

LCD TV OWNER'S MANUAL

LCD TV MODELS

26LC7D*

32LC7D*

37LC7D*

42LC7D*

Please read this manual carefully before operating your set. Retain it for future reference. Record model number and serial number of the set. See the label attached on the back cover and quote this information to your dealer when you require service.



of the DVB Project

DVB is a registered trademark

ID Number: 4616: 26LC7D(26LC7D-AB) 4624: 32LC7D(32LC7D-AB) 4623: 37LC7D(37LC7D-AB) 4622: 42LC7D(42LC7D-AB)



ACCESSORIES

Ensure that the following accessories are included with your product. If an accessory is missing, please contact the dealer where you purchased the product.







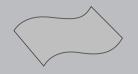
Batteries



Remote Control



Power Cord



Polishing Cloth Polish the screen with the cloth.

- This feature is not available for all models.
- * Slightly wipe stained spot on the exterior only with the polishing cloth if there is stain or fingerprint on the exterior.
- * Do not wipe roughly when removing stain. Please be aware that excessive force may cause scratch or discoloration.



Cable Management

This feature is not available for all models.



2-TV Bracket Bolts



2-TV Brackets, 2-Wall Brackets



Twister Holder Arrange the wires with the twister holder.



4-bolts for stand assembly See below for detail information. (Refer to p.6)

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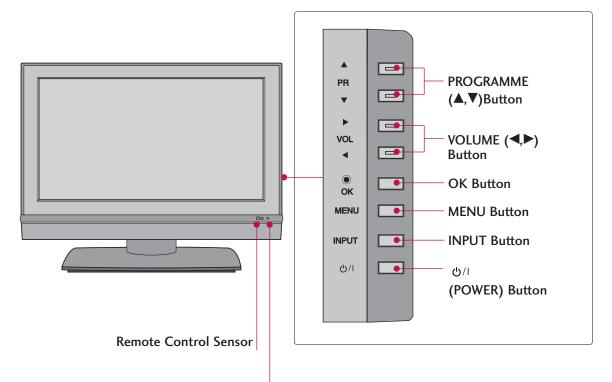
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After reading this manual, keep it handy for future reference.

PREPARATION

FRONT PANEL CONTROLS

- This is a simplified representation of the front panel. Image shown may be somewhat different from your TV.
- If your product has a protection film attached, remove the film and then wipe the product with a polishing cloth.

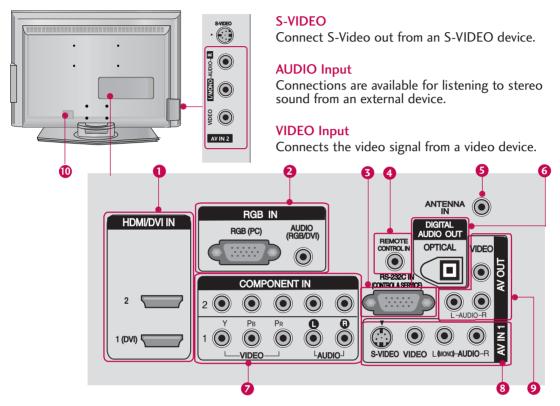


Power Standby Indicator

- Illuminates red in standby mode.
- \bullet Illuminates green when the set is switched on.

BACK PANEL INFORMATION

This is a simplified representation of the back panel. Image shown may be somewhat different from your TV.



1 HDMI/DVI IN

Connect a HDMI signal.
Or DVI(VIDEO) signal to the this port with a HDMI to DVI cable.

2 RGB/AUDIO IN

Connect the output from a set top box or PC to the appropriate input port.

- 3 RS-232C IN (CONTROL & SERVICE) PORT Connect to the RS-232C port on a PC.
- 4 Remote Control Port Connect your wired remote control.
- **S** ANTENNA IN Connect antenna signals to this jack.
- ODIGITAL AUDIO OUT Connect digital audio from various types of equipment. Note: In standby mode, these ports do not work.

O COMPONENT IN

Connect a component video/audio device to these jacks.

8 AV (Audio/Video) IN 1

Connect audio/video output from an external device to these jacks.

S-VIDEO

Connect S-Video out from an S-VIDEO device.

AV OUT

Connect a second TV or monitor.

10 Power Cord Socket

For operation with AC power.

Caution: Never attempt to operate the TV on DC power.

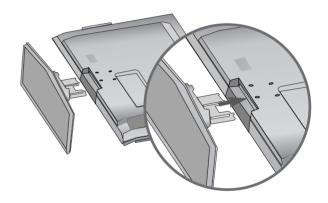
PREPARATION

STAND INSTALLATION

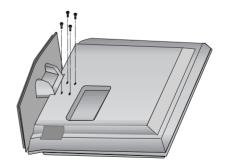
1 Carefully place the product screen side down on a cushioned surface that will protect product and screen from damage.



Assemble the product stand with the product as shown.

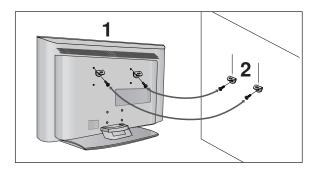


Install the 4 bolts securely, in the back of the product in the holes provided.



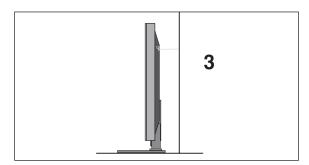
ATTACHING THE TV TO A WALL

- This Feature is not available for all models.
- Set it up close to the wall so the product doesn't fall over when it is pushed backwards.
- The instructions shown below is a safer way to set up the product, which is to fix it on the wall so the product doesn't fall over when it is pulled in the forward direction. It will prevent the product from falling forward and hurting people. It will also prevent the product from damage caused by fall. Please make sure that children don't climb on or hang from the product.



- Use the eye-bolts or TV brackets/bolts to fix the product to the wall as shown in the picture. (If your product has the bolts in the eye-bolts position before inserting the eye-bolts, loosen the bolts.)

 * Insert the eye-bolts or TV brackets/bolts and tighten them securely in the upper holes.
- Secure the wall brackets with the bolts (not provided as parts of the product, must purchase separately) on the wall. Match the height of the bracket that is mounted on the wall.



Use a sturdy rope (not provided as parts of the product, must purchase separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

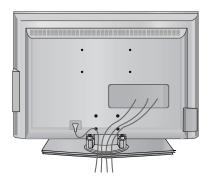
NOTE

- ▶ When moving the product to another place undo the ropes first.
- ▶ Use a product holder or a cabinet that is big and strong enough for the size and weight of the product.
- ▶ To use the product safely make sure that the height of the bracket that is mounted on the wall is same as that of the product.

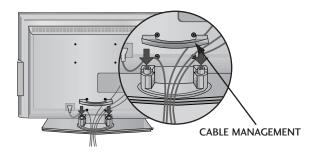
BACK COVER FOR WIRE ARRANGEMENT

Connect the cables as necessary.

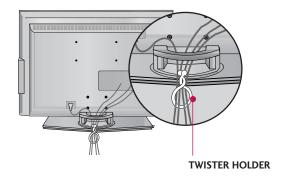
To connect additional equipment, see the External Equipment Setup section.



2 Install the CABLE MANAGEMENT as shown.



Bundle the cables using the supplied twister holder. (This Feature is not available for all models.)

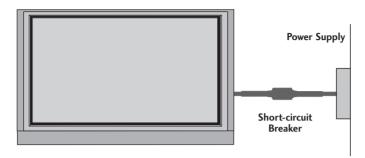


How to remove the CABLE MANAGEMENT Hold the CABLE MANAGEMENT with both hands and pull it upward.

NOTE

- ▶ Do not hold the CABLE MANAGEMENT when moving the product.
 - If the product is dropped, you may be injured or the product may be broken.

■ Image shown may be somewhat different from your TV.



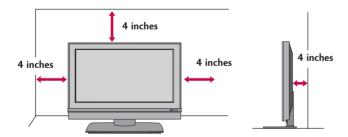
GROUNDING

Ensure that you connect the earth ground wire to prevent possible electric shock. If grounding methods are not possible, have a qualified electrician install a separate circuit breaker.

Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.

DESKTOP PEDESTAL INSTALLATION

For proper ventilation, allow a clearance of 4inches on each side from the wall.

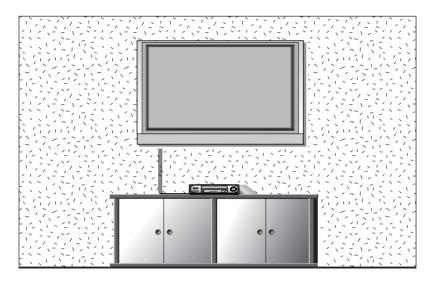


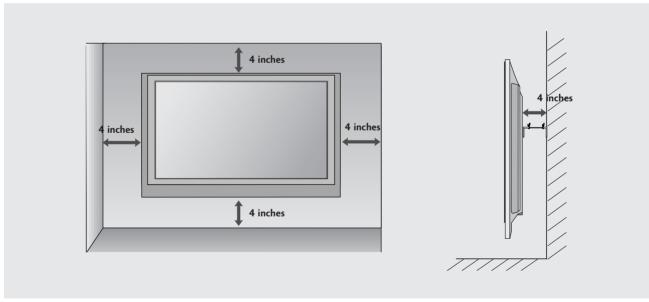
A CAUTION

▶ Ensure adequate ventilation by following the clearance recommendations.

WALL MOUNT: HORIZONTAL INSTALLATION

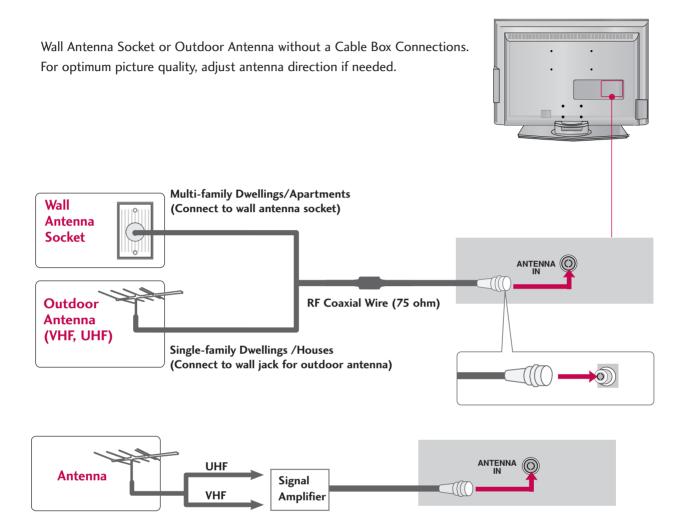
For proper ventilation, allow a clearance of 4" on each side and from the wall. Detailed installation instructions are available from your dealer.





■ To prevent the equipment damage, never plug in any power cords until you have finished connecting all equipment.

ANTENNA CONNECTION



- To improve the picture quality in a poor signal area, please purchase a signal amplifier and install properly.
- If the antenna needs to be split for two TV's, install a 2-Way Signal Splitter.
- If the antenna is not installed properly, contact your dealer for assistance.

NOTE

▶ The TV will let you know when the analogue, cable, and digital programme scans are complete.

HD RECEIVER SETUP

This TV can receive Digital Over-the-air/Cable signals without an external digital set-top box. However, if you do receive digital signals from a digital set-top box or other digital external device, refer to the figure as shown below.

This TV supports HDCP (High-bandwidth Digital Contents Protection) protocol for Digital Contents (480p, 576p, 720p, 1080i, 1080p).

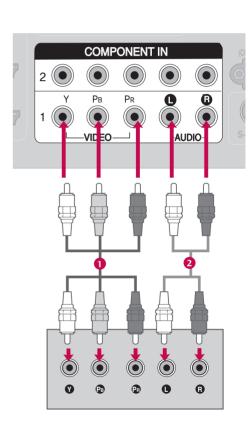
When connecting with a Component cables

- Connect the video outputs (Y, PB, PR) of the digital set top box to the **COMPONENT IN VIDEO 1** jacks on the set. Match the jack colors

 (Y = green, PB = blue, and PR = red)
- Connect the audio output of the digital set-top box to the **COMPONENT IN AUDIO 1** jacks on the set.
- Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- Select Component 1 input source using the INPUT button on the remote control.

