurations

7-Wire Configurations (Standard RS-232C cable)

	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DSR
DSR	6	4	DTR
RTS	7	8	CTS
CTS	8	7	RTS
	D-Sub 9	D-Sub 9	

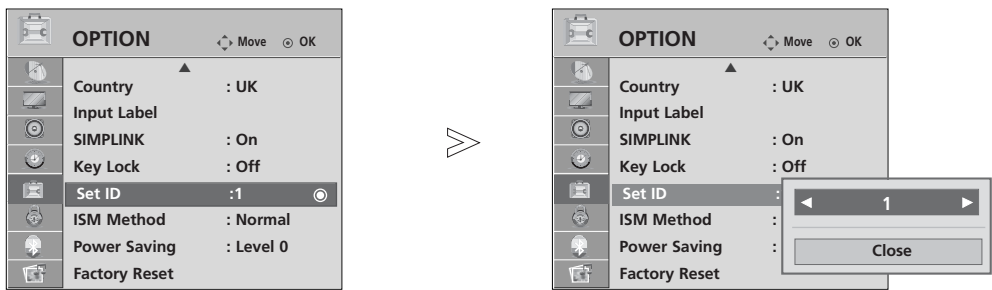
3-Wire Configurations(Not standard)

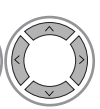
	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	7	RTS
CTS	8	8	CTS
	D-Sub 9	D-Sub 9	

APPENDIX

Set ID

Use this function to specify a set ID number.
Refer to 'Real Data Mapping'. ► p.128



-   Select **OPTION**.
-   Select **Set ID**.
-   Adjust **Set ID** to choose the desired TV ID number.
The adjustment range of SET ID is 1~99.

- Press **RETURN** to move to the previous menu screen.

Communication Parameters

- Baud rate : 9600 bps (UART)
- Data length : 8 bits
- Parity : None
- Stop bit : 1 bit
- Communication code : ASCII code
- Use a crossed (reverse) cable.

Command Reference List

	COMMAND 1	COMMAND 2	DATA (Hexadecimal)
01. Power	k	a	00 ~ 01
02. Aspect Ratio	k	c	Refer to p. 126
03. Screen Mute	k	d	00 ~ 01
04. Volume Mute	k	e	00 ~ 01
05. Volume Control	k	f	00 ~ 64
06. Contrast	k	g	00 ~ 64
07. Brightness	k	h	00 ~ 64
08. Colour	k	i	00 ~ 64
09. Tint	k	j	00 ~ 64
10. Sharpness	k	k	00 ~ 64
11. OSD Select	k	l	00 ~ 01
12. Remote control lock mode	k	m	00 ~ 01
13. Balance	k	t	00 ~ 64
14. Colour Temperature	k	u	00 ~ 02
15. Abnormal Status	k	z	00 ~ a
16. ISM Method	j	p	Refer to p. 127
17. Power Saving	j	q	00 ~ 04
18. Auto Configuration	j	u	01
19. Equalize	j	v	Refer to p. 128
20. Tune Command	m	a	Refer to p. 128
21. Channel Add/Skip	m	b	00 ~ 01
22. Key	m	c	Key C ode
23. Control Back Light	m	g	00 ~ 64
24. Input select (Main)	x	b	Refer to p. 129

* When setting the 15 ~ 24, a menu does not appear on screen.

Transmission / Receiving Protocol

Transmission

[Command1][Command2][][Set ID][][Data][Cr]

- * [Command 1] : First command to control the TV.
(j, k, m or x)
- * [Command 2] : Second command to control the TV.
- * [Set ID] : You can adjust the set ID to choose desired monitor ID number in option menu. Adjustment range is 1 ~ 99. When selecting Set ID '0', every connected set is controlled. Set ID is indicated as decimal (1~99) on menu and as Hexa decimal (0x0~0x63) on transmission/receiving protocol.
- * [DATA] : To transmit command data. Transmit 'FF' data to read status of command.
- * [Cr] : Carriage Return
ASCII code '0x0D'
- * [] : ASCII code 'space (0x20)'

OK Acknowledgement

[Command2][][Set ID][][OK][Data][x]

- * The set transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

Error Acknowledgement

[Command2][][Set ID][][NG][Data][x]

- * The set transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

Data 00: Illegal Code

APPENDIX

01. Power (Command: k a)

- To control Power On/Off of the set.

Transmission

[k][a][][Set ID][][Data][Cr]

Data 00 : Power Off 01 : Power On

Ack

[a][][Set ID][][OK/NG][Data][x]

- To show Power On/Off.

Transmission

[k][a][][Set ID][][FF][Cr]

Ack

[a][][Set ID][][OK/NG][Data][x]

- * Similarly, if other functions transmit '0xFF' data based on this format, Acknowledgement data feed back presents status about each function.
- * OK Ack., Error Ack. and other message may display on the screen when TV is power On.