 If connected to COMPONENT IN 2 input, select Component 2 input source.

Signal	Component 1/2	HDMI1/DVI, HDMI2
480i	Yes	No
480p	Yes	Yes
576i	Yes	No
576p	Yes	Yes
720p	Yes	Yes
1080i	Yes	Yes
1080p	No	Yes



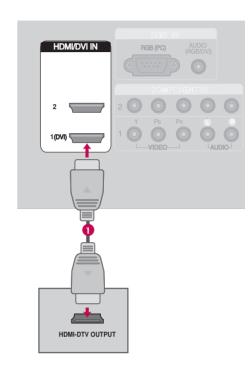
When connecting with HDMI cable

- Connect the digital set-top box to **HDMI/DVI IN 1** or **2** jack on the set.
- No separate audio connection is necessary.
- Turn on the digital set-top box.

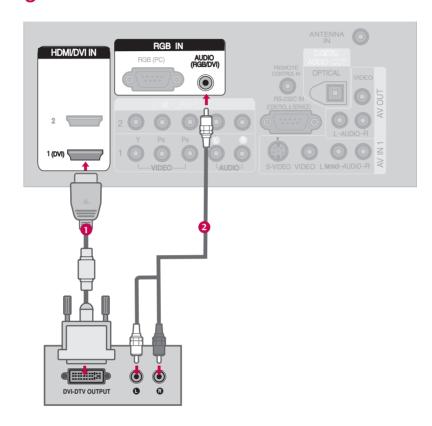
 (Refer to the owner's manual for the digital set-top box.)
- Select HDMI1/DVI or HDMI 2 input source using the INPUT button on the remote control.

NOTE

- ▶ If the digital set-top box supports Auto HDMI function, the output resolution of the source device will be automatically set to 1280x720p.
- ▶ If the digital set-top box player does not support Auto HDMI, you need to set the output resolution appropriately.
 To get the best picture quality, adjust the output resolution of the source device to 1280x720p.



When connecting HDMI to DVI cable



- Connect the DVI output of the digital set-top box to the **HDMI**/DVI IN 1 jack on the set.
- Connect the audio output of the digital set-top box to the AUDIO(RGB/DVI) jack on the set.
- Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- Select **HDMI1/DVI** input source using the **INPUT** button on the remote control.

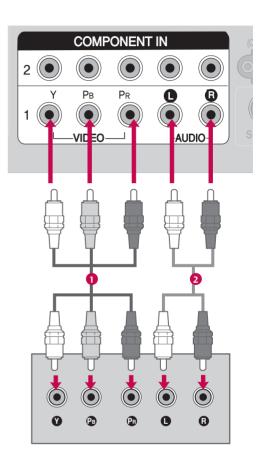
DVD SETUP

When connecting Component cables

- Connect the video outputs (Y, PB, PR) of the DVD to the COMPONENT IN VIDEO1 jacks on the set.

 Match the jack colours (Y = green, PB = blue, and PR = red).
- Connect the audio outputs of the DVD to the **COMPO-NENT IN AUDIO1** jacks on the set.
- Turn on the DVD player, insert a DVD.
- Select Component 1 input source using the INPUT button on the remote control.

 If connected to COMPONENT IN 2 input, select Component 2 input source.
- Refer to the DVD player's manual for operating instructions.

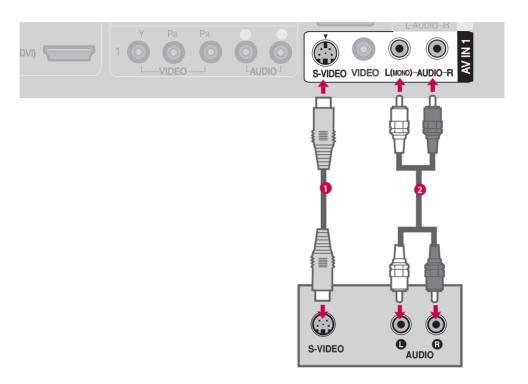


Component Input ports

To get better picture quality, connect a DVD player to the component input ports as shown below.

Component ports on the TV	Υ	Рв	PR
Video output ports on DVD player	Y Y Y	P _B B-Y Cb	P _R R-Y Cr
	Y	Pb	Pr

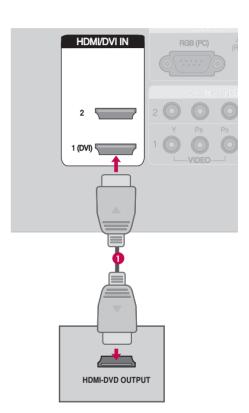
When connecting with an S-Video cable



- Connect the S-VIDEO output of the DVD to the **S-VIDEO** input on the set.
- Connect the audio outputs of the DVD to the **AUDIO** input jacks on the set.
- Turn on the DVD player, insert a DVD.
- Select AV1 input source using the INPUT button on the remote control. If connected to AV IN 2 input, select AV2 input source.
- Refer to the DVD player's manual for operating instructions.

When connecting HDMI cable

- Connect the HDMI output of the DVD to the HDMI/DVI IN 1 or 2 jack on the set.
- 2 No separate audio connection is necessary.
- Select **HDMI1/DVI** or **HDMI 2** input source using the **INPUT** button on the remote control.
- Refer to the DVD player's manual for operating instructions.



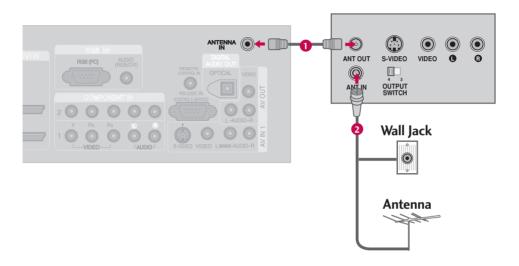
NOTE

- ▶ If the DVD supports Auto HDMI function, the DVD output resolution will be automatically set to 1280x720p.
- ▶ If the DVD does not support Auto HDMI, you need to set the output resolution appropriately.
 - To get the best picture quality, adjust the output resolution of the DVD to 1280x720p.

VCR SETUP

- To avoid picture noise (interference), leave an adequate distance between the VCR and TV.
- If the 4:3 picture format is used; the fixed images on the sides of the screen may remain visible on the screen. This phenomenon is common to all manufacturers and in consequence the manufacturer's warranty does not cover the product bearing this phenomenon.

When connecting with an antenna

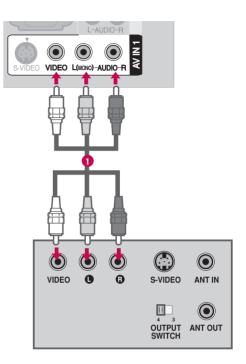


- Connect the RF antenna out socket of the VCR to the ANTENNA IN socket on the set.
- Connect the antenna cable to the RF antenna in socket of the VCR.
- Set VCR output switch to 3 or 4 and then tune TV to the same programme number.
- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)

When connecting with an RCA cable

- Connect the **AUDIO/VIDEO** jacks between TV and VCR. Match the jack colours(Video = yellow, Audio Left = white, and Audio Right = red)
- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- Select AV1 input source using the INPUT button on the remote control.

 If connected to AV IN2, select AV2 input source.



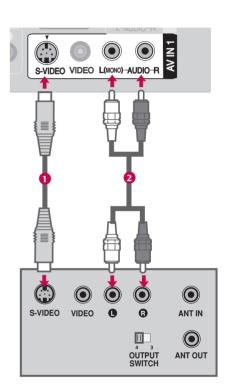
NOTE

If you have a mono VCR, connect the audio cable from the VCR to the AUDIO L(MONO) jack of the set.

When connecting with an S-Video cable

- Connect the S-VIDEO output of the VCR to the **S-VIDEO** input on the set.
- Connect the audio outputs of the VCR to the AUDIO input jacks on the set.
- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- Select AV1 input source using the INPUT button on the remote control.

 If connected to AV IN 2 input, select AV2 input source.



NOTE

➤ The picture quality is improved: ; compared to normal composite (RCA cable) input.

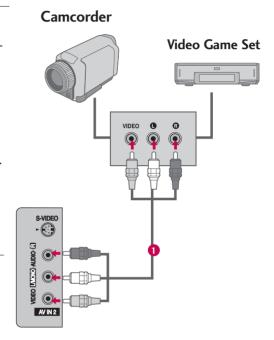
CAUTION

➤ Do not connect to both Video and S-Video at the same time. In the event that you connect both Video and the S-Video cables, only the S-Video will work.

OTHER A/V SOURCE SETUP

- Connect the **AUDIO/VIDEO** jacks between TV and external equipment. Match the jack colours.(Video = yellow, Audio Left = white, and Audio Right = red)
- Select AV2 input source using the INPUT button on the remote control.

 If connected to AV IN1 input, select AV1 input source.
- Operate the corresponding external equipment.



PC SETUP

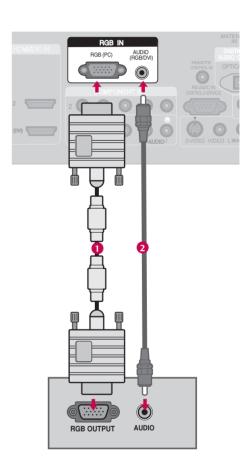
This TV provides Plug and Play capability, meaning that the PC adjusts automatically to the TV's settings. The TV perceives 1024x768, 60Hz as DTV 720p based on the PC graphic card. If necessary, change the screen scanning rate for the graphic card accordingly.

When connecting D-sub 15pin cable

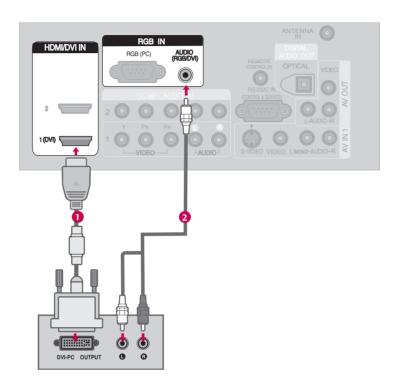
- Connect the RGB output of the PC to the RGB (PC) jack on the set.
- Connect the PC audio output to the AUDIO (RGB/DVI) jack on the set.
- Turn on the PC and the set.
- Select **RGB-PC** input source in input option of Special menu.
- Once you select **RGB-PC** in input option of Special menu, **INPUT** button is also available for this purpose.

NOTE

➤ Check the image on your TV. There may be noise associated with the resolution, vertical pattern, contrast or brightness in PC mode. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the VIDEO menu until the picture is clear. If the refresh rate of the PC graphic card can not be changed, change the PC graphic card or consult the manufacturer of the PC graphic card.



When connecting HDMI to DVI cable



- Connect the DVI output of the PC to the HDMI/DVI IN 1 jack on the set.
- Connect the PC audio output to the AUDIO (RGB/DVI) jack on the set.
- Turn on the PC and the set.
- Select HDMI1/DVI input source using the INPUT button on the remote control.

NOTE

- ▶ If the PC has a DVI output and no HDMI output, a separate audio connection is necessary.
- ▶ If the PC does not support Auto DVI, you need to set the output resolution appropriately. To get the best picture quality, adjust the PC graphics card's output resolution to 1024x768, 60Hz.

NOTES

- ➤ To get the the best picture quality, adjust the PC graphics card to 1280x768, 60Hz.
- ▶ Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.
- When Source Devices are connected with HDMI/DVI Input, the output PC Resolution(VGA, SVGA, XGA), Position and Size may not fit on the Screen. As shown in the picture below, press the OK button to adjust the screen Position of the TV SET and contact a PC graphics card service center.
- ▶ When Source Devices connected with HDMI/DVI Input, output TV SET Resolution (480p, 576p, 720p, 1080i, 1080p) and TV SET Display fit EIA/CEA-861-B Specification to Screen. If not,

- refer to the Manual of HDMI/DVI Source Devices or contact your service centre.
- ▶ If the HDMI/DVI Source Device is not connected to the Cable or if there is a poor cable connection, "No signal" is displayed in the HDMI/DVI Input. In this case, that Video Resolution is not supported. If "Invalid Format" is displayed, refer to the Source Device manual or contact your service centre.
- ➤ Avoid keeping a fixed image on the screen for a long period of time. The fixed image may become permanently imprinted on the screen.
- ► The synchronization input form for Horizontal and Vertical frequencies is separate.