02. Aspect Ratio (Command: k c) (Main Picture Size)

- To adjust the screen format. (Main picture format)
You can also adjust the screen format using the **Aspect Ratio** in the Q.MENU. or PICTURE menu.

Transmission

[k][c][][Set ID][][Data][Cr]

Data 01 : Normal screen (4:3) 05 : Zoom2
 02 : Wide screen (16:9) 06 : Original
 04 : Zoom1 07 : 14:9
 09 : Just Scan

Ack

[c][][Set ID][][OK/NG][Data][x]

- * Using the PC input, you select either 16:9 or 4:3 screen aspect ratio.
- * In DTV/HDMI (1080i 50Hz/60Hz, 720p 24Hz/50Hz/60Hz, 1080p 24Hz/30Hz/50Hz/60Hz), Component(720p, 1080i, 1080p 50Hz/60Hz) mode, Just Scan is available.

03. Screen Mute (Command: k d)

- To select screen mute on/off.

Transmission

[k][d][][Set ID][][Data][Cr]

Data 00 : Screen mute off (Picture on)
 01 : Screen mute on (Picture off)

Ack

[d][][Set ID][][OK/NG][Data][x]

04. Volume Mute (Command: k e)

- To control volume mute on/off.
You can also adjust mute using the MUTE button on remote control.

Transmission

[k][e][][Set ID][][Data][Cr]

Data 00 : Volume mute on (Volume off)
 01 : Volume mute off (Volume on)

Ack

[e][][Set ID][][OK/NG][Data][x]

05. Volume Control (Command: k f)

- To adjust volume.
You can also adjust volume with the VOLUME buttons on remote control.

Transmission

[k][f][][Set ID][][Data][Cr]

Data Min : 00 ~ Max : 64

- * Refer to 'Real data mapping 1'. See page 128.

Ack

[f][][Set ID][][OK/NG][Data][x]

06. Contrast (Command: k g)

- To adjust screen contrast.
You can also adjust contrast in the PICTURE menu.

Transmission

[k][g][][Set ID][][Data][Cr]

Data Min : 00 ~ Max : 64

- * Refer to 'Real data mapping 1'. See page 128.

Ack

[g][][Set ID][][OK/NG][Data][x]

07. Brightness (Command: k h)

- To adjust screen brightness.
You can also adjust brightness in the PICTURE menu.

Transmission

[k][h][][Set ID][][Data][Cr]

Data Min : 00 ~ Max : 64

- * Refer to 'Real data mapping 1'. See page 128.

Ack

[h][][Set ID][][OK/NG][Data][x]

08. Colour (Command: k i)

- To adjust the screen colour.
You can also adjust colour in the PICTURE menu.

Transmission

[k][i][][Set ID][][Data][Cr]

Data Min : 00 ~ Max : 64

- * Refer to 'Real data mapping 1'. See page 128.

Ack

[i][][Set ID][][OK/NG][Data][x]

09. Tint (Command: k j)

- To adjust the screen tint.
You can also adjust tint in the PICTURE menu.

Transmission

[k][j][][Set ID][][Data][Cr]

Data Red : 00 ~ Green : 64

* Refer to 'Real data mapping 1'. See page 128.

Ack

[j][][Set ID][][OK/NG][Data][x]

10. Sharpness (Command: k k)

- To adjust the screen sharpness.
You can also adjust sharpness in the PICTURE menu.

Transmission

[k][k][][Set ID][][Data][Cr]

Data Min : 00 ~ Max : 64

* Refer to 'Real data mapping 1'. See page 128.

Ack

[k][][Set ID][][OK/NG][Data][x]

11. OSD Select (Command: k l)

- To select OSD (On Screen Display) on/off when controlling remotely.

Transmission

[k][l][][Set ID][][Data][Cr]

Data 00 : OSD off 01 : OSD on

Ack

[l][][Set ID][][OK/NG][Data][x]

12. Remote control lock mode (Command: k m)

- To lock the front panel controls on the monitor and remote control.

Transmission

[k][m][][Set ID][][Data][Cr]

Data 00 : Lock off 01 : Lock on

Ack

[m][][Set ID][][OK/NG][Data][x]

* If you are not using the remote control, use this mode.
When main power is on/off, external control lock is released.

13. Balance (Command: k t)

- To adjust balance.
You can also adjust balance in the AUDIO menu.

Transmission

[k][t][][Set ID][][Data][Cr]

Data Min : 00 ~ Max : 64

* Refer to 'Real data mapping 1'. See page 128.

Ack

[t][][Set ID][][OK/NG][Data][x]

14. Colour Temperature (Command: k u)

- To adjust colour temperature. You can also adjust Colour Temperature in the PICTURE menu.

Transmission

[k][u][][Set ID][][Data][Cr]

Data 00: Medium 01: Cool 02: Warm

Ack

[u][][Set ID][][OK/NG][Data][x]

15. Abnormal State (Command: k z)

- To recognize an abnormal state.

Transmission

[k][z][][Set ID][][FF][][Cr]

Data FF : Read

Ack

[z][][Set ID][][OK/NG][Data][x]

Data 00: Normal (Power on and signal exist)
01: No signal (Power on)
02: Turn the TV off by remote control
03: Turn the TV off by sleep time function
04: Turn the TV off by RS-232C function
05: 5V down
06: AC down
07: Turn the TV off by Fan Alarm function
08: Turn the TV off by Off time function
09: Turn the TV off by Auto sleep function
a: Turn the TV off by AV board detection.

* This function is "read only".

**16. ISM Method (Plasma TV only)
(Command: j p)**

- To control the ISM method. You can also adjust ISM Method in OPTION menu.

Transmission

[j][p][][Set ID][][Data][Cr]

Data 01: Inversion
02: Orbiter
04: White wash
08: Normal

Ack

[p][][Set ID][][OK/NG][Data][x]

APPENDIX

17. Power Saving (Plasma TV only) (Command: j q)

- To reduce the power consumption of the TV. You can also adjust Low Power in OPTION menu.

Transmission

[j][q][][Set ID][][Data][Cr]

Data Min :00 ~ Max :04 (*transmit by hexadecimal code)

Ack

[q][][Set ID][][OK/NG][Data][x]

18. Auto Configure(Command: j u)

- To adjust picture position and minimize image shaking automatically. It works only in RGB (PC) mode.

Transmission

[j][u][][Set ID][][Data][Cr]

Data 01: To set

Ack

[u][][Set ID][][OK/NG][Data][x]

19. Equalize(Command: j v)

- To adjust equalize.

Transmission

[j][v][][Set ID][][Data][Cr]

MSB

LSB

0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---

└─ Frequency ─┐ ┌─ Data ─┐

7	6	5	Frequency	4	3	2	1	0
0	0	0	80Hz	00000 ~10010				
0	0	1	220Hz					
0	1	0	470Hz					
0	1	1	1 KHz					
1	0	0	2.2KHz					
1	0	1	4.7KHz					
1	1	0	12KHz					

Ack

[v][][Set ID][][OK/NG][Data][x]

20. Tune Command (Command: m a)

- Select channel to following physical number.

Transmission

[m][a][][Set ID][][Data0][][Data1][][Data2][Cr]

Data00 : High channel data

Data01 : Low channel data

ex. No. 47 -> 00 2F (2FH)

No. 394 -> 01 88 (188H),

DTV No. 0 -> Don't care

Data02 0x00 : ATV Main

0x10 : DTV Main

Channel data range

Analogue - Min: 00 ~ Max: 63 (0~99)

Digital - Min: 00 ~ Max: 3E7 (0~999)

Ack

[a][][Set ID][][OK/NG][Data][x]

Data Min: 00 ~ Max: FF

21. Channel Add/Skip(Command: m b)

- To set skip status for the current Programme.

Transmission

[m][b][][Set ID][][Data][Cr]

Data 00 : Skip

01 : Add

Ack

[b][][Set ID][][OK/NG][Data][x]

* Real data mapping 1

00 : Step 0
 ...
 A : Step 10 (Set ID 10)
 ...
 F : Step 15 (Set ID 15)
 10 : Step 16 (Set ID 16)
 ...
 64 : Step 100
 ...
 6E : Step 110
 ...
 73 : Step 115
 74 : Step 116
 ...
 C7 : Step 199
 ...
 FE : Step 254
 FF : Step 255

* Real data mapping 2

00 :-40
 01 :-39
 02 :-38
 ...
 28 :0
 ...
 4E : +38
 4F : +39
 50 : +40

22. Key(Command: m c)

► To send IR remote key code.

Transmission

[m][c][][Set ID][][Data][Cr]

Data Key code - Refer to page 122.

Ack

[c][][Set ID][][OK/NG][Data][x]

23. Control Back Light (Command: m g) (LCD TV only)

► To Control the back light.

Transmission

[m][g][][Set ID][][Data][Cr]

Data : data Min: 00 ~ Max: 64 (* transmit by Hexadecimal code)

Ack

[g][][Set ID][][OK/NG][Data][x]

24. Input select (Command: x b) (Main Picture Input)

► To select input source for main picture.

Transmission

[x][b][][Set ID][][Data][Cr]

Data Structure

MSB				LSB			
0	0	0	0	0	0	0	0
└ External Input ┘				└ Input Number ┘			

External Input				Data
0	0	0	0	DTV
0	0	0	1	Analogue
0	0	1	0	AV
0	1	0	0	Component
0	1	0	1	RGB-PC
1	0	0	1	HDMI/DTV-PC

Input Number				Data
0	0	0	0	Input1
0	0	0	1	Input2
0	0	1	0	Input3
0	0	1	1	Input4

Ack

[b][][Set ID][][OK/NG][Data][x]

APPENDIX

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Version 2.1, February 1999

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