Supported Display Specifications (RGB/HDMI-PC)

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720x400	31.468	70.08
640x480	31.469 37.500	59.94 75.00
800x600	37.879 46.875	60.31 75.00
1024x768	48.363 56.476 60.023	60.00 70.06 75.02
1280x768	47.776	59.870
1360x768	47.720	59.799
1366x768	47.13	59.65

Supported Display Specifications (HDMI-DTV)

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720x576	31.25	50.00
720x480	31.47/31.50	59.94/60.00
1280x720	44.96/45.00 37.50	59.94/60.00 50.00
1920x1080i	28.125 33.72/33.75	50.00 59.94/60.00
1920x1080p	67.432/67.500 56.25 26.97/27.00 33.71/33.75	59.939/60.00 50.00 23.97/24.00 29.97/30.00

Screen Setup for PC mode

Overview

This function works in the following mode: Component1, Component2, RGB-PC, HDMI1/DVI or HDMI2.

Resolution function works only RGB-PC mode. (1024/1280/1360/1366x768, 60Hz)

Note: Some signal from some graphics boards may not function properly. If the results are unsatisfactory, adjust your monitor's position, size and phase manually.

Adjustment for screen Resolution, Position, Clock and Phase

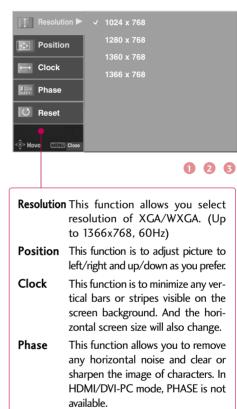
- Press the OK button and then use ▲ or ▼ button to select Resolution, Position, Clock, or Phase.
- Press the ▶ button and then use ▲ or ▼ or ▼ or ▶ button to make appropriate adjustments.
 - The **Phase** adjustment range is -32 ~ +32. The **Phase** only works in RGB-PC mode.
 - The Clock adjustment range is -50 ~ +50. The Clock only works in RGB-PC mode.
- 3 Press the OK button.

Initializing (Reset to original factory values)

To initialize the adjusted values

This function allows you to return to the good picture reproduction programmed at the factory and cannot be change.

- Press the OK button and then use ▲ or ▼ button to select Reset.
- Press the ▶ button and then use ◀ or ▶ button to select Yes.
- Press the OK button.







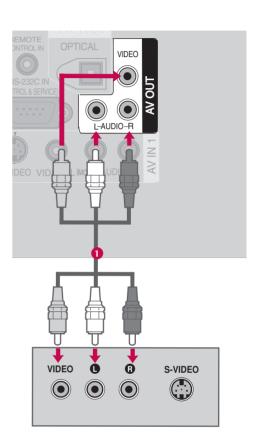
AV OUTPUT SETUP

The TV has a special signal output capability which allows you to hook up a second TV or monitor.

- Connect the second TV or monitor to the TV's **AV OUT** jacks.
- See the Operating Manual of the second TV or monitor for further details regarding that device's input settings.



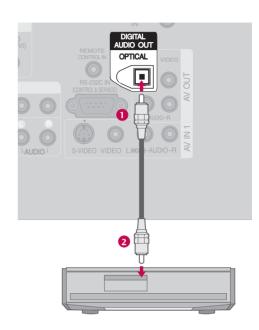
- ▶ Digital, Component1-2, RGB-PC, HDMI1/DVI, HDMI2 input sources cannot be used for AV out.
- ▶ We recommend to use the AV OUT jacks for VCR recording.



DIGITAL AUDIO OUTPUT SETUP

Send the TV's audio to external audio equipment via the Digital Audio Output (Optical) port.

- Connect one end of an optical cable to the TV Digital Audio (Optical) Output port.
- Connect the other end of the optical cable to the digital audio (optical) input on the audio equipment.
- Set the "TV Speaker option Off" in the AUDIO menu. See the external audio equipment instruction manual for operation.



NOTE

➤ When connecting with external audio equipments, such as amplifiers or speakers, please turn the TV speakers off.

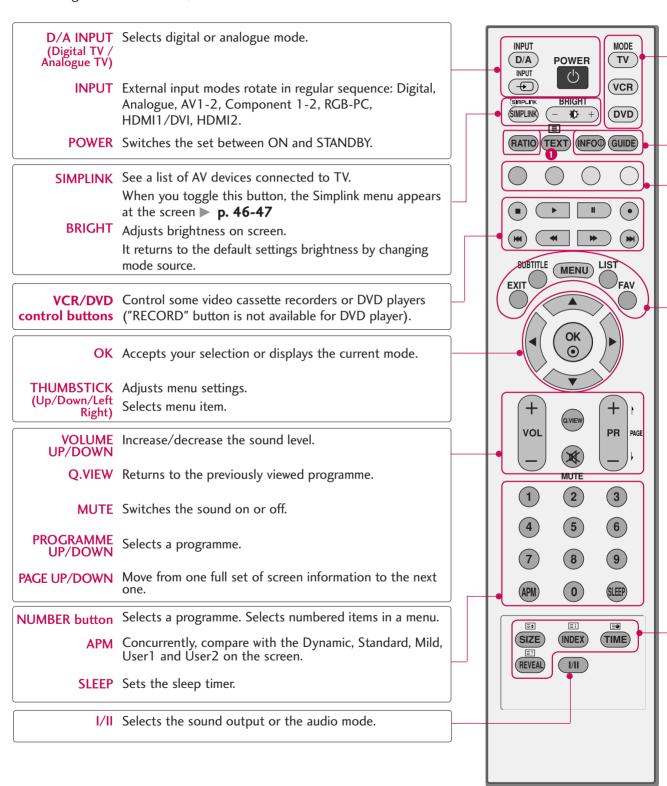
A CAUTION

▶ Do not look into the optical output port. Looking at the laser beam may damage your vision.

WATCHING TV/PROGRAMME CONTROL

REMOTE CONTROL KEY FUNCTIONS

When using the remote control, aim it at the remote control sensor on the TV.



TV, VCR, DVD Selects the remote operating mode: TV, VCR, DVD. Select other operating modes, for the remote to operate external devices.

RATIO Selects your desired picture format.

INFO ① Shows the present screen information.

GUIDE Shows a programme schedule.

Coloured They are used as per the indications or functions displayed on the TV screen in the case of buttons Text displays (Teletext, EPG) and programme edit.

EXIT Returns to TV viewing from any menu.

SUBTITLE Recalls your preferred subtitle in digital mode.

MENU Selects a menu.

LIST Displays the programme table.

FAV Displays the selected favourite programmes.

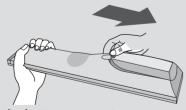
(FAVOURITE)

1 TELETEXT These buttons are used for teletext.

Text button is used to enable teletext services while other buttons are for teletext functions.

* For further details, see the 'Teletext' section.

Installing Batteries



- Open the battery compartment cover on the back side and install the batteries matching correct polarity (+with +, -with -).
- ■Install two 1.5V AA batteries. Don't mix old or used batteries with new ones.
- Close cover.

Remote control effective range



- Use a remote control up to 7 meters distance and 30 degree (left/right) within the receiving unit scope.
- Dispose of used batteries in a recycle bin to preserve environment.

WATCHING TV/PROGRAMME CONTROL

TURNING ON THE TV

If your TV will be turned on, you will be able to use its features.

- Ensure the power cord is connected correctly.

 When connected to power the TV switches to standby mode.
 - In standby mode, press the ७/۱, INPUT, PR (▲ or ▼) button on the TV or press the POWER, INPUT, D/A INPUT, PR (+ or -), Number (0~9) button on the remote control.
- Select the viewing source by using the **INPUT** button on the remote control.
 - This TV is programmed to remember which mode it was last set to, even if you turn the TV off.
- When finished using the TV, press the **POWER** button on the remote control. The TV reverts to standby mode.



▶ If you intend to be away on vacation, disconnect the power plug from the wall power outlet.

INITIALIZING SETUP

If the OSD (On Screen Display) is displayed on the screen as figure 1 after turning on the set, you can adjust the Auto Programme tuning, Time Zone selection or Password setting.

NOTE

▶ It will automatically disappear after approx. 40 seconds unless a button is pressed.



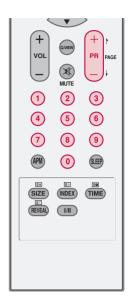


Figure 1.

PROGRAMME SELECTION

Automatically finds all programmes available through antenna or cable inputs, and stores them in memory on the programme list.

Press the **PR** + or - or **NUMBER** buttons to select a programme number.



VOLUME ADJUSTMENT

Adjust the volume to suit your personal preference.

- Press the **VOL+** or button to adjust the volume.
- 2 If you want to switch the sound off, press the MUTE button.
- You can cancel the Mute function by pressing the MUTE, I/II or VOL + or button.



WATCHING TV/PROGRAMME CONTROL

EPG (ELECTRONIC PROGRAMME GUIDE)

- In Digital Mode Only

This system has an Electronic Programme Guide (EPG) to help your navigation through all the possible viewing options.

The EPG supplies information such as programme listings, start and end times for all available services. In addition, detailed information about the programme is often available in the EPG (the availability and amount of these programme details will vary, depending on the particular broadcaster).

This function can be used only when the EPG information is broadcasted by broadcasting companies.





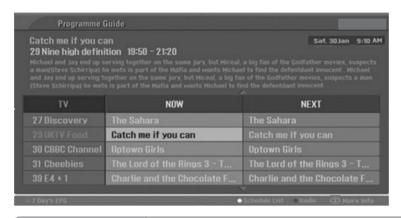
Switch on/off EPG

- Press the **GUIDE** button to switch on EPG.
- Press the GUIDE or EXIT button again to switch off EPG and return to TV viewing.

Select a programme

Press the ▲ or ▼ or ▼ or ▶ buttons to select desired programme, then press the OK button to display the selected programme.

Button Function in NOW/NEXT Guide Mode



Remote Control Buttons	Function
GREEN	Change to 7Day's EPG Guide
YELLOW	Shows the Schedule List
BLUE	Selects the Radio programmes
▲/▼/∢/▶	Select the Broadcasting Programme
EXIT	Switch off EPG
INFO ①	The detail information on or off

Button Function in 7 Days Guide Mode



Remote Control Buttons	Function
GREEN	Change to Now/Next Guide
RED	Enter Timer Reservation/Cancel setting mode
YELLOW	Shows the Schedule List
BLUE	Selects the Radio programmes
▲/▼/⋖/ ▶	Select the Broadcasting Programme
EXIT	Switch off EPG
Page Move	Selects the page
Day Move	Selects the day
INFO 🛈	The detail information on or off

WATCHING TV/PROGRAMME CONTROL

Button Function in Extended Description Box



Remote Control Buttons	Function
•	Change to the selected channel
INFO ①	The detail information on or off

Button Function in Reservation Setting Mode

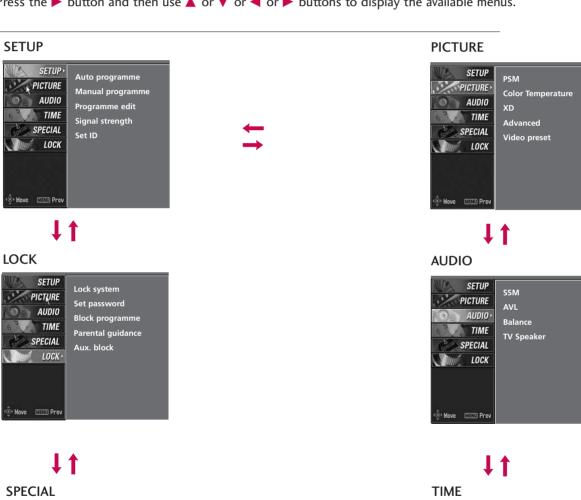


Remote Control Buttons	Function
YELLOW	Change to Guide
PR +/ -	Page Up/Down
	Delete the selected item

ON SCREEN MENUS SELECTION AND ADJUSTMENT

Your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual.

- Press the MENU button and then use ▲ or ▼ button to select the each menu.
- Press the ▶ button and then use ▲ or ▼ or ▼ or ▶ buttons to display the available menus.







WATCHING TV/PROGRAMME CONTROL

AUTO PROGRAMME TUNING

Up to 100 TV stations can be stored in this set by programme numbers (0 to 99). Once you have preset the stations, you will be able to use the PR + or - or NUMBER buttons to scan the stations you programmed. Stations can be tuned using automatic or manual modes.

A password is required to gain access to Auto programme or Manual programme menu if the Lock system is turned on.

If you forgot your password, press '7', '7', '7', '7' on the remote control.

In Australia, if no station name can be assigned to a station, the programme number is assigned and stored as ---- followed by a number see 'Assigning a station name' section to assign the station name.

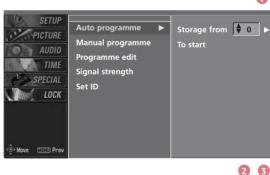
- Press the **MENU** button and then ▲ or ▼ button to select the SETUP menu.
- Press the ▶ button and then ▲ or ▼ button to select Auto programme.
- Press the button to select **Storage from**. Select the beginning programme number with the ▲ or ▼ button or NUMBER buttons.
- Press the ▶ button to select **To start**.
- Press the **OK** button to begin auto programming. All receivable stations are stored.

To stop auto programming, press the **OK** button. When auto programming is completed, the **Programme edit** menu appears on the screen. See the 'Programme Edit' section to edit the stored programme.

Press **EXIT** button to return to normal TV viewing.









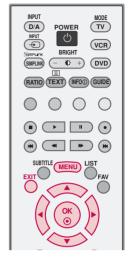




MANUAL PROGRAMME TUNING

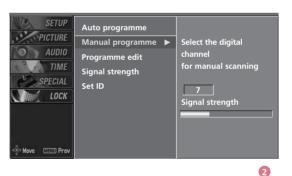
In Digital Mode

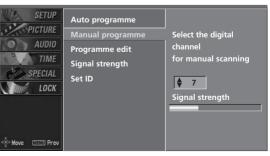
Manual programme lets you manually add a programme to your programme list.



- Press the **MENU** button and then use ▲ or ▼ button to select the **SETUP** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Manual programme.
- Press the ▶ button and then use ▲ or ▼ button to select the programme number you want to add.
- Press the OK button to store the programme. When the programme number you want to add is already added in programme list, the message "Already programmed channel. Do you want to update?" will appear. If you want to keep on manual programming, select YES with using ◀ or ▶ button . Then, press the OK button. Otherwise select NO. When the programme is stored, the Programme edit menu appears on the screen. See the 'Programme Edit' section to edit the stored programme.
- Press **EXIT** button to return to normal TV viewing.









WATCHING TV/PROGRAMME CONTROL

MANUAL PROGRAMME TUNING Continued

In Analogue Mode

Manual programme lets you manually tune and arrange the stations in whatever order you desire. Also you can assign a station name with five characters to each programme number.

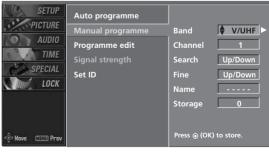
- Press the MENU button and then use ▲ or ▼ button to select the **SETUP** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Manual programme.
- Press the ▶ button to select **Band**. Press the ▲ or ▼ button to select **V/UHF** or **Cable** as required.
- Press the button to select **Channel**. Press the or V button to select the desired channel number.
- Press the ▶ button to select **Search**. Press the ▲ or ▼ button to commence searching. If a station is found the search will stop.
- If this station is the one required, press the ◀ or ▶ button to select Storage. Select the desired programme number with the ▲ or ▼ button.
- Press the **OK** button to store it.
- To store another station, repeat steps 3 to 7.
- Press **EXIT** button to return to normal TV viewing.



















FINE TUNING - In Analogue Mode only

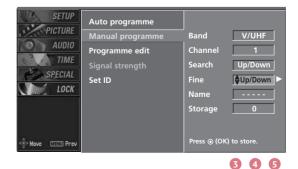
Normally fine tuning is only necessary if reception is poor. The finely tuned programme will be indicated by a yellow number during programme selection.



- Press the MENU button and then use ▲ or ▼ button to select the SETUP menu.
- Press the ▶ button and then use ▲ or ▼ button to select Manual programme.
- Press the ▶ button and then ◀ or ▶ button to select **Fine**.
- Press the ▲ or ▼ button to fine tune for the best picture and sound.
- Press the **OK** button to store.
- 6 Press **EXIT** button to return to normal TV viewing.







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WATCHING TV/PROGRAMME CONTROL

ASSIGNING A STATION NAME - In Analogue Mode only

You can assign a station name to each programme number.



- Press the MENU button and then use ▲ or ▼ button to select the **SETUP** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Manual programme.
- Press the ▶ button and then use ◀ or ▶ button to select Name.
- Press the ▲ or ▼ button. You can use the numeric **0** to **9**, the alphabet **A** to **Z** +, -, and blank.
- Press the ◀ or ▶ button to select the position and make your choice of the second character, and so on.
- Press the **OK** button to store.
- Press **EXIT** button to return to normal TV viewing.





2







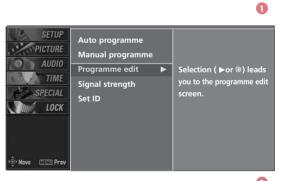
PROGRAMME EDIT

This function enables you to delete or skip the stored programmes. Also you can move some stations to other programme numbers or copy blank station data into the selected programme number.



- Press the MENU button and then use ▲ or ▼ button to select the SETUP menu.
- Press the ▶ button and then use ▲ or ▼ button to select **Programme edit.**
- 3 Press the ▶ button.
- Deleting a programme (In Analogue Mode Only)
 - a. Select a programme to be deleted with the ▲ or ▼
 or ▼ or ▶ buttons.
 - Press the RED button twice. The selected programme is deleted, all the following programmes are shifted up one position.
 - Copying a programme (In Analogue Mode Only)
 - a. Select a programme to be copied with the ▲ or ▼
 or ▼ buttons.
 - b. Press the **GREEN** button.
 - c. Move the programme to the desired programme number with the ▲ or ▼ or ► buttons.
 - d. Press the **GREEN** button again to copy the programme. All the following programmes are shifted down one position.







WATCHING TV/PROGRAMME CONTROL

Moving a programme (In Analogue Mode Only)

- a. Select a programme to be moved with ▲ or ▼ or
 ✓ or ▶ buttons.
- b. Press the **YELLOW** button.
- c. Move the programme to the desired programme number with the ▲ or ▼ or ► buttons.
- d. Press the **YELLOW** button again to release this function.
- Skipping a programme number
- a. Select a programme number to be skipped with ▲
 or ▼ or ► buttons.
- b. Press the **BLUE** button. The skipped programme number turns to blue.
- c. Press the **BLUE** button again to release the skipped programme.

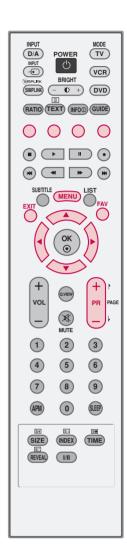
When a programme number is skipped it means that you will be unable to select it using the **PR+** or - button during normal TV viewing. If you want to select the skipped programme, directly enter the programme number with the NUMBER buttons or select it in the programme edit or table menu.

■ Selecting Favourite Programme

a. Select your favourite programme number with ▲ or ▼ or ▼ or ▶ buttons and then press the FAV button. It will automatically include the selected programme into your favourite programmes list and a heart mark will appear in front of that programme number. You can store up to 10 programmes.



Repeatedly press the **FAV** button to select stored favourite programmes in normal TV viewing.



CALLING UP THE PROGRAMME LIST

You can check the programmes stored in the memory by displaying the programme list.

Displaying programme list

■ Press the **LIST** button to display the Programme table menu.

The programme list appears on the screen.

NOTE

- ➤ You may find some blue programmes.

 They have been set up to be skipped by auto programming or in the programme edit mode.
- ▶ Some programmes with the channel number shown in the programme LIST indicate there is no station name assigned.

Selecting a programme in the programme list

- Select a programme with the ▲ or ▼ or ⋖ or ▶ buttons.
- The set switches to the chosen programme number.

Paging through a programme list

- Press the **PR+** or button to changes current page into previous/next page.
- Press the LIST button to return to normal TV viewing.



WATCHING TV/PROGRAMME CONTROL

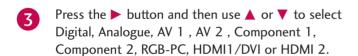
INPUT SOURCE SELECTION

Alternatively you can select the Digital, Analogue, AV1-2, Component 1-2, RGB-PC, HDMI1/DVI or HDMI 2 mode by pressing the INPUT button.

Press the D/A INPUT button to select digital or analogue mode.

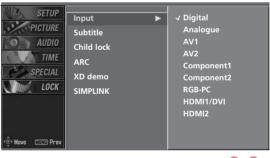


- Press the **MENU** button and then use ▲ or ▼ button to select the SPECIAL menu.
- Press the ▶ button and then use ▲ or ▼ button to select Input.













KEY LOCK

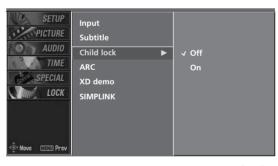
The TV can be set so that the remote control is needed to control it. This feature can be used to prevent unauthorized viewing.



- Press the MENU button and then use ▲ or ▼ button to select the SPECIAL menu.
- Press the ▶ button and then use ▲ or ▼ button to select **Child lock**
- Press the ▶ button and then use ▲ or ▼ button to select **On** or **Off**.
- 4 Press **EXIT** button to return to normal TV viewing.











- With the lock on, the display 'Child lock: On' appears on the screen if any button on the front panel is pressed while viewing the TV.
- ➤ The display 'Child lock: On' will not appear on the screen if any button on the front panel is pressed while displaying the menus.

WATCHING TV/PROGRAMME CONTROL

SIMPLINK

This operates only for the devices with the SIMPLINK logo. Please check the SIMPLINK logo.

This allows you to control and play other AV devices connected to the display through HDMI cable without additional cables and settings.

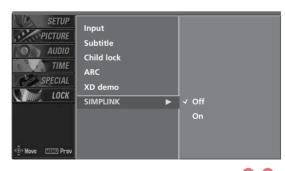
If you do not want SIMPLINK menu, select "Off".



- Press the **MENU** button and then use ▲ or ▼ button to select the **SPECIAL** menu.
- Press the ▶ button and then use ▲ or ▼ button to select **SIMPLINK**.
- Press the ▶ button and then use ▲ or ▼ button to select **On** or **Off**.
- 4 Press **EXIT** button to return to normal TV viewing.









SIMPLINK Functions

Disc playback

Control connected AV devices by pressing the ▲ or ▼ or ►, OK buttons and buttons for play, stop, pause, fast reverse, fast forward, chapter skip.(The • button does not provide such functions)

Direct Play

After connecting AV devices to TV, you can directly control the devices and play media without additional settings.

Select AV device

Enables you to select one of AV devices connected to TV and play it.

Power off all devices

When you power off TV, all connected devices are turned off.

Switch audio-out

Offers an easy way to switch audio-out.

* A device, which is connected to TV through HDMI cable but does not support Simplink, does not provide this function.

SIMPLINK Menu

Press the ▲ or ▼ or ◀ or ▶ button and then OK button to select the desired SIMPLINK source.

- **TV viewing:** Switch to the previous TV programme regardless of the current mode.
- 2 **DISC playback**: Select and play discs. When multiple discs are available, the titles of the discs are conveniently displayed at the bottom of the screen.
- **3 VCR playback:** Play and control the connected VCR.
- **4 HDD Recordings playback :** Play and control recordings stored in HDD.
- **Select** Home theatre/Audio Out to TV: Select Home theatre or TV speaker for Audio Out.



Selected Device

- When no device is connected (displayed in gray)
- When a device is connected (displayed in bright colour)

NOTE

- ► Connect the HDMI/DVI IN or HDMI IN terminal of the TV to the rear terminal (HDMI terminal) of the SIMPLINK device with the HDMI cable.
- ▶ After connecting the HDMI terminal for the home theater with SIMPLINK function in the above method, connect the VARIABLE AUDIO OUT terminal on the back of the TV to the VARIABLE AUDIO IN terminal on the back of the SIMPLINK device with the VARIABLE AUDIO OUT cable.
- ▶ When operating the external device with SIMPLINK, press the TV button among the MODE button on the remote controller.
- ▶ When you switch the Input source with the INPUT button on the remote controller, you can stop the operation of device controlled by SIMPLINK.
- ▶ When you select or operate the media device with home theater function, the speaker automatically switches to home theater speaker (HT speaker).

WATCHING TV/PROGRAMME CONTROL

DIGITAL SIGNAL STRENGTH - In Digital Mode only

Reveals how strong your DTV signal is and whether you need to adjust your antenna.

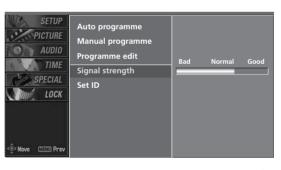
The higher the signal strength, the less likely you are to experience picture degradation.

Digital TV Signals; May not be available in all areas, nor broadcast all programmes.



- Press the **MENU** button and then use ▲ or ▼ button to select the **SETUP** menu.
- Press the ▶ button and then use ▲ or ▼ button to select **Signal strength**.
- View the on-screen signal strength monitor to see the strength of the signal being received.
- 4 Press **EXIT** button to return to normal TV viewing.





2

PICTURE CONTROL

PICTURE SIZE(ASPECT RATIO)CONTROL

You can watch TV in various picture formats; Auto, 4:3, 16:9 (Wide), 14:9, Zoom and Cinema zoom.

NOTE

▶ If a fixed image is displayed on the screen for a long time, it image may become imprinted on the screen and remain visible. This phenomenon is common to all manufacturers and in consequence the manufacturer's warranty does not cover the product bearing this phenomenon.





Press the **RATIO** button repeatedly to select the desired picture format.

■ You can also adjust **ARC** in the **SPECIAL** menu.

Auto

Selects the proper picture proportion to match the source's image. $(4:3 \rightarrow 4:3, 16:9 \rightarrow 16:9)$

4:3

Choose 4:3 when you want to view a picture with an original 4:3 aspect ratio.

16:9

Adjust the picture horizontally, in a linear proportion to fill the entire screen.

14:9

The screen size is, more enlarged at both sides, to create a spectacular view.

You can move the 14:9 screen using \triangle or \bigvee button. The adjustment range is -10 - +10.

Zoom

Choose Zoom when you want to view the picture without any alteration. However, the top and bottom portions of the picture will be cropped.

You can move the Zoom screen using \triangle or \bigvee button. The adjustment range is -16 - +16.

Cinema Zoom

Choose Cinema Zoom when you want to enlarge the picture in correct proportion. Note: When enlarging or reducing the picture, the image may become distorted.

You can adjust the enlarge proportion of Cinema Zoom using ▲ or ▼ button.

The adjustment range is 1-16.

NOTE

- ▶ In HDMI/DVI-PC and RGB-PC mode, 4:3 and 16:9 is available.
- ▶ Auto: When your TV receives the wide screen signal, it will be automatically changed to the picture format sent. (Not available in all countries)

PICTURE CONTROL

PRESET PICTURE SETTINGS

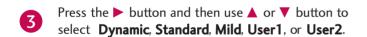
PSM - PRESET

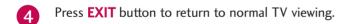
This function adjusts the set to the best picture appearance. When adjusting picture options (contrast, brightness, colour, sharpness and tint) manually, PSM is automatically changed to User.

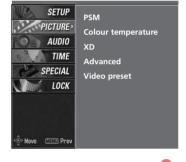
Picture options Dynamic, Standard, and Mild are preset and programmed for good picture quality at the factory and cannot be changed.

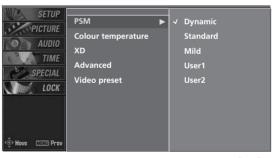


- Press the **MENU** button and then use ▲ or ▼ button to select the **PICTURE** menu.
- Press the ▶ button and then use ▲ or ▼ button to select **PSM**.











AUTO COLOUR TONE CONTROL (WARM/MEDIUM/COOL)

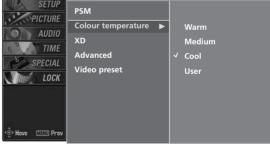
Choose one of three automatic colour adjustments. Set to warm to enhance hotter colours such as red, or set to cool to see less intense colours with more blue.



- Press the MENU button and then use ▲ or ▼ button to select the **PICTURE** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Colour temperature.
- Press the ▶ button and then use ▲ or ▼ button to select either Warm, Medium, Cool, or User.
- Press **EXIT** button to return to normal TV viewing.









PICTURE CONTROL

ADAPTIVE PICTURE MODE (APM)

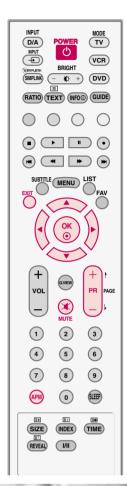
Allows you to select your preferred picture mode after comparing the four different picture (Dynamic, Standard, Mild, and User1 (or User2) settings.

- Press the APM button once. The screen is divided to 4 sections.
- Use the ▲ or ▼ or ▼ or ▶ buttons to navigate between the 4 screen sections.

 By pressing the OK button, you can select the desired mode.

NOTE

- While in the APM mode, only the POWER, APM, OK, EXIT, ▲ or ▼ or ►, VOLUME + or -, MUTE buttons on the remote control are usable.
- ➤ APM screen will automatically disappear after approx. 40 seconds unless a button is pressed.







MANUAL PICTURE ADJUSTMENT

PSM - USER OPTION

You can adjust picture Contrast, Brightness, Colour, Sharpness, and Tint options to the levels you prefer.

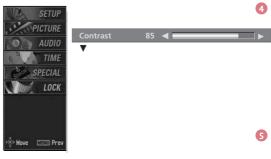


- Press the **MENU** button and then use ▲ or ▼ button to select the **PICTURE** menu.
- Press the ▶ button and then use ▲ or ▼ button to select **PSM**.
- Press the ▶ button and then use ▲ or ▼ button to select **User 1** or **User 2**.
- Press the ▶ button and then use ▲ or ▼ button to select the desired picture option (Contrast, Brightness, Colour, Sharpness, or Tint).
- Press the ▶ button and then use ◀ or ▶ button to make appropriate adjustments.
- Press **EXIT** button to return to normal TV viewing.







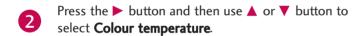


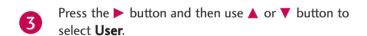
PICTURE CONTROL

COLOUR TONE - USER OPTION

You can also adjust the detailed settings (Red, Green, Blue) by selecting the **User** menu.



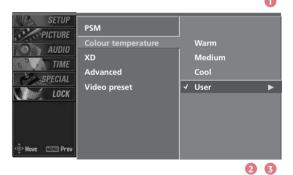




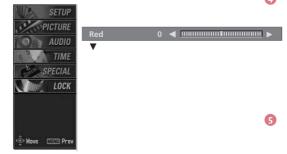
- Press the ▶ button and then use ▲ or ▼ button to select **Red**, **Green**, or **Blue**.
- Press the ▶ button and then use ◀ or ▶ button to make appropriate adjustments.
 - The adjustment range of **Red**, **Green**, or **Blue** is -20~ +20.
- 6 Press EXIT button to return to normal TV viewing.









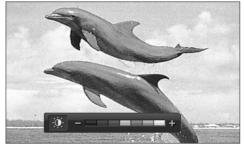


BRIGHTNESS ADJUSTMENT

Adjust the brightness using this button on the remote control.



- Press the button.
- Adjust the desired screen brightness.





PICTURE CONTROL

XD - PICTURE IMPROVEMENT TECHNOLOGY

XD is LG Electronics' unique picture improving technology to display a real HD source through an advanced digital signal processing algorithm.

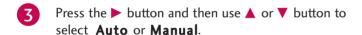
When selecting PSM options (Dynamic, Standard and Mild), XD is automatically changed to Auto.

But when selecting PSM options (User 1 and User 2), you can choose the Auto / Manual.

When selecting the Manual, you can adjust the XD contrast, XD colour and XD noise.



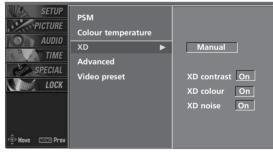
- Press the **MENU** button and then use ▲ or ▼ button to select the **PICTURE** menu.
- Press the ▶ button and then use ▲ or ▼ button to select XD.



Selecting the Manual

- Press the ▶ button and then use ◀ or ▶ button to select XD contrast, XD colour or XD noise.
 - **XD contrast:** Optimizing the contrast automatically according to the brightness of the reflection.
 - **XD colour:** Adjusting the colours of the reflection automatically to reproduce as closely as possible to natural colours.
 - **XD noise:** Removing the noise up to the point where it does not damage the original picture.
- 2. Use the ▲ or ▼ button to select **On** or **Off**.
- Press EXIT button to return to normal TV viewing.







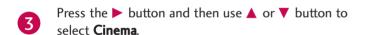
ADVANCED-CINEMA

Set up the TV for the best picture appearance for viewing movies.

This feature operates only in AV1, AV2, and Component



- Press the **MENU** button and then use ▲ or ▼ button to select the **PICTURE** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Advanced.



- Press the ▶ button and then use ▲ or ▼ button to select **On** or **Off**.
- Press **EXIT** button to return to normal TV viewing.











PICTURE CONTROL

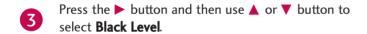
ADVANCED-BLACK(DARKNESS) LEVEL

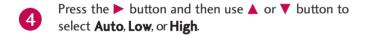
Adjusting the contrast and the brightness of the screen using the black level of the screen.

This feature operates only in AV1, AV2, HDMI1/DVI or HDMI2 mode.



- Press the MENU button and then use ▲ or ▼ button to select the PICTURE menu.
- Press the ▶ button and then use ▲ or ▼ button to select Advanced.





Auto

Realizing the black level of the screen and set it to High or Low automatically.

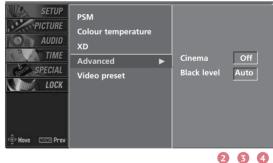
The black level of the screen gets darker.

High

The black level of the screen gets brighter.

Press **EXIT** button to return to normal TV viewing.





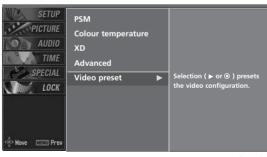
PICTURE PRESET

Use to quickly reset all the Picture menu options to their original factory preset values.



- Press the **MENU** button and then use ▲ or ▼ button to select the **PICTURE** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Video preset.
- Press the ▶ button to reset the picture menu options to original values.









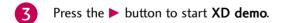
PICTURE CONTROL

XD DEMO

Allows you to select your preferred picture mode after compare the four different picture (Dynamic, Standard, Mild, and User1 (or User2)) settings.

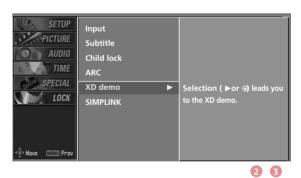


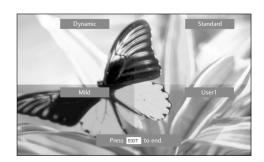
- Press the MENU button and then use ▲ or ▼ button to select the SPECIAL menu.
- Press the ▶ button and then use ▲ or ▼ button to select XD demo.











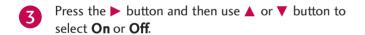
SOUND & LANGUAGE CONTROL

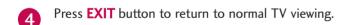
AUTO VOLUME LEVELLER (AVL)

AVL automatically keeps on an equal volume level even if you change programmes.



- Press the MENU button and then use ▲ or ▼ button to select the AUDIO menu.
- Press the ▶ button and then use ▲ or ▼ button to select **AVL**













SOUND & LANGUAGE CONTROL

PRESET SOUND SETTINGS - SSM MODE

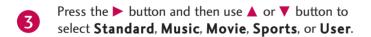
SSM lets you enjoy the best sound without any special adjustment because the TV sets the appropriate sound options based on the programme content.

When adjusting sound options (treble and bass) manually, SSM is automatically changed to User.

Standard, Music, Movie, and Sports are preset for good sound quality at the factory and are not adjustable.

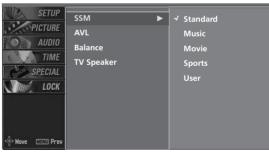


- Press the **MENU** button and then use ▲ or ▼ button to select the **AUDIO** menu.
- Press the ▶ button and then use ▲ or ▼ button to select SSM.













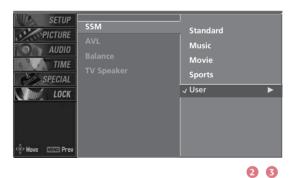
SOUND SETTING ADJUSTMENT - USER MODE

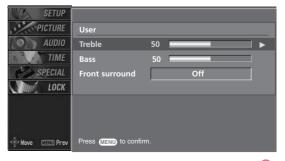
Adjust the sound to suit your taste and room situations.



- Press the MENU button and then use ▲ or ▼ button to select the AUDIO menu.
- Press the ▶ button and then use ▲ or ▼ button to select **SSM**.
- Press the ▶ button and then use ▲ or ▼ button to select **User**.
- Press the ▶ button and then use ▲ or ▼ button to select the desired sound option (**Treble**, **Bass**, or **Front surround**).







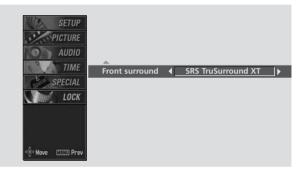
4

SOUND & LANGUAGE CONTROL

Press the ▶ button and then use ◀ or ▶ button to make appropriate adjustments.

Selecting the Front surround

Press the ▶ button and then use ◀ or ▶ button to select **Off** or **SRS**(Sound Retrieval System)**TruSurround XT**.



6 Press **EXIT** button to return to normal TV viewing.

SRS TruSurround XT

Takes advantage of any multi-channel format without needing to add extra speakers or equipment. Dialog clarity, bass enrichment, and the addition of stereo audio enhancement produces an immersive sound experience from standard stereo material.

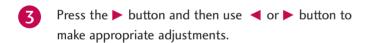
- ► SRS(♠) is a trademark of SRS Labs, Inc.
- TruSurround XT technology is incorporated under license from SRS Labs, Inc.

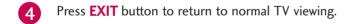
BALANCE

Adjust the left/right sound of speaker to suit your taste and room situations.



- Press the **MENU** button and then use ▲ or ▼ button to select the **AUDIO** menu.
- Press the ▶ button and then use ▲ or ▼ button to select **Balance**.















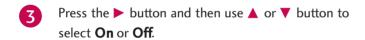
SOUND & LANGUAGE CONTROL

TV SPEAKERS ON/OFF SETUP

Turn the TV speakers off if using external audio equipment. In AV1-2, Component1-2, RGB PC, HDMI1/DVI and HDMI2 mode, the audio signal can be outputted even though there is no video signal.



- Press the **MENU** button and then use ▲ or ▼ button to select the **AUDIO** menu.
- Press the ▶ button and then use ▲ or ▼ button to select TV Speaker.











STEREO/DUAL RECEPTION - In Analogue Mode only

■ Mono sound selection

If the stereo signal is weak in stereo reception, you can switch to mono by pressing the **I/II** button twice. In mono reception, the clarity of sound is improved. To switch back to stereo, press the **I/II** button twice again.

Broadcast	On Screen Display
Mono	MONO
Stereo	MONO / STEREO

SPEAKER SOUND OUTPUT SELECTION

In AV 1-2, Component 1-2, RGB-PC, HDMI1/DVI or HDMI 2 mode, you can select output sound for the left and right loud-speakers.

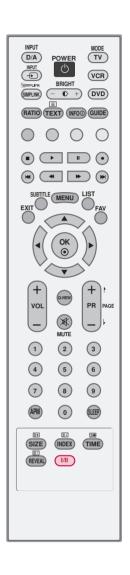
Repeatedly press the **I/II** button to select the sound output. L+R: Audio signal from audio L input is sent to the left loud speaker and audio signal from audio R input is sent to the right loud speaker.

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

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



▶ In digital mode, repeatedly press the I/II button to change the audio mode (MPEG or DOLBY DIGITAL).

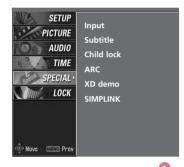


SUBTITLE - In Digital Mode only

You can select Subtitle on or off with the **TEXT** button in DTV mode.



- Press the **MENU** button and then use ▲ or ▼ button to select the **SPECIAL** menu.
- Press the ▶ button and then use ▲ or ▼ button to select **Subtitle**.
- Press the ▶ button and then use ▲ or ▼ button to select **On** or **Off**.
- Press EXIT button to return to normal TV viewing.







TIME SETTING

CLOCK SETTING

AUTO CLOCK SETTING

The time is automatically set from a digital channel signal. The digital channel signal includes information for the current time provided by the broadcasting station.

Set the clock manually, if the current time is set incorrectly by the auto clock function.

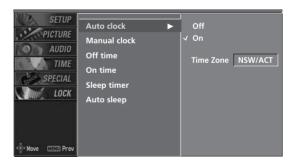


- Press the **MENU** button and then use ▲ or ▼ button to select the **TIME** menu.
- Press the ▶ button and then use ▲ or ▼ button to select **Auto clock**
- Press the ▶ button and then use ▲ or ▼ button to select **On**.
- Press the ▶ button and then use ▲ or ▼ button to select your viewing area time zone:

NSW/ACT, NT, TAS, WA, SA, QLD, or VIC.

Press **EXIT** button to return to normal TV viewing.





2





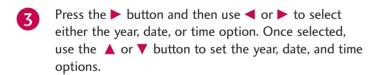
TIME SETTING

MANUAL CLOCK SETTING

If the current time setting is wrong, reset the clock manually.



- Press the MENU button and then use ▲ or ▼ button to select the **TIME** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Manual clock













AUTO ON/OFF TIMER SETTING

The time function operates only if the current time has been set.

The Off-Time function overrides the On-Time function if they are both set to the same time.

The TV must be in standby mode for the On-Time function to work.

If you do not press any button within 2 hours after the TV turns on with the On Time function, the TV will automatically revert to standby mode.

- Press the **MENU** button and then use ▲ or ▼ button to select the **TIME** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Off Time or On Time.
- Press the ▶ button and then use ▲ or ▼ button to select On.
 - To cancel the **Off Time** or **On Time** function, select Off.
- Press the ▶ button and then use ▲ or ▼ button to set the hour.
- Press the ▶ button and then use ▲ or ▼ button to set the minutes.
- Only On time Press the ▶ button and then use ▲ or ▼ to select the programme at turn-on.

Press the ▶ button and then use ▲ or ▼ to set the sound level at turn-on.

Press **EXIT** button to return to normal TV viewing.









TIME SETTING

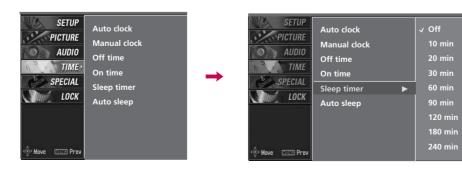
SLEEP TIMER SETTING

You don't have to remember to switch the set off before you go to sleep.

The sleep timer automatically switches the set to standby after the preset time has elapsed.

- Press the SLEEP button repeatedly to select the number of minutes. First the Off option appears on the screen, followed by the following sleep timer options: 10, 20, 30, 60, 90, 120, 180, and 240 minutes.
- When the number of minutes you want is displayed on the screen, press the **SLEEP** button. The timer begins to count down from the number of minutes selected.
- To check the remaining minutes before the TV turns off, press the **SLEEP** button once.
- To cancel the Sleep Timer, press the SLEEP button repeatedly to select Off.
- When you switch the set off, the set cancels the preset sleep time.

■You can also set up the Sleep timer in the TIME menu.





AUTO SHUT-OFF SETTING

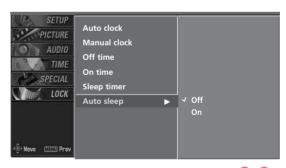
If set to on and there is no input signal, the TV turns off automatically after 10 minutes.



- Press the **MENU** button and then use ▲ or ▼ button to select the **TIME** menu.
- Press the ▶ button and then use ▲ or ▼ button to select **Auto sleep**.
- Press the ▶ button and then use ▲ or ▼ button to select **On** or **Off**.
- 4 Press **EXIT** button to return to normal TV viewing.









PARENTAL CONTROL / RATINGS

SET PASSWORD & LOCK SYSTEM

SETTING UP YOUR PASSWORD

Set up is used to block specific channels, ratings, and external viewing sources.

A password is required to gain access to this menu.

- Press the **MENU** button and then use the ▲ or ▼ button to select the **LOCK** menu. Then, press the ▶ button.
 - Enter the password as requested.
 - The TV is set up with the initial password "0-0-0-0".





SET PASSWORD

Change the password by inputting a new password twice.

- After inputting the current password, use the ▲ or ▼ button to choose **Set password**.
- Press the button and then choose any 4 digits for your new password next to New.

As soon as the 4 digits are entered, re-enter the same 4 digits to **Confirm**.

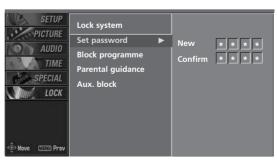
The new password is memorized.

Press **EXIT** button to return to normal TV viewing.



▶ If you ever forget your password, key in '7', '7', '7' on the remote control.





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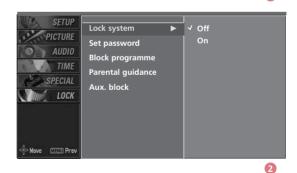
LOCK SYSTEM

Enables or disables the blocking scheme you set up previously.

- After inputting the password, use the ▲ or ▼ button to choose **Lock system**.
- Press the ▶ button and then use the ▲ or ▼ button to select On or Off.
 - When you select **On**, the Lock System is enabled.
- Press **EXIT** button to return to normal TV viewing.







PARENTAL CONTROL/RATINGS

PROGRAMME BLOCKING

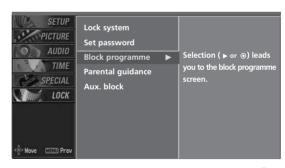
Select a channel number that you wish to block.

- After inputting the password, use the ▲ or ▼ button to choose **Block programme**.
- Press the ▶ button. You will now see a screen filled with channel numbers and a preview picture.
- Use ▲ or ▼ or ◀ or ▶ buttons to select a channel and then use the OK button to block or unblock it.
- 4 Press EXIT button to return to normal TV viewing.





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PARENTAL GUIDANCE - In Digital Mode only

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

After inputting the password, use the ▲ or ▼ button to choose **Parental guidance**.

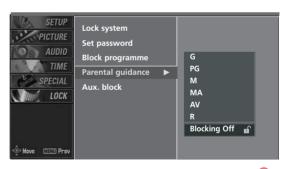
Press the ▶ button and then use the ▲ or ▼ to select G, PG, M, MA, AV or R.

- G (General audience)
 - PG (Parental guidance suggested)
 - M (Mature audiences)
 - MA (Mature adult audiences)
 - AV (Adult audiences)
 - R (Restricted)
 - Blocking Off (Permits all programs)
- Press **EXIT** button to return to normal TV viewing.











PARENTAL CONTROL/RATINGS

EXTERNAL INPUT BLOCKING

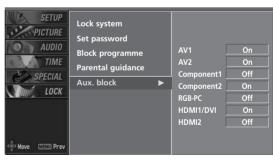
Enables you to select a source to block from the external source devices you have hooked up.

- After inputting the password, use the ▲ or ▼ button to choose Aux. block
- Press the ▶ button and then use the ◀ or ▶ button to select a source.
- Press the ▶ button and then use the ▲ or ▼ button to select **On** or **Off** on the each source.
- Press **EXIT** button to return to normal TV viewing.





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TELETEXT

- * This feature is not available in all countries.
- Teletext is a free service broadcast by some 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 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** or **EXIT** button to switch off teletext.

SIMPLE Text

- * This feature is not available in all countries.
- 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.
- The PR + or button can be used to select the preceding or following page.

TOP Text

- * This feature is not available in all countries.
- 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.
- Use the yellow button to proceed to the next group with automatic overflow to the next block.
- With the **GREEN** button you can proceed to the next existing page with automatic overflow to the next group. Alternatively the **PR** + button can be used.
- The red button permits to return to previous selection. Alternatively the PR- button can be used.

■ Direct page selection

Corresponding to the 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 button to select the index page.
- 2. You can select the pages which are colour coded along the bottom line with the same coloured buttons.
- 3. Corresponding to the SIMPLE teletext mode, you can select a page by entering its three digit page number with the NUMBER buttons in FASTEXT mode.
- 4. The PR + or button can be used to select the preceding or following page.

Special Teletext Functions



REVEAL

Press this button to display concealed information, such as solutions of riddles or puzzles. Press this button again to remove the information from the display.



Selects double height text.

Press this button to enlarge the top half of the page.

Press this button again to enlarge the bottom half of the page.

Press this button again to return to the normal display.



TIME

When viewing a TV programme, press this button to display the time at the top right hand corner of the screen. Press this button again to remove the display.

TROUBLESHOOTING

The operation does no	The operation does not work normally.									
The remote control doesn't work	 Check to see if there is any object between the product and the remote control causing 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, VCR etc. Install new batteries. 									
Power is suddenly turned off	 Is the sleep timer set? Check the power control settings. Power interrupted No broadcast on station tuned with Auto off activated. 									

The operation does not	work normally.
No picture &No sound	 Check whether the product is turned on. Try another channel. The problem may be with the broadcast. Is the power cord inserted into wall power outlet? Check your antenna direction and/or location. Test the wall power outlet, plug another product's power cord into the outlet where the product's power cord was plugged in.
Picture appears slowly after switching on	■ This is normal, the image is muted during the product startup process. Please contact your service center, if the picture has not appeared after five minutes.
No or poor colour or poor picture	 Adjust Colour in menu option. Keep a sufficient distance between the product 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 product experiencing problems, tune to another station.
Lines or streaks in pictures	 Station signal is weak, reorient antenna to receive weaker station. Check for sources of possible interference. Check antenna (Change the direction of the antenna).

The audio function does	The audio function does not work.							
Picture OK & No sound	 Press the VOL or VOLUME 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 product	A change in ambient humidity or temperature may result in an unusual noise when the product is turned on or off and does not indicate a fault with the product.							

There is a problem in PC	There is a problem in PC mode. (Only PC mode applied)									
The signal is out of range	Adjust resolution, horizontal frequency, or vertical frequency.Check the input source.									
Vertical bar or stripe on background & Horizontal Noise & Incorrect position	■ Work the 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.									

MAINTENANCE

Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you will have your new TV. Be sure to turn the power off and unplug the power cord before you begin any cleaning.

Cleaning the Screen

- Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.
- Make sure the excess water is off the screen, and then let it air-dry before you turn on your TV.

Cleaning the Cabinet

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

Extended Absence

A CAUTION

▶ If you expect to leave your TV dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

PRODUCT SPECIFICATIONS

MODELS		26LC7D * (26LC7D-AB)	32LC7D * (32LC7D-AB)	37LC7D * (37LC7D-AB)	42LC7D * (42LC7D-AB)			
Dimensions (Width x Height x Depth)	Including stand Excluding stand	676.5 x 531.2 x 221.0mm 26.6 x 18.8 x 3.3 inches	806.6x 606.5 x 249.0 mm 31.8 x 21.7 x 3.1 inches	36.5 x 27.3 x 11.0 inches 9270 x 692.8 x 280.5 mm 36.5 x 24.8 x 3.5 inches 9270 x 630.0 x 88.0 mm	1033.4 x 750.0 x 2876 mm 40.7 x 27.0 x 3.5 inches			
Weight	including stand excluding stand		31.5 pounds / 14.3 kg 24.7 pounds / 11.2 kg		54.9 pounds / 24.9 kg 45.0 pounds / 20.4 kg			
Power requirement		AC100-240V~ 50/60Hz 1.3A	AC100-240V~ 50/60Hz 1.5A	AC100-240V~ 50/60Hz 1.8A	AC100-240V~ 50/60Hz 2.3A			
Television System Program Coverage External Antenna Impedan	ce	PAL B/G, DVB-T VHF 0-12, UHF 20-75, CATV 02-44, DTV 06-12, 27-69 75 ohm						
Environment condition	Operating Temperature Operating Humidity			F (0 ~ 40°C) nan 80%				
	Storage Temperature Storage Humidity	-4 ~ 140°F (-20 ~ 60°C) Less than 85%						

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

PROGRAMMING THE REMOTE CONTROL

The remote is a multi-brand or a universal remote. It can be programmed to operate most remote-controllable devices of other manufacturers.

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

Programming a code into a remote mode

- To find out whether your remote can operate the device without programming, turn on the device such as a VCR and press the corresponding mode button on the remote.
 - After that, press the **POWER** button. If the device is turned off then it responds properly and the remote need not to be programmed. If not, the remote should be programmed to operate the device. The programming procedures are explained below.
- Press the **MENU** and **MUTE** button continuously at the same time for 2 seconds, the current selected device button will be illuminated.
 - If you don't press any button for 20 seconds, the light on the mode button will be turned off. In that case, you have to repeat from step 2.
- Enter code numbers using the number button on the remote by referring the code table on the following pages. When pressing the button, the light blinks. If the device turned off, the programming is successful.
- 4 Press the MENU button to store the code. After blinking twice, this code is stored.
- 5 Test the remote functions to see if the device responds properly. If not, repeat from step 2.

Code (Hexa)	Function	Note	Code (Hexa)	Function	Note
50	D/A INPUT	Remote control Button	64	SIZE	Remote control Button
ОВ	INPUT	Remote control Button	70	INDEX	Remote control Button
79	RATIO	Remote control Button	26	TIME	Remote control Button
OE	SLEEP	Remote control Button	2A	REVEAL	Remote control Button
10-19	Number Key 0-9	Remote control Button	20	TEXT	Remote control Button
1A	Q.VIEW	Remote control Button	72	RED	Remote control Button
09	MUTE	Remote control Button	71	GREEN	Remote control Button
02	VOL+	Remote control Button	63	YELLOW	Remote control Button
03	VOL -	Remote control Button	61	BLUE	Remote control Button
00	PR +	Remote control Button	53	LIST	Remote control Button
01	PR -	Remote control Button	0A	1/11	Remote control Button
1 E	FAV	Remote control Button	AA	INFO	Remote control Button
40	A	Remote control Button	E1	- *	Remote control Button
41	▼	Remote control Button	EO	₩ - +	Remote control Button
07	◀	Remote control Button	В1		Remote control Button
06	>	Remote control Button	ВО	>	Remote control Button
44	OK	Remote control Button	BA	II	Remote control Button
43	MENU	Remote control Button	BD	•	Remote control Button
5B	EXIT	Remote control Button	B2	 44	Remote control Button
92	APM	Remote control Button	8F	≪	Remote control Button
A9	GUIDE	Remote control Button	8E	>>	Remote control Button
7E	SIMPLINK	Remote control Button	В3	▶ ▶	Remote control Button
39	SUBTITLE	Remote control Button			

IR CODES

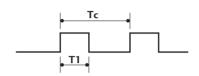
1. How to Connect

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

Duty ratio = T1/TC = 1/3

■ Configuration of frame

1st frame



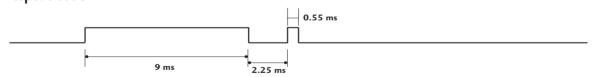
Repeat frame



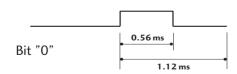
Lead code

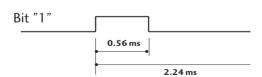


■ Repeat code



■ Bit description





■ Frame interval: Tf

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



VCRs

Brand	Cod	es			Brand	Cod	es			Brand	Cod	es		
AIWA	034				MAGNAVOX	031	033	034	041	SAMSUNG	032	040	102	104
AKAI	016	043	046	124		067	068				105	107	109	112
	125	146			MARANTZ	012	031	033	067		113	115	120	122
AMPRO	072					069					125			
ANAM	031	033	103		MARTA	101				SANSUI	022	043	048	135
AUDIO DYNAMICS	012	023	039	043	MATSUI	027	030			SANYO	003	007	010	014
BROKSONIC	035	037	129		MEI	031	033				102	134		
CANON		031	033		MEMOREX	003	010	014	031	SCOTT	017	037	112	129
CAPEHART	108						034		072		131			
CRAIG		040				101		134	139	SEARS	003	800		
CURTIS MATHES		033			MGA	045	046	059			013	014	017	020
DAEWOO		007		064	MINOLTA	013	020				031	042	073	081
	065		110	111	MITSUBISHI	013		045			101			
DAYTRON	112	116	117	119			051	059	061	SHARP	031	054	149	
DAYTRON	108	007	070	0.47	NATO	151	0.40			SHINTOM	024	0.00	071	0.50
DBX			039	043	MTC	034				SONY		009		052
DYNATECH	034	053			MULTITECH	024	034	070	0.47			057		0/6
ELECTROHOME EMERSON	059	017	025	027	NEC	048	023	039	043	SOUNDESIGN	077	078	149	
EIVIERSOIN	029		023		NORDMENDE	048				STS	013			
			046		OPTONICA	053	054			SYLVANIA	031	077	034	050
	129		138		PANASONIC		070	074	083	SILVAINIA	067	055	054	039
FISHER	-		009		TANASONIC	133		145	003	SYMPHONIC	034			
FUNAI	034	000	00)	010		155	110	115		TANDY	010	034		
GE	031	033	063	072	PENTAX	013	020	031	033	TATUNG	039			
01	107	109	144			063	020		000	TEAC		039	043	
GO VIDEO	132	136			PHILCO	031	034	067		TECHNICS	031	033	070	
HARMAN KARDON	V	012	045		PHILIPS	031	033	034	054	TEKNIKA	019	031	033	034
HITACHI	004	018	026	034		067	071	101			101			
	043	063	137	150	PILOT	101				THOMAS	034			
INSTANTREPLAY	031	033			PIONEER	013	021	048		TMK	006			
JCL	031	033			PORTLAND	108				TOSHIBA	800	013	042	047
JCPENNY	012	013	015	033	PULSAR	072					059	082	112	131
	040	066	101		QUARTZ	011	014			TOTEVISION	040	101		
JENSEN	043				QUASAR		066			UNITECH	040			
JVC			033		RCA		020			VECTOR RESEARCH				
			055	060			041			VICTOR	048			
		150					109	140	144	VIDEO CONCEPTS		034	046	
KENWOOD			039	043			147			VIDEOSONIC	040			
		048			REALISTIC		800			WARDS		013		
LG (GOLDSTAR)		012		020			033		040			033		040
HOVD		106	114	123	DICO		054	101		VALALIA		054		0.47
LLOYD	034	000	017	014	RICO	058				YAMAHA		034		043
LXI			013 101		RUNCO	148				ZENITH		048		101
MAGIN	040	034	101	106	SALORA	014					USB	0/2	080	101
IVIAGIIN	0+0													

VCRs

Brand	Cod	es			Brand	Cod	les			Brand	Cod	es		
ABC	003	004	039	042		074				REMBRANT	025			
	046	052	053		LG (GOLDSTAR)	001	106	101	005	SAMSUNG	102	107	030	068
AJIN	112				M-NET	037				SCIENTIFIC ATLANTA	003	011	041	042
ANTRONIK	014				MACOM	033					043	045	046	
ARCHER	005	007	014	024	MAGNAVOX	010	012	064	079	SHERITECH	022			
CABLE STAR	026				MEMOREX	100				SIGNAL	030			
CENTURION	092				MOVIE TIME	028	032			SIGNATURE	052			
CENTURY	007				NSC	015	028	038	071	SL MARX	030			
CITIZEN	007					073				SPRUCER	047	078		
COLOUR VOICE	065	090			OAK	016	031	037	053	STARCOM	002	004	800	009
COMBANO	080	081			PANASONIC	044	047			STARGATE	800	030		
COMTRONICS	019	030			PARAGON	100				TADIRAN	030			
DIAMOND	023									TAEKWANG	110			
EAGLE	020	030	040		PHILIPS	006	012	013	020	TAIHAN	105			
EASTERN	057	062	066			065	085	090		TANDY	017			
ELECTRICORD	032				PIONEER	034	051	052	063	TEXSCAN	029			
GE	072					076				TOCOM	039	040	056	
GEMINI	800	022	025	054	POST NEWS WEEK	(016				TOSHIBA	100			
GI	052	074			PRUCER	059				UNIKA	007	014	024	
GOLDEN CHANNEL	030				PTS	011	048	071	072	UNITED CABLE	004	053		
HAMLIN	049	050	055			073	074			UNIVERSAL	005	007	014	024
HITACHI	052	055			PULSAR	100					026	027	032	035
HOSPITALITY	070	077			RCA	047				VIEWSTAR	012	015	018	086
JERROLD	002	003	004	800	REGAL	049	050				087	880	089	
	009	010	052	069	REGENCY	057				ZENITH	100	114	060	093

DVD

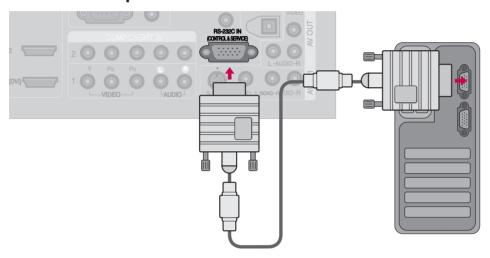
Brand	Codes	Brand	Codes	Brand	Codes
APEX DIGITAL	022	MITSUBISHI	002	RCA	005 006
DENON	020 014	NAD	023	SAMSUNG	011 015
GE	005 006	ONKYO	008 017	SONY	007
HARMAN KARDO	N 027	PANASONIC	003 009	THOMPSON	005 006
JVC	012	PHILIPS	013	TOSHIBA	019 008
LG	001 010 016 025	PIONEER	004 026	YAMAHA	009 018
MAGNAVOX	013	PROCEED	021	ZENITH	010 016 025
MARANTZ	024	PROSCAN	005 006		

EXTERNAL CONTROL THROUGH RS-232C

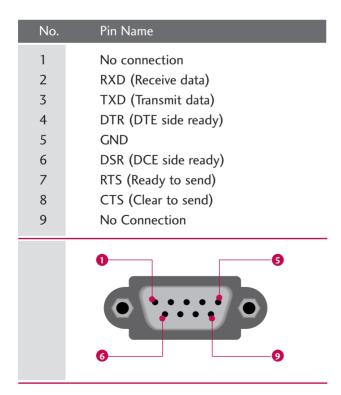
Connect the RS-232C (serial port) input jack to an external control device (such as a computer or an A/V control system) to control the TV's functions externally.

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

RS-232C Setup



Type of Connector; D-Sub 9-Pin Male



RS-232C Configurations

7-Wire Co	nfigurations	(Standard RS-2	232C cable)
	PC	TV	
RXD	2 •——	3	TXD
TXD	3 •——	<u> </u>	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								

SET ID

Use this function to specify a TV ID number. Refer to 'Real Data Mapping1'. See page 93.

- Press the **MENU** button and then use ▲ or ▼ button to select the **SETUP** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Set ID.
- Press the ▶ button and then use ▲ or ▼ button to adjust **Set ID** to choose the desired TV ID number. The adjustment range of Set ID is 1~99.
- Press **EXIT** button to return to normal TV viewing.





Communication Parameters

■ Baud rate: 9600 bps (UART) ■ Stop bit : 1 bit

■ Data length: 8 bits ■ Communication code : ASCII code ■ Parity : None ■ Use a crossed (null modem) cable. 2 3

Command Reference List

	COMMAND1	COMMAND2	DATA (Hexadecimal)		COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power	k	a	0 ~ 1	15. Bass	k	S	0 ~ 64
02. Input Select	k	b	0 ~ 8	16. Balance	k	t	0 ~ 64
03. Aspect Ratio	k	С	See p.93	17. Colour Temperatur	e k	u	0 ~ 2
04. Screen Mute	k	d	0 ~ 1	18. Red Adjustment	k	٧	0 ~ C8
05. Volume Mute	k	e	0 ~ 1	19. Green Adjustment	: k	W	0 ~ C8
06. Volume Control	k	f	0 ~ 64	20. Blue Adjustment	k	\$	0 ~ C8
07. Contrast	k	g	0 ~ 64	21. Channel Tuning	m	a	See p.95
08. Brightness	k	h	0 ~ 64	22. Send IR Code	m	С	See p.95
09. Colour	k	i	0 ~ 64	23. Input Select	Х	b	See p.95
10. Tint	k	j	0 ~ 64				
11. Sharpness	k	k	0 ~ 64				
12. OSD Select	k	1	0 ~ 1				
13. Remote Control/ Key Lock	k	m	0 ~ 1				
14. Treble	k	r	0 ~ 64				

Transmission / Receiving Protocol

Transmission

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

[Command 1]: First command to control the set.(j, k, m or x) [Command 2]: Second command to control the set.

[Set ID]: You can adjust the set ID to choose desired TV ID number in Setup menu. Adjustment range is 1 ~ 99. When selecting Set ID '0', every connected the TV 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 TV 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 TV transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

Data1: Illegal Code

Data2: Not supported function

Data3: Wait more time

01. Power (Command2:a)

To control Power On/Off of the TV.

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

Data 0 : Power Off Data 1 : Power On

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

* In a like manner, if other functions transmit 'FF' data based on this format, Acknowledgement data feedback presents status about each function.

02. Input Select (Command2:b)

To select input source for the TV.

Transmission [k][b][][Set ID][][Data][Cr]

Data 0: Digital

Data 5: Component 2

Data 1: Analogue

Data 6: RGB-PC

Data 2: AV1

Data 7: HDMI1/DVI

Data 3: AV2

Data 8: HDMI2

Data 4: Component 1

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

03. Aspect Ratio (Command2:c)

To adjust the screen format.

You can also adjust the screen format using the ARC button on remote control or in the Special menu.

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

Date 0: Auto

1: 4:3

2: 16:9

3: 14:9 (-10) ~ D: 14:9 (0) ~ 17: 14:9 (10)

18: Zoom (-16) ~ 28: Zoom (0) ~ 38: Zoom (16)

39: Cinema Zoom (1) ~ 48: Cinema Zoom (16)

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

* Using the PC input, you select either 16:9 or 4:3 screen aspect ratio.

04. Screen Mute (Command2:d)

To select screen mute on/off.

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

Data 0 : Screen mute off (Picture on)
Data 1 : Screen mute on (Picture off)

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

05. Volume Mute (Command2: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 0: Volume mute on (Volume off)

Data 1: Volume mute off (Volume on)

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

06. Volume Control (Command2: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: 0 ~ Max: 64

Refer to 'Real data mapping1' as shown below.

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

07. Contrast (Command2:g)

To adjust screen contrast.

You can also adjust contrast in the Picture menu.

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

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping1' as shown below.

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

08. Brightness (Command2:h)

To adjust screen brightness.

You can also adjust brightness in the Picture menu.

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

Data Min: 0 ~ Max: 64(*transmit by Hexadecimal code)

Refer to 'Real data mapping1' as shown below.

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

09. Colour (Command2:i)

To adjust the screen colour.

You can also adjust colour in the Picture menu.

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

Data Min: 0 ~ Max: 64

Refer to 'Real data mapping1' as shown below.

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

```
*Real data mapping 1
```

0: Step 0

o . Step

A: Step 10 (SET ID 10)

ij

F: Step 15 (SET ID 15)

10: Step 16 (SET ID 16)

:

63 : Step 99 (SET ID 99)

64 : Step 100

Tint: R50 ~ G50, Balance: L50 ~ R50

10. Tint (Command2:j)

To adjust the screen tint

You can also adjust tint in the Picture menu.

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

Data Red: 0 ~ Green: 64

*Refer to 'Real data mapping1'. See page 93.

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

11. Sharpness (Command2:k)

To adjust the screen sharpness.

You can also adjust sharpness in the Picture menu.

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

Data Min: 0 ~ Max: 64

*Refer to 'Real data mapping1'. See page 93.

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

12. OSD Select (Command2:I)

To select OSD (On Screen Display) on/off.

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

Data 0: OSD off Data 1: OSD on

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

* When setting "OSD - Off", every OSD doesn't display on screen.

13. Remote Control Lock Mode (Command2:m)

To lock the remote control and the front panel controls on the set.

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

Data 0: Lock off Data 1: Lock on

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

14. Treble (Command 2:r)

To adjust treble.

You can also adjust treble in the Audio menu.

Transmission [k][r][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping1'. See page 93.

Acknowledgement [r][][Set ID][][OK/NG][Data][x]

15.Bass (Command2:s)

To adjust bass.

You can also adjust bass in the Audio menu.

Transmission [k][s][][Set ID][][Data][Cr]

Data Min: 0 ~ Max: 64(*transmit by Hexadecimal code)

*Refer to 'Real data mapping1'. See page 93.

Acknowledgement [s][][Set ID][][OK/NG][Data][x]

16. Balance (Command2:t)

To adjust balance.

You can also adjust balance in the Audio menu.

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

Data Min: 0 ~ Max: 64(*transmit by Hexadecimal code)

*Refer to 'Real data mapping1'. See page 93.

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

17. Colour Temperature (Command2:u)

To adjust colour temperature.

You can also adjust colour temperature in the Picture menu.

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

Data 0: Medium 1: Cool 2: Warm 3: User

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

18. Red Adjustment(Command:v)

To adjust red in colour temperature

```
Transmission [k][v][ ][Set ID][ ][Data][Cr]
```

Data Min:0 ~ Max:C8

*Refer to "Real data mapping 2". as shown below.

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

19. Green Adjustment(Command:w)

To adjust green in colour temperature.

Transmission [k] [w] [] [Set ID] [] [Data] [Cr]

Data Min:0 ~ Max:C8

*Refer to "Real data mapping 2" as shown below

Acknowledgement [w][][Set ID][][OK/NG][Data][x]

20. Blue Adjustment(Command:\$)

To adjust blue in colour temperature.

Transmission [k][\$][][Set ID][][Data][Cr]

Data Min:0 ~ Max:C8

*Refer to "Real data mapping 2" as shown below

Acknowledgement [\$][][Set ID][][OK/NG][Data][x]

```
*Real data mapping 2
```

0:-20

5:-19

A:-18

: 5F: -1

64: 0

69: +1

C3:+19

C8:+19

21. Channel Tuning (Command: m a)

To tune channel to following programme number

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

Data 0: High channel data
Data 1: Low channel data
Data 2: 00: Analogue TV
: 10: Digital TV

ex) Analogue TV: ma 0 00 01 00

* Channel Data Range:

Analogue TV: 0 ~ 63 Digital TV: 0 ~ 3E7

22. Send IR Code (Command: m c)

To send IR remote key code

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

Data Key code: Refer to page 86.

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

23. Input Select(Command: x b)

To select input source for TV.

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

Data 00 : Digital

Data 41 : Component2

Data 10 : Analogue

Data 50 : RGB-PC

Data 20 : AV1

Data 60 : HDMI1/DVI

Data 21 : AV2

Data 90 : HDMI2

Data 40 : Component1

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

LG Electronics Inc